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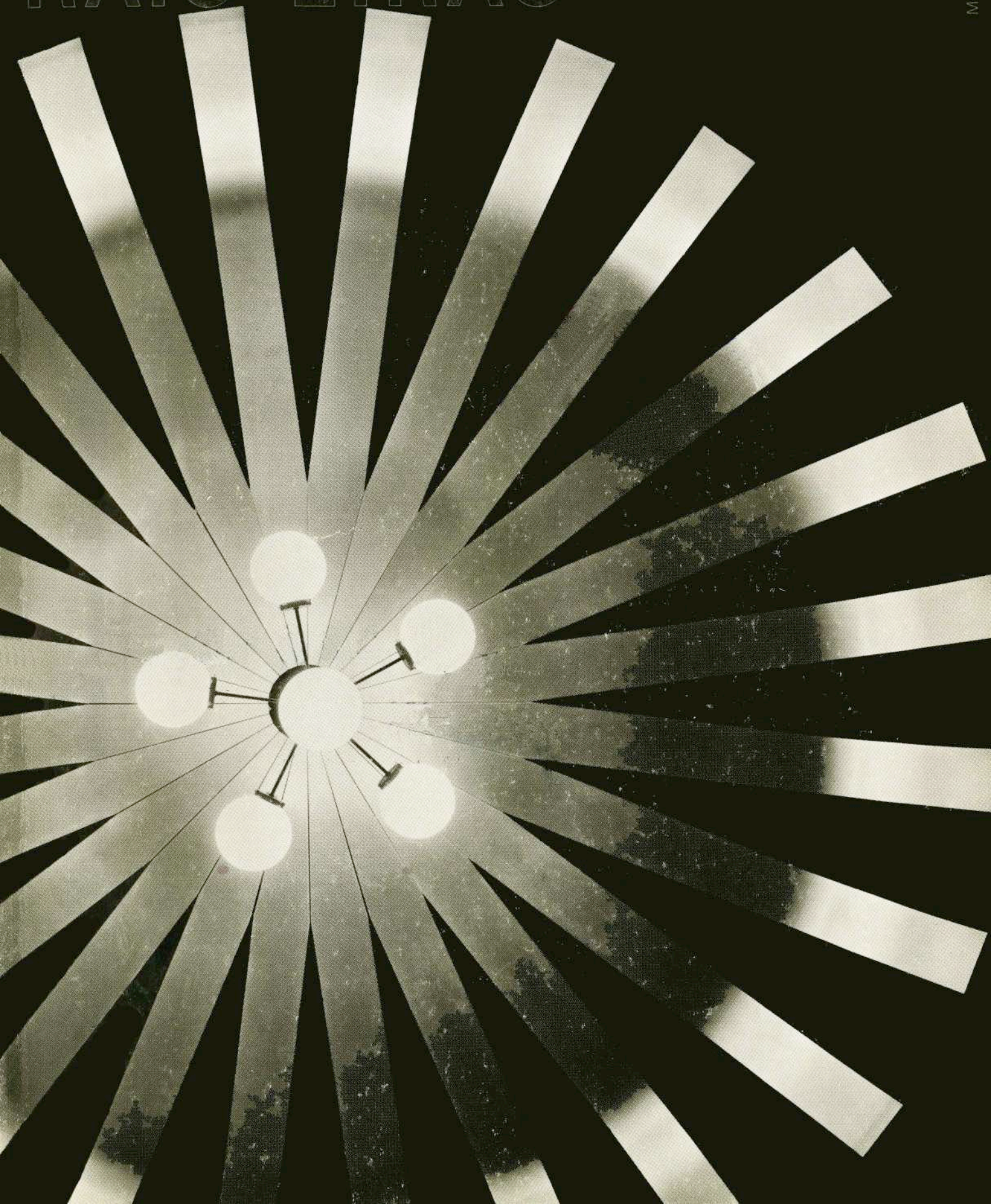

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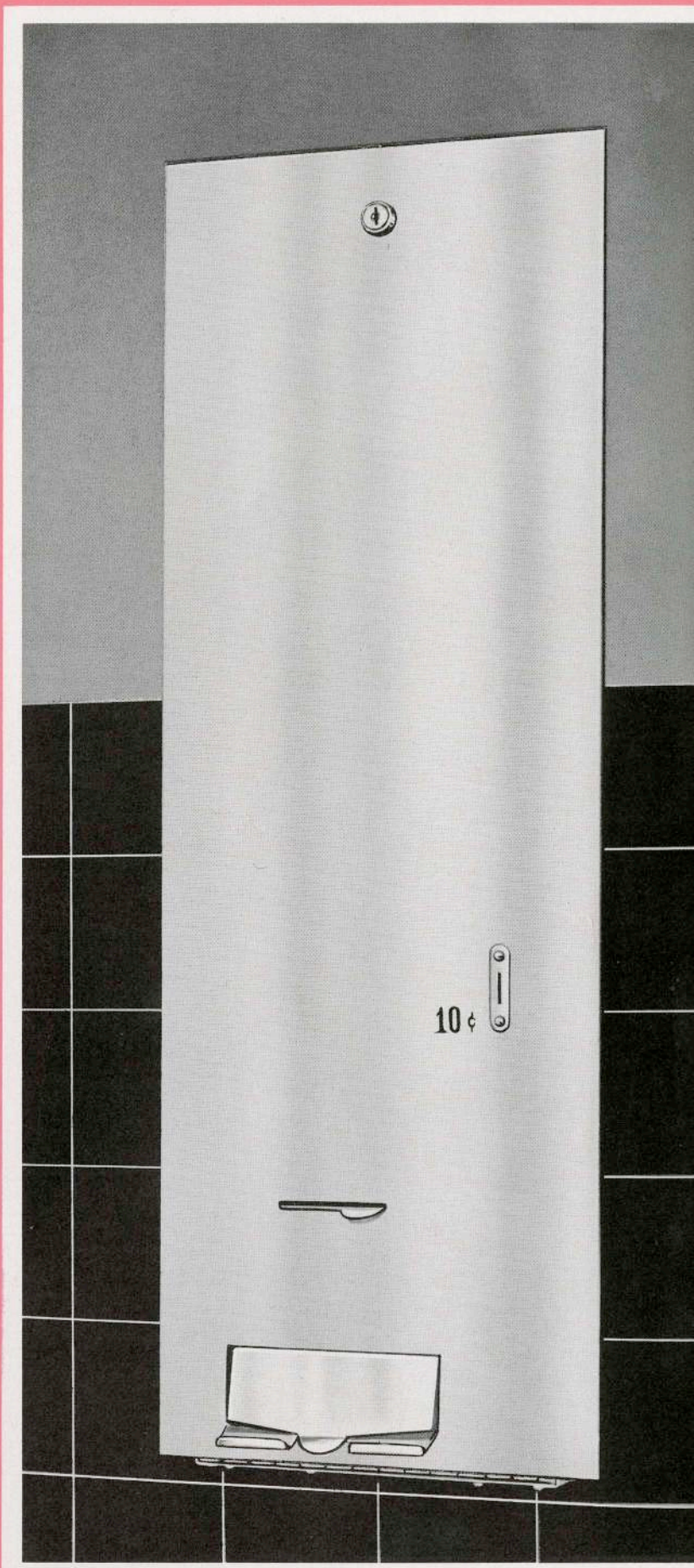

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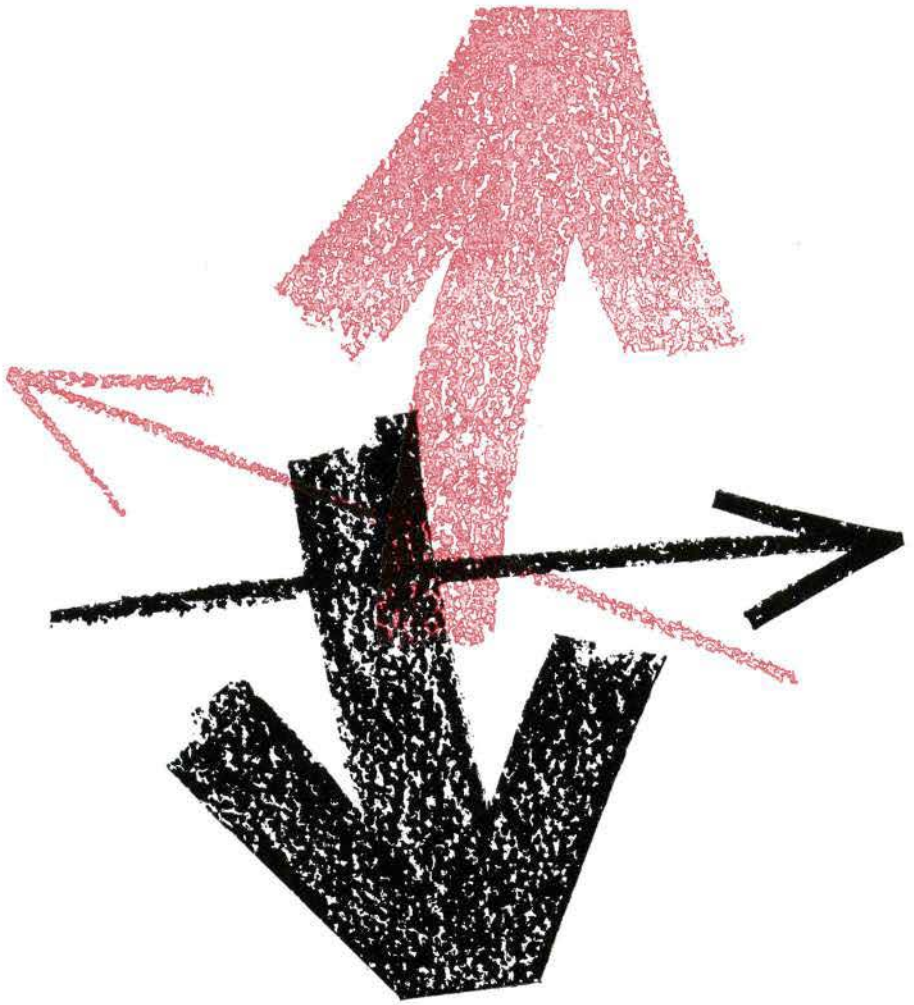

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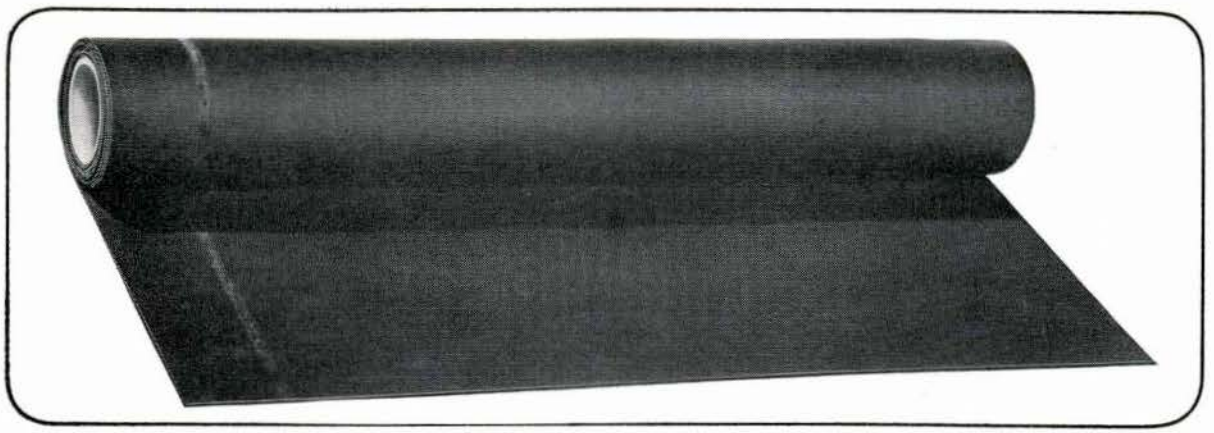

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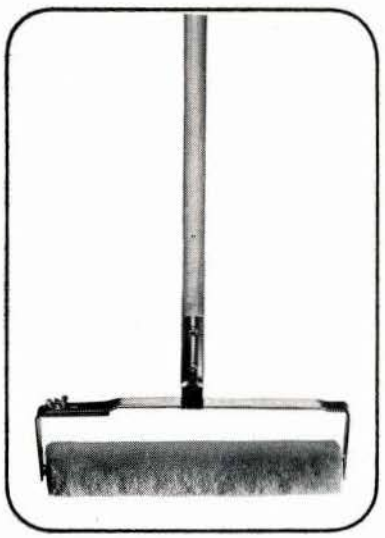

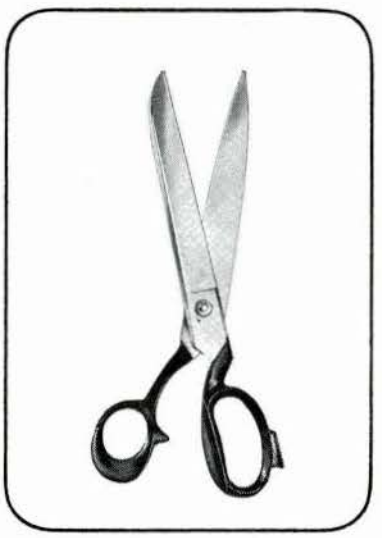

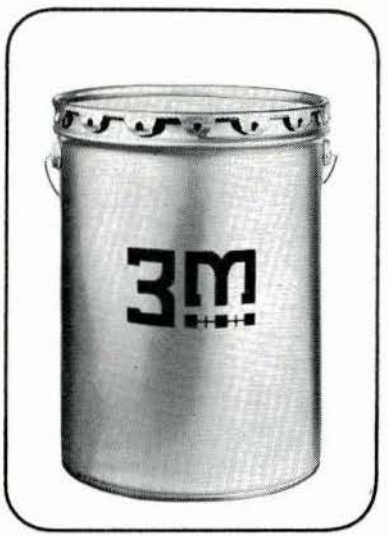

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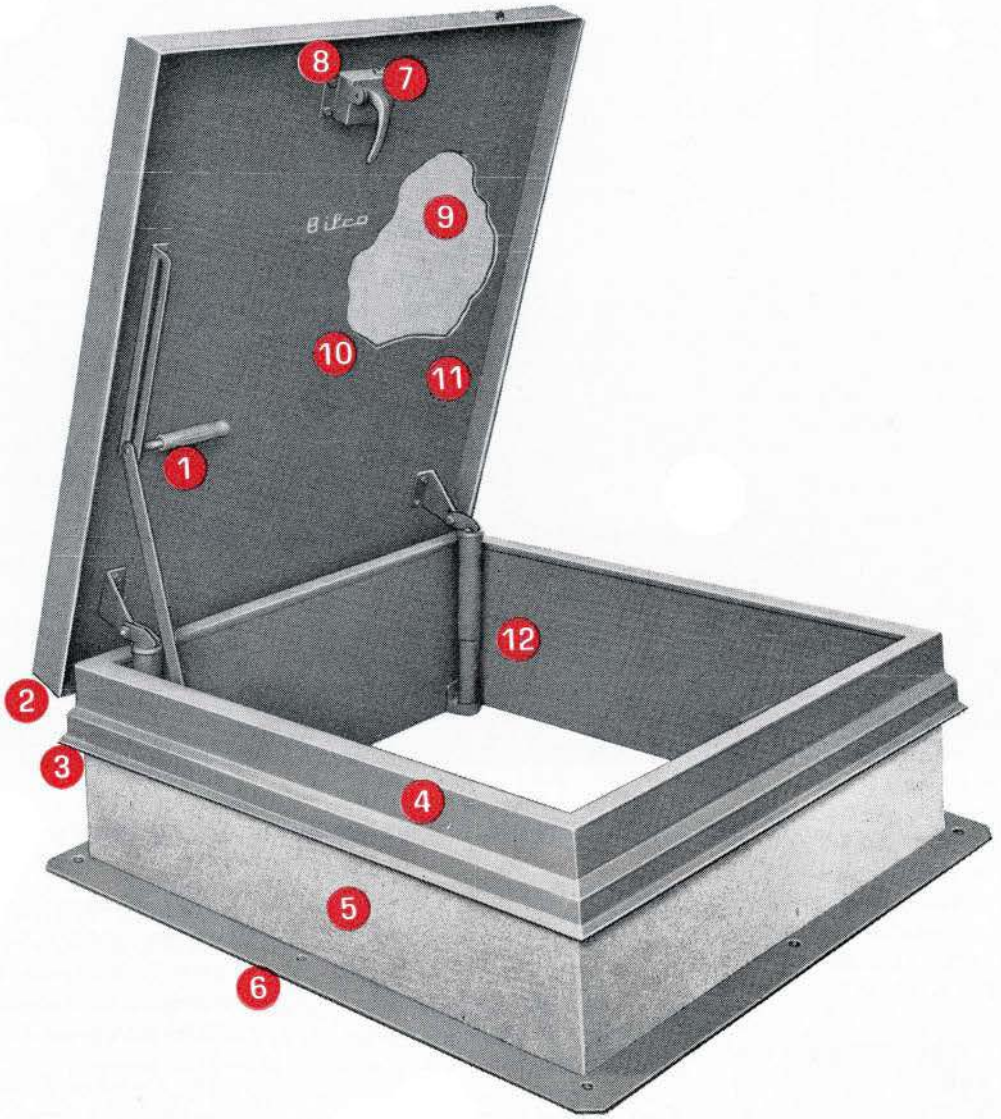

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Institute News

Officers of the Institute had a busy month in January. President John Lovatt Davies was a featured speaker at the annual meeting of the Province of Quebec Association of Architects, and remained throughout the busy three-day sessions. He then flew to St. John's for the annual meeting of the Newfoundland Association of Architects. Then back west for the annual meeting of the Alberta Association at Banff. After a few days at his office in Vancouver, he was back in Montreal again for a meeting of the executive committee of the Institute.

In Montreal, Mr. Davies made a hit when he described Jacques Hébert's World Fair symbol as "first-class" and said "the cavalier way in which some representatives of the Canadian people treated it has not been reassuring." He expressed the hope that "those who are making an effort to see that this is a well-designed affair will not be further delayed."

"One good result of this action" he added, "has been to interest Canadians in the Fair, and the design has been so widely publicized that it is accepted as the emblem by a great many people."

"I am sure, that given the opportunity, Canadian architects can make this the most beautiful fair ever held."

Revised by-laws of the Institute are now being printed and will be distributed shortly to all members. Several important changes have been made by the council, including changes in the composition of the council itself, which will take effect at the annual assembly in June. Net effect is to have a somewhat smaller council with larger proportional representation for the smaller provincial associations. Quebec and Ontario, for example, will each have six members of council instead of 11 and 12, respectively, as at present.

The council will elect an executive committee of 15 persons, instead of the present 11. One purpose of this change is to give a place on the executive to every provincial association.

The number of standing committees has been extended to seven — namely, architectural education, scholarships, building research, professional usage, competitions, public information, and legal documents.

Following a meeting of the RAIC Assembly Planning Committee in Halifax recently, Chairman Jacques Roy announced that the keynote speaker at the Assembly will be Sir Robert Matthew, President of the Royal Institute of British Architects and of the International Union of Architects. The main theme: "The Architect in a Changing World."

Right Hon. Lester B. Pearson, PC, Prime Minister of Canada, will be the speaker at the closing dinner. He and Sir Robert will be installed as Honorary Fellows of the Institute by the Chancellor of the College of Fellows, Herbert H. G. Moody.

Gordon Ricketts, Secretary of RIBA, is another special guest.

Features of the program will include seminar discussions on aspects of the main theme, an outdoor shore dinner and entertainment, College of Fellows meeting and dinner, golf, tennis, sea bathing, and special events for the ladies.

The dates: June 17 to 20.

The place: Algonquin Hotel, St. Andrews-by-the-Sea, New Brunswick.

Entries for the Massey Medals Competition are coming in daily to RAIC headquarters. Members are reminded that May 15 is final date for receipt of entry forms and registration fees, and that all entries must be sent in special binders by June 1.

The Canadian Conference of University Schools of Architecture will hold its annual meeting in Halifax, N.S., on June 15 and 16. Joint sessions will be held with the school visiting group of the institute's standing committee on architectural education, which is making its first official visit to the School of Architecture, Nova Scotia Technical College. The director of the school, Douglas Shadbolt, MRAIC, will be the host.

With the approach of the travel season, members are reminded of the RAIC travelling card available from headquarters. In English, French, German, Italian, Spanish, Swedish, and Japanese, it requests local authorities to provide facilities for architectural study by the bearer. It also lists regulations governing the measurement of photographing of public buildings in European and Asian countries.

Dr. Eric Arthur (F), Chairman of the RAIC Committee on Historic Buildings, announces the opening of the photographic exhibition, "Historic Architecture of Canada", on June 11 in the National Gallery, Ottawa. Hon. Arthur Laing, Minister of Northern Affairs and National Resources, will officiate. The exhibition is comprised of 166 photographs, old and new, of historic buildings from sea to sea — from Queen's Battery in St. John's to the Legislative Buildings in Victoria. It marks the culmination of three years of patient research and assembling by committee members across Canada, assisted by the Historic Sites Branch of Department of Northern Affairs. By special arrangement with the Fathers of Confederation Memorial Theatre Foundation, the exhibition will be on display as a feature attraction this fall at the official opening of the Theatre in Charlottetown by Her Majesty the Queen.

Following these showings in Ottawa and Charlottetown, the exhibition will tour art galleries and universities in all provinces. It is also expected to be a feature of the Canadian Pavilion at the World's Fair, 1967.

Members will be interested in an address on "The Responsibility of the Architect — to the Public and to the Profession" by John C. Parkin, FRAIC, FRIBA, delivered to the Minnesota Society of Architects at Minneapolis recently. It is reprinted as the lead article in the AIA Journal for January 1964.

The Canadian School Journal is now sponsoring a monthly competition for the "School of the Month" Award. Certificates will be given to the school board, the architect and the general contractor, who in the opinion of the award committee, have collaborated to build the best school in any given month. The award committee is chaired by F. J. K. Nicol, MRAIC, ARIBA, Toronto, and includes also Norman A. McMurrich (F), Toronto. Entry forms and instructions are available from — School of the Month Award, Canadian School Journal, 1710 Bayview Avenue, Toronto.

The R. S. McLaughlin Collegiate and Vocational Institute in Oshawa, Ont., received the first "School of the Month" award. Gordon S. Adamson and Associates, Toronto were the architects. The November-December issue of the CSJ provides an excellent description of the school.

Fred Price

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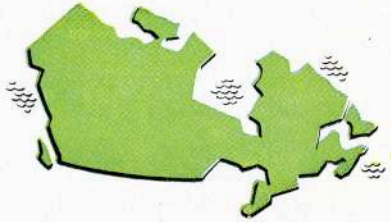

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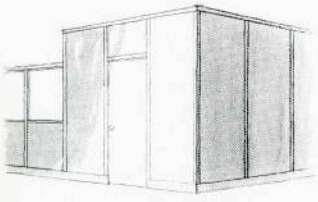

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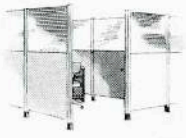

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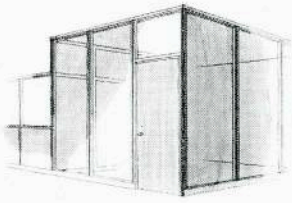

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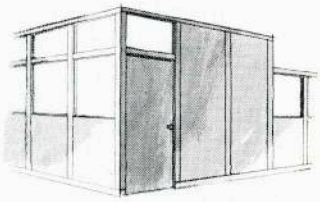

HUDSON
standard line partitions

SURVEY OF THE PROFESSION

The RAIC Committee on the Profession has recently been reconvened to carry out further studies in connection with various aspects of the architectural profession in Canada. Members of the Committee are H. H. G. Moody (F), Chairman, Winnipeg; R. S. Morris (F), Toronto; Peter Thornton (F) Vancouver and Peter Dobush (F) and Henri Mercier (F), Montreal.

In the last two years both the RIBA and the AIA have published reports on the problems related to architectural practice in the UK and USA which vary from each other to a greater or lesser degree in the various areas of practice, as well as being similar to a certain extent in some places. The RAIC Committee on the Profession have studied these reports and come to the conclusion that whereas some problems in Canada relate only to Canadian practice, a great many of our problems are similar to the American practice and comparatively few to those of the UK.

Prof. W. C. Raymore (F)

Before we can recommend a full scale study leading to a report, we feel that it is essential to make preliminary investigations in detail and find out certain basic facts. This will require the full time of an experienced architect over a few months' period. Also, before this preliminary work is started, we think it essential for two of our members to visit AIA headquarters in Washington to talk with those who have been closely concerned with the studies and report carried out in the USA. We have made both these recommendations to the RAIC Council, and now have approval to proceed.

R. S. Morris will go to Washington in early March and will be accompanied by Fred Price, RAIC Executive Director and Prof. W. G. Raymore (F) of the School or Architecture, University of Toronto, who will become an added member of our committee and who will give two months of his time during the coming summer to this investigation work. The work will consist of collecting data and will probably include travelling to the various urban centres in Canada and talking with a wide cross-section of the architectural profession. From this preliminary research the Committee on the Profession will then determine what further steps should be taken and so recommend to the RAIC.

H. H. G. Moody

A. G. HENDERSON, RSA, PPRIAS, HON. FRAIC, HON. FAIA (PAST PRESIDENT RIBA) 1882-1963

AN APPRECIATION

Although we were both students at the Glasgow School of Art about the same period, our paths did not really converge until I welcomed him on behalf of the RAIC, when he disembarked at Quebec accompanied by Mrs. Henderson and Secretary, Bill Spragg.

Details of their architectural pilgrimage of goodwill, belonging to the past have been amply described in the pages of both the RIBA and RAIC Journals.

However, in the passing of the principal figure after a long battle with disability and illness, it seems like an opportune moment not only to express the regrets of the profession in Canada but also to remind ourselves of the many happy incidents and lasting friendships created during their tour which extended to our west coast and terminated as guests of the AIA in Washington.

It might also be fittingly recalled that one tangible souvenir of their travels, the badge of office which now adorns our own Presidents, came from the RIBA as a token of appreciation for RAIC efforts on their behalf.

In a great many unheralded respects, President Henderson and his party provided a notable tie with our overseas professional affiliations while at the same time adding stimulus to the relationships among the members in Canada!

Along with our many regrets, we offer our condolences to his devoted wife and daughter Marie.

J. Roxburgh Smith, PP, RAIC

AIRPORT SIGNS COMMENDED

The Sign Association of Canada has voted a commendation to John B. Parkin Associates for "excellent control and esthetics" for design and lettering of the signs in the new Toronto International Air Terminal building at Malton.

POSITION AVAILABLE

A qualified architect is required for a medium sized practice in Saskatchewan. The architect should be capable of handling entire projects from inception and supervising the work of draftsmen. Emphasis would be placed upon design ability and a younger man is preferred. Applicants should write stating salary desired, to Kerr, Cullingworth, Riches & Associates, Architects, 602 Investors Building, Saskatoon, Saskatchewan.

POSITIONS WANTED

Two Israeli architects (husband and wife) seek positions in architect's office anywhere in Canada. Would like to work for at least one year and will be available about a year from now. Have experience in both Europe and England on public and private projects since graduating in 1961. For further information write: Raphael Dankner, c/o Sir Basil Spense, architect, 1 Fitzroy Square, London, W1, England.

PRACTICE NOTES

The firm of Thompson, Berwick & Pratt announces that it has merged with O. Safir & Co. Ltd., consulting engineers specializing in structural work and R. J. Cave & Co. Ltd., civil and mechanical engineers and planners. The new firm will be known as Thompson, Berwick, Pratt & Partners.

Senior partners are R. A. D. Berwick, C. E. Pratt and Otto Safir. Other partners are R. J. Cave, J. M. Dayton, Roy Jessiman, F. S. Brodie, D. A. D. Hickman and R. J. Thom. The firm's headquarters will continue to be at 1553 Robson Street, Vancouver.


