

# RAIC JOURNAL

---

Serial No 377, Vol. 34, No 1	<b>EDITORIAL</b> <i>President of the RAIC</i>	2
<b>ARTICLES</b>		
	The McGill Leoni, <i>Peter Collins</i>	3
	A New Concept in Theatre Design, <i>Norman R. Branson</i>	10
	Expansible Intersections for Metal Curtain Walls, <i>H. E. Voegeli</i>	20
<b>ILLUSTRATIONS</b>		
	Park Plaza Hotel, Toronto, Ontario <i>Architects, Page &amp; Steele</i>	5
	Calgary Civic Air Terminal, Alberta <i>Architects, Clayton, Bond &amp; Mogridge</i>	15
	Fourwinds Apartment House, Montreal, Quebec <i>Architect, Philip F. Goodfellow</i>	22
	<b>VIEWPOINT</b>	26
	<b>NEWS FROM THE INSTITUTE</b>	27
	<b>OBITUARY</b>	27
	<b>CONTRIBUTORS TO THIS ISSUE</b>	28

*The Institute does not hold itself responsible for the opinions  
expressed by contributors*

## ROYAL ARCHITECTURAL INSTITUTE OF CANADA

### EDITORIAL BOARD

EARLE C. MORGAN (F), CHAIRMAN  
ERIC R. ARTHUR (F), EDITOR  
J. D. Annett, *Edmonton*; F. Bruce Brown (F), *Toronto*; Howard D. Chapman, *Toronto*; P. A. R. Dickinson, *Toronto*; J. P. Dumaresq, *Halifax*; Ants Elken, *Toronto*; Robert C. Fairfield, *Toronto*; Henry Fliess, *Toronto*; Wm. S. Goulding, *Toronto*; D. C. Haldenby, *Toronto*; K. Izumi, *Regina*; Douglas E. Kertland (F), *Toronto*; H. Claire Mott (F), *Saint John*; Forsey Page (F), *Toronto*; S. M. Roscoe, *Hamilton*; John A. Russell (F), *Winnipeg*; Wm. J. Ryan, *St. John's*; E. J. Turcotte (F), *Montreal*; John H. Wade (F), *Victoria*; G. Everett Wilson, *Toronto*.

J. F. SULLIVAN, PUBLISHER

*All correspondence should be addressed to the Editor*

EDITORIAL AND ADVERTISING OFFICES, 57 QUEEN STREET WEST, TORONTO 1  
Authorized as Second Class Mail, Post Office Department, Ottawa

EACH YEAR THE PRESIDENT of the RAIC is asked to write an Editorial for the *Journal*. This is a privilege and an honour which only the chosen few attain. I appreciate the honour because it affords the opportunity to discuss a subject in which we are all vitally interested.

In thinking what to say I was drawn in two directions, one to say something about the *Journal*, which has become so important to the Royal Institute. The *Journal* has been very successful during the last few years, but can only remain so by having the full support of every member of the Institute, whose duty it is to see that the editor is kept informed of interesting buildings known to each member and to contribute thoughtful articles of interest to the profession.

The other subject which interests me profoundly is the critical shortage of architectural technicians. Because of the importance of this question, I choose it in preference to *Journal* matters.

This country is in a state of rapid expansion and the technical manpower shortage has a significance of paramount importance. In recent years the annual output of architectural graduates has been in the neighbourhood of one hundred. The classes of 1957 and 1958 will be just about the same and could be smaller. The primary purpose of our universities has always been to produce scholars and I hope it will always remain so, but the specialized education of our architects can only be used to the best advantage if they are supported by fully trained technicians. It is said that at least three technicians or assistants are required for every architectural graduate. We depend for this help entirely on graduates from our universities, untrained personnel from our technical schools and to a great extent upon architects and draughtsmen from the United Kingdom and European countries; in addition, about thirty graduates from the one school of architectural technology in Canada. Other than this one school, I believe I am correct in saying that Canada has no facilities for training such personnel. It is of this school that I would like to say a few words.

From 1945 to 1948, the Ryerson School of Technology served as a Dominion-Provincial Rehabilitation Centre for ex-servicemen. Due to its popularity, in 1948 it was taken over by the Ontario Department of Education and has since been operated by that Department with phenomenal success. It is the largest school of its kind on the continent. The course in architectural technology grants no degree, although it provides education three years beyond the high school level. It is predicated on the students having successfully completed their grade twelve examinations. The degree of success achieved by the graduates of this School creates a strong precedent for an early establishment of similar courses in every province in the Dominion. It must be remembered that graduates from this School are not architects and never will be unless they are successful in writing and passing the prescribed provincial examinations permitting entry into the profession. But they are thoroughly trained architectural technicians, and, as such, help fill the ever-increasing void in the professional manpower shortage. This country needs and will need many more technicians than it is now training. The problem is obviously a provincial one and should have the backing that only the provincial departments can give.