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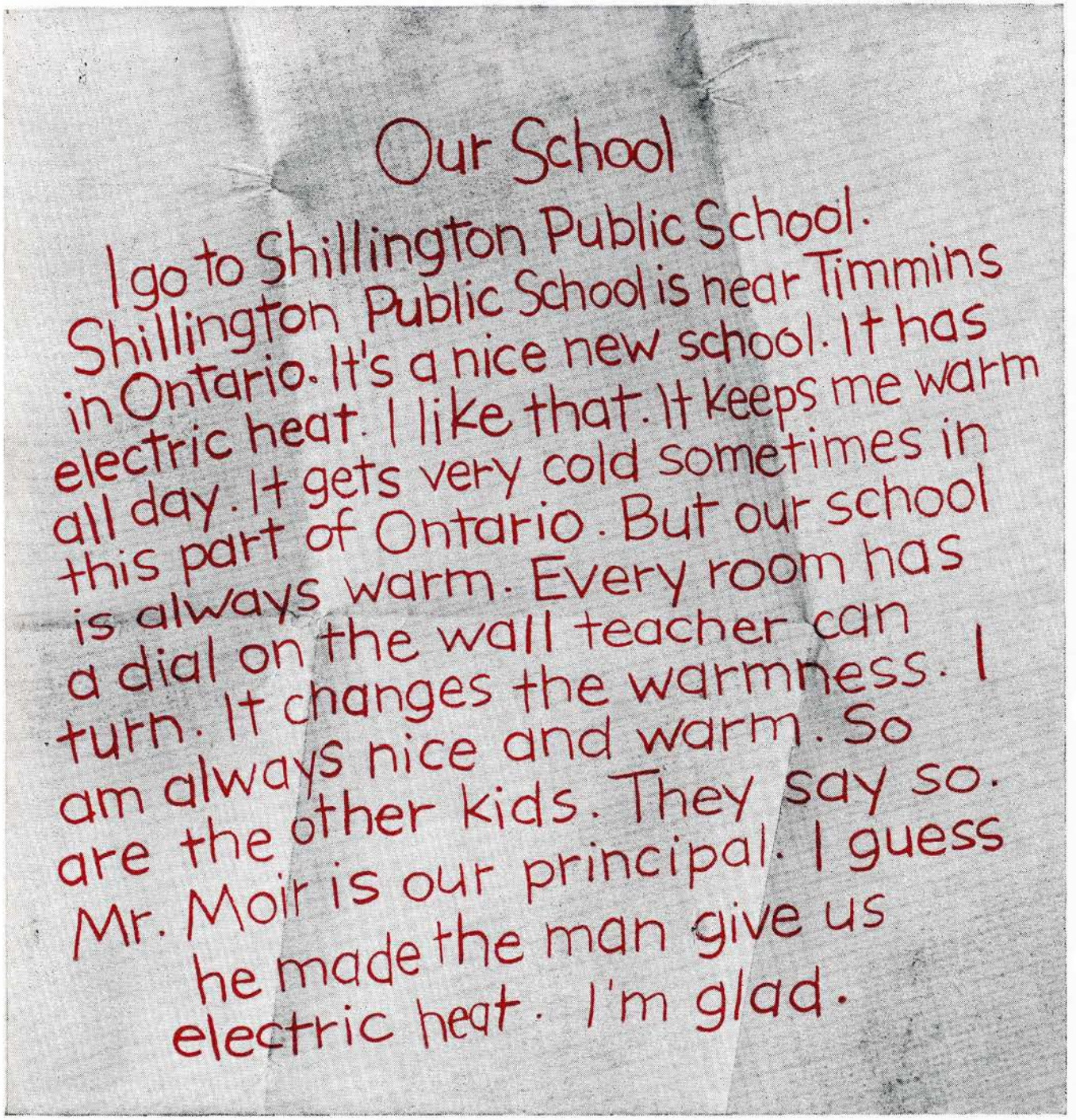

Provincial News

40TH ANNUAL MEETING OF THE MANITOBA ASSOCIATION OF ARCHITECTS

Thomas Creighton's remarks at the RAIC Annual Assembly in 1963 seemed to voice many premonitions already held by members of the Provincial Associations across Canada. The problems of the practice of architecture in a swiftly changing economy are being dealt with by councils in every province. The real efforts in these endeavors are undoubtedly being accomplished by hardworking sub-committees who are beginning to focus on these critical questions. The president's report by Isadore Coop framed the four major areas of concern — the regulation of practice in Manitoba, education, public relations and our liaison with the RAIC. The critical questions of fee schedules, expanded services, package deals and other related problems have not been examined too closely in the past year by this council due to the fact that a special sub-committee dealing with revisions in the Act had still to make their recommendations. This has now been accomplished and if such revisions are accepted by the membership and passed by the Legislature, renewed efforts can be made in dealing with these questions. In this direction Mr Coop suggested that the deliberations on these matters at the British Columbia Institute's last Annual Meeting merited investigation.

In the area of education, the president, at this point invited the Assembly to record particular pleasure in the news received last fall of the elevation of the School of Architecture to a full faculty and the appointment of John Russell as dean. This move was accomplished at a special convocation at which Sir Basil Spence was awarded the Honorary Degree, Doctor of Laws (honoris causae) by The University of Manitoba. Particular attention was drawn to the singular success of the joint-lectureship program of last year. This venture has proven to be a unique instrument for sustaining the interest of the practising members in a matter of critical importance — "our concern about architecture itself and our problems of designing buildings which are properly related to a changing society in a changing environment". The conference last year, in connection with the School's 50th Anniversary, dealing with Architecture in the Northern Latitudes, was a fine success and members were exposed to the unique talents of Ralph Erskine. This year of 1964 will mark the 50th year of the Manitoba Association of Architects and the president urged that special efforts be made to mark this significant event.

Mr Coop proceeded into the area of public relations by stating that "virtually every matter which came to your council's attention in the past year, in one way or another, impinged upon questions of our public image . . ." The chairmanship of the committee was under the direction of N. C. H. Russell, who strongly suggested our public image was somewhat out of focus. Among some excellent recommendations from this committee was one urging the Manitoba Association of Architects to undertake a sustaining membership in the Manitoba Historical Society and to assume an active role in the recording and documenting of buildings of historical importance. This recommendation was later buttressed by a resolution from Morley Blankstein asking for more active participation in this direction. It was pointed out that "although the architectural heritage of Western Canada is very young, many structures are just now reaching the critical age where they may be lost without active intervention".

One recommendation from the president's report regarding public relations, which was of crucial value in my opinion, dealt with the active support of the MAA to the Faculty of Architecture in the field of research. The availability of an architectural research group could be of immeasurable value in assisting the MAA to respond knowledgeably to particular public issues of local interest. To promote and endorse good planning decisions is, in the final analysis, our best public relations.

W. J. Whenham, MAA President Elect

One report, which caused considerable controversy among the membership, was that of the RAIC Journal Committee. Some rather sweeping suggestions by this committee advocated that the Journal become a quarterly publication and take on a more professional image in dealing with current theories of architecture, research in architecture and architectural criticism; that the subject matter be more controversial; that the Journal disband the provincial editorial committees and have the publication material selected by a staff member. A final recommendation by this committee stated that the image of the Journal be altered or its publication be abandoned. As could be expected a spirited controversy ensued . . . the progressive development and improvement in the Journal was stoutly defended and there was no unanimity in the adoption of this report.

The most interesting and topical of the new business was that dealing with Canada's centenary celebrations. With great pride we learned that Etienne Gaboury had been appointed to act on the advisory committee by the Canadian Corporation for the 1967 World Exhibition. Mr Gaboury made an excellent case for the choice of the theme "Man and his World", and urged that steps be taken to study ways in which the MAA can contribute to the success of the undertaking. A resolution suggesting that the MAA undertake its own Centennial Project was unanimously endorsed.

At the luncheon, we were pleased to formally welcome Fred W. Price, new Executive Director of the RAIC, who brought warm greetings from the East.

Following the luncheon, a group of fourth year students from the Faculty of Architecture recreated their Chicago Tour of 1963. This was a production of considerable virtuosity, which included tape recordings of poetry readings and jazz, a cartoon impression of Chicago, slides of significant architecture and events and a movie film, all of which, in concert, captured the pulse and energy of a great

(Continued on page 17)

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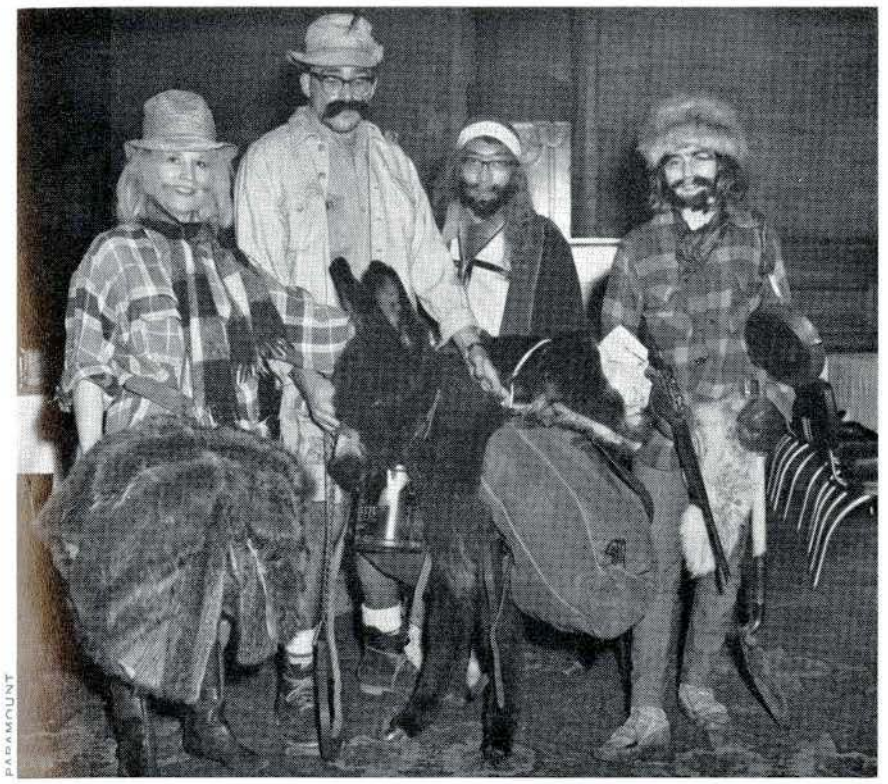

American city. Needless to say, this student production also dealt with the technology of the new pop-top beer cans and the esthetics of the slender ankles of Chicago office girls on lunch hour. In any case it provided stimulating and amusing entertainment.

The final event was the staging of the Beaux Arts Ball that evening. The theme appropriately enough, was "Gold", which topped the Golden Jubilee celebrations of the School of Architecture. (1964 will also be the Jubilee Year of the Manitoba Association of Architects). The ballroom was filled with *GOLD*fish, miners from the '49 *GOLD* Rush complete with live burro, 14 carats and a whole tribe of natives from the *GOLD* Coast. On this significant theme the 49th Annual Meeting of the MAA ended.

R. Douglas Gillmor.

The newly elected council of the Alberta Association of Architects: back row, from left; D. G. Forbes, D. L. Sinclair, K. C. Stanley, H. Seton, president; H. Dunn, K. L. Bond and G. R. Robins. (Not present were R. F. Bouey and J. McIntosh). Front row, from left: Mrs. F. O'Connor and Mrs. H. L. Bond.

ALBERTA ANNUAL MEETING

The 53rd Annual General Meeting of the Alberta Association of Architects was held at Banff on 25th January. H. W. Seton, Calgary, was elected President, with R. F. Bouey, Edmonton, First Vice-President; H. Dunn, Edmonton, Second Vice-President; D. L. Sinclair, Edmonton, Honorary Secretary and J. McIntosh, Edmonton, Honorary Treasurer. Members of council at large elected were D. G. Forbes, Mrs. F. M. O'Connor and K. C. Stanley, Edmonton; K. L. Bond, Calgary, G. R. Robbins, Lethbridge.

The principal speaker at the convention, Chief Justice McLaurin, urged the Association to assume the leadership in the field of civic planning and beautification, saying that Canadian cities were woefully backward here. He stressed the role of the independent architect in private and public enterprise in ensuring integrity and accuracy.

Guest speakers at the convention luncheon were John L. Davies (F), President RAIC, and Fred Price, Executive Director. Topic of the President's address was the situation of the architectural profession throughout Canada. While referring to the problem in Alberta, where the Provincial government practices in many fields which are normally served by the architect in private practice, Mr. Davies also spoke of problems in other provinces, and said that, in most ways, the challenge faced by architects is the same in all parts of Canada and, in fact, in the world. The President also spoke of the recent Commonwealth meeting of architects in London and of the International Union of Architects gathering in Cuba and Mexico, when Canada was admitted to membership. He said that the way in which architects of all nations laid aside politics and worked together to help solve common problems was very reassuring and exciting. Although architects must solve their own local problems, the most important way in which they can serve society and themselves is constantly to strive for the highest standard of architectural competence.

Two new members, D. J. Dubeta and D. H. Kirk, were inducted at the President's reception.

J. McIntosh

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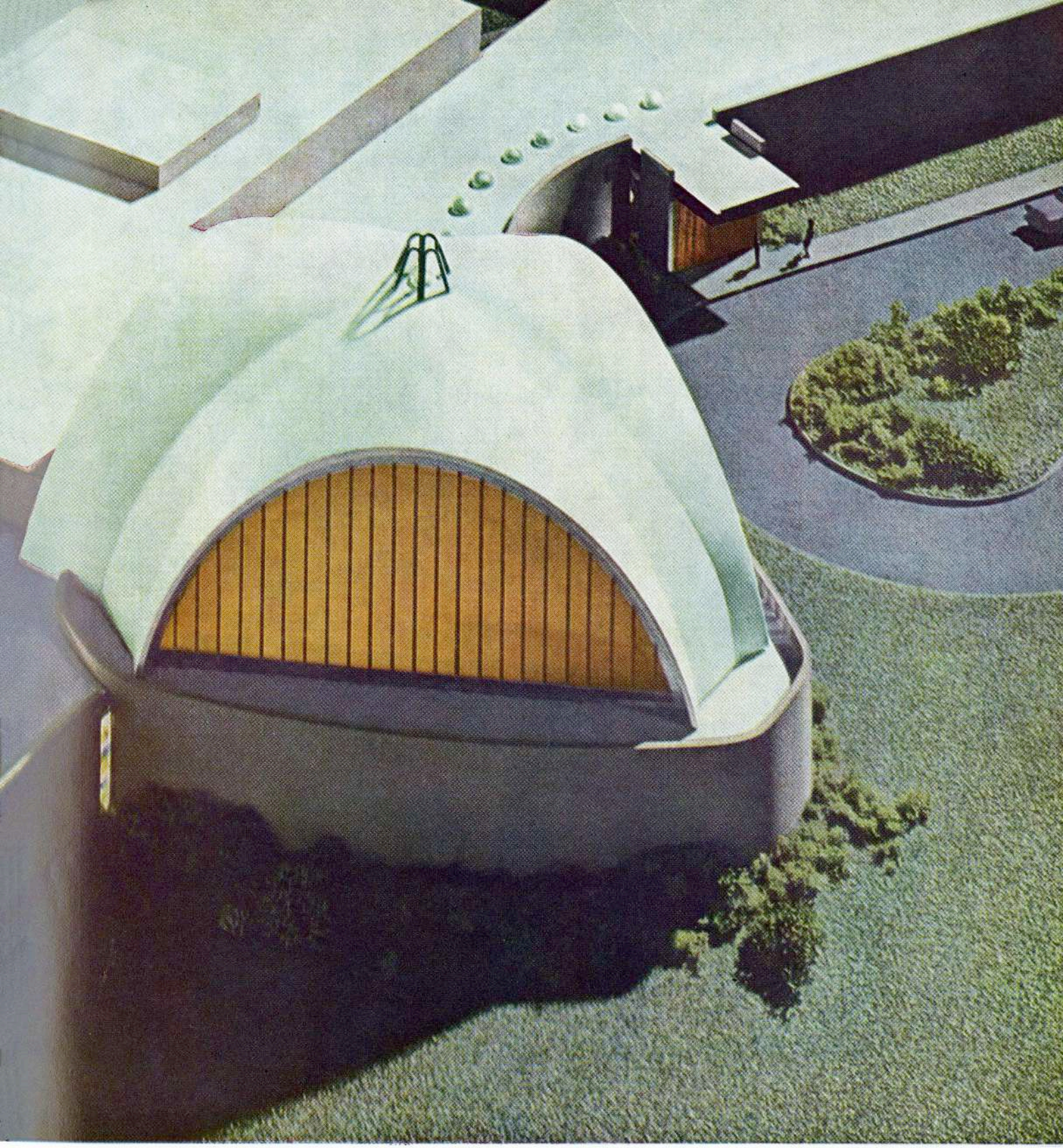

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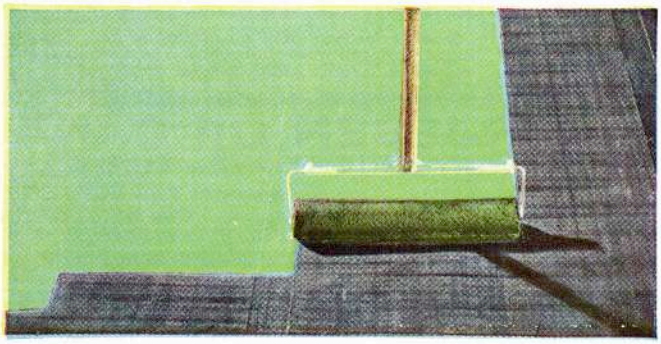

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Letters

Editor RAIC Journal,
Your article on my sculpture for the new Telegram building showed your magazine to have good taste as well as solid insight into my work.
Please continue in this attitude.
Gerald Gladstone, Toronto.

Editor, RAIC *Journal*

We have been particularly pleased to observe the steady improvement in your publications over the past few months. Your January issue approaches a quality identifiable with a profession which proports the basis of its visual manifestations in intellectual and creative search.

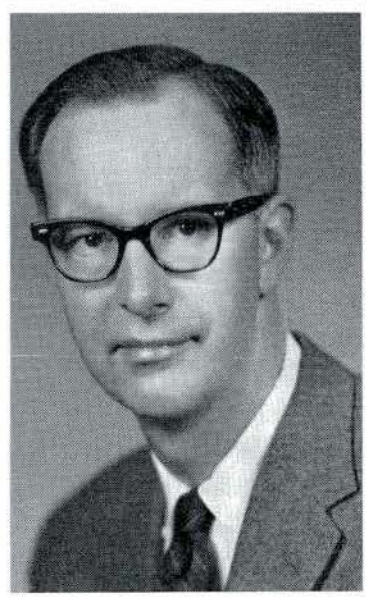
Your new approach is qualitatively evident in the inclusion of the Erskine essays and visually evident in the vast improvement of graphics and layout of the cover, and contents page.

S. Benjamin, Winnipeg

Editor, RAIC *Journal*

With reference to my article *"Standard Canadian Bid Depository"* in the RAIC Journal January 1964, I would like to amplify the last paragraph concerning the Federal Department of Public Works' formal specification of bid depository. Subsequent to the publication of the article the Department has established the following policy: bid depository will be formally specified on DPW projects under the "Standard Canadian Bid Depository Principles and Procedures for Federal Government Projects" on building construction work valued in excess of $200,000 and advertised in March but closing after April 1, 1964. For the initial trial period at least, the trades to be specified will be electrical and mechanical.

E. L. Mahoney, CCA, Ottawa



HEADS ARCHITECTURAL HISTORIANS

Prof H. Allen Brooks, who teaches history of Art at the University of Toronto, has been elected president of the Society of Architectural Historians at its annual meeting in Philadelphia. Dr. Brooks, an occasional contributor to the Journal, is completing a book about Frank Lloyd Wright's Chicago contemporaries.

AIA AWARDS FOR 1964

The AIA Gold Medal for 1964 has been awarded to Pier Luigi Nervi, and the Fine Arts Medal to Henry Moore. One of Moore's best known works in Canada is the sculpture outside the Canadian Imperial Bank of Commerce in Montreal.

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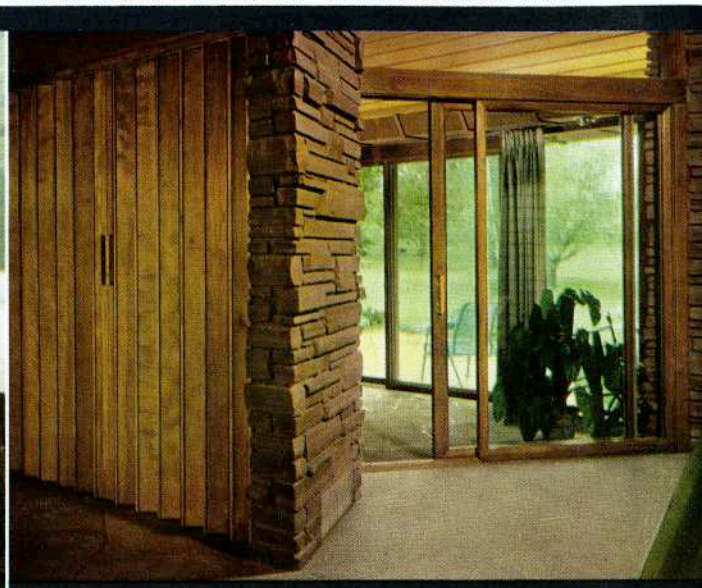

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Book Reviews

ARCHITECTURAL PHYSICS: LIGHTING, by R. G. Hopkinson. Published by Her Majesty's Stationery Office: 1963; pp. 354; 8½ in. by 12 in.; price £2-10s-0d (approx. $7.00)

The author has been in charge of lighting research at the Building Research Station (Dept. of Scientific and Industrial Research) in Britain since 1947. During this time he has worked closely with the architectural and lighting professions and has become aware of the need for a new approach to lighting studies in the training of architects. This book has been written primarily with the needs of undergraduate and graduate architectural students in mind, but it should be of interest to graduate architects as well.

The book is divided into two distinct parts: Part I deals with the technical basis of lighting which an architect should know, and Part II consists of reprints of various research papers published by the author and his colleagues which deal in a more specialized way with the topics discussed in Part I. The treatment of the material is quite unique. Lighting is considered as one of the aspects of building science which is concerned with human beings in their environment; the first two chapters are therefore devoted to a discussion of psychophysics, and its importance in lighting studies and design. Lighting and vision are discussed briefly and then four chapters are devoted to daylight; the effect of window shapes and position, etc.; measurement of daylight with models; and details of methods of calculation. Basic artificial lighting techniques are outlined and a very valuable chapter is included on the use of artificial lighting as a permanent supplement to daylight.

The material in this book is very well organized and presented, with numerous helpful illustrations. The inclusion at the end of each chapter in Part I, of a summary of the material of the chapter, should be very helpful for students. A list of books for further reading is given at the end of Part I and a very detailed list of references is given at the end of Part II. This is an excellent book and should be very helpful to students, practicing architects and research workers in the field of building science.

M. G. Currie

LETTERING FOR ARCHITECTS AND DESIGNERS, by Milner Gray and Ronald Armstrong. 160 pp. illus. B. T. Batsford Ltd., London 1962. 63/-.

SIGN LANGUAGE, by Mildred Constantine and Egbert Jacobson. 212 pp. illus. Reinhold Publishing Corporation 1961 $15.

LETTERING FOR ARCHITECTS AND DESIGNERS gives a wide survey of the use of letters and symbols as a means of communication and identification. The first part of the book deals with early alphabets, scripts and types, leading to the development of easily identifiable signs and display lettering, which it is realized, in turn lead back full circle to the picture writing from which alphabets began. The next section deals with the selection of the right letter-form, with many examples; these range from exhibition and ephemeral lettering to corporate symbols, road signs, air line badges, and the labels of branded goods. There is also an account by Eliot Noyes of his sign study for IBM. The authors then give practical information on the construction, illumination and specification of letters in various media. The whole book is well-illustrated with examples largely, but not exclusively, from England, and a good coverage is given of contemporary practice.

SIGN LANGUAGE by Constantine and Jacobson sets out to give a visual grammar and vocabulary relating the subject to the urban and rural scene. By means of many striking and wide-ranging illustrations, four pages of which are in colour, the authors deal with advertising and signs on buildings and roads, readability related to speeds and letter sizes, neon and moving signs, and the relationship of the whole to the environment and to twentieth-century culture.

If architects are concerned with the spiritual expression that makes the city a contemporary symbol, then they will have to resolve not only social and economic needs in building, and the requirements of traffic, but also the ever-changing demands of communication.

Jonas Lehrman

Critiques de livres

par Denis Tremblay (A)

MARCEL BREUER:
REALISATIONS ET PROJETS — 1921-1962.
Légende et introduction par Cranston Jones.
(Vincent, Freal & Cie, 4, rue des Beaux-Arts, Paris VI.)
1 Vol rel. 9″ x 11″, 264 pages, 274 illustrations et plans dont six en couleurs.

Prix approx. $18.00

La préface est une allocution prononcée par Marcel Breuer. L'ouvrage est présenté par Cranston Jones, où il relate les études de Breuer qui arriva de Hongrie au Bauhaus à l'âge de 18 ans, où il fut l'élève de Gropins, puis son collaborateur quand l'école de Weimar s'établit à Dasseau en 1926 dans les nouveaux immeubles dessinés par Gropins.
L'on sait que Breuer est le créateur de chaises en tubes metalliques et contreplaqué et qu'il révolutionna l'art du mobilier. Mais c'est surtout l'architecte et ses réalisation que l'ouvrage présente et commente. Bien que ce volume soit surtout un album de photos d'oeuvres réalisées et de projets, il contient aussi des textes de Breuer où il expose sa propre philosophie de la composition architecturale de même que ses jugements personnels sur WRIGHT, NERVI, le peintre Paul Klee, sur l'enseignement de l'architecture, le Bauhaus, l'urbanisme et autres sujets de la plus grande importance pour notre profession. Tous ces textes sont à lire et à méditer.
Cet ouvrage parait également en anglais sous le titre "Building and Projects, 1921-1962" (Frédéric A. Praeger, N.Y.) et on en trouvera une assez longue analyse dans la livraison de Janvier 1964 de Progressive Architecture.

PIER LUIGI NERVI: STRUCTURES NOUVELLES.
(Vincent, Fréal & Cie, 4, rue des Beaux-Arts, Paris VI)
1 Vol relié, 9″ x 11″, 168 pages.

Prix approx. $16.00

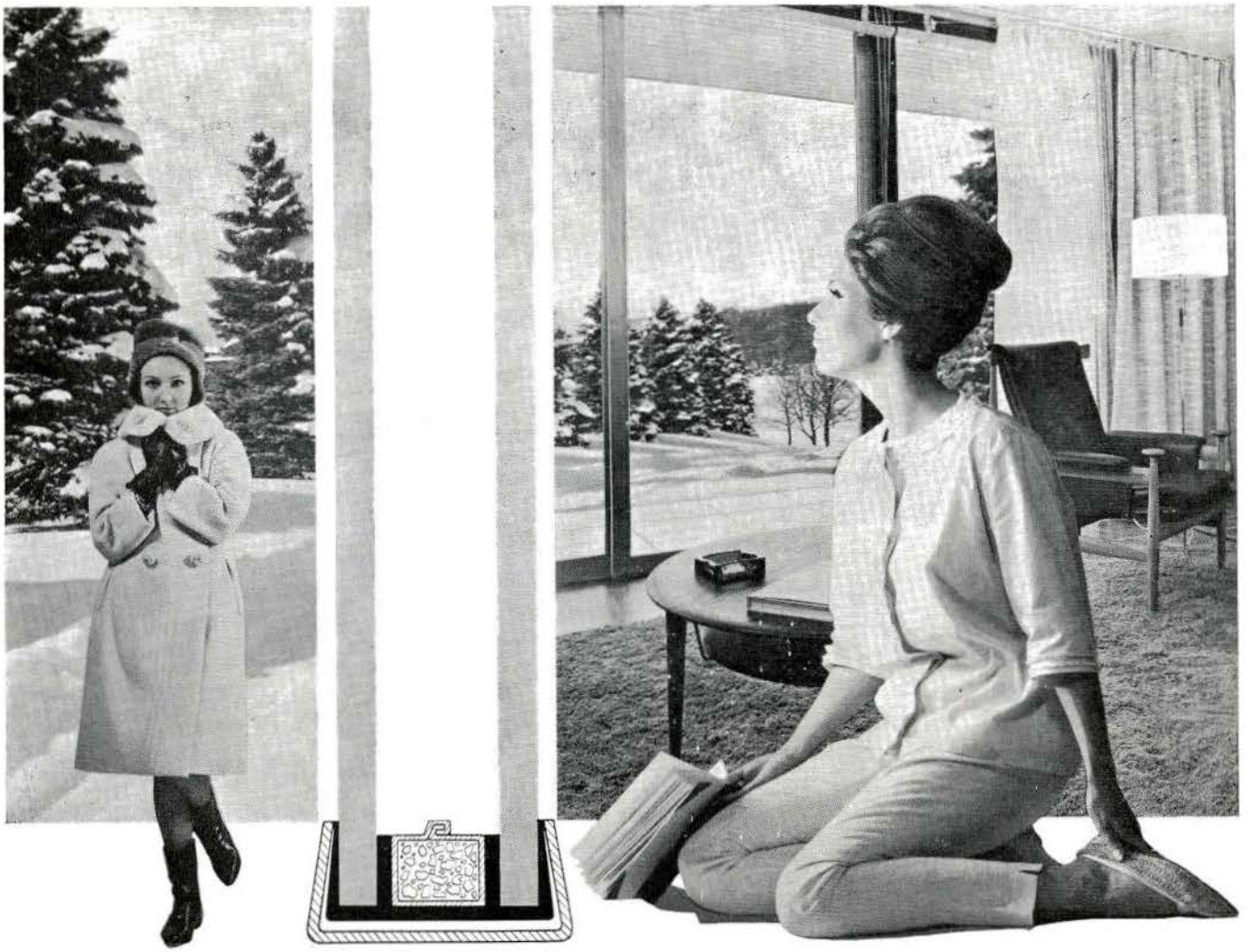
Il s'agit d'un album ou recueil de photos d'oeuvres réalisées, de dessins et de maquettes, accompagnés de brèves descriptions et commentaires pour chaque illustration, en français et en allemand.
Nervi n'est pas à présenter à des architectes ou à des ingénieurs en structure, et c'est sans doute pourquoi ce livre ne comporte ni préface, ni présentation du grand constructeur et ingénieur italien de réputation internationale. L'on sait en effet que Nervi est l'un des grands virtuoses du béton armé, qu'il a su porter jusqu'ici aux limites de ses possibilités, et que ses oeuvres valent tout autant par leurs qualités esthétiques que structurales. Il est l'inventeur du ferro-ciment, qui consiste à incorporer plusieurs rangs serrés de treillis métalliques de petit diamètre dans le ciment pour constituer des voiles minces ondulées et très légères pour leur résistance, ce qui permet de couvrir de grandes surfaces avec une grande économie de matériaux.
Il fut associé à Breuer et Zehrfuss pour le Palais de l'UNESCO à Paris, et il faut lire ce qu'en dit Breuer dans le livre *Réalisations et Projets,* présenté dans cette même livraison du *Journal.* Le petit Palais des Sports construit pour les Jeux Olympiques de Rome (1957) est sans doute, son chef-d'oeuvre à ce jour par son élégance et sa beauté.
Ce volume doit s'ajouter, sur les rayons de la bibliothèque de l'architecte, à d'autres ouvrages sur Nervi, en particulier au volume qu'il écrivit lui-même: *Construire Correcttemente* publié en anglais sous le titre *STRUCTURES* (F. W. Dodge Corporation, N.Y. 1956) ou encore au volume de la collection "The Masters of World Architecture Series" (Geo. Brozilliers Inc. N.Y. 1960).

MICHEL RAGON: OU VIVRONS-NOUS DEMAIN?
(Robert Laffont, 6 Place Saint-Sulpice, Paris VIe)
1 Vol bro. 6″ x 9½″, 214 pages, 1963.

Prix $6.25

Il s'agit d'un ouvrage consacré à l'architecture fantaisiste ou paraissant telle, ou encore plus ou moins utopique.
Mais comment distinguer l'utopie du possible? Combien d'utopies d'hier sont devenues aujourd'hui réalités ou le seront demain? Suivant les concepts généralement reçus il y a à peine cent ans, ne vivons-nous pas aujourd'hui en pleine utopie?
Les philosophes ont de tous temps rêvé de la Cité idéale, tant sur le plan de sa constitution économique et sociale que sur celui de son aménagement matériel. L'Utopie, ou *Utopia,* de Thomas Morus a servi à désigner toute conception ou plan jugé irréalisable. Aujourd'hui, ce sont les architectes et les urbanistes qui rêvent de la Cité de demain et en tracent l'image.

L'auteur en tant que chroniqueur pour l'hebdomadaire *"ARTS"* a été amené à connaitre les architectes, urbanistes et sociologues les plus prospectifs, et ce sont leurs idées et leurs propositions qui lui ont permis de dégager les grandes lignes de ce qu'un avenir pas très lointain nous réserve peut-être. L'explosion démographique, en effet, oblige à de nouvelles solutions pour l'aménagement urbain comme pour l'habitat collectif afin d'empêcher l'homme d'être étouffé par la ville et la ville de mourir par congestion.
Ce livre traite des nouvelles formes de la ville de demain, d'un urbanisme spatial ou vertical libérant le sol et de l'urbanisme souterrain; des nouveaux matériaux et des nouvelles structures; de maisons transportables et autres sujets de la même veine et se termine par un chapitre sur la civilisation des loisirs qui nous attend grâce à l'automatisation qui libérera de plus en plus d'hommes du travail.
L'architecture étant une recherche constante de solutions nouvelles pour des problèmes nouveaux, ce livre, où l'imagination ne fait pas défaut, fera passer de bons moments qui ne seront pas du temps perdu.



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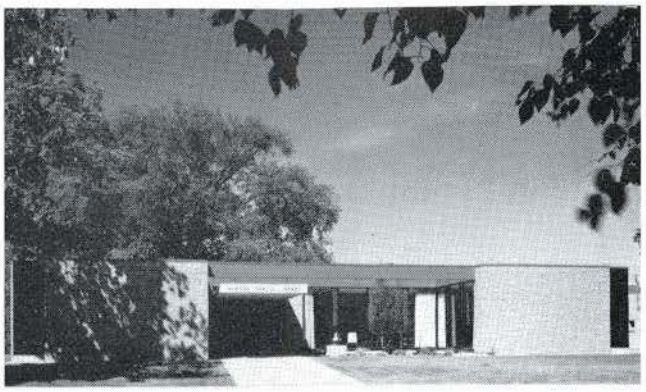
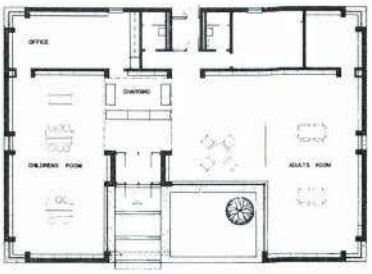


JOWETT



AURORA PUBLIC LIBRARY

An expression for the suburban or town library has undergone a struggle similar to the little red schoolhouse. Not quite large enough to make a bid for architectural greatness the solutions to these small scale structures are usually wrought with architects' frustrations.

Stanley Heinonen of Irving Boigon and Associates has revived the dignity that these buildings used to have. The graceful horizontal lines of the new contrast well with the heavy mass of the old. However, in using steel to achieve this apparent lightness, it has left the interior with an openness of planning not suitable to the function. Although it is obvious that attention has been given to the location of books (along the exterior walls) there is no privacy. This will probably change as the activities of the program are fulfilled and new stacks used to break up the area into suitable cells of quiet contemplation. *NH*

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Affleck, Desbarats, Dimakopoulos, Lebensold, Sise; Architects

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New Filing Index Adopted

A new format for data filing and construction specifications to replace the existing American Institute of Architects Standard Filing System and Alphabetical Index, which is also used by the RAIC, was adopted at the Third Industry Conference on Uniform Indexing held at AIA Headquarters in Washington on February 23. Canadian delegates to the Conference, Robert Briggs, Toronto, representing the RAIC and Peter T. M. Barrott *(F)*, Montreal, representing the Specification Writers Association of Canada, voted in favor of the new system, making official its introduction to Canada in place of the 44-year-old RAIC/AIA system.

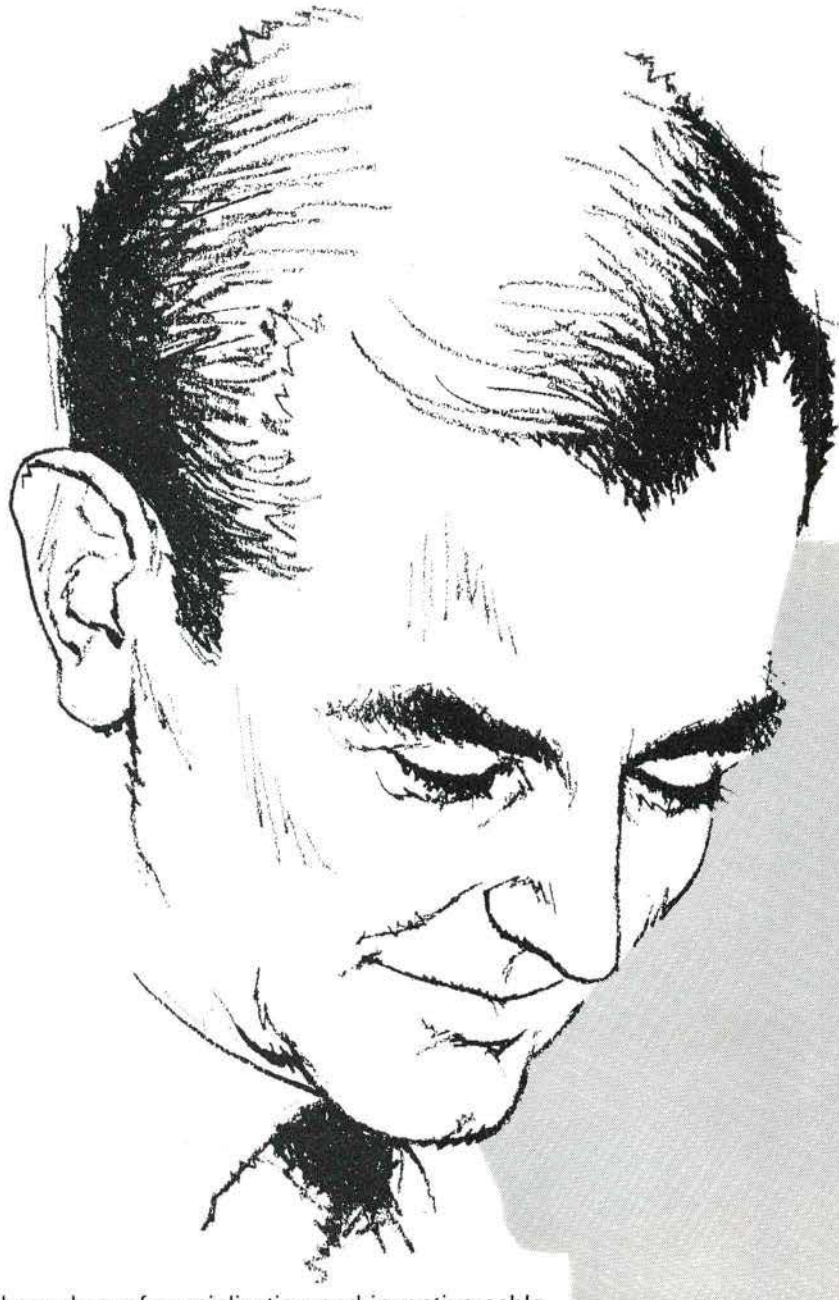
Much remains to be done before the new system can be taken into use, however, as it will be some time before data converting the old system to the new can be made available. Progress will be reported at a fourth conference scheduled at Washington on July 13. Manufacturers will require guidance on how to index new literature for filing purposes, and it is possible that numbers will be alloted officially, and not selected arbitrarily by the manufacturer.

The new format grew out of the "CSI Format for Building Specifications" devised over the past few years by the Construction Specifications Institute in the United States. The AIA last year approved it as a basis for further study and application where feasible, and a Liaison Committee of the AIA and the CSI was established to conduct conferences of all groups engaged in building construction to decide upon a new system acceptable to all, or most groups. The new format, which is the result, differs from other systems in that it is geared directly to specification writing. It is as much a retrieving system as a filing system because all product literature and data used in the writing of a specification section is given a corresponding number in one of 16 divisions. Thus the technical data and literature of all manufacturers of the same product is in one file. While the numbers of the 16 divisions and their titles are fixed, complete flexibility is possible in the arrangement of sections, within each division, in alphabetical sequence. Filing identification for literature is restricted to the manufacturer's name, the date of issue, the division number, a fixed subgeneric group name in capital letters with, underneath in lower case letters if further identification is necessary, the name of the specific material. For example, Section 9 is Finishes. Vinyl asbestos is a resilient flooring and therefore a finish. Its filing identification would be

The XX Co, 1964
9 RESILIENT FLOORING
vinyl asbestos

The 16 Divisions are:

1 — General Requirements
2 — Site Work
3 — Concrete
4 — Masonry
5 — Metals: Structural & Miscellaneous
6 — Carpentry
7 — Moisture Protection
8 — Doors, Windows & Glass
9 — Finishes
10 — Specialties
11 — Equipment
12 — Furnishings
13 — Special Construction
14 — Conveying Systems
15 — Mechanical
16 — Electrical



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In these days of specialization and inventive cable development the consulting engineer or architect almost needs eyes in the back of his head to keep up. Either that or a close working relationship with someone who spends 100% of his time in the field.

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Cost Control

by James Vair

Detailed accounting records covering each project undertaken by the firm serve two main purposes: to exercise management control when the cost tends to become excessive in relation to the fee exigible; to provide a useful historical record of work performed, cost and time of various personnel involved, and other statistical data for comparison with or in budgeting similar projects that may arise in the future.

The project ledger is perhaps the most important accounting record that an architectural firm maintains. Its function, as the name suggests, is to analyze the costs and fees of the firm by each project undertaken. In other words, the unit of study in the case of the project ledger is the individual project or job. By contrast, the general ledger from which the statement of income for the firm is prepared, is a summary of operations treating the whole firm as a unit.

Without going into the mechanics of the accounting procedures involved, it may be stated that the general ledger provides the control totals for the elements of cost and revenue that enter into each individual project. In a sense, then, the profit or loss for the firm as a whole is the sum of the individual profits and losses on each project. Viewed in this light, it will be seen that the individual project becomes the control point for the profits of the firm. This is somewhat of an oversimplification, but it is a useful concept to keep in mind.

The elements of cost which enter into a project were illustrated by the statement of income which appeared in the January issue, that is: fees of engineers and consultants; staff salaries; other direct costs; overhead (the indirect costs of the firm, usually described as "administrative and general expenses").

The actual format of the project ledger varies considerably among architectural firms and is naturally influenced by the method of record-keeping employed, whether manual or mechanized. Good general rules to observe are to keep it simple, and to avoid too large a form. Under a manual system, data with respect to fees paid and received are best shown on a separate page or card to provide space for the columnar analysis of salaries and overhead by the various stages involved in each project. A typical breakdown by stages might be as follows: client consultation; sketches and preliminary drawings; working drawings; specifications; construction supervision; revision of working drawings arising from changes by the owner. Again, there is nothing universal about these classifications, and different firms will be found to use a more or less elaborate breakdown.

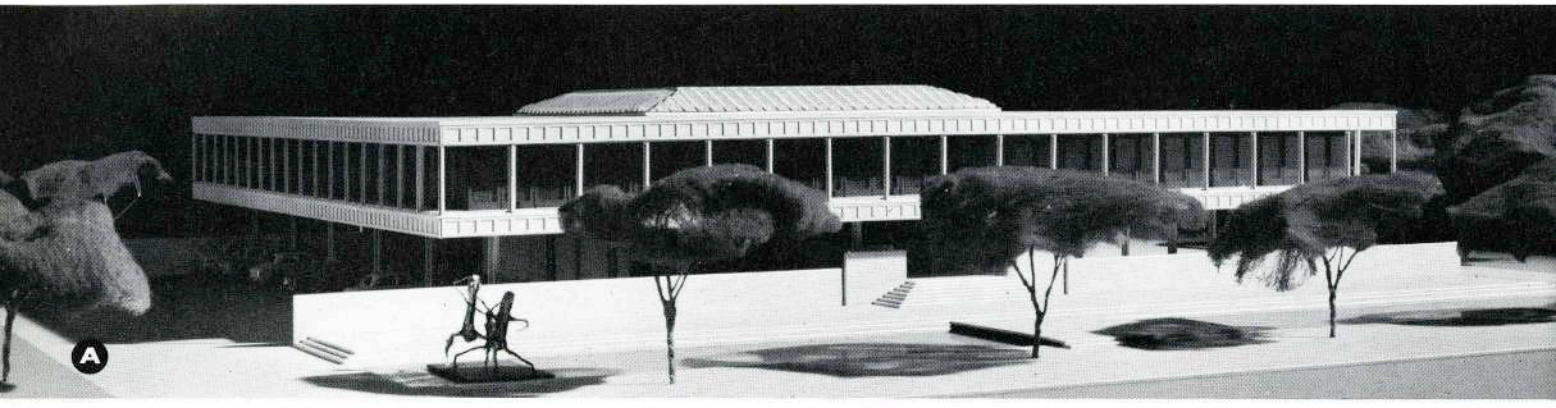
Fees paid and received are generally posted from copies of engineers' bills submitted and copies of the firm's accounts rendered to clients. The actual books of account for summarizing these particular business papers would be the cash disbursements journal or voucher register in the case of fees paid, and the cash receipts journal in the case of fees received, assuming the firm is on a cash basis.

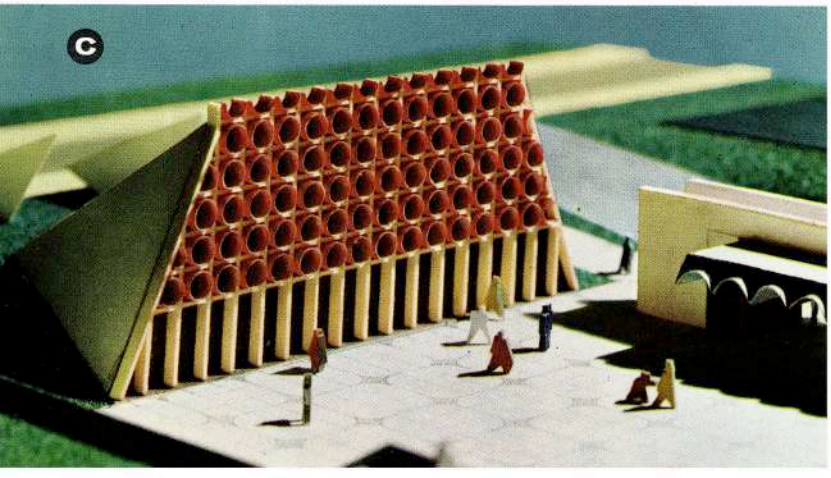
Other direct expenses would also originate from the voucher register, in the maority of cases, although some of the larger firms use a special book termed the "Job Direct Expense Journal."

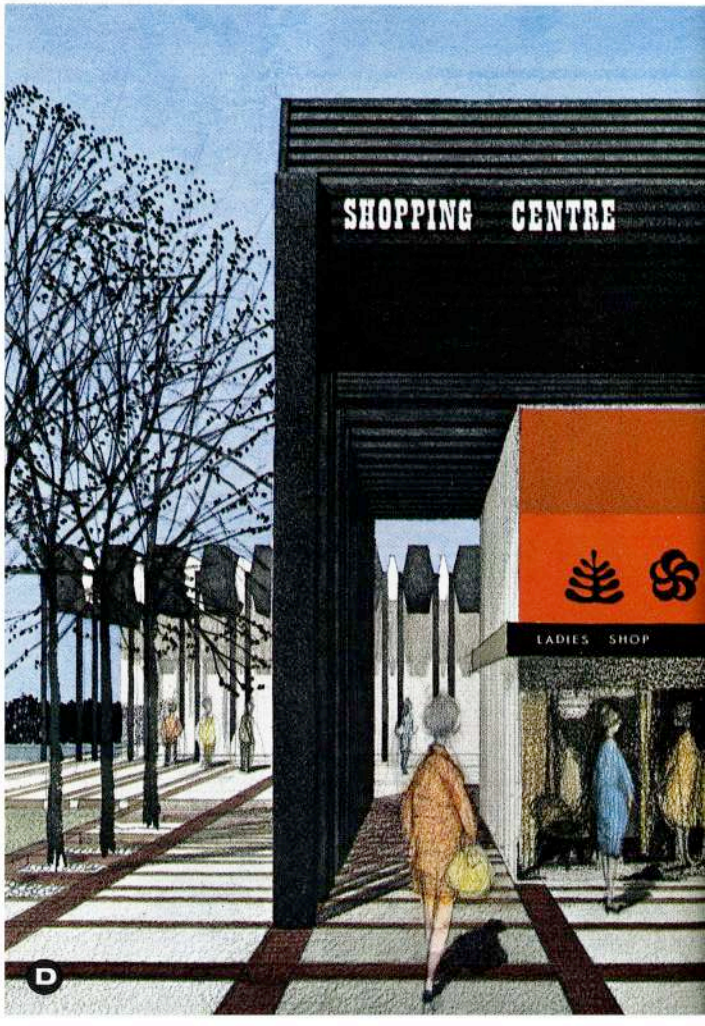
The distribution of salaries and overhead to individual projects is more complicated, and generally requires careful consideration to develop a formula that will be satisfactory to the principals in a firm. The belief is commonly held that a job is charged at the same hourly rate at which the men involved are paid, and that this is the extent of the cost accounting required. As most architects know, however, it is not quite so simple. For one thing, associates and draftsmen are almost invariably paid on a fixed salary basis, so that the question immediately arises — what is an appropriate hourly rate taking into account the "normal" productive hours that a man is expected to work? In the writer's opinion, the best approach is to budget a man's chargeable hours for the year in advance and divide this figure into his total compensation. The budget of chargeable time may be calculated somewhat as shown.

Total possible — 52 weeks @ 40 hours		2,080
Less 8 statutory holidays	64	
2 weeks annual vacation	80	144
		1,936
Estimated non-chargeable time, 7%		136
time for year		1,800

WHEN YOU BUILD WITH







Illustrated above are representative examples of the imaginative use of steel construction, selected from the "TREND" Program of modern architectural design, conducted by The Steel Company of Canada with the cooperation of leading Canadian architects.

A. OFFICE BUILDING: *Architects*, Bland, Le Moyne & Edwards
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C. SUBWAY STATION: *Architects*, R. D'Astous and Associate
D. SHOPPING CENTRE: *Architect*, Michael M. Kopsa, M.R.A.I.C.
E. FIELD HOUSE: *Architects*, Izumi, Arnott and Sugiyama
F. URBAN CHURCH: *Architect*, Clifford Wiens, B.Sc., M.R.A.I.C.
G. MARINA: *Architects*, Roscoe & Maciver

Professional Consultant for series: Prof. E. R. Arthur, M.A., LL.D.

THE STEEL COMPANY OF CANADA, LIMITED • *Hamilton/Montreal* A Canadian-owned company with sales offices across Canada, and representatives in principal overseas markets.

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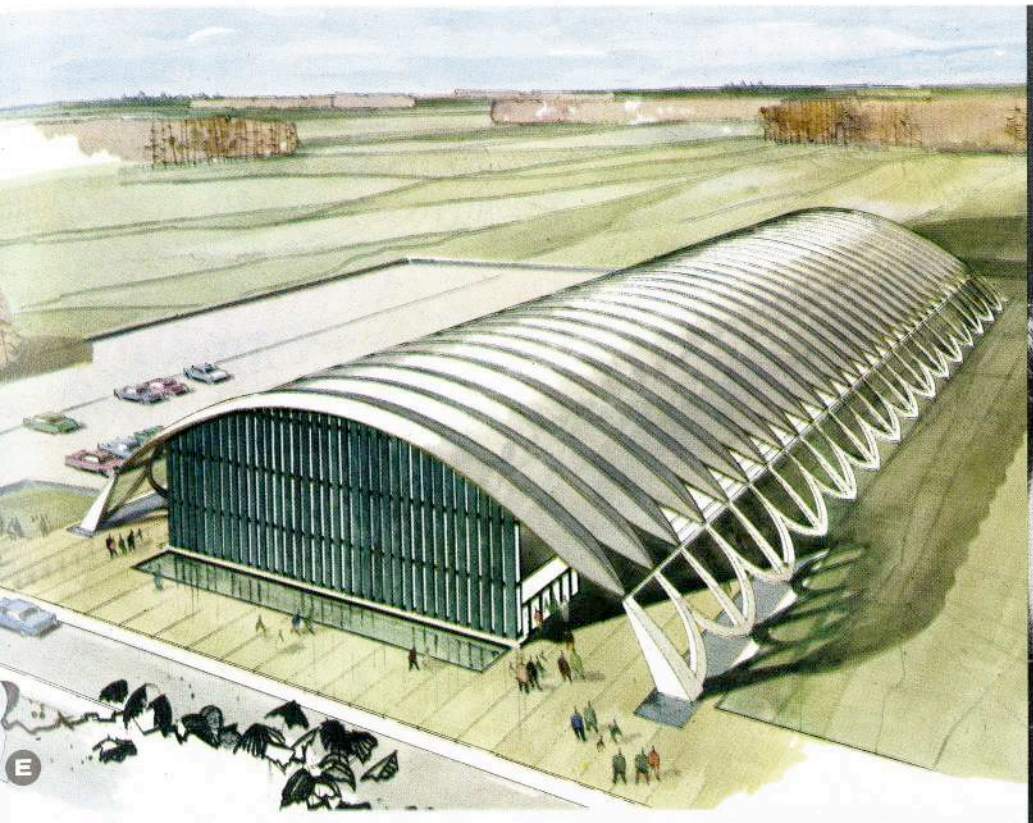

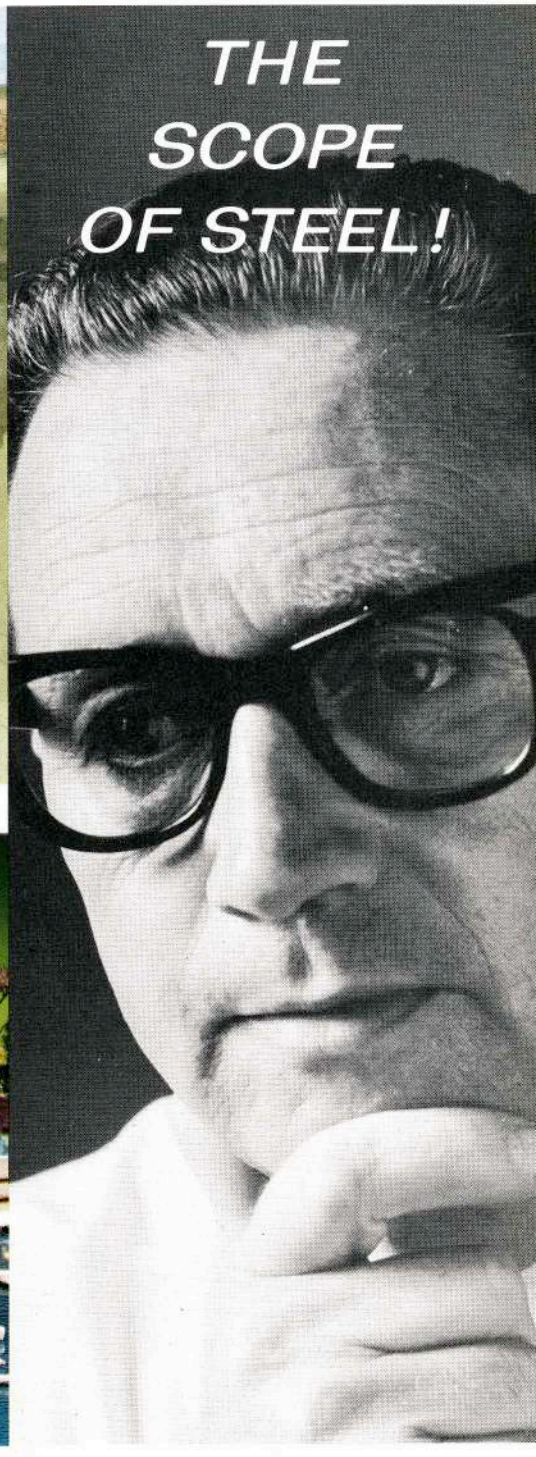

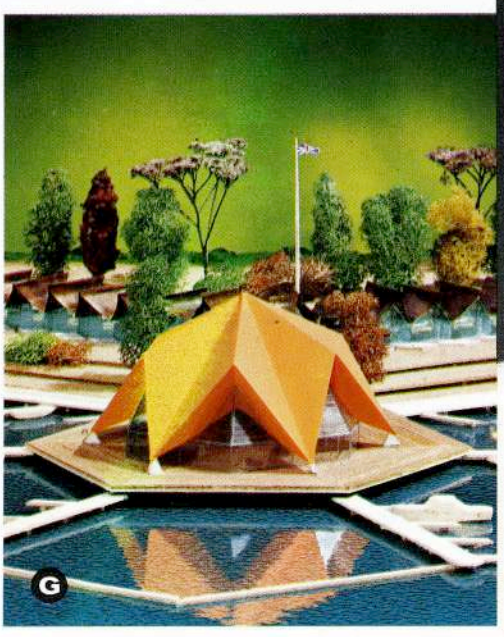

Design for tomorrow, with the colourful, functional beauty of steel . . . with its unique combination of flexibility and strength . . . with its constantly expanding scope of form, texture and design.

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In the design and construction of a modern building, steel represents both the inspiration and the means to its expression in terms of tomorrow and the years ahead.

STELCO

6301-9

If the firm keeps adequate time records, there should be no difficulty in verifying that 1,800 hours is a reasonable estimate for the individual in question. When in doubt, it is preferable to err on the low side, for a certain amount of time is bound to get charged to speculative projects and competitions which may never bring in any fees.

In a large firm, group rates would probably be used covering all personnel within pre-determined salary ranges. This involves no serious sacrifice in precision, since variations in actual chargeable time realized usually offset the minor differences between actual salaries paid and the average salary assumed for any given group.

The basis for applying overhead to projects is another area which often gives rise to controversy. Some accountants recommend that the actual overhead incurred each month be applied to all projects in process at the month-end — usually as a percentage of the direct salary dollar. However, this practice has a serious limitation in that the firm's overhead may fluctuate widely from month to month, especially if the accounts are kept on a cash basis. Hence, it is not recommended because of the lack of comparability of costs which results between projects receiving charges in different months throughout the year. The best approach (and the one, incidentally, that is used by industrial firms in computing standards) is to budget the firm's overhead for the year in advance, and then calculate the ratio of total overhead to total direct salaries. Overhead may then be applied as a percentage of the salaries charged to each project each month. However, a more convenient technique is to develop an inclusive rate for each staff member or each rate group, as the case may be, which includes *both* salaries and overhead. The mechanics of this procedure are shown below.

Finally, there is the question of how to cost partners' time. Ideally, an allowance for partners' salaries should be included in the budgeted direct expenses of the firm, which allowance becomes the basis for costing each partner's time in the same manner as for the associates and draftsmen. This frequently leads to an argument over the salary level to be used. Obviously, it is not the total participation in the firm's profits which any given partner expects to realize. At the same time, it should probably be above the highest level for the associates of the firm. A partner is presumably making a more valuable contribution to the practice, and this merits some differential in costing rates as well as in billing rates. Sometimes the partnership agreement will specify the salaries which working partners are entitled to for their services, as distinct from the return on their capital investment in the form of interest and residual profits. Under these circumstances, the same salaries may be conveniently used for costing purposes.

SUMMARY

The record-keeping procedures described thus far are not, of course, an end in themselves. Their purpose is to permit the preparation of management reports such as is shown in projects report table. The usefulness of this report is that it provides a bird's-eye view of the projects in process at any given date, and focuses attention on those projects where, for example, actual hours may be running ahead of budget hours. Whether or not such variations are caused by external factors outside the control of the architect, the comparison of planned costs against actual costs is still an essential step in the operations of the *Management Cycle* described in the preceding article in this series. Considerable skill is also required to develop a report form which contains neither too little nor too much detail. Thus, the object is not to record all the information about all projects on a single page (even if it were physically possible to do so), but to direct attention to projects requiring executive action.

INCLUSIVE RATE FOR SALARIES AND OVERHEAD

Staff Member	Base Salary Weekly	Base Salary Annual	Overhead at 75% (Note 1)	Total	Indicated cost rate per chargeable hour (Note 2)
John Able	$119.	$6,188.	$4,641.	$10,829.	$6.00
Etc	Etc	Etc			

Note: (1) Ratio of budgeted overhead to budgeted direct salaries for the year.