It is astounding to read that Russia graduates from her universities more trained architects and engineers than the combined output of all the universities in the United States, Great Britain and Canada. In addition, there are said to be some four thousand schools of technology, graduating one and a half million technicians a year. These young people feed and sustain the professional manpower. If this is true, it is a sound and desirable state of affairs which we might well examine and follow.

Architectural education has always been and will continue to be a matter of prime importance to the Royal Institute, and, until quite recently, there seemed to be no reason why it should concern itself with anything specifically educational other than the affairs of the university schools of architecture and the ways and means for others to enter the profession by examination. Due to our phenomenal expansion, conditions have changed and unless we are prepared to understand and make a realistic effort to rectify the serious discrepancy between the supply and demand of professional and technological personnel, then we are failing in our duty.

Further, I believe that the Royal Institute and the Provincial Associations must recognize and fully co-operate with all such schools and consider this problem as part of the scheme of things. No matter where such schools are situated, the provinces and the Institute must be prepared to give them backing and approval, if, on investigation, it is found that the curriculum, staff and buildings fulfil the proper academic standards. Undoubtedly the time has arrived to do something about this important question if our profession is to maintain and expand, rather than contract, in influence in the sphere of architectural education.

One factor contributing to the trained manpower shortage is the wastage of professional and technical personnel. Architects do not necessarily practise. Many find their way into other or allied businesses. It would be of interest to know what happens to all the graduates of the Canadian schools of architecture from year to year – how many enter private practice, how many are absorbed into businesses other than architecture, how many spend their lives as draughtsmen. We educate men to be architects and scholars and if, because we lack trained technicians to sustain them, a large percentage is forced to do work that trained technicians can do, then we have lost an opportunity that will be difficult to rectify.

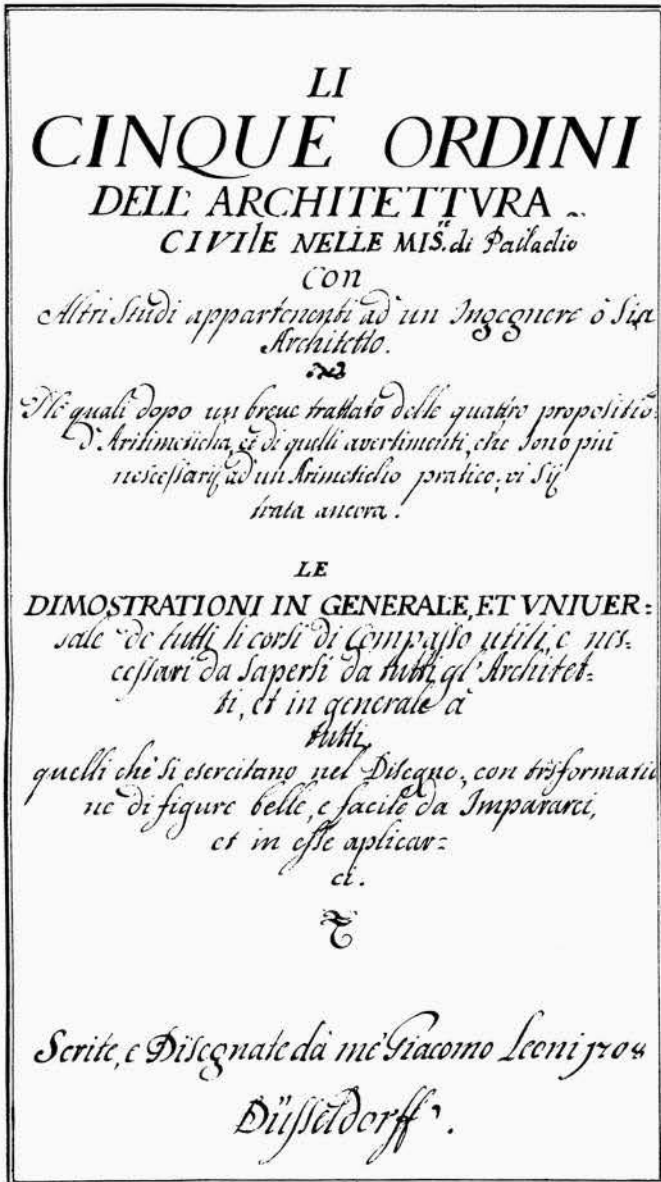
I cannot let this opportunity pass without extending to every member of the Royal Institute greetings and good wishes from the Council for continued success, happiness and well-being in the coming year.

The last few years have been kind to all of us. I believe that we have made the best of our opportunity by improving the standards of our profession and creating closer and better public relations than ever before.

*D. E. Kertland, President*

# The McGill Leoni

BY PETER COLLINS



The manuscript title page. The fourth line originally read simply "D'Andrea Palladio", but for some reason a slip of paper was subsequently pasted on top with the amendment "Civile nelle mis(u)re di Palladio". The date 1708 appears immediately after Leoni's name in ink, the pencilled figures being a modern addition.