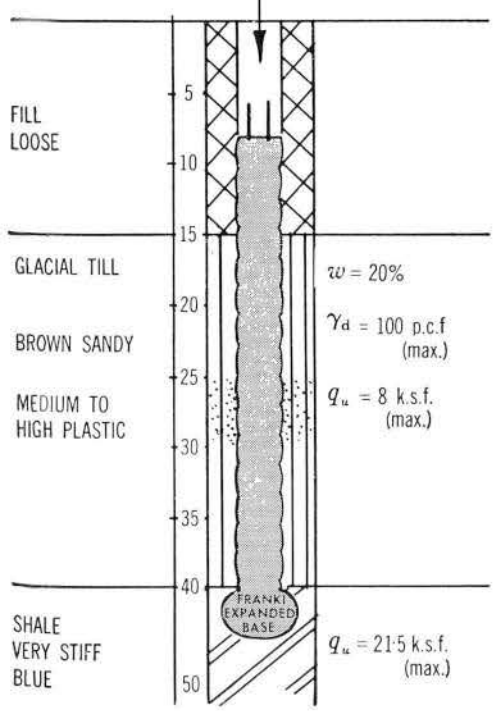
(2) Based on a forecast of 1,800 chargeable hours for the year.

PROJECTS REPORT — Covering all projects displaying activity in 1963 and up to January 31, 1964

Project No.	Description	Starting Date	Payment Years	Consultants' Fees	Sundry Direct Costs	Salaries & Overhead Budget Hours	Salaries & Overhead Actual Hours	Salaries & Overhead Amount	Total Costs to date	Fees Received	Indicated Profit/(Loss) to date	Remarks
643	Highrise Apts. Ltd.	Aug, 1963	1963	$ 8,464	$1,240	3,800	3,810	$24,348	$34,052	$35,876		
			1964	4,330	10	–	34	238	4,578	7,404		
				12,794	1,250	3,800	3,844	24,586	38,630	43,280	$4,650	Complete
644	Township School	Sept, 1963	1963	–	$12	7,200	204	$1,196	$1,208			
			1964	–	–	–	46	288	288			
					12	7,200	250	1,484	1,496	–	($1,496)	Sketches only
645	White Residence	Oct, 1963	1963	–	–	120	40	$280	$280	–	($280)	Sketches only
			1964	–	–	–	–	–	–			

FRANKI FACTS

R.A.I.C. File No. 6-A-2



w = MOISTURE CONTENT
γ_d = DRY DENSITY OF THE SOIL
q_u = ULTIMATE UNCONFINED COMPRESSIVE STRENGTH

ARCHITECTS & ENGINEERS:
Green, Blankstein, Russell & Associates
Winnipeg

ASSOCIATE ARCHITECTS:
Annett & Bittorf, Edmonton

GENERAL CONTRACTORS:
Alta-West Construction Ltd.
Edmonton

NUMBER OF UNITS:
110 Franki Caisson-Piles

WORKING LOADS:
110 tons maximum

Franki caissons provide structural security on river bank site

Problem

The "Palisades" is one of many high-rise apartments in Edmonton supported on deep foundations.

The site, however, was not typical and offered a complexity of design problems. Two independent soil investigations confirmed that erratic soil conditions were present, commencing with topsoil, through sandy clay till to clay shale. Sporadic deposition and more recent reworking of the sub-soil resulted in density variations. These conditions necessitated careful foundation study.

The site was on the north bank of the North Saskatchewan River and had an average gradient of 20 degrees. Site preparation by excavation required one extensive side hill cut and fill operation which created a further problem. Located immediately above on the bank was an old elementary school whose playground abutted on the property. The support of the playground was maintained by an 18' high retaining wall. The cut undermined the wall and the resultant horizontal earth force had to be resisted by the uphill side of the building. Furthermore, this excavation produced concern as to the stability of the entire bank and the security of the surrounding buildings.

Solution

The soil conditions on the downhill side of the property required deep piles to penetrate the loose fill produced by site preparation. Piles were chosen on the uphill side as well, in order to have a uniform design throughout.

Drilled excavated caissons were attempted but were abandoned when it became apparent that the soil conditions were too difficult for economic use of this method.

Franki caissons were then successfully installed in the clay shale layer or immediately above it. Uniform bearing at each column location was achieved by measuring the base resistance for each caisson. Batter piles were installed under the uphill wall to resist earth forces. Limited access required that the batter be "reversed", i.e., the piles were driven under the pile driver instead of away from it.

An independent investigation showed that despite high soil densities, the resulting driving vibrations produced no movement or other detrimental effect in the retaining wall.

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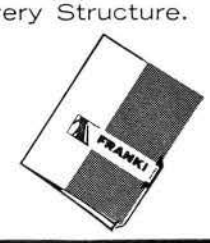
Literature - This series of job highlights, as well as other descriptive literature, will be sent to you upon request to Franki of Canada Ltd., 187 Graham Blvd., Montreal 16, P.Q.



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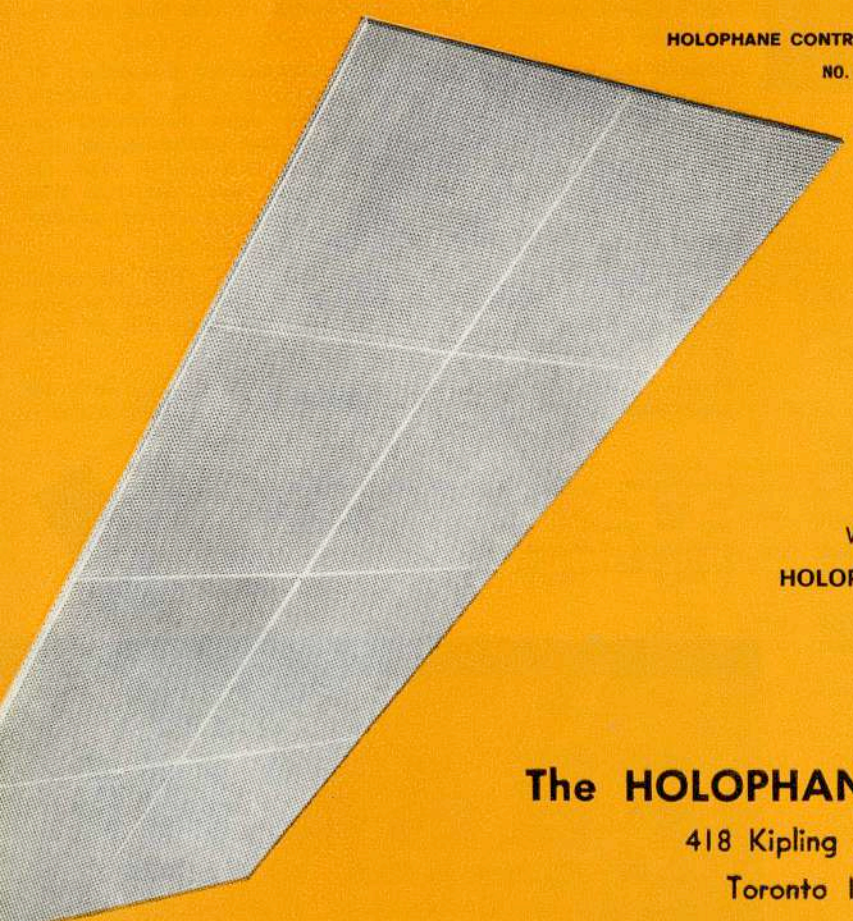

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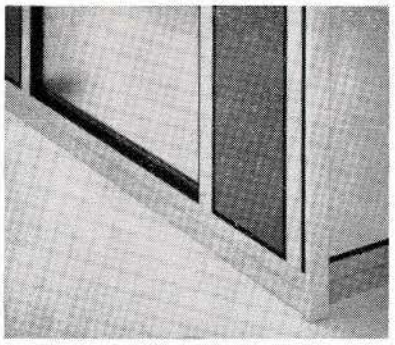

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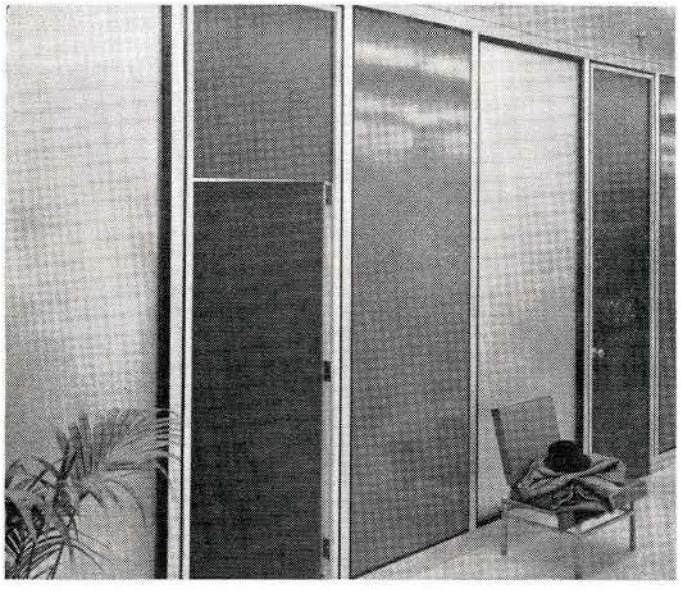
They key together and are quick to change
Whenever the time comes to re-arrange ☐ ☐



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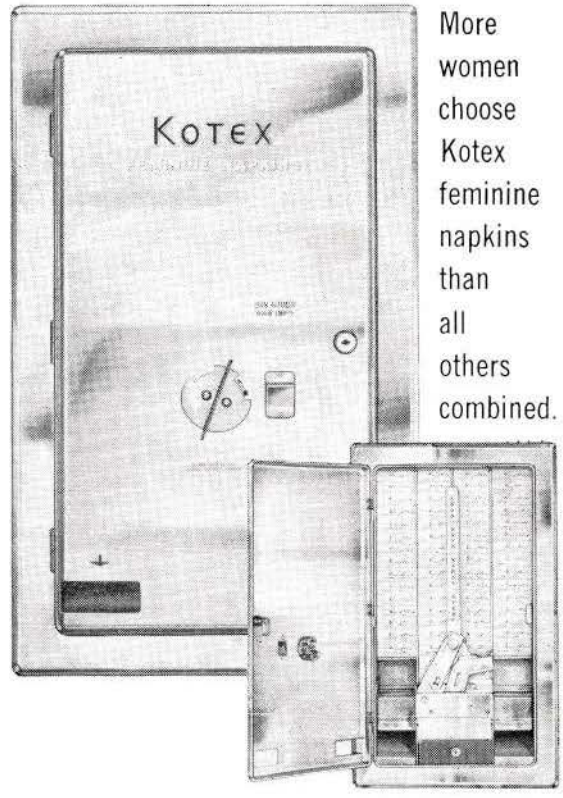

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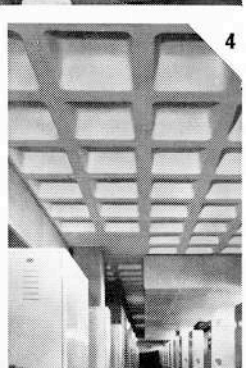
2

Concrete construction has been featured throughout, in the reinforced concrete structural system and floors; in the precast concrete exposed ceilings . . . Extensive use of form-patterning and bush hammering was made to create a wide variety of effects on all exposed concrete surfaces. Result: an impressive exterior, spacious interiors that achieve a warm, club-house atmosphere through varied combinations of exposed concrete and other materials.

Architects: Affleck, Desbarats, Dimakopoulos, Lebensold, Sise. Professional Advisor: Prof. John Bland. General Contractor: J. S. Hewson & Associates. Project Managers: Racey-MacCallum & Associates Ltd.

1. Golfer's-eye view of the new club-house of Summerlea Golf & Country Club at Pointe Cascades, P.Q.
2. Exposed concrete beams create interesting ceiling patterns in lounge and dining areas.
3. This view of the front verandah shows the harmonious blending of exposed concrete, stone and glass.
4. Men's locker room, showing concrete waffle ceiling.

3



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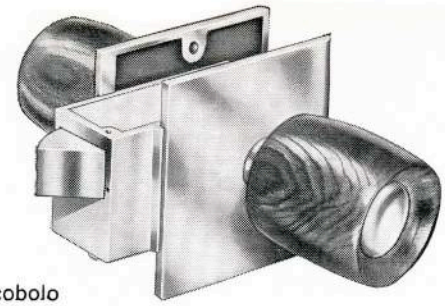
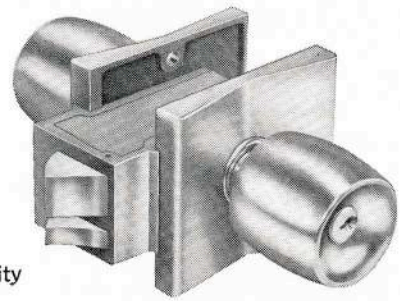
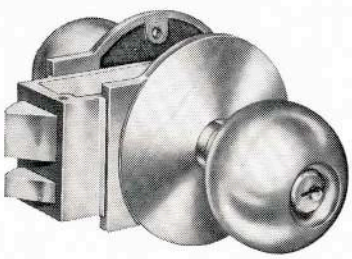


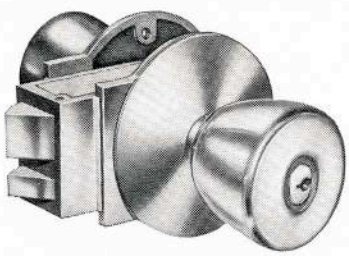
Cocobolo



Unity

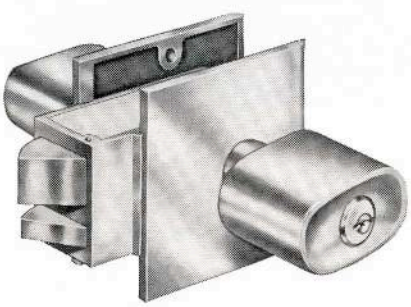


Mono



Moderalev

Mystic



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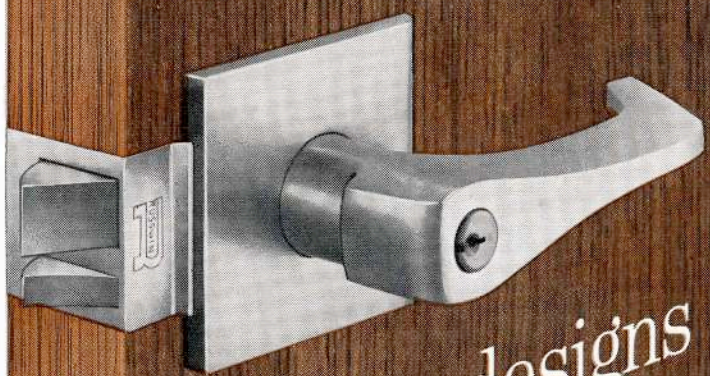
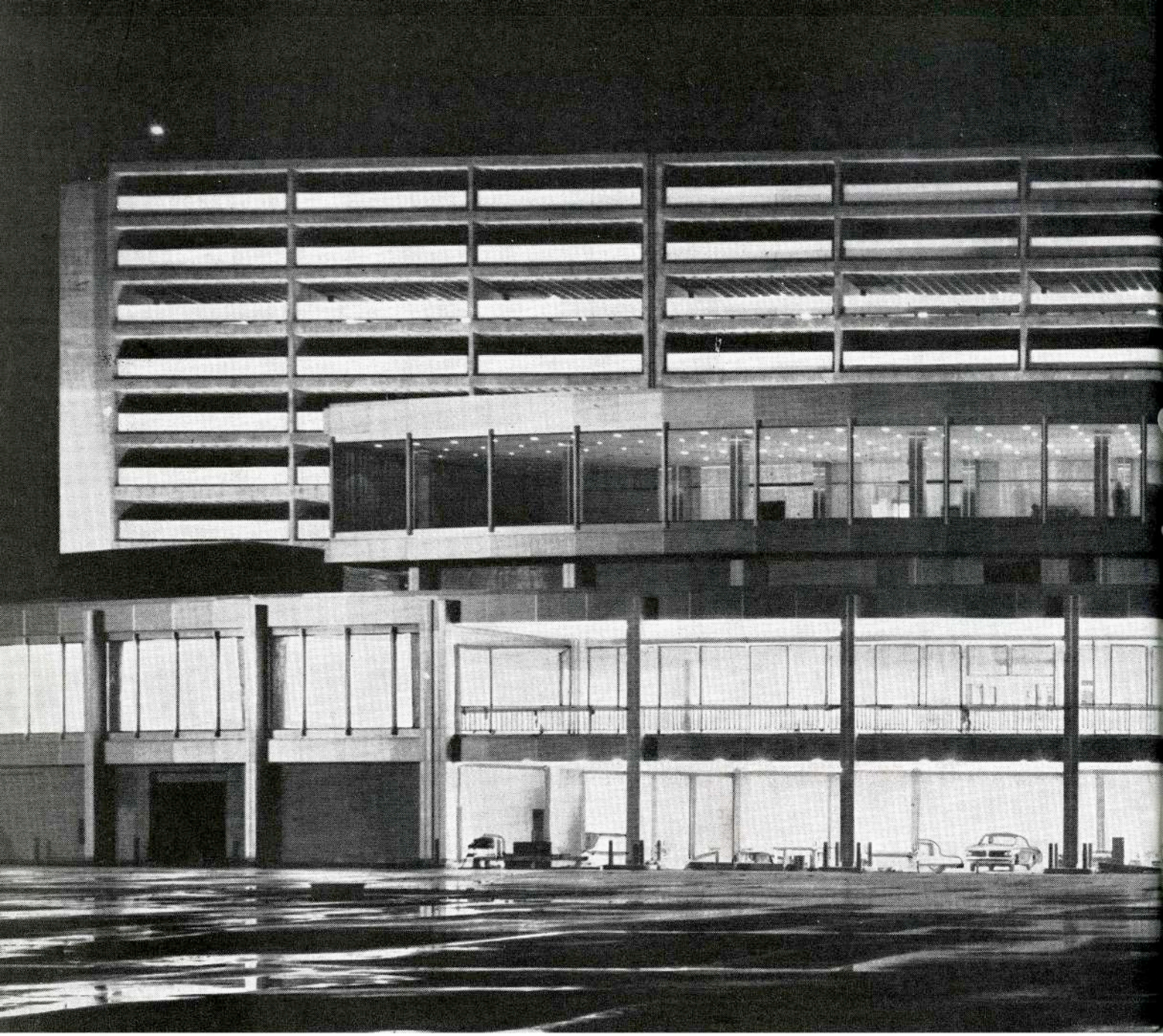


Uniloc designs by Russwin



CPI successfully completes exacting curtain wall contract on new aeroquay

Nobody, anywhere had ever put curtain wall on a building like the 632 foot diameter doughnut that comprises the aeroquay at Toronto's International Airport. CPI undertook complete contract responsibility for it, CPI did it . . . and CPI talks about it with justifiable pride because it *was* quite a job. There were over 550 separate lites to install, some as big as 20 feet by 12 feet, weighing over three quarters of a ton; thousands of drawings had to be made; the curtain wall itself was erected to extremely close tolerances (no mean feat itself on a circular plan like this); even testing was carried out on the site.

CPI supplied and erected everything: glass, neoprene gaskets, aluminum extrusions, stainless steel frames, doors, even the venetian blinds. They supervised the setting of the steel anchors for the building's curtain wall grid and were responsible for every step of the walling until the last lite of glass was in place and wiped clean.

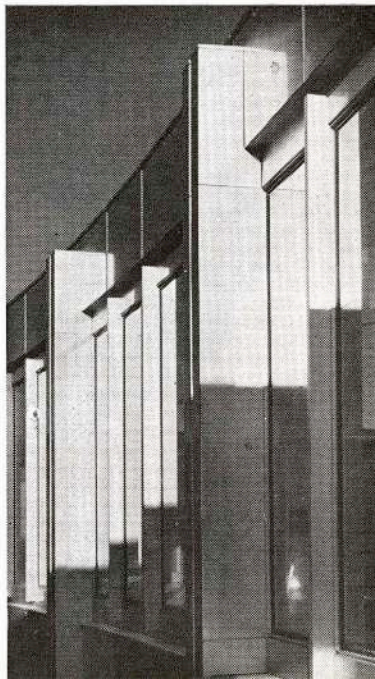
The end result is a true jet-age building with 18 to 25 per cent more usable floor space than would have been possible with any other type of wall.

CPI's experience was the prime factor in the success of the aeroquay installation. It was gained on more than 300 glass-walled buildings, skyscrapers like the cruciform building in Montreal's Place Ville Marie, airports in Winnipeg, Regina, Ottawa and Montreal. This experience, plus CPI's policy of complete contract responsibility, are at your disposal anywhere

Architect—John B. Parkin Associates *General Contractor*—Foundation Company of Canada Limited

in Canada where there's a curtain wall to be built.

In addition to the aeroquay itself, CPI also supplied and erected the complete curtain wall for the airport's new Administration Building shown here with the aeroquay and parking building in the background.



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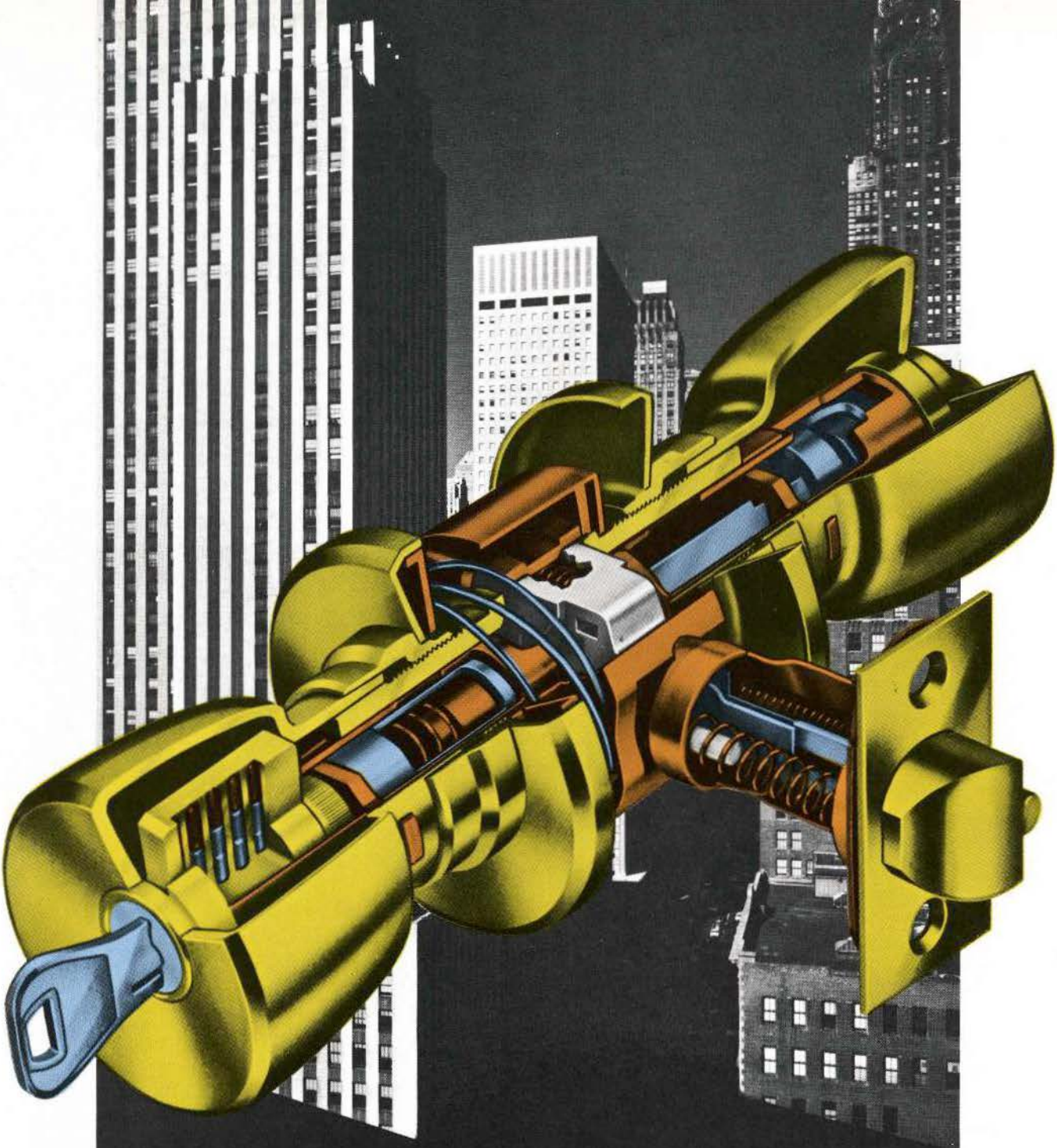

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Lighting

by George Banz

BRUNSWICK 18 AUGUST 1764
*This night I had an adventure. I had no chair to bring me home from Court, and my servant had brought no lantern. Indeed he had not come for me at all, so that I was obliged to trudge home by myself in the dark. It is a regulation at Brunswick that if any person is found on the streets after ten o'clock at night without a light, the patrol shall carry him to the Guard. I dreaded this, and as I was posting along, up came a couple of musketeers on horseback. I tried to escape, but in vain. They rode me up to the wall. I told them, "I am a gentleman coming from the Court. Your servant." The cavalry answered, "You must go with us." However, after pausing a little, they asked me where I lodged. Upon which they separated and one of them followed me to my inn, taking special care that I should not run away from him. I imagined that he was only to tell the people of the house that I was his prisoner, and then carry me to the Guard; so I offered him money to go away. No — he would not be bribed. I therefore resigned myself to my fate. Happy was I to find that he allowed me to enter my quarters in peace, saying, "This is a gentleman whom I found on the street."**

In contrast to even the recent past, we have today an abundance of artificial light at our disposal. The change was sudden and we have not yet learnt how best to apply our ability to turn darkness to light.
Outside our homes and places of work, we expect artificial light to give little more than directional orientation and safety in motion at night. We accept light in the service of advertising as we accept our news and communications media in the same service. And we are used to the sight of buildings in floods of artificial light, arrogantly defying nature's cycle of night following day.

These buildings are often important monuments of the past. Some were designed before the advent of electricity, all were conceived in the pre-modern spirit when night was dark. But today we expect our historic monuments to impress us at all times particularly when we are tourists. There are few such buildings, so let them be placed under floods of sodium light.
The monuments of the present pose somewhat different problems. First of all they are monuments only to their architects and owners, to everybody else they are office buildings and factories. Floodlighting helps overcome this misunderstanding. What else but a monument would be flood-lit? It also avoids sleek shiny modern buildings having to expose an embarrassing conventionality at night. Because one way of telling truly modern architecture from *contemporary eclectic* poor cousin is by studying its night appearance. Modern architecture is conceived as simultaneous, continuous space sequences modulated and differentiated by building structure and according to function with interior spaces extending to the exterior. As interior and exterior spaces are functionally lit, night architecture is determined.
If the architectural concept is valid, there will be no discrepancy between day architecture and night architecture, but only a subtle change of emphasis. The popularity of floodlighting may again underline the architect's uneasy effort to mask this common discrepancy.

The night view emphasizes the irrelevancy of perspective vision in modern architecture and urban planning. Buildings lose their substance and break up into lit planes and elements, dynamic sequences of patterns, points and lines. Individual buildings thus lose their significance and become indistinguishable parts of groups and conglomerations. The night view of our cities is invariably much more exhilarating than the daytime view, because it is truly contemporary and alive, when the overwhelming mass of today's buildings are a carryover from a dead past. Night architecture should thus be a constant reminder to architects of the visual shortcomings of their work, and a challenge indicating opportunities for a total architecture.

*Boswell on the Grand Tour: Germany and Switzerland 1764, Wiliam Heinemann Ltd., First Published 1953.

Contributors

George Banz, a frequent contributor to the Journal, is a senior member of the Architects Partnership.

Marion Currie, BASc, PEng, MIES is a lecturer at the University of Toronto. Her instructions to the students in architecture include lab demonstrations of actual lighting conditions as well as requiring field reports on specific lighting studies within the city.

Carmen Corneil graduated from the School of Architecture, University of Toronto in 1957 and was awarded the Pilkington Travelling Scholarship. He is presently instructing at the Regional Institute in Trondheim, Norway.

Light as a Design Element

by Marion G. Currie

JOWETT

Architecture without light would have no meaning, yet the overall effect of light on an architectural design is often unconsciously ignored by the architect. An intuitive feeling for the effects of natural light is often evident, but when night falls or when an interior space relies on artificial light alone, the conscious control by the architect of the effects of light is no longer in evidence. This is not an easy task for the designer; ideally he must try to visualize the appearance he would like his design to have under various lighting conditions. He must be thoroughly acquainted with the effects that light can achieve and in a general way with the means by which these effects may be accomplished. Limitations of time and money preclude the consideration of every aspect of lighting by the architect. It is hoped that with the co-operation of a sympathetic lighting engineer, the important consideration will receive attention.

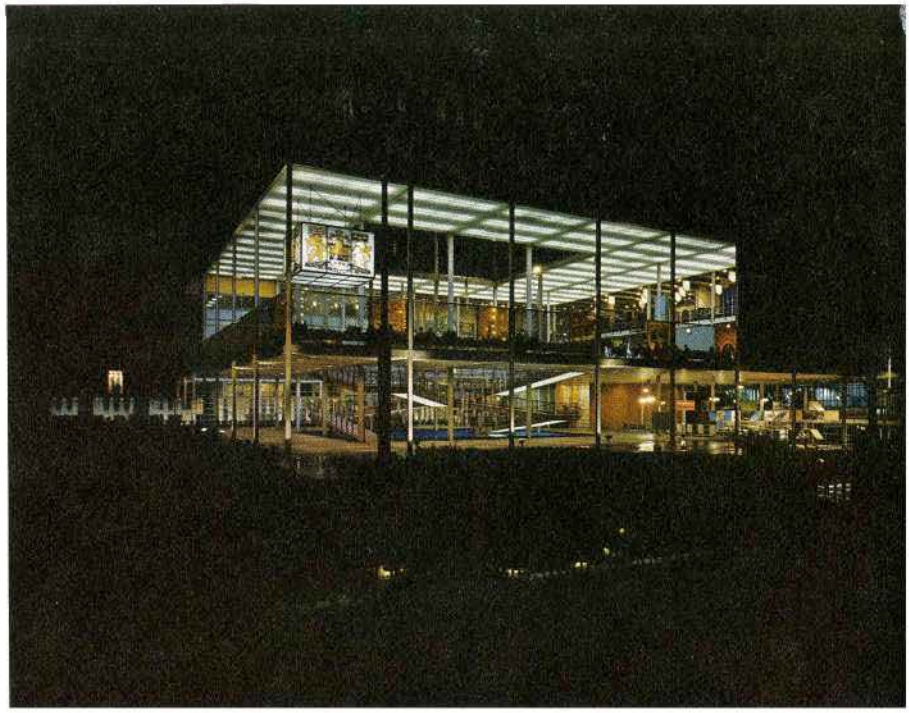
Light has always been a necessary requirement to perform a visual task, but it may serve other functions as well. It may be used to attract attention, provide decoration, reveal the architecture, create a dramatic effect or provide a centre of interest. In any field of view the eye is involuntarily attracted to the areas which are the brightest, most colourful or have the highest contrasts. These facts are well understood in stage and display lighting but are often not fully exploited by the architect. The aesthetic background of the architect can make a major contribution to these creative aspects of lighting design. This does not mean that the purely aesthetic approach should take precedence over the demands of the visual task. It does mean that the architect and engineer each have a unique contribution to make and that each must intelligently weigh the demands of the other to arrive at a successful solution.

Reference to a few examples may serve to illustrate how the creative aspects of lighting can contribute to an architectural design. Some examples will show that lack of correct attention to detail and in the execution of the design give disappointing and unexpected results.

JOWETT

The entrance way to Lothian Mews in Toronto (1) is lit by an indirect cove lighting system which washes the walls with light leaving the ceiling slightly darker. This emphasizes the arched form of the ceiling and draws the eye into the space. A criticism of the design might be the rather dark, blank wall at the end of the far passageway. However, a visit to the Mews today will show a colourful, brightly lighted display case on this wall, leading the pedestrian back into the courtyard area (2). Here a much more festive, animated area is created by the lighting. A lighted fountain and bright luminous fixtures add sparkle to the scene. A tremendous variety of light and colour is provided by the encircling shops with their glass wall. The clean line of the arched roof and columns stands out in silhouette against the luminous background of the shop windows.

3



ARCHITECTS
1, 2 (Page 45) Webb, Zerafa & Menkes
3 C. B. Greenberg. Photo courtesy Canadian Government Exhibition Commission
4 Crang & Boake
5, 6 Gerald Robinson
7 Thompson, Berwick & Pratt

The theme for the Canadian Pavilion at the Brussels World's Fair (3) was "Man and Space". The large luminous ceiling, open walls on the ground floor and glass walls on the upper floor contributed to the impression of space. Variety and interest were provided by the use of numerous small light sources. The luminous panel under the stairs accentuated their winding course to the upper level. In this building the lighting made a major contribution to the architectural expression and articulation of space.

The "light tree", in the completely enclosed Thorncliffe Shopping Plaza, Toronto, is used as a decorative element and provides an unusual centre of interest in a rather large space (4). The upper half of each luminaire is red and the lower half white, thus providing colour accent as well as light.

A similar approach is seen in the lighting of the second floor shopping area in the Colonnade in Toronto (5, 6). The luminaires consist of a cluster of diffusing globes suspended under an umbrella of greenish-gold tentacles. The dark blue ceiling as a background for the luminaires enhances the effect. This area receives considerable natural light during the day and at night the decorative luminaires provide adequate light for people to circulate in the space. Additional light interest is provided by the surrounding shops.

In the BC Electric Building, Vancouver, the strong horizontal element expressed by the structure by day is repeated by the lighting at night (7). Here the interior lighting serves a two-fold purpose; it provides light for working and light for advertising. Some additional light is added around the top canopy to highlight the structure.

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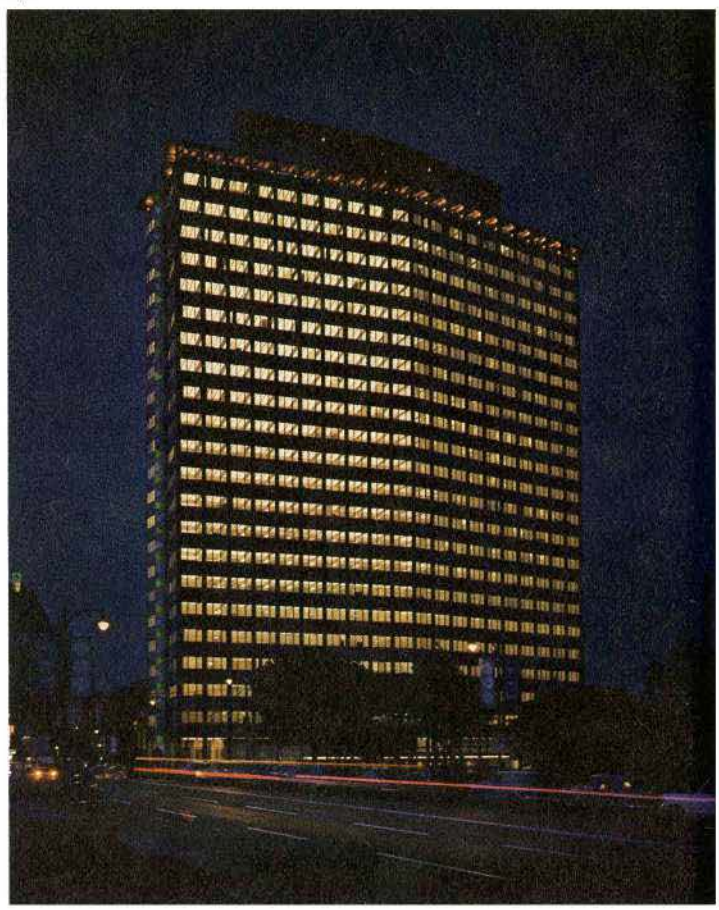

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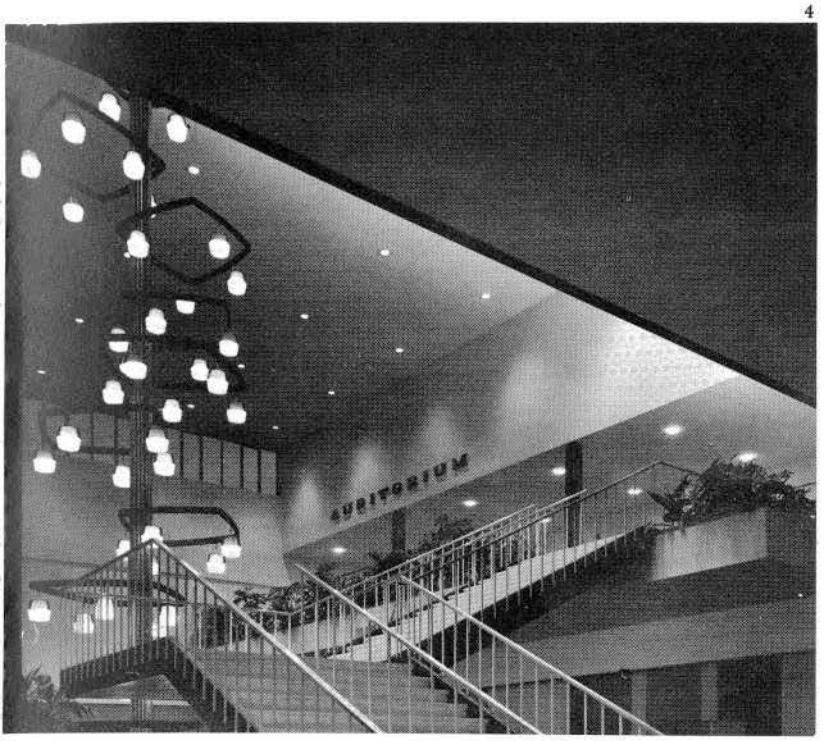

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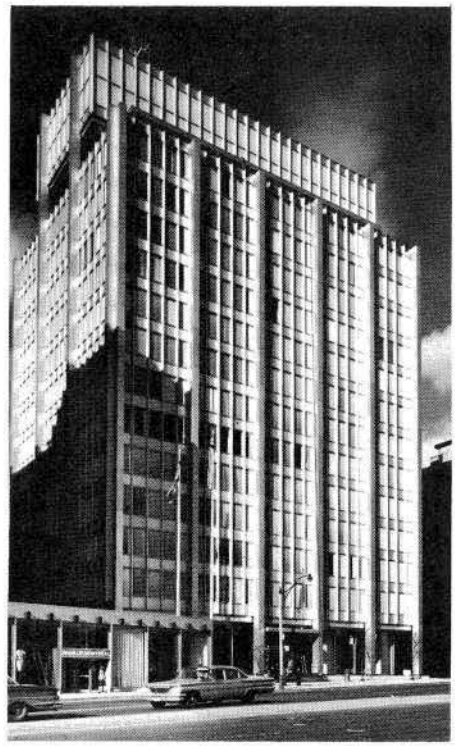

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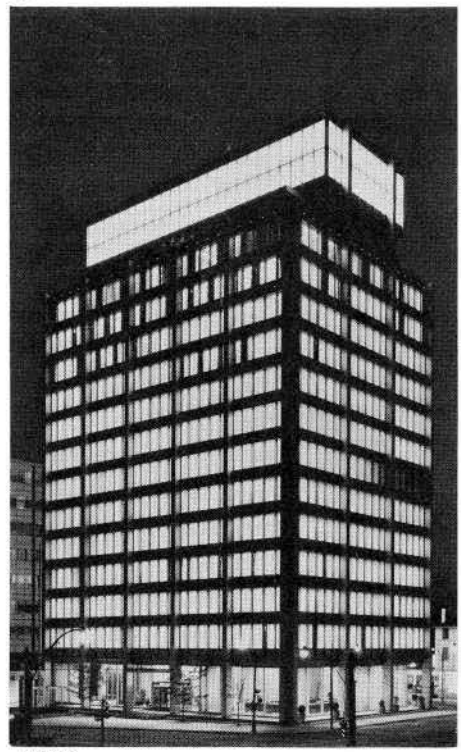

PANDA

ARCHITECTS
8-10 John B. Parkin Associates
11, 12 Blankstein, Coop, Gillmor, Hanna
13, 14 Izumi, Arnott and Sugiyama
15 (Page 50) Designer/Nelson MacDonald for Neon Sales and Service Limited
16-19 Photos courtesy National Capital Commission

As with the BC Electric Building, the night lighting of the Sun Life Building in Toronto, for the most part, is provided by the normal interior office lighting (8, 9). Here, however, the daytime appearance of the building is completely altered at night. The strongly vertical structure by day takes on a horziontal appearance by night as the luminous window elements dominate the structural form of the building.

Lighting for dramatic effect is illustrated in the Knox Fellowship Centre and Chapel, Toronto (10). The large black shadow of the cross thrown on the white brick wall behind, provides a simple but striking solution. The downlighting on the roof of the Chapel is also simple, unobtrusive and effective. Less successful are the patches of light on the exterior chapel walls and the ragged shadow of the roof edge on the white brick behind. These effects compete with the roof and the cross for attention. A more uniform wash of light on the chapel walls would have eliminated these distracting, high contrast areas.

A study of the Empress Bowling Lanes in Winnipeg, reveals a rather unusual method of lighting the form of the arched canopy. Luminaires were recessed into the pavement under the canopy washing it from below with light (12). The modelling of the form is excellent and the lighting equipment pleasantly unobtrusive. The floodlighting on the front wall of the building was not, however, as carefully executed. No attempt appears to have been made to conceal the rather unattractive floodlighting units located on the ground along the inner edge of the walkway. In addition, a rather distracting sharp shadow is evident on the right hand side of the front wall where the building projects (11). Some carefully placed small units along the roof of this projection might have eliminated this dark area.

In the design of the Regina Public Library, the exterior lighting units fastened on the columns have produced the rather curious effect of cutting the columns in half (14). This impression is caused by the spill light on the columns close to the luminaires. The use of a louvre, designed to prevent direct light from falling on the columns, or a unit with the beam directed further out would have helped to eliminate these bright patches. The rows of units attached to the front wall of the building also raises a question (13). Was the pattern formed on the wall of the building by these luminaires intended to be the dominant element or should it have been of secondary importance to the name of the building? With the present solution the pattern created by the light competes very effectively with the name of the building for your attention.

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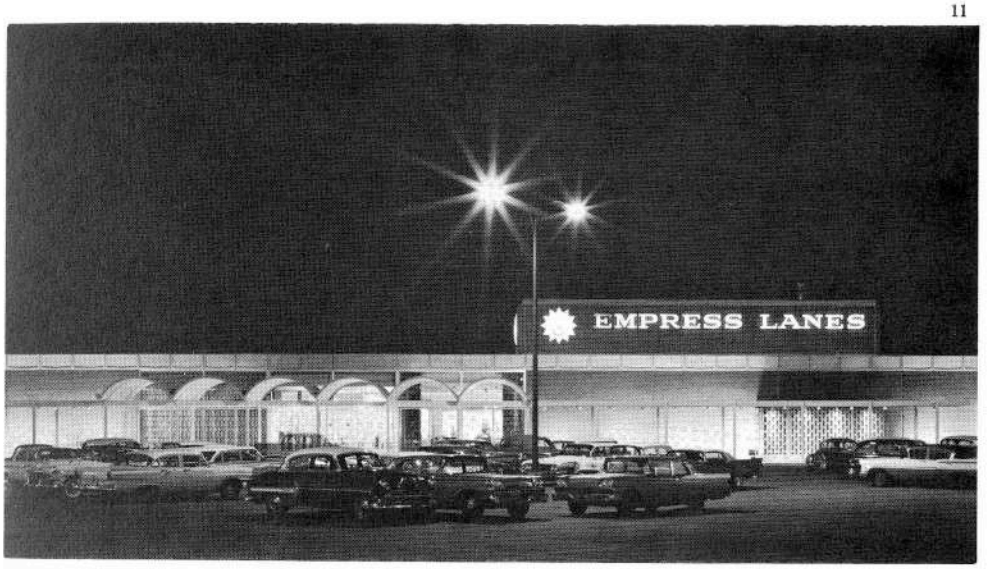

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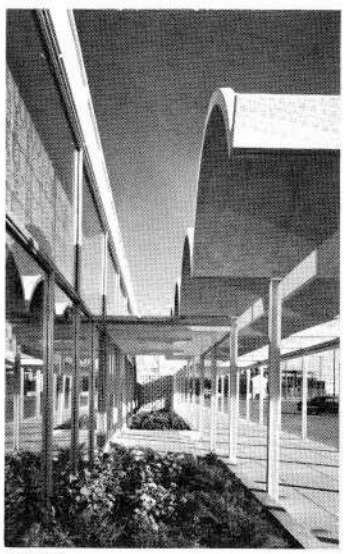

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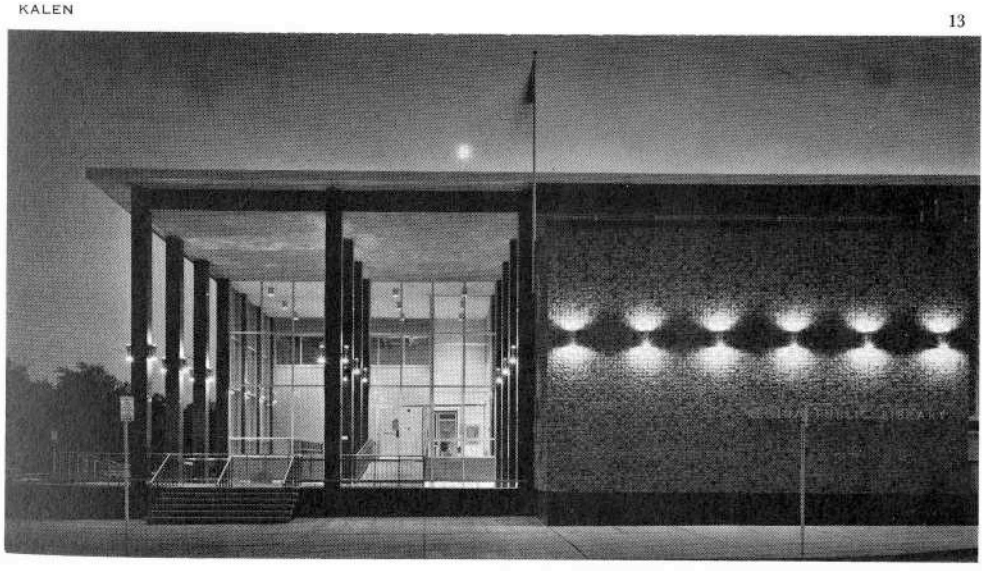

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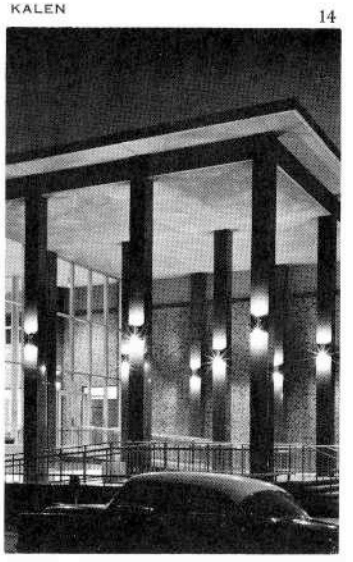

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BRIERLEY

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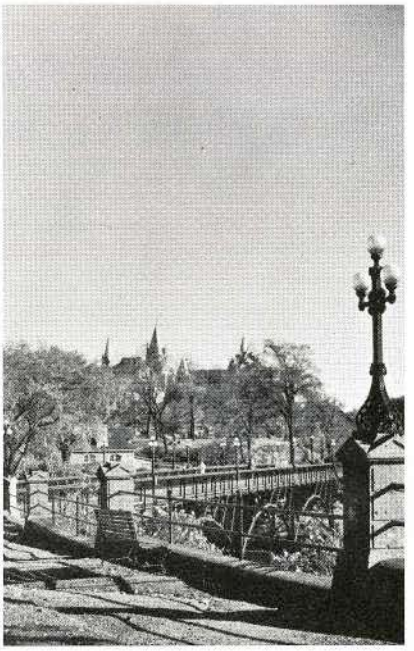

The after view of a small restaurant in Calgary, shows how the design staff of a sign company completely transformed the building's original appearance by the imaginative use of light, subtly incorporated in the renovated building facade (15). The dark oriental bridge stands out in sharp relief against the light-coloured shoji screen with its clean, dark, structural elements; the two red and white spherical luminaires provide additional points of interest. Narrow, vertical lines of coloured light are created by Neon lamps placed behind a plastic face in the steel pilasters. These pilasters also conceal the indirect lighting which produces a soft light on the upper panel sections. An additional accent is provided by the use of downlighting in the window and entrance areas.

To illustrate a particular point, let us consider specific examples of public lighting. These fixtures (some of which are now obsolete) demonstrate the conflicting interests of the architect and lighting engineer. Many architects seem to find the diffusing globe type of luminaire aesthetically pleasing. However, the engineer, faced with a difficult lighting problem, cannot accept them as a valid solution. Where lighting is primarily a safety element, as in street lighting for fast-moving or high-density traffic, lighting equipment which produces more and better controlled light has to be utilized. The use of the diffusing cluster (16), which is a pedestrian area only, is valid. But where traffic moves fairly quickly on winding roads adequate lighting cannot be achieved by this type of design (17-19). In areas such as this, however, where aesthetics do deserve consideration, a co-operative effort between the engineer and architect should produce a better result than could be achieved by either acting alone.

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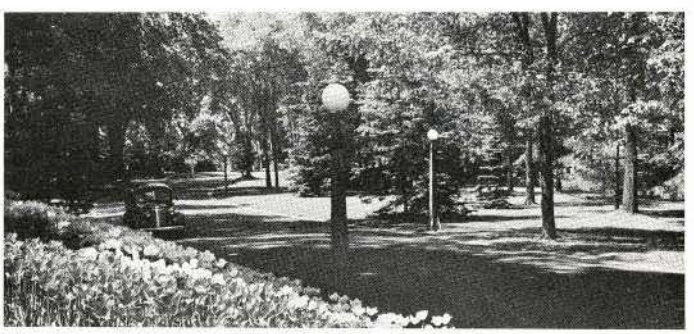

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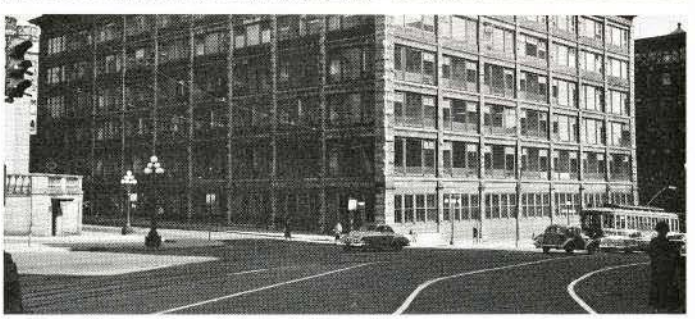

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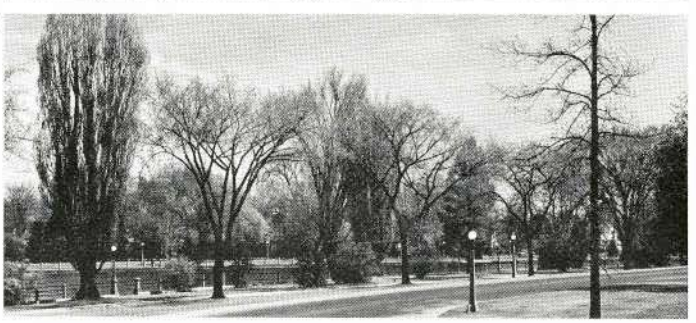

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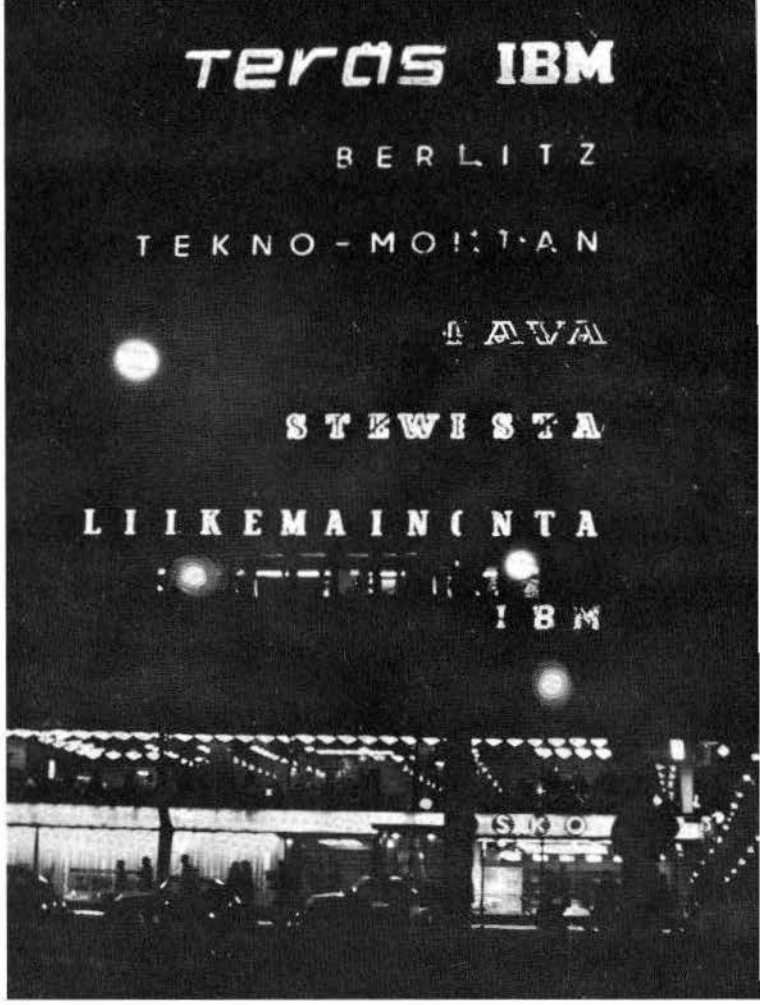


1

Outdoor Lighting in the Scandinavian Countries

by Carmen Corneil

1 Spandrel Neon on a building in Helsinki — a typical urban night scene in Scandinavia.
2 Detail of the copper curtain wall on the latest of Stockholm's five central slabs with copper fixtures placed at the heads of windows. Also, the Stockholm tower at night. Architects/Blackström & Reinius.

A Mr. Lennart Edelberg, burgher of Ribe, Denmark, writing to Poul Henningsen, the Dane of fixture designing fame and editor of the Louis Poulsen & Co. A/S technical news bulletin, protests: "We would like to have it human in Ribe. Progress is not necessarily identical with coldness and ugliness, we hope. But we see the fluorescents marching victorious in Europe — is that necessary? Have our technical people been spiritually lazy? When the inner core of Paris manages without fluorescence, is that wisdom or misfortune?

"There was a time one approached a small town at night time with a certain expectation. Now one sees immediately overall fluorescent illumination, stretching like tentacles from the town's heart and far out along the lonely roads to the municipality's bitter end. The lamps burn all night, long into the bright morning hours and bring us a remarkable bastard feeling of security and coldness. One knows that the town ahead looks like all the others."

As for building, the cause of Herr Edelberg would seem to be shared by Scandinavia's architects: the craft of the incandescent lighting armature in metal and glass is well advanced and the luminous ceiling is still a rarity.

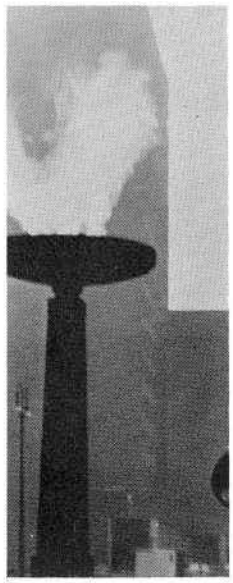
If an explanation were required for this phenomenon it might be found in the developing careful craft tradition or in the presence of a remarkable quality of sunlight in Scandinavia, or perhaps in the special significance which the general darkness of the winter months gives to lantern and lamp. In any case, a feeling for the influence and character of light is as

much a part of the good architect's work as the feeling for materials and dimensions. Architecture in Scandinavia is becoming as international as anywhere these days, but Architect Jacobsen can still use Danish craftsmanship with rich materials to luxuriantly fill out his international inclination toward purity. The velvety darkness of the lobby of his Royal Hotel in Copenhagen must certainly be made with similar intentions. This particular many storied building has been introduced into central Copenhagen amidst considerable controversy. Recently some voices have been heard conceding that its lighted windows add a new dimension to Tivoli, the central amusement park. As a hotel it could well have windows flicking on and off after dark. Stockholmers, realizing that their new central office towers are lost to the city at night, have tried to recoup in the latest slab by putting lights on the curtain wall, more the approach of Tivoli itself.

Makeshift design motivation has found more familiar haunts in the shopping center in the new Stockholm satellite at Farsta, where a commercial contrivance of gaiety has been aggressively pursued in the diversion of facades, fountains and abundant semi-integrated lighting effects. It must be accepted that the lights - of - the - carnival and show - window architecture have a relevance in this context but there is something in their impassive juxtaposition with the plaza that is disturbing.
There is in Scandinavia, possibly just as disturbing, a heavily romantic streak that reappears now and again. The Opera in Stockholm, recently partly renovated suggests a mood of passion and special moment with the flickering glow of gas torches set around its festive terraces. Flares are also visible in Oslo along the approach to the City Hall, in competition with other street lighting, throwing an infernal light in which the promenading crowds seem for an instant to wear horned helmets and carry shields and spears.

Entrances are usually an important and revealing detail. A Danish tendency to evolve into lines and planes has produced some recessed incandescent canopy installations of great merit. In Trondheim, a Norwegian city on about the 64th parallel, in renovations to a hotel lobby, Architect Arne Korsmo has made a light-bearing milieu of glass, white marble, polished metal and other luminous materials and drawn it plastically through the preserved facade to form an entrance.

Always refreshing, Aalto's creative sculptural handling in low relief of a building's spatial implications has included at times a special exterior lighting fixture having to do with entrance, but the main thing is, of course, within. In the recent office building for the Enso Gutzeit Company a reserved and sparsely simple entrance portico is provided which is lighted by five giant metal fixtures, ceiling mounted and linked to the building by special conduits. Similar fixtures are found inside in the lobby which is also pointedly unpretentious but gleams with brass and wood. This building whose important location in Helsinki and white marble facades must make it quite tempting to the floodlight people who are busily at work highlighting the white tusks of many towns in Scandinavia is, so far, after hours, unlit. During the dark winter days, special ceiling fixtures in the offices arranged to correspond to window openings evidence a visual business behind the calm marble facade.



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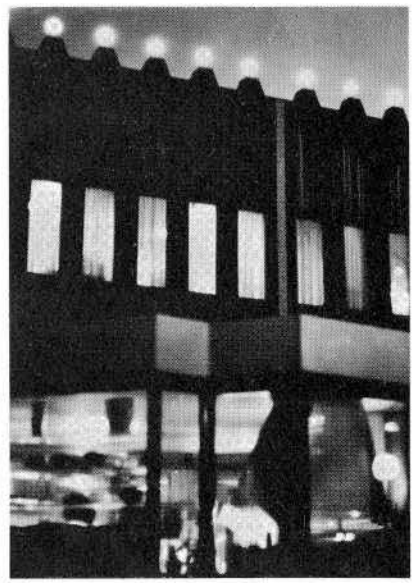

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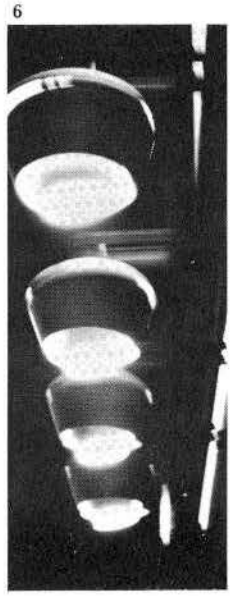
3 Gas torches in Oslo with Ràdhus in background.
4 Clear glass balls decorating the teak house in Farsta Centrum. Kiosk in foreground stands in the middle of the plaza.
5 Copper lighting fixtures over the main entrance to Aalto's Iron House in Helsinki, a building which contributes mightily to its location.
6 Metal ceiling fixture in entrance portico of the Enso Gutzeit offices in Helsinki. Architect/Alvar Aalto.
7 Detail of the white marble facade of the Enso Gutzeit building with brass ceiling fixtures.
Photos by the author.



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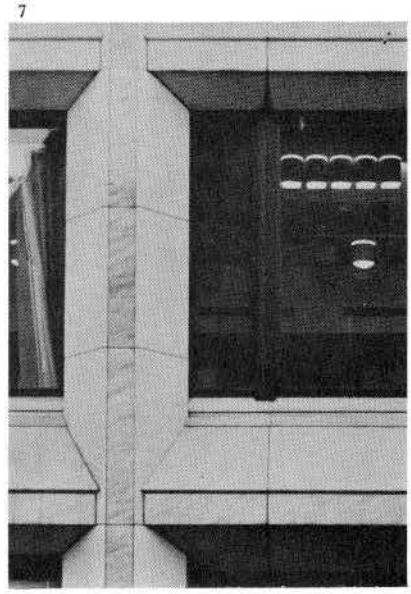

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Looking east. The down-town triangle framed by the Bow River (left) and the CPR right-of-way (right).
From bottom to top: 14th Street West bridge, Louise bridge, Centre Street bridge and Langevin bridge.
From left to right: Prince's Island Park (topping the triangle), residential (mostly decayed uses), Central Business District, CPR right-of-way, strip block of warehousing now fit for renewal.

CPR Redevelopment Proposal

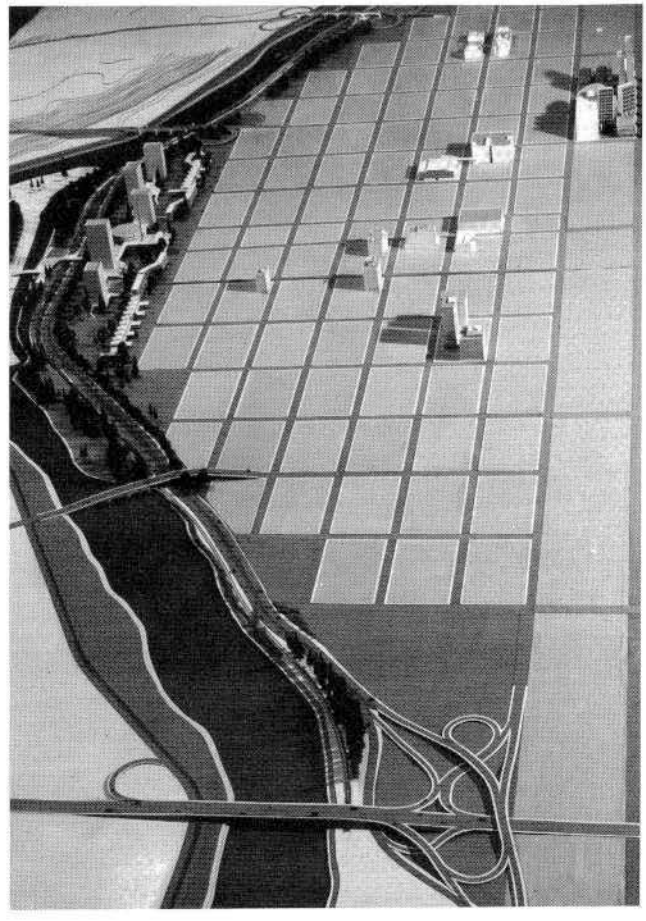
a Study by Dr. D. Styliaras

Dr Dimitrios Styliaras received his degrees in architecture and doctorate of city planning at the Technological University in Berlin. He has lectured at that school as well as at Weimar, Yale and Columbia and is now associate professor of architecture and planning for the faculty of architecture at the University of Manitoba. He is a member of the campus planning and building committee and the planning research centre and is a private consultant on architecture, civic design, housing and planning.

Calgary is a young urban settlement of overdeveloped, sprawling residential suburbs, with an underdeveloped central core, which is merely a collection of streets and blocks. As such, it is now overdue for the sort of care needed to make it worthy of the name "city", a place for work, sociability and culture. That special quality which makes a city the cradle of man's most noble achievements, is still possible for a booming and vigorous Calgary.

The essence of any city is in the core, and the best are those in which the natural amenities have been most skilfully used to enrich them with interest, variety and contrast. Calgary's core is a sharply defined triangle, delimited on two sides by the pleasant Bow River with its clear, fast running waters, and on the long side by the Canadian Pacific Railroad right-of-way. The latter is a strip 400 feet wide and about 20 blocks long, 105 acres in all, of centrally located land. Interconnections between areas north and south of the tracks are made by means of underpasses. Special features of the river front are the little

Prince's Island park topping the triangle and the St Patrick's and St George's Islands at the eastern edge of it, where the Bow and Elbow rivers meet. This confluence of the two rivers probably attracted the first settlers who founded Calgary. Subsequent generations have treated the triangle portion of the Bow River bank with exploitation rather than vision. Today the south river bank is an unsightly area of dilapidated single homes, awaiting, as it were, their chance to be put to better use. The part of the core that is the central business district proper comprises an area about 10 blocks long by 4 blocks wide, immediately north of the tracks. South of the tracks, a one-block strip between 10th and 11th Avenues, consisting of partly vacant or dilapidated warehouses, is another area where changes are coming. Under the provisions of the General Plan, the warehousing is supposed to be removed to the industrial district of the city. A third area for renewal is the CPR right-of-way itself. The plans of CPR to clear out gradually all of the rail installation and industrial or other facilities now existing on the right-of-way, will make some 70 acres of central land available for commercial and related use. This would of course mean relocation of the tracks, for which a new route is being planned along the very edge of the south bank of the Bow River. A new railway station would then be built at the far east corner of the triangle.

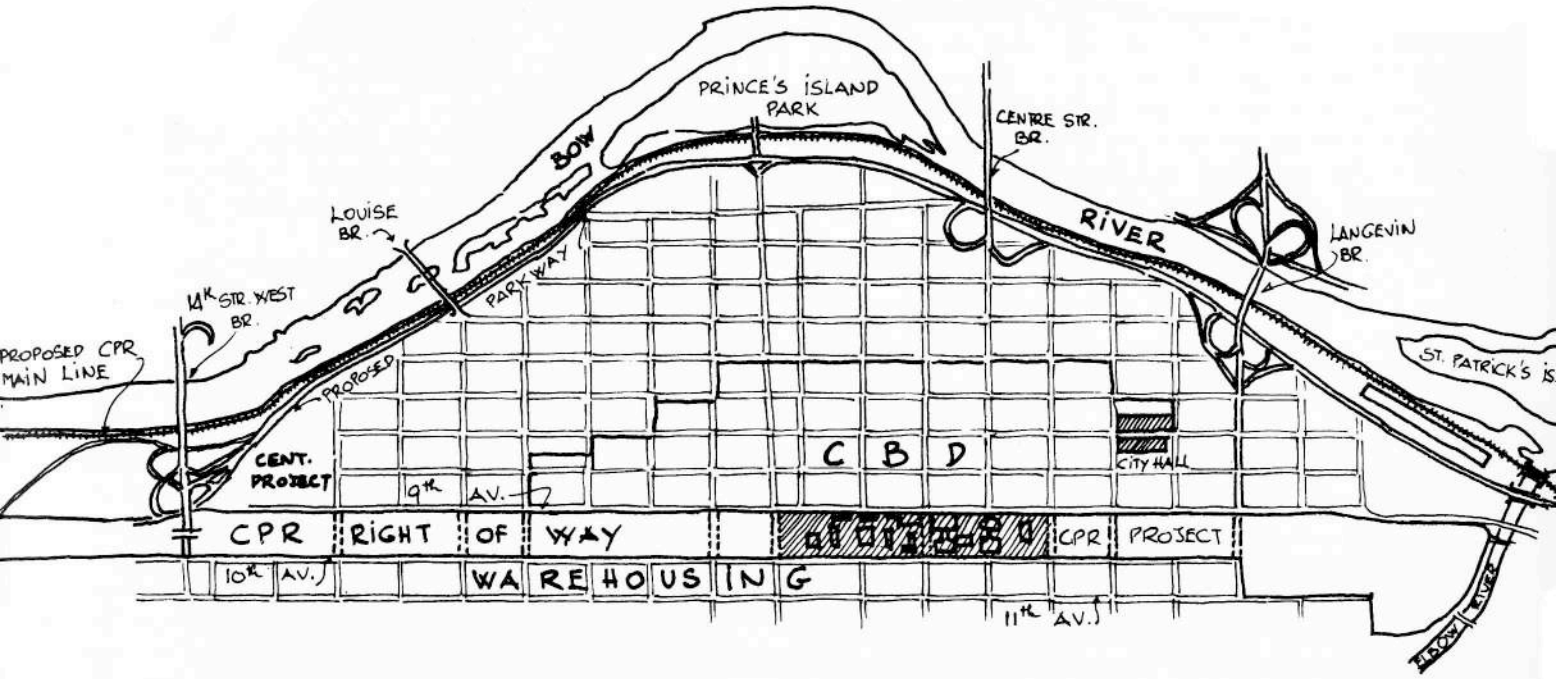


Model of the triangle as proposed by the city and the CPR. From left to right: Prince's Island park, new CPR main line, 6 lane parkway, existing newest commercial and office buildings with the city hall group at upper top, and the CPR right-of-way.

A number of Calgarians are opposed both to what they call a "violation" by the railroad of the river bank and to the CPR commercial development itself. They argue that the river bank should not be considered as being just waste space, open to easy way out traffic solutions, but should be transformed so as to enhance the city's core. Furthermore, they say, Calgary's downtown triangle is big enough to accommodate any ultimate growth, so that additional CPR-owned and -operated core space would strongly compete with the rest, to the detriment of the latter. Some opponents to the project further maintain that Calgary's immediate and future needs are for more industry rather than for more commercial and office space. On the other hand, those Calgarians who endorse the project are satisfied that the proposed CPR development will give a new impulse to the city, attracting considerable capital investment and balancing more evenly the taxation load.

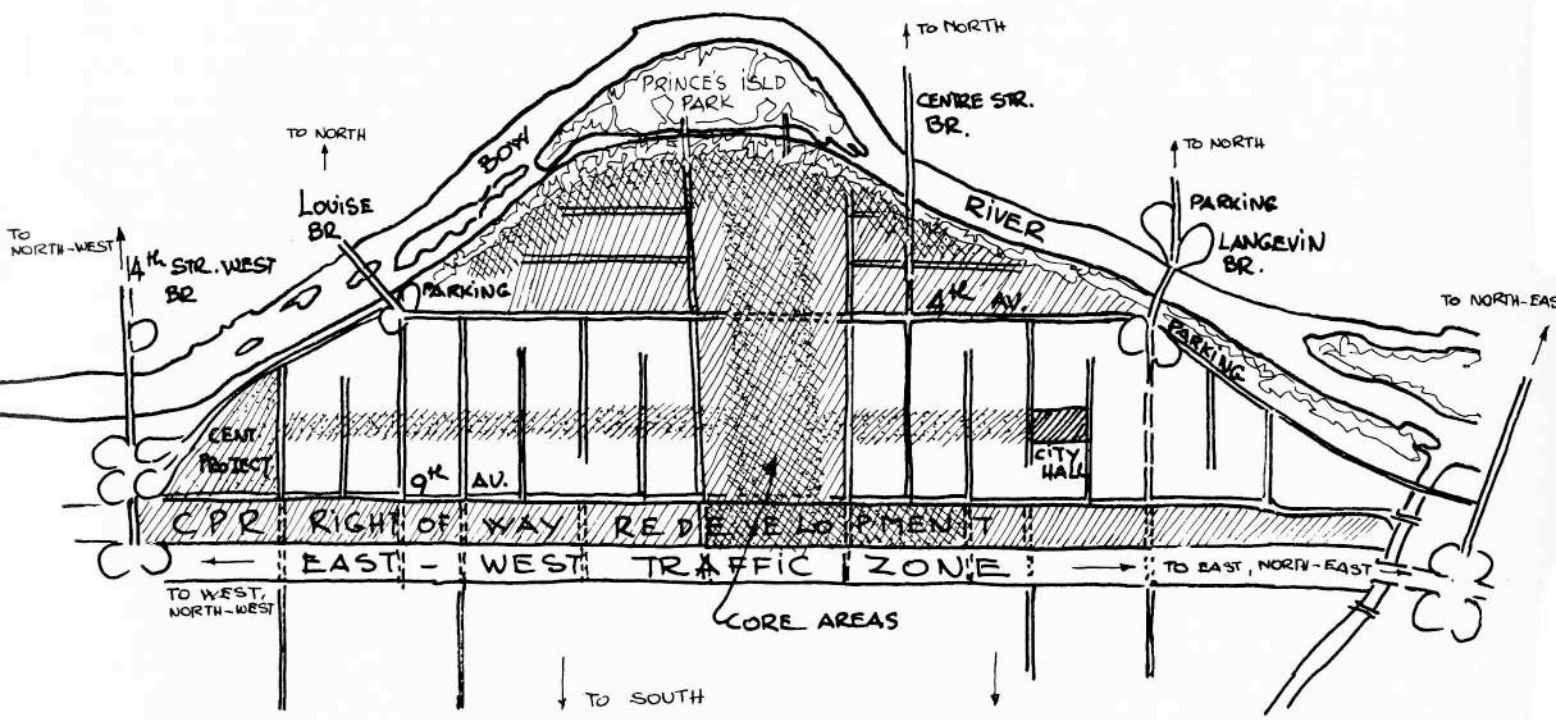
There probably are many other arguments, more or less weighty, in favor or against the CPR proposal. For the writer to elaborate on them would hardly be beneficial to the common cause. Instead, starting with the basic premise that a positive attitude would be wise for the city authorities, we should first examine certain implications of the proposal in respect to the city centre as a whole. What are the plans the city has for the core?

In regard to traffic problems, Calgary, one of the fastest growing cities in Canada, certainly has its full share. To ease the downtown traffic city authorities are proposing to build a six-lane parkway, to run adjacent to the proposed CPR rail line along the south bank of the Bow River. The parkway, they say, would also serve as an east-west bypass of the core, linked by means of cloverleaves to three of the four downtown bridges, the exception being the Louise Bridge. The writer feels this proposal insufficient to meet Calgary's growing traffic needs. In fact most of the traffic comes from the south, the east-north-east and the west-north-west. A traffic line therefore is most needed to handle the south traffic, and such a line should be able to handle the north-east and north-west traffic also. The remaining north traffic would continue to use the existing but improved bridges, for which traffic the portion of a parkway between the Langevin and Louis bridges would be of little use. Thus, it would seem that the planned parkway would have at best a limited function in serving the traffic bulk of the core. More effective long range solutions therefore should be sought. In regard to the planned rail line along the south river bank, the proposal might perhaps be economical, but it is otherwise fundamentally unsound. In an era such as ours, which makes so many demands on our incredibly tortured cities, be it by congestion, pollution, noise, disorder or ugliness, it is imperative that no freight train lines be allowed to run through or close to central parts of a city, if they have nothing to serve there. Since they deal only with warehousing and industry,



DEVELOPMENT OF CALGARY'S CENTRE AS PROPOSED BY THE CITY AND THE CPR

DEVELOPMENT OF CALGARY'S CENTRE AS SUGGESTED FOR FURTHER STUDY



freight lines ought to be diverted away from the core, which has enough problems without them. Only passenger traffic should remain tangential to the core. The present general location of the passenger train line would be best also for the future. Railroad stations are for people and have been most useful when centrally located. The CPR proposal to divert all rail traffic along the south river bank is based on one-sided considerations only, and thus is unjustifiable.

As in most cities today, the approach to the Calgary traffic problems demands boldness and directness. In this sense it would be most advisable to locate a traffic zone immediately south of and running parallel to the CPR right-of-way, in order to alleviate the task of the already overloaded 11th and 12th Avenues and to act as a regulator of traffic in all directions. Surfaces and/or structures adjacent to the moving traffic lines should serve for parking of vehicles that do not necessarily have to penetrate the core. Such a zone could further include rapid transit lines, perhaps fully or partially elevated ones, next to which the CPR passenger train service could most expediently be accommodated. Any related structures could be such as to include some shopping along pedestrian links leading to the core, and if desired, even occasional office space on upper levels to allow for more variety in the complex. This traffic zone could occupy land perhaps on the now partially obsolescent strip of blocks immediately south of the CPR right-of-way, and it would greatly upgrade the value of this land. Such then might be the city's real chance for a strong answer to a difficult problem.

Because of its obvious importance, traffic has been discussed first. However, life in the city core is equally of major concern. In this context, the entire triangle should be considered, for any split of it would be artificial. Hereby the task should be to take into account more than sheer technicalities, and to make a creative projection of how the area could be forged into a congenial place for people, their vital interests, happiness and enjoyment.

How far have city authorities already decided about the gradual reshaping of the now characterless core? What has been proposed so far is an isolated group of apartment point blocks, with some commercial and related facilities, facing Prince's Island at the north edge of the triangle. The scheme is still just an idea, and quite vague as to its ultimate realization. This is as far as the city's own projects go. On the opposite side of the triangle, CPR plans for any parts of the right-of-way are even more vague, in fact still non-existent, for no planners or architects have labored on them as yet. An attempt to convey some idea about them has been made by the association called "Calgarians for Progress". Its plan shows a number of buildings within a zone that has no relationship to its surroundings. An existing newer building group next to the city hall, consisting of a library, a police headquarters, municipal offices and a garage, has also not been integrated into a total scheme. Therefore, the theme that prevails so far in the projected picture for Calgary's core is *Isolation* with no suggestion that the core elements will eventually be linked together into any coherent unity. If it is at all true that the character of any city is qualified by the life at its centre, then the character of Calgary is likely to remain fragmented, aimless and spotty with little or no true urbanity. What should be its most cherished natural amenity, the river bank, has been chosen to serve irrelevant transportation purposes. It would seem, therefore, that any decision or agreement which might effect the whole future of Calgary as a city is at the moment premature.

Following principles of successful city planning, such as continuity, variety and freedom of choice, the writer imagines the entire triangle as an articulated and coherent unit, with the CPR development primarily north-oriented, so as to consolidate the central business district, rather than contribute to its dispersal. Immediately south of their development, an east-west stretching traffic zone, as previously described, should regulate all vehicular approaches and bypasses, as well as provide for parking and pedestrian linkage with the southern sections. The traffic directly from and to the north could move via the Louise, Centre and Langevin bridges. Free of this traffic as well as of any crosstown traffic, the northern part of the triangle should be redeveloped in strong association with the river and with the existing central business district. The river should be an integral part of the core, not for any sentimental reasons, but primarily because it will provide a wider range of possibilities and values in an upgrading process which, in fact, is the true goal of any sound planning. That urban values are strongly associated with esthetics and psychological impact is indisputable. The greatest possible enrichment of the core would be the target. What then might thus be created closer to the river in terms of apartments, hotels, clubs, buildings for culture, places for eating, entertainment, shopping, etc., should be properly linked with the CPR development, as a reflection of it at the other side of the core, by devoting some of the north-south streets primarily to pedestrian use. It should be emphasized that this would involve only a pleasant cross-town walk of 15 minutes, which is the time necessary to stroll from 9th Avenue down to the river. Along the way, light commercial facilities, especially fashion shops, cafe's, entertainment, some of it behind arcaded galleries, interspersed with landscaping, could all provide for interest and would constitute the linkage. Thus, from the river with its openness, to the CPR scheme's contrasting enclosures, there should be a continuous flow of urban spaces that has a beginning and an end, with intermediate targets full of variety and moments of surprise.

The above is offered as an appraisal of what has or has not been done, and as a suggestion of what could be done for the benefit of the people of a city that is perhaps never to become a city of millions but could become a centre of prominence. More study would be necessary to indicate the best solutions. Planning is a constant search and a cautious touch. Conditions like the ones in Calgary are not unusual in our relatively young and fast-growing Canadian cities, which may be compared to overgrown bodies, with lots of arms and legs but not sufficiently strong hearts. To consolidate and protect that heart is vital lest the heavy body should collapse. The city's heart needs surbanity to nourish the hearts of its people.

THE FACULTY OF ARCHITECTURE
UNIVERSITY OF MANITOBA

VOXTOX

A kaleidescopic commentary by students, graduates and visiting lecturers at

MANITOBA

The aim of the Faculty of Architecture at Manitoba is not to produce a special type of architect in quantity, but rather to create an environment which will stimulate and enable each student to become an architect of individual quality. We recognize that a university school of architecture is more than just a place of learning: its physical environment must arouse, promote and foster a mental environment in which staff and students will share in the mutual experiences of learning to think and learning to do. This total environment of experiences for the student must include a well-organized curriculum of considerable breadth and professional depth, a highly experienced staff, a student body eager to learn, an efficient and effective building within which to work, and an alumni legacy of undergraduate traditions and post-graduate achievements. At Manitoba this solid environmental core is augmented and enhanced by the presence of Canada's only university course in Interior Design, by post-graduate courses in both City Planning and Architecture, by an extensive program of visiting lecturers, conferences and seminars made possible through the annual generous support of the Manitoba Association of Architects, by a constructive program of travelling exhibitions, by an annual student publication supported entirely by patrons within the profession, and by a stimulating program of live concerts and fine films.

Manitoba possesses a rich tradition of active cooperation on the part of staff and students and a heritage of distinguished accomplishments on the part of its alumni throughout the world.

My desire to become an architect is as that of Stefan Zeromski to be a writer

The celebration of the fiftieth anniversary of architecture at Manitoba has been a rewarding experience and has prompted us to indulge in retrospect and introspection to acknowledge the signal honour of becoming a Faculty of Architecture with the attendant sobering realization of responsibility to students, graduates, alma mater and the profession, and to consider seriously the possible recharting and expansion of our undergraduate and graduate programs. We look forward to the next half century with confidence as we face the challenges of increasing enrollment, expanding curricula and active research programs.

In this issue of the RAIC Journal we welcome the opportunity of presenting a compendium of student opinion and reaction to the five-year environmental experience of studying architecture at Manitoba. These student commentaries, selected and edited, but not censored, by four members of our staff punctuated by a few statements from graduates and visiting lecturers have been assembled into an abstract mosaic of words and illustrations. We trust that the reader will find it interesting, revealing, entertaining and stimulating. John A. Russell, Dean, FRAIC

I assume that the art of architecture cannot be taught. However, the excitement that compelled me towards this course could be fanned into some kind of flame. Alas, I sometimes feel that this has not happened.

Arch III

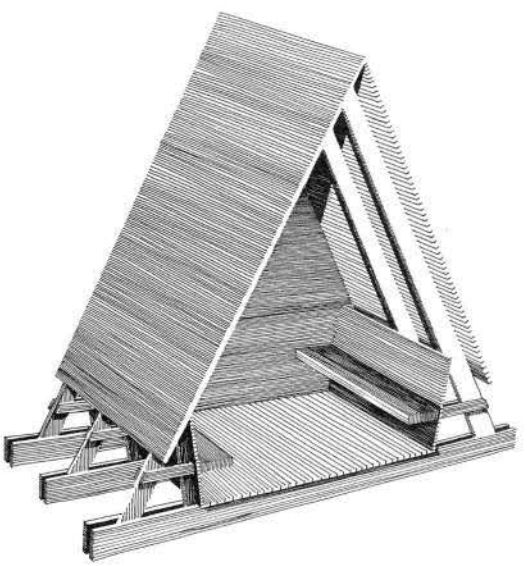
I am studying achitecture. I chose it because I like it. Knowing nothing about it, I liked it and now that I know what it is and how it works, I like it even better.

In this, my architectural journal, there will be among other things, two kinds of statements, I will make declarations of the utmost dogmatism; statements that I know to be true beyond any doubting. I will also pose questions. These will be the expressions of curiosity of things about which I know nothing. If this architecture course proceeds as I hope it will, my development can be measured by the degree to which these two positions change place. I hope to find answers to those questions that I now ask so that I will be able to speak confidently about those things about which I now know nothing. At the same time I hope to learn to question those things about which I know everything. The answers to my questions will give beginning of knowledge. Questioning my dogmatism will be the beginning of wisdom. With both I should then be able to stand at the threshold of the art of architecture. *Arch I*

Ambition partly promoted my interest in architecture. As far as I know there are no other people in my home town who have degrees in architecture; they only have diplomas. I figured that if I graduate and return to my home town, I shall be the only 'Architect' who will have a degree and consequently I shall have a large number of customers. Therefore, I shall have a comfortable income and live comfortably. *Arch I*

. . . "I WANT. I MUST. I WILL."

The faculty is a centre of culture.



When people are engaged in a space, space becomes place.

Erskine

When people are engaged in an idea, the idea becomes life.

The study of architecture extends far beyond the mere physical aspect of building. It is an expression of man's social, spiritual, technological and artistic aspirations. The curriculum of the faculty embraces the technical, artistic and humanistic dimensions of architectural thought.

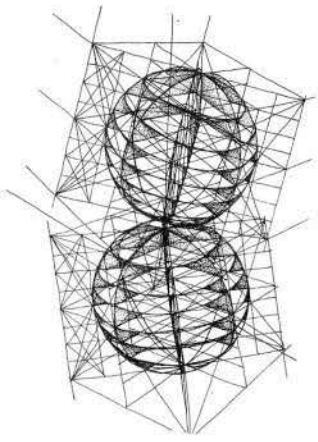
This philosophy includes the Interior Design curriculum, with the design core analyzing the requirements of people engaged in various living and working activities accommodated intelligently and with sensitivity within an architectural frame.

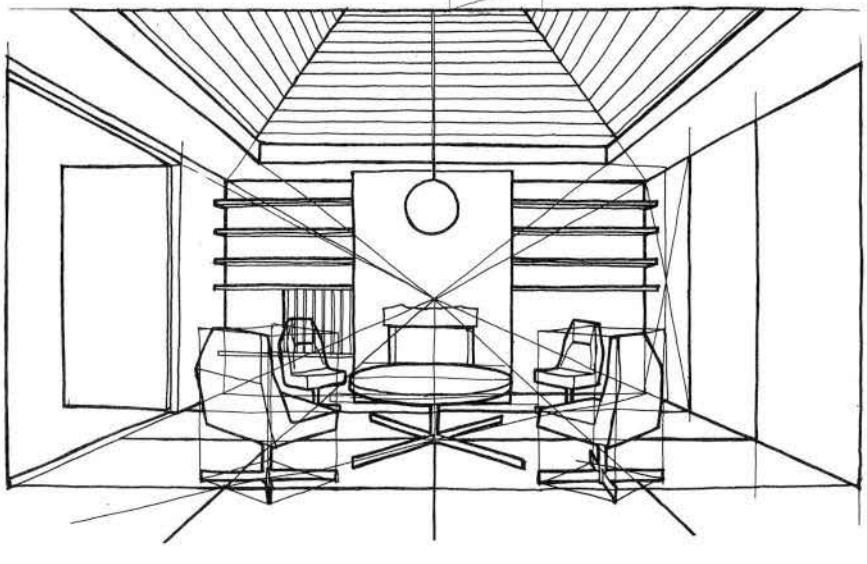
Architectural experience deals with a sequence of spaces and is continuous. It does not begin when one comes in the front door and end when one leaves.

Architectural space is any containing volume, interior or exterior, such as a room where the floor, the walls and the ceiling define the limitations of the volume; the prairie where the sky defines the limits.

Architectural space is the life of the individual that makes up the society. It is limited by the experiences of the members.

Arch IV

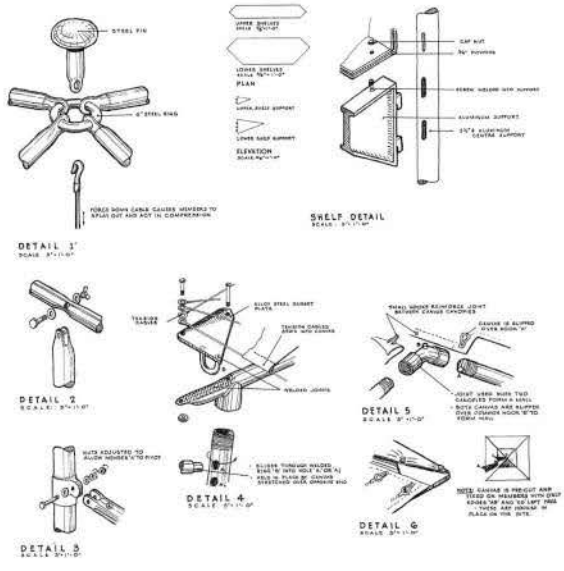


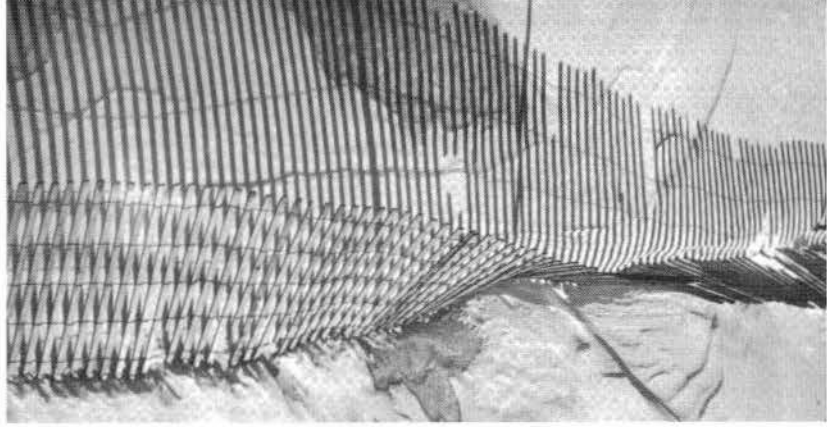


The roughest course in first year is drafting. Rough, I mean, not because it is hard, but because it is rough.

Of all the first-year courses, design is the most interesting. The hardest part of design is to learn that the profs don't expect or even want a work of art.

Good advice is to follow the specific restrictions and rules for each project; don't try to be a child prodigy (sic.)! *Arch I*



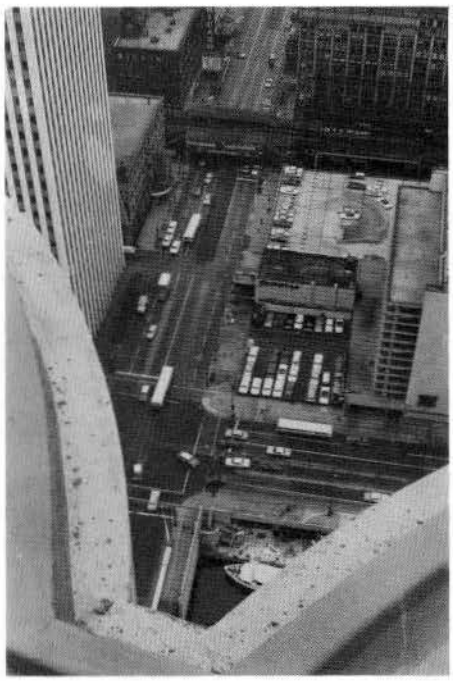


Very few take the time or make the effort to look around them and see life.

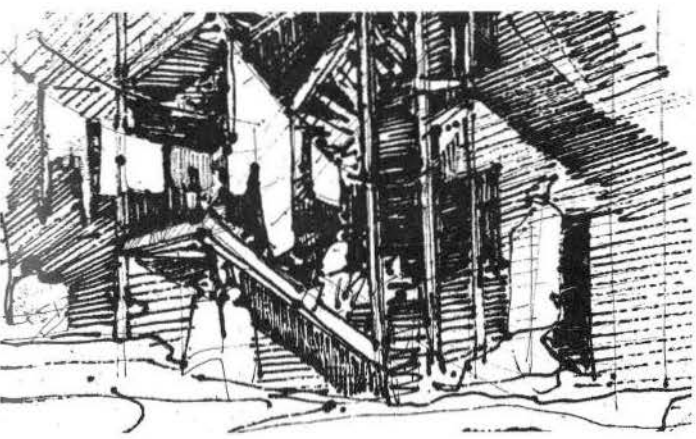
No superficial individual eccentric motives should be allowed to be expressed for the purpose of showing off, or of being different. How can an answer be found if the real questions are not faced squarely? *Arch III*

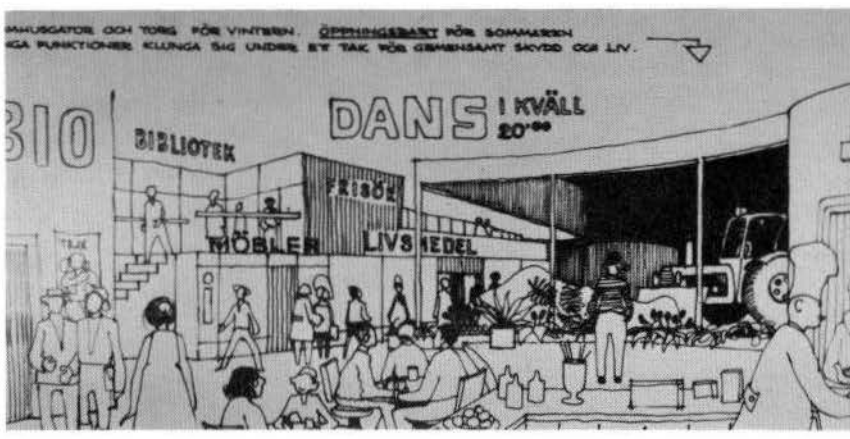
We must gain as complete an understanding as possible of human behaviour and emotions. *Arch II*

My greatest fear, as I am sure, is the fear of many other students, that of turning out to be nothing more than an architectural hack; that is, of lowering myself to be a salesman of architecture with profits as the criterion. I still recoil with some horror everytime I reflect upon what one of our more *soi-distant* architects revealed to my naïve mind, when he told me it took him five years to get rid of all the idiotic ideas of the young architect just out of school, and to teach him to design in the proper sensible way. We have evidence of this design sensibility all around us. *Arch IV*



Let us not forget that the ultimate reality, the basis of all real architecture, is the human associations between people; who have different characters and different dreams. We must help them find the environment in which they can lead the life they are hoping for. *Erskine*

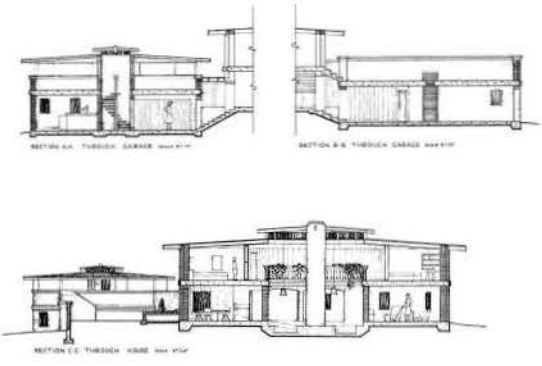




Man standing alone on a broad sweeping plain finds himself, in a manner of speaking, at the centre of a great hemisphere, formed between the ground and the sky. As the third dimension has so little concrete indication, any element of reasonable heights takes on great significance — another person, a grain elevator, the march of telephone poles. *Arch IV*

The prairie is not a friendly place. Yet for those who belong here, and there are a few, it has a strange compelling majesty that other areas do not have; and we love it! *Arch III*

Landscape incorporates the total physical environment in which man lives; the architect must, therefore, work with landscape in his designs. *Arch IV*



The prairie is dominated by a very strong horizontal element and a very open and bold character. The effect and influence of this unique geographic condition should produce a unique corresponding architecture.

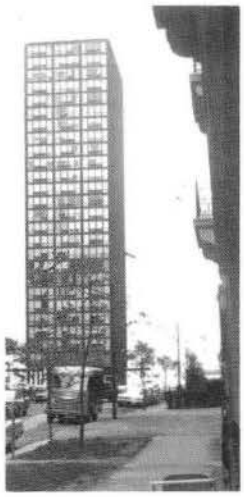
For our climate there are other types of housing than those around us, which would make more sense, but our democracy says that every man may do as he pleases. *Arch II*

THERE IS A REAL NEED FOR A TRUTHFUL BASIC FORMULATION

George Swinton's paintings gave us a sort of image which we must create for ourselves. The image of the prairies and its changing character; the change of light and colour; and the change of the seasons; the flatness of the land and the fertility of the land. *Gerson*

When purely functional and sociological considerations are translated in a poetic or inspired sense into shaping of our environment to serve as a receptacle for the flow of human life, serving man's physical and mental needs, the results can be said to be architecture.

It is only natural that our environment, which is directly dependent on our scientific and technological developments, should lag behind until planners can fully understand these developments and their implications. *Arch V*

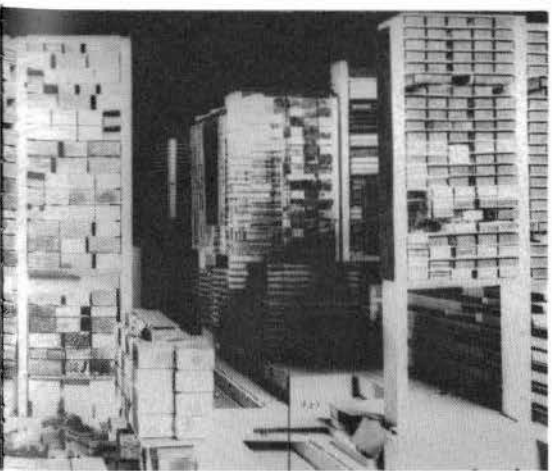


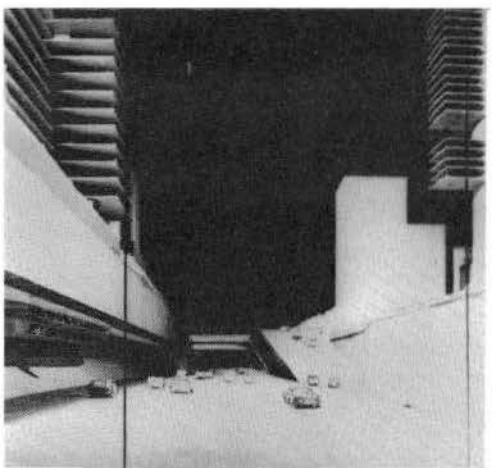
In the Loop of Chicago, the high-rise building and the streets seem incompatible. One or the other was neglected, perhaps in their common developments, having indeed arrived at a dead end in their present concept. History explains this: the high-rise building developed before the automobile. *Arch V*

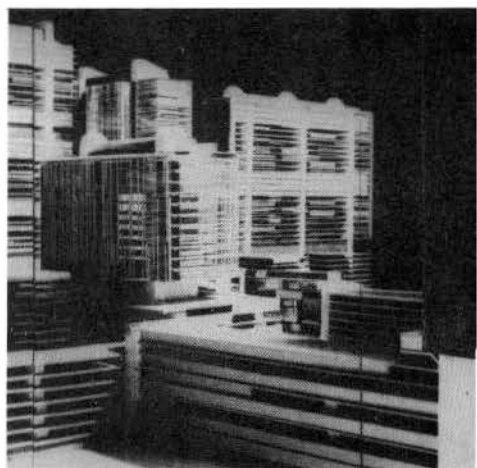
Most of our reactions to the physical world are sub-conscious. For the architect it must be not only a conscious reaction, but a reaction of acute consciousness — a consciousness of what forms the physical world must take, to support the highest and most worthy ideals of us all in the way that we wish to live. It is only through this obligation that the architect has the right to change the world to his image, in the name of us all. *Arch IV*

TO EXPRESS A CONCEPT

An approach to the high-rise concept. B.Arch Thesis 1963. N. Hamy

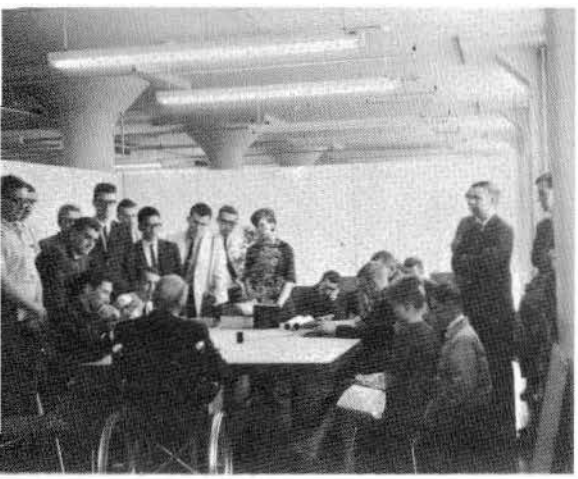






Architecture can only become an art in the hands of a sensitive man; concerned with all aspects of architecture; aware of human needs; with the ability to translate physical requirements into utilitarian forms that express his time.

We must be what we are; artists whose major purpose is to interpret man in his society and give him an ordered environment. *Arch IV*



To emulate and imitate, no matter how well, is insufficient to meet the complex psychological problems that are present in today's complex society. *Arch V*

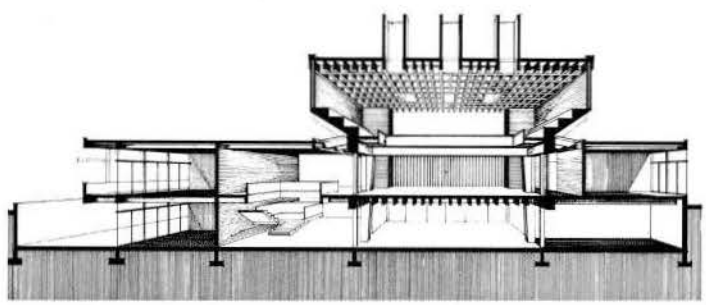
Discipline is all-important in design. Order is inherent in discipline. Unity and beauty cannot exist without order. Thus discipline is a prerequisite for design.
Arch I

ARCHITECTURE SHOULD BE A RATHER HUMBLE JOB

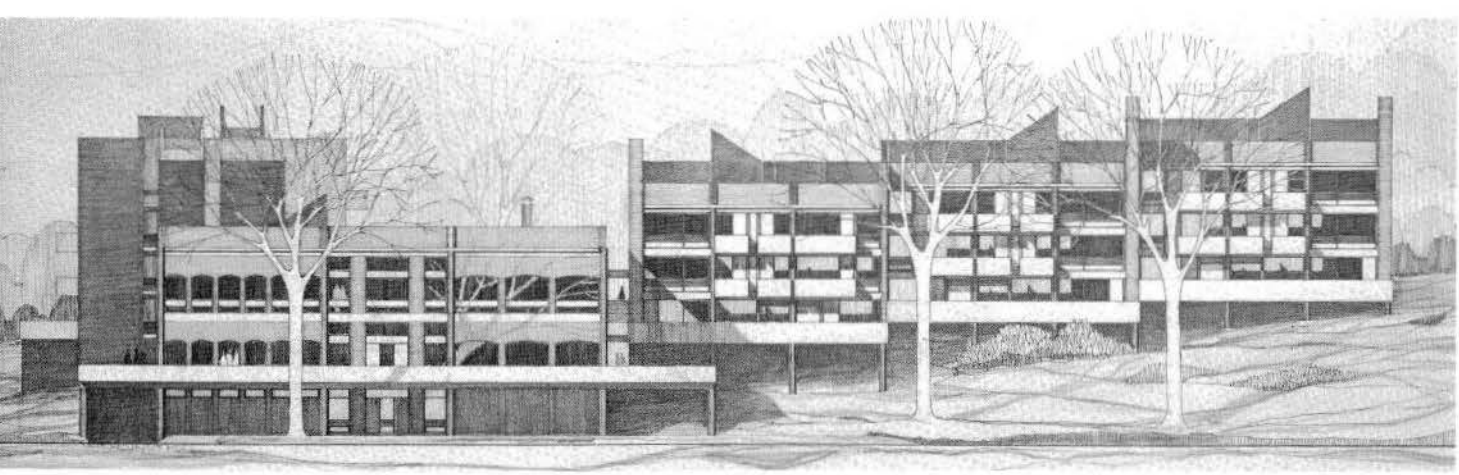
The widening gap between the architect and the people becomes more apparent with the passing of each day. It is obvious that one of the roots of such a schism lies in the educational training of the young architect.

Architectural education helps the student develop an ability to approach architectural problems. It teaches him to solve a problem systematically. It does not teach him solutions.

I have found the essence of architecture on the reading list but conspicuously absent from the curriculum. Opportunities to discuss, argue, and shape my own interpretations have been few and have occurred despite a very full program of uncoordinated courses. *Arch IV*



Today each architect must seriously reappraise his or her attitude to the professional responsibility which really is honesty in the broadest sense of the word.
Arch V



I expect a good job immediately after I leave this school with my degree. I expect to fit in with the world of architects, and before too long to have gained enough experience to be able to practice on my own. This university education should be my launching pad to the top of the ladder. *Arch I*

Many have made it their aim to fill their personal coffers with crisp bills, to pad their egos and to do a minimum of work which would directly benefit society. *Arch V*

For my own practice, I will do what I feel and think is right. *Arch III*

It would seem, judging contemporary Canadian architecture, that a minimum of creative talent exists in the profession. *Arch V*

It is not the job of the architect, who is unquestionably meant to design communities, to build monuments for himself or for his clients.
Erskine

WHICH ONE SOMEHOW HAS TO LEARN TO DO RATHER WELL

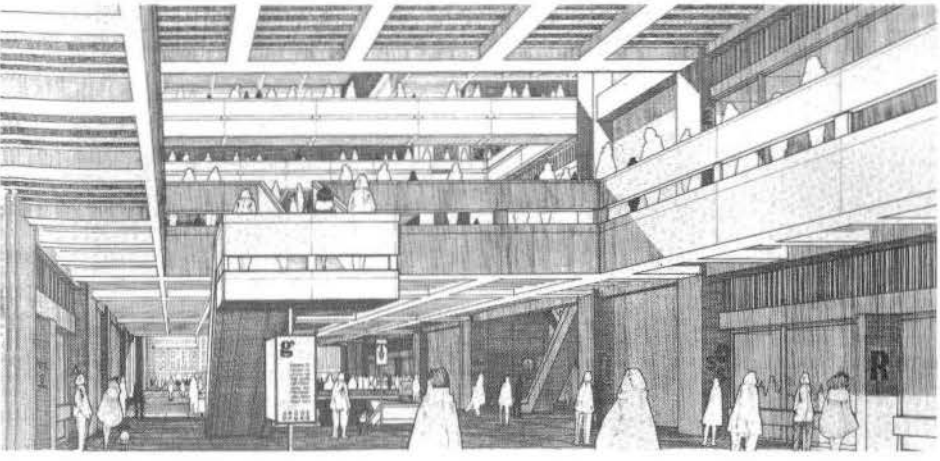
ERSKINE

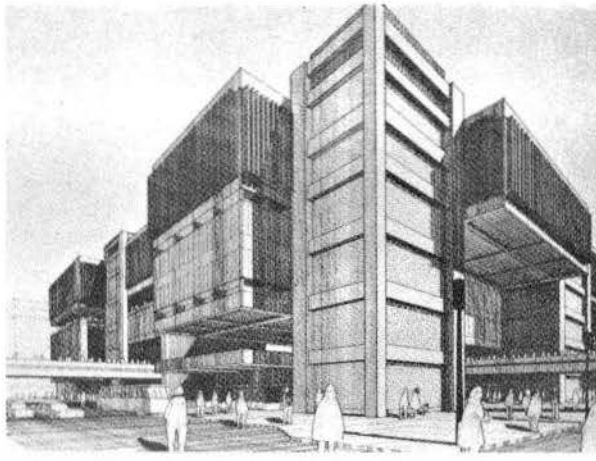
In your work you have to be concerned with the dreams of people. These are much more important than your own architectural dreams.
Erskine

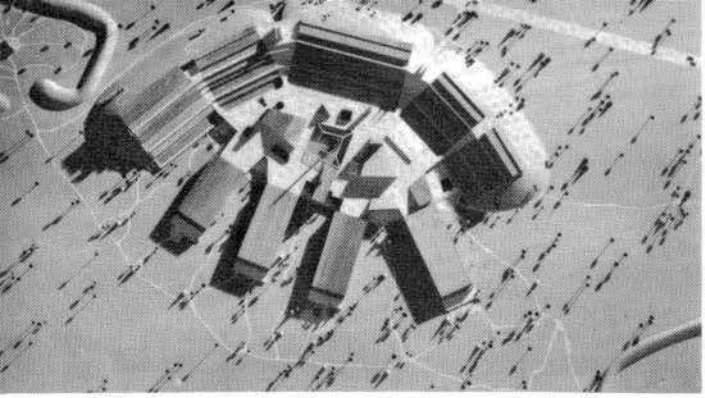
If architects are not willing to meet the increasingly important demands of industry, business and planning, then they must be content to play a minor role in society.
The architectural profession today is not in touch with reality and the people, nor is it actively participating in the development of the country. *Arch V*

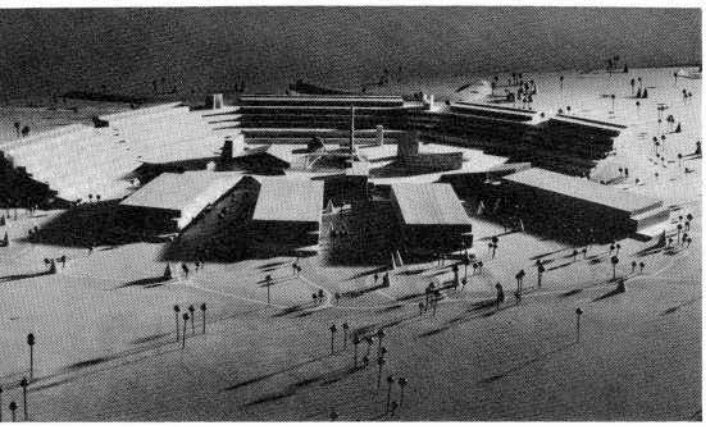
The architectural profession is comprised of individuals who spend most of their time trying to outdo each other in the business world; who join together annually, pat each other on the back, deplore the ugly cities around, speak profound thoughts, and do nothing. The profession spends too much time talking and not enough time in organized group action aimed at improving the things we see around us.
Maintaining ideals helps the profession far more than fighting for higher fees. *Arch V*

Market Square, Hamilton, Ontario — Commercial Urban Redevelopment B.Arch. Thesis 1962. J. A. Bogdan



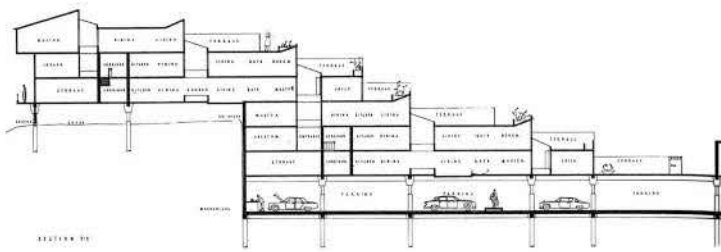






The mistake in the past was to reproduce the established town patterns of the southern regions, in the north. In order to survive we must adjust to our environment. The community must grow out of a specific need, in a specific area, with a form suited to the specific climatic and topographic conditions. Only then will the bribed workers who live there take a pride in their community.

Pine Point, N.W.T. A Sub-arctic Town
B.Arch. Thesis 1962. W. B. C. deLint



Last year's graduating class has been one of the most dynamic in the school's history. In order to keep their idealism alive in the cold and cruel world of real life, they have formed a movement called 'Force'.

"Our only hope to become a force in Canada's development depends on the extent to which we exchange and clarify our thoughts regarding our approach toward the common goal: the improvement of our environment. By exchanging questions, answers and information, and through the experiences of our various acquaintances, we will not only benefit as individuals, but we will also be able to make a stronger contribution."

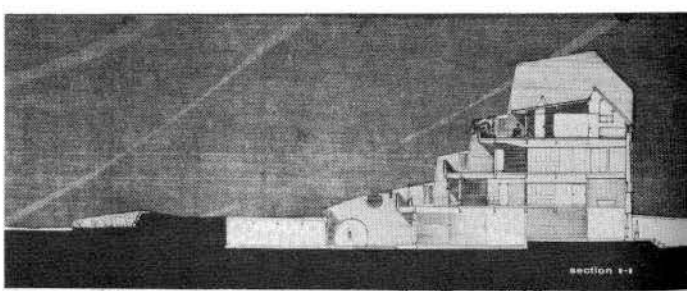
Editing and layout: Professors C. deForest, J. Graham, C. Nelson and R. Zuk

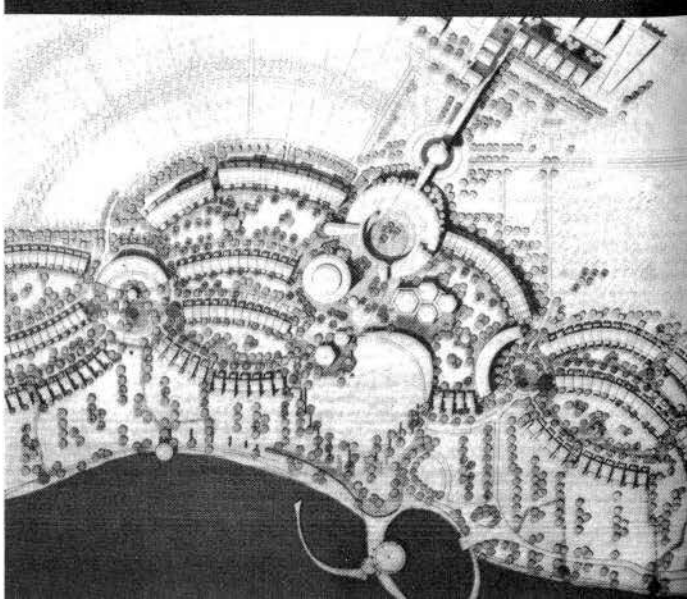
Although seeming highly utopian, it is hoped that this project will stimulate thought; will open men's eyes to a better and more positive future for agriculture and the rural way of life; and will be a starting point and basis for further more specific developments. To convince, the initial concept must be strong in spirit and in form and must reflect this strength in the quality of the planning and the architecture.

Prairie Stop, Saskatchewan. An Agrarian Village Study
B.Arch. Thesis 1963. W. A. Fullerton

Architecture is a thrusting up from the earth. It is building. It is a positive thing. And this is its glory. It is a bold, brave, exultant answer to the negativism of the world. This it must be, and for this we must be grateful. It must serve humanity in a most practical way. But before architects may claim for architecture the highest plateau of artistic endeavor, they must find some way to speak of the human condition. They must speak, not in the idealized romanticism of Frank Lloyd Wright, nor in the classic understatement of Mies van der Rohe. They must find a way to express the universal eloquence of compassion. They must find a way to absorb the darkness but not be defeated by it; not with pious dreams of the future but rather with the wisdom and compassion and, in its broadest sense, the poetic understanding of man.

Arch I





Technical Column

Edited by Douglas H. Lee

S. Metrick, B Arch, is manager of market and product development for Kawneer of Canada Ltd. He has been working with curtain wall and window problems for the past 12 years in the United States and Canada.

Window Problems In Modern Structures

by S. Metrick

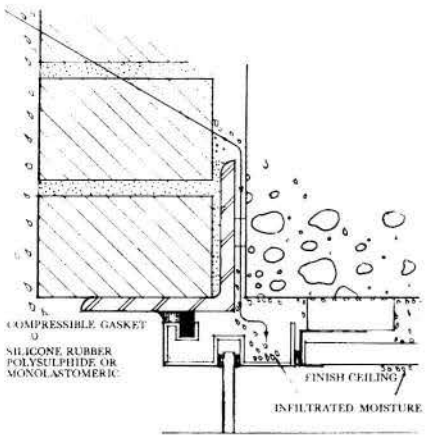


FIGURE 1

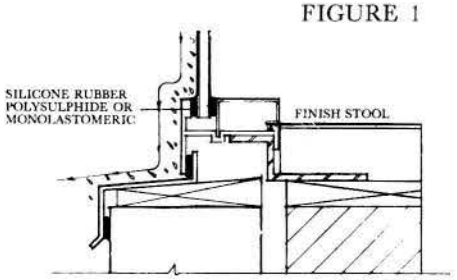


FIGURE 2

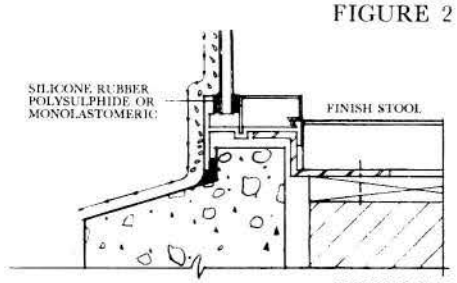
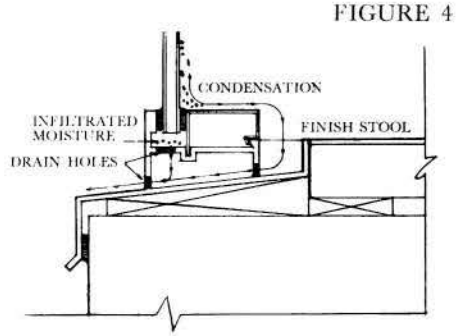


FIGURE 3

FIGURE 4



Transparency is not synonymous with windows but drips, drafts, cracks and other problems are. A window may be a limited size rectangle or a progression of rectangles becoming a total facade.

Without doubt the greatest problem has been, and remains, one of moisture penetration. Leakage problems in some structures have been spectacular. Poor glazing techniques, or inadequate specifications for proper materials have contributed to a large percentage of problem installations.

Head and lintel details must be subject to special scrutiny (1). There can be little comfort in the most meticulous glazing and perimeter sealant designs if the conditions above the window render the precautions useless. Lack of lintel flashing demands special waterproofing attention to the jointing of the veneer as well as to the veneer itself, if moisture is to be prevented from spilling into the head section of the window and onto the ceiling.

Sill conditions are perhaps the most vulnerable points for failure. Figure 2 illustrates a typical fixed glazing detail with arrangement for interior glazing. This type of window detail relies entirely upon the glazing sealant design for the weatherability of the installation.

Good results can be obtained from glazing details shown in figures 2 and 3 but it should be remembered that the very best of glazing sealant designs are subject to human and material failures which could lead to moisture penetration into the structure. Figure 4 then becomes the recommended detail to ensure success even if sealants should fail. The continuous sill, if it is made deep enough, can serve as a condensation gutter as well as a drain flashing for the window unit.

While problems of moisture penetration from without command a deserved share of attention, problems of moisture from within are of growing concern. The window as a unit has not changed too radically over the years. The environment within which it must perform, however, has undergone a revolution. Almost all buildings which depend to a large degree on space rentals are being equipped with air conditioning. Relative humidities carried by these modern structures during winter months are variable from 15% to 45%. This is compared to the building of only a decade ago which carried relative humidities of about 5 to 10%. How much relative humidity can be carried in a given building or area will depend upon many factors. Windows have limitations: they cannot be designed to meet unlimited conditions of environment. The conditions of environment, however, can be modified to meet the limitations of windows.

The largest single source of heat loss in a building is the window areas. How this condition is treated will determine the levels of humidity which can be maintained without condensation and moisture run off during periods of low outside temperatures. Here the most important design feature is the heat source. The loss of heat through glass and metal frames must be supplemented and replaced in quantity and coverage so that no part of the window unit will have an interior surface temperature below the dew point of the desired relative humidity within the room. If this prime consideration to successful, or at the least acceptable window function was followed, most of the built-in hazards contributing to malfunction could be avoided.

NEW PRECAST TECHNIQUES FOR
TORONTO CITY HALL

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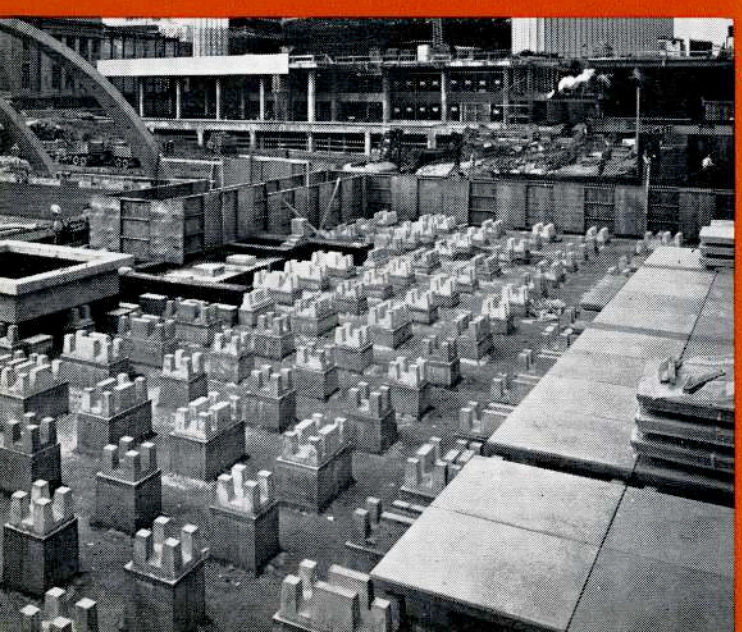
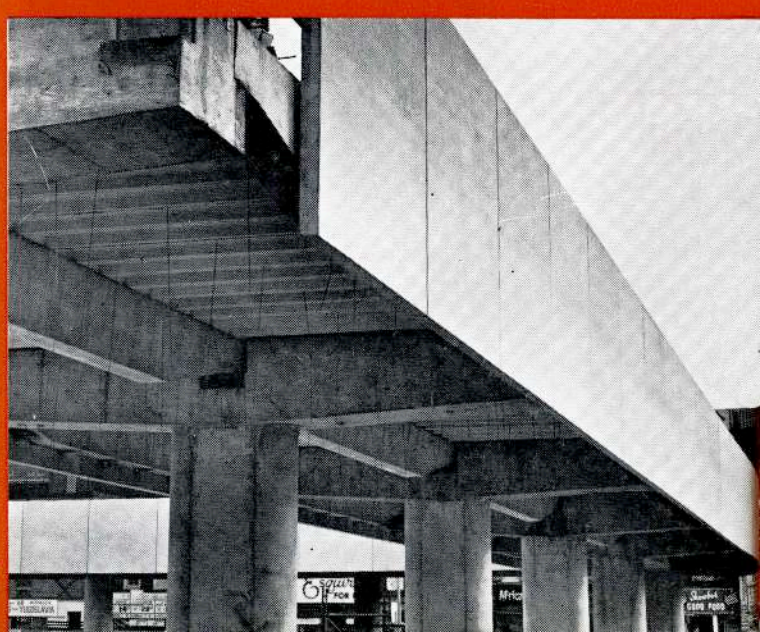




A. 11′ x 4′ MARBLE FACED PANELS

Split-faced marble pieces are set in rubber extrusion in form which holds marble in place during pour and prevents leakage of concrete between marble strips.

B. PANELS AS FORM

Panels being used as part of form for reinforced concrete bearing walls. Form ties bolted to rear of panel are encased in continuous vertical ribs of concrete. A slip-form between panel and poured concrete provides continuous vertical air-space. Temporary braces are used to hold panels during first stage of two stage pour.

C. PANEL ERECTION TECHNIQUE

Pre-aligned dowelling system enables precise placing of one panel on the one below, eliminates scaffolding, cuts costs and time, and increases safety factors.

D. NATHAN PHILLIPS SQUARE

Precast concrete capped stub columns carry 6′ 6″ square paving slabs on roof of existing and new parking garage. Open joints in paving permit drainage and access for maintenance and repairs.

E. ELEVATED WALKWAY

Walkway surrounding Nathan Phillips Square provides grandstand view for civic functions. Beams, deck and parapet panels are of precast concrete.

Architects: Viljo Revell—John B. Parkin Associates. General Contractor: Anglin-Norcross Ontario Limited

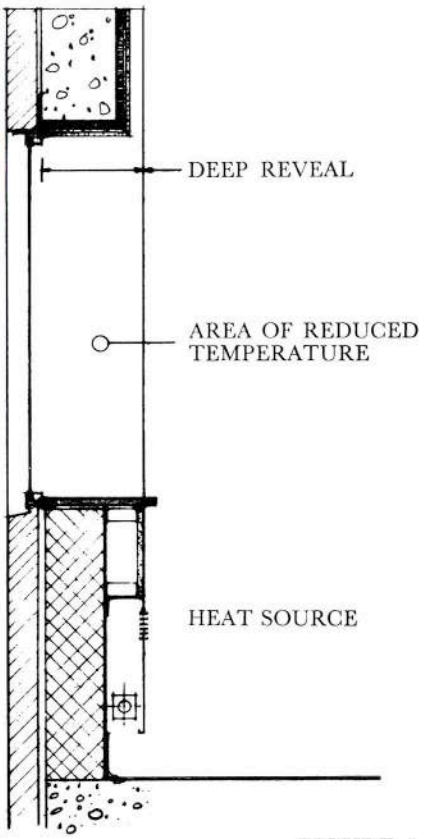


FIGURE 5

The three most common faults contributing to condensation problems are illustrated in figures 5, 6 and 7. First, a deep interior reveal of the window, combined with remote location of the heat source creates a cold air pocket and is therefore a potential window problem (5). Secondly, curtains or blinds between the window and heat source isolates the window from the heat causing a lower temperature between the curtain and window (6). Curtains prevent heat from reaching the cold surfaces of the glass and metal resulting in low surface temperatures on these areas while the moisture vapor in the room air passes through the curtain to be cooled to its dewpoint. Condensation forms or frost appears depending on the exterior temperatures. Third, a heat source between the window and curtain is another potential hazard (7). A unit diffusion section for heat and humidity as illustrated here can cause problems when the occupant is allowed to shut off the source of heat for reasons of comfort, leaving only the flow of cooler conditioned air to circulate. Resultant condensation is always a problem and even more so if no provision has been made to collect and lead away the condensate.

No standard foolproof formula exists for satisfying all conditions under which windows are to perform, but an understanding of some conditions which produce these problems may indicate where a design modification is necessary.

FIGURE 6

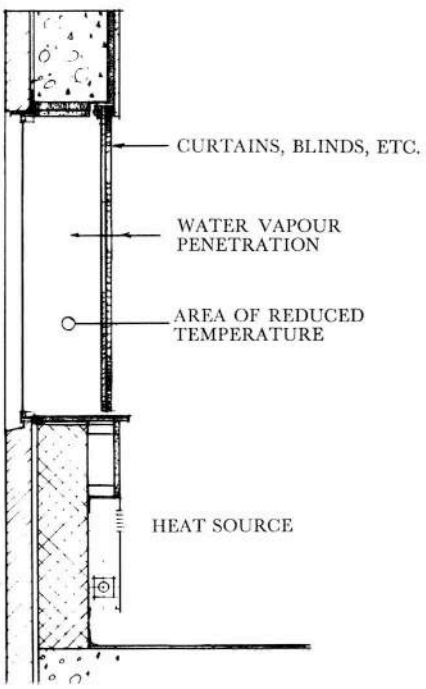
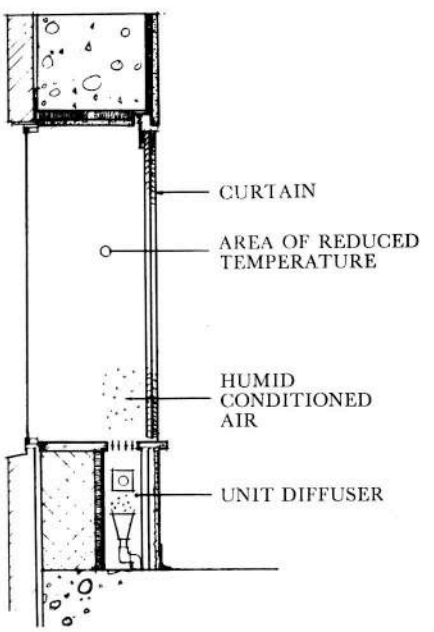


FIGURE 7



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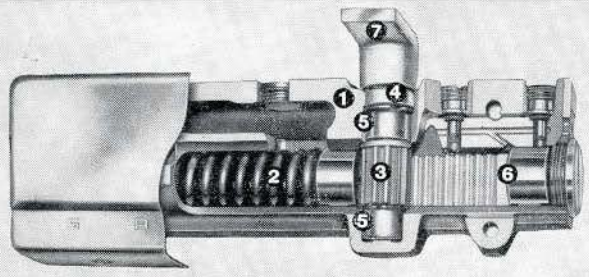

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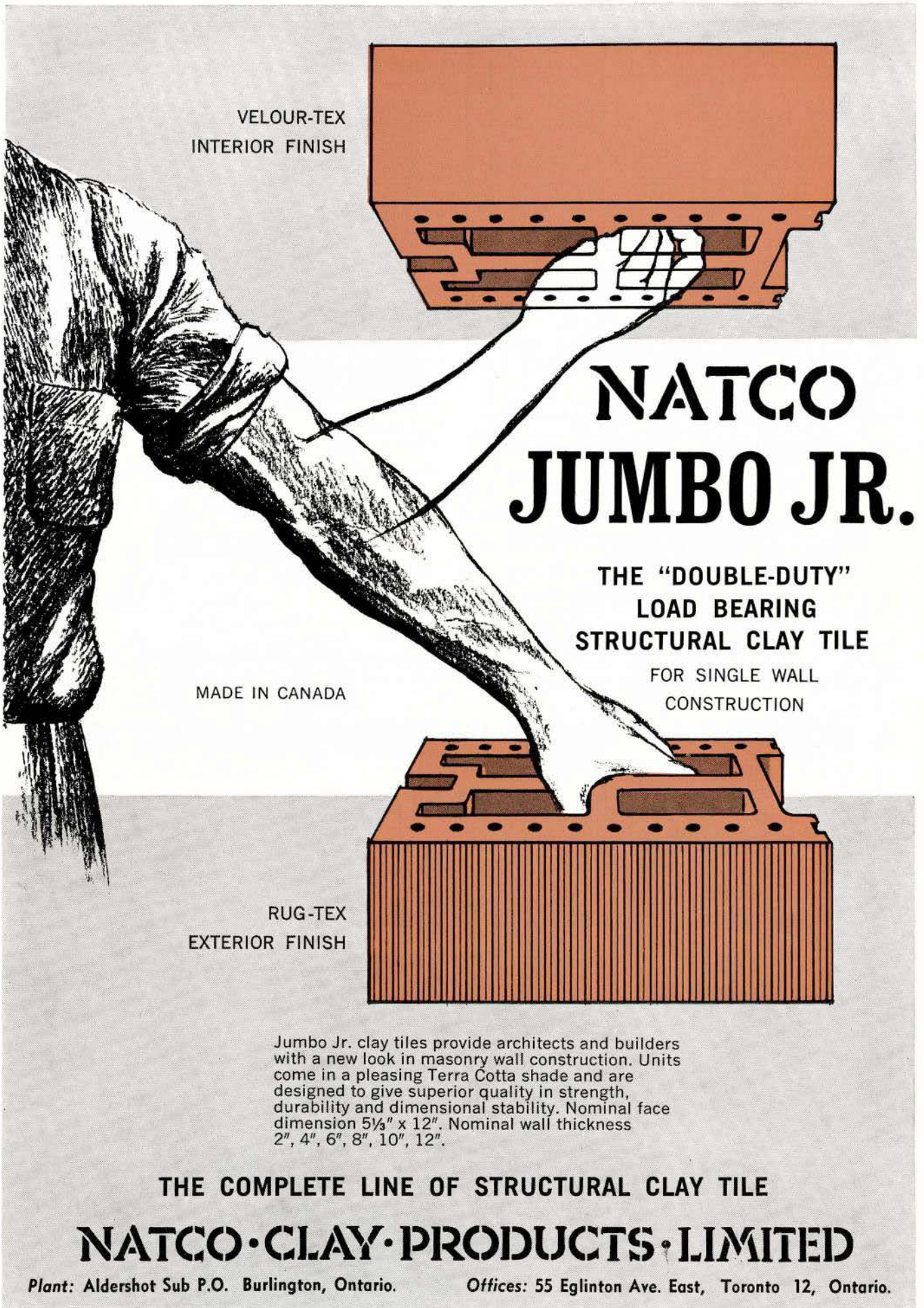

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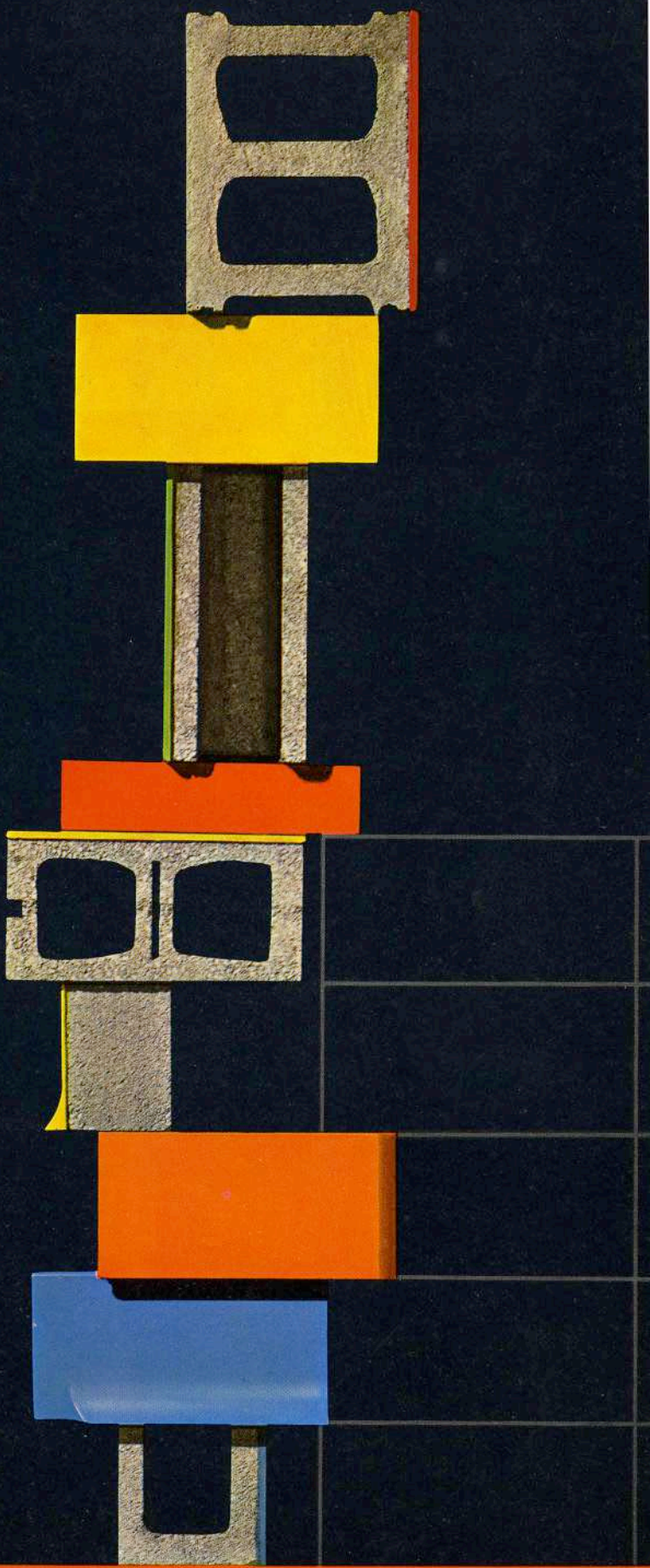

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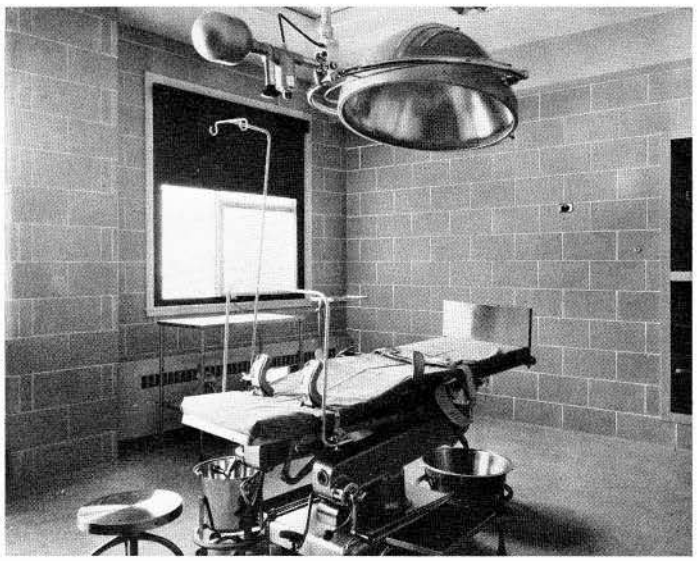
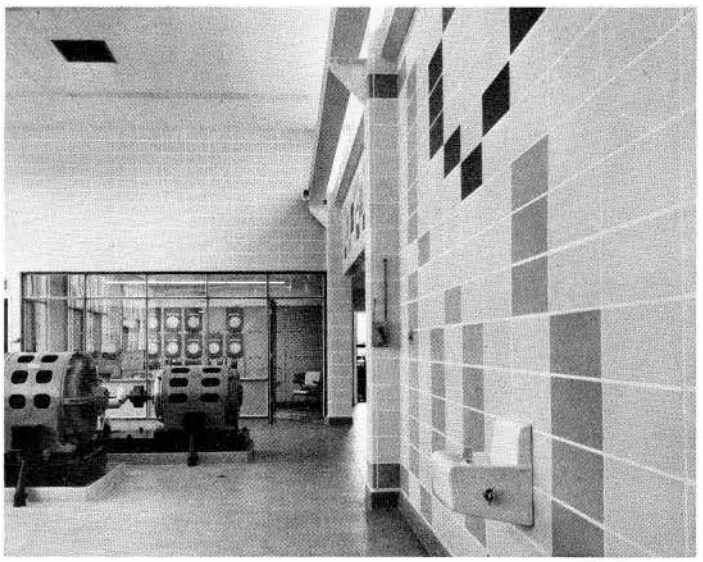


. . . in hospitals



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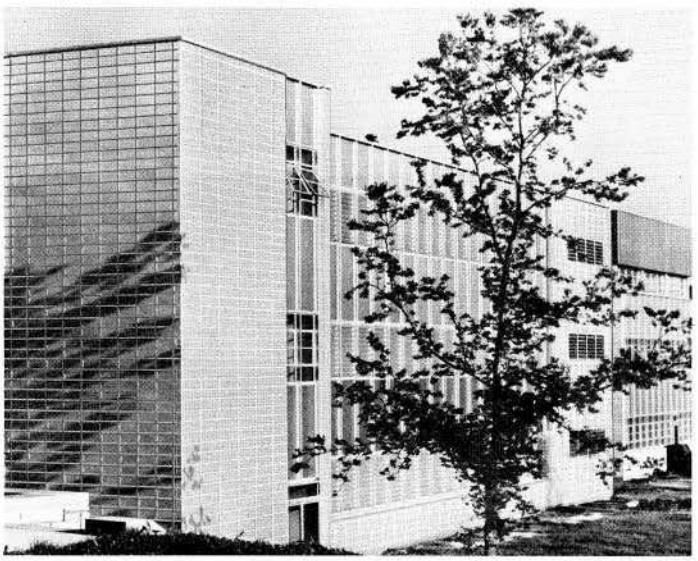

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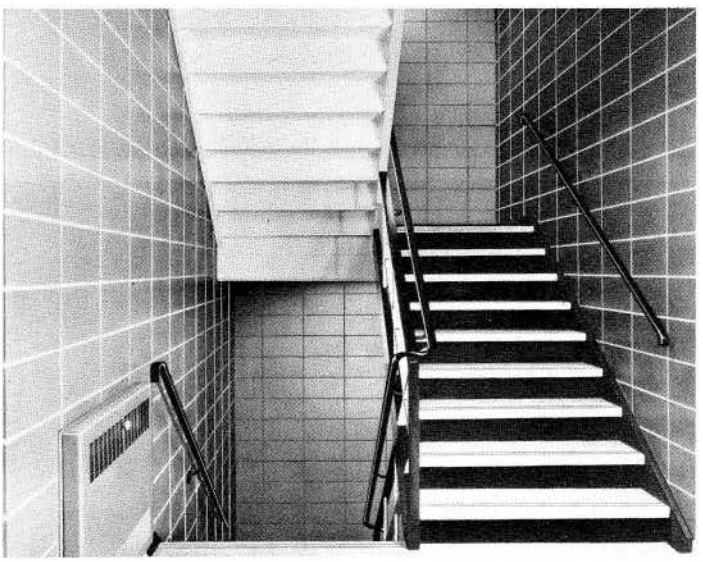

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LITERATURE

"Planned Hospital Communications Guide". Also sound filmstrip entitled "Rx for Communications-itis". Manual and film available upon request from the franchised DuKane distributor for Canada, *General Sound & Theatre Equipment Ltd., 861 Bay Street, Toronto 5. 925-3871.*

New round and square recessed lighting units designed for poured concrete construction. Write for Bulletin No. PC 2-863, AIA File No. 31F2. *N. H. Scott, Wakefield Lighting Ltd., PO Box 3231, London, Ont.*

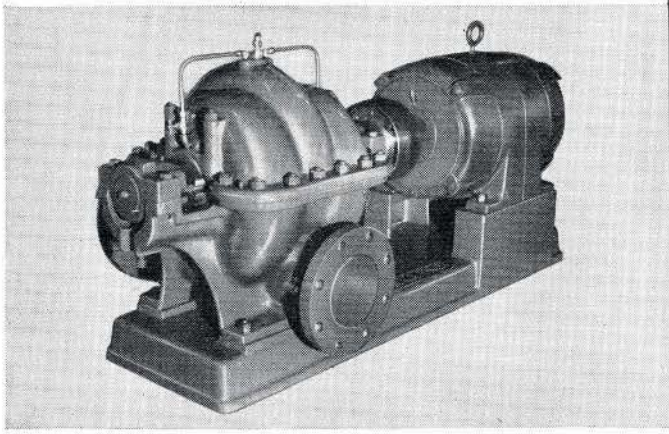
12-page catalogue on automatic gravity filtration. Diagrams, charts, and applications of the Monovalve series of filters. Write: *W. A. Wachsmuth, manager, Graver Water Conditioning Division — Procor Ltd., Third Line, Oakville, Ont.*

Two booklets with background information and specifications on "Q-Block" quality control program for the concrete masonry industry. Write: *National Concrete Products Association, Suite 601, 55 York Street, Toronto 1. 368-8957.*

ASG catalogue "Glass for Architects and Designers." Available thicknesses and dimensions, heat and light transmission values, and recommended applications are listed. Write: *ASG, Box 929, Kingsport, Tennessee.*

Catalogue of "Ewing" flagpoles and accessories. Write: *John Ewing & Co. Ltd., 14 Thora Ave., Scarborough, Ont.*

INDISPENSABLE



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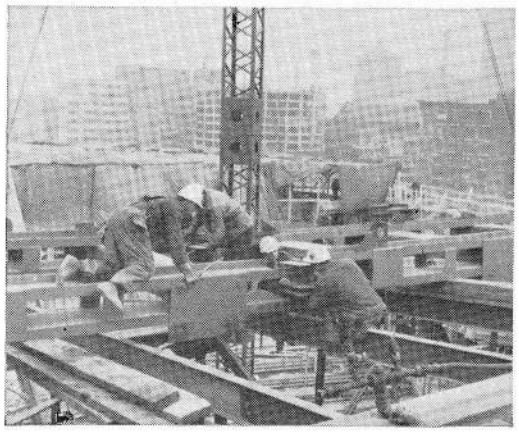

Place des Arts, Montreal
Architects: Affleck, Desbarats, Dimakopoulos, Lebensold, & Sise.
Consulting Structural Engineers: Brouillet & Carmel.

steel speeded construction of Montreal's new concert hall

By using steel to support the roof of the stage house and the auditorium and to provide structural stability for the three balconies, the very best use was made of construction time. Steel is always shop fabricated and structural members can be delivered to the site and put into place at the most expedient time and with the minimum of hinderance to other trades. Small illustration shows Dominion Bridge riggers joining roof sections. Altogether 530 tons of structural steel went into this building.

steel speeds construction

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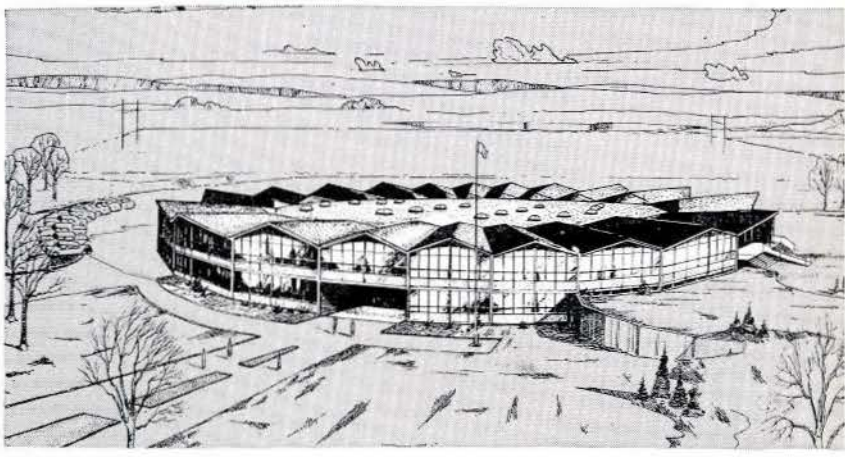
STRUCTURAL DIVISION
DOMINION BRIDGE

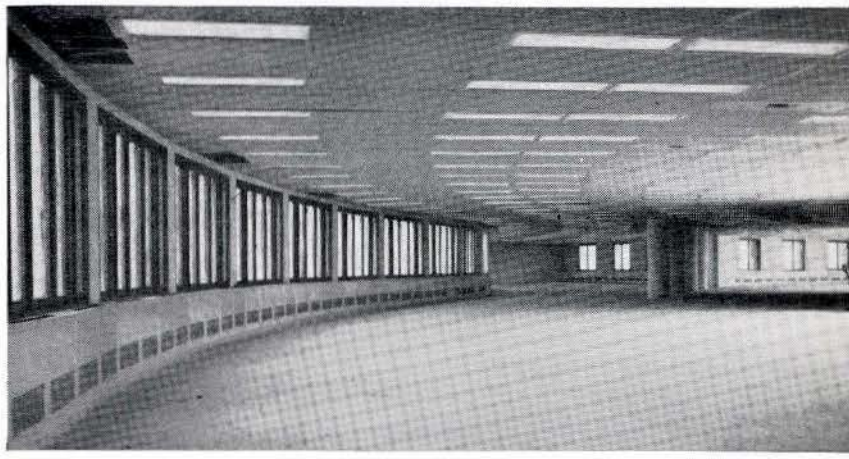
16 PLANTS COAST TO COAST

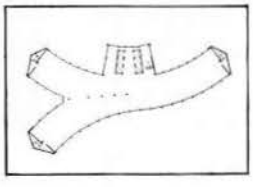


Brule Street School
Dartmouth School Commission, Nova Scotia
Architects: J. Philip Dumaresq & Associates
Contractors: Blunden Supplies Limited

school in the round

Not unique anymore but interesting and efficient. This school is a 20-sided structure, approximately 196 feet in diameter. A gymnasium occupies the core to the full height of the building, and two floors of classrooms are located on the perimeter. A 9-foot corridor on each floor provides access between the classrooms and the gymnasium.





Saskatchewan Power Corporation, Regina
Architect: Joseph Pettick
Consultants: C. C. Parker, Whittaker & Co. **Ltd.**

"Y" shaped with flowing curves

Structural steel was chosen to frame this unusual building in Regina. Thirteen floors each with column-free areas 270 ft. x 42 ft. provide wide open spaces for the efficient layout of offices. Twenty-three hundred (2300) tons were erected on schedule. A.36 is used for the beams and bracing and A.7 for the columns. Photograph shows one of the 13 floors. Note the flow of the wall line and the vast open area so easily obtained with steel construction.

Index to Advertisers

Montreal Star Building, Montreal. *Architect:* Marshall & Merrett. *Contractor:* Robert McAlpine Limited. *Structural Engineer:* Shector & Forte. *Ready Mix Producer:* Dominion Building Materials Limited. *Flooring Subcontractor:* Armoured Floor (1961) Limited.

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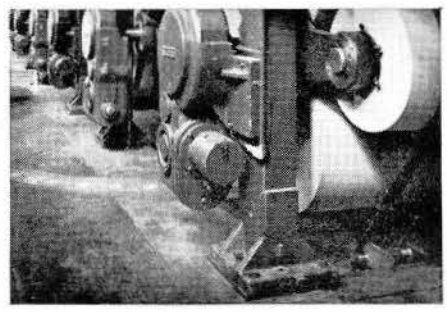
The Montreal Star Building is another example of how architect, engineer and contractor benefit alike by the multiple advantages of controlled performance concrete with POZZOLITH. More workable concrete with slump easily held within tight limits. More uniform concrete with controlled rate of hardening. Stronger concrete with up to 25% higher compressive and flexural strength and greater bond-to-steel. Neither plain concrete nor concrete with any other admixture can match POZZOLITH concrete in delivering predictable concrete performance.



At right: Other features of this building—Giant Goss printing presses are "grouted for good" with EMBECO non-shrink Grout . . . precise alignment is a "must" here. Floor is "iron-armoured" with MASTERPLATE for freedom from dusting and maximum wear resistance.

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