ALTHOUGH THE GREAT LIBRARIES in North America can boast as fine and as extensive a collection of early architectural publications as is to be found in any country in Europe, there are few institutions in either Canada or the United States which

possess important architectural manuscripts going back earlier than the middle of the eighteenth century. It was therefore with surprise and considerable pleasure that an unknown and unpublished manuscript of Giacomo Leoni was recently discovered in the Blackader Library of McGill University, where it had remained undetected for some thirty years. That it should have thus escaped attention is not surprising, since it was disguised as a common or garden copy of Palladio's *Five Orders*, and duly catalogued as such. But on closer inspection it has turned out to possess a certain amount of original material, which not only throws new light on the career of a distinguished eighteenth century architect, but gives us a clue as to the possible origins of the great publication which was later to bring him fame.

Giacomo Leoni (c. 1686-1746) has figured little in architectural history books until recent years, but with the renewed interest in eighteenth century architecture, he is at last receiving some of the credit which is his due. It was his magnificent English edition of Palladio's *Four Books of Architecture*, undertaken in 1711 and first published in 1715-16, which started the Palladian movement in England, and spread it to the American colonies, where the colonial aristocracy, emulating their English cousins, constructed innumerable town houses and country mansions in the Palladian style. It was Leoni's publication which first drew Thomas Jefferson's attention to Palladianism in 1769, and ensured that, in the words of Hugh Morrison, 'from then on, he remained faithful to Palladio for fifty-five years'.

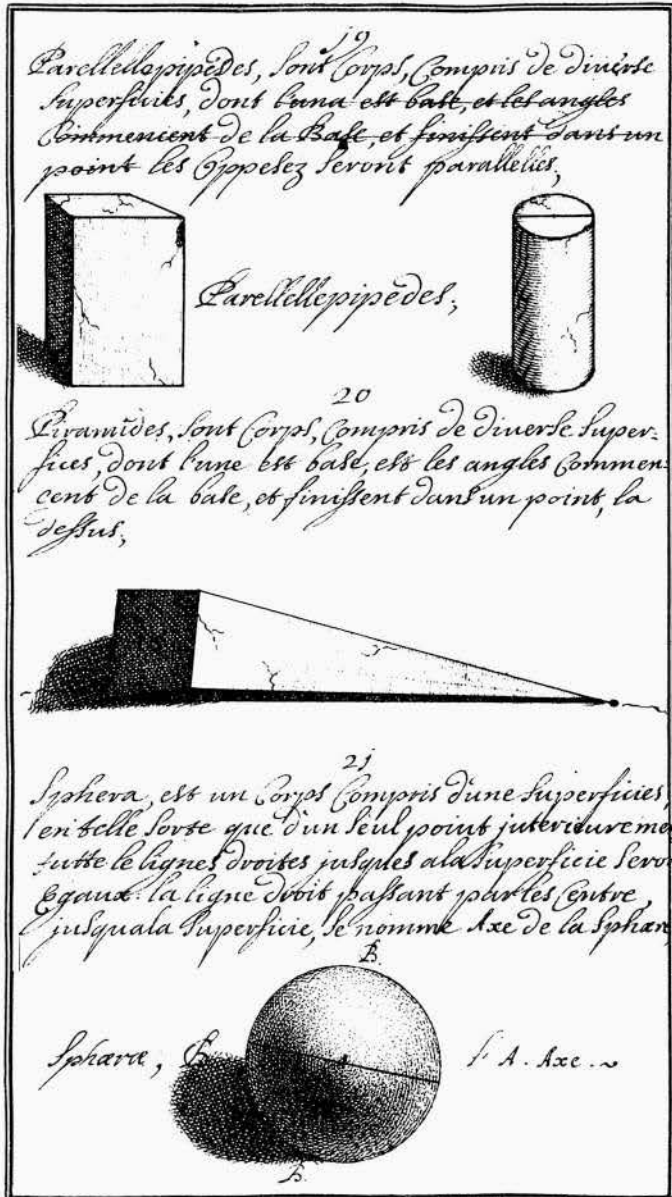
Yet in spite of the success of Leoni's literary works, and the fame he eventually acquired as a designer of English country mansions, his early career has so far remained obscure. All that has been known about him has been derived from the preface of his published work; namely, that he was a Venetian, and had formerly been architect to the Elector Palatine. Of his previous experience as a writer, of his early career as an architect, and of the reasons which prompted him to adopt Nicholas Dubois, a British Army Engineer, as the translator of his edition of Palladio, nothing has hitherto been known. It may be possible, however, with the discovery of this new manuscript, to give partial answers to all these questions, which, though by no means of far-reaching importance, should nevertheless be of interest to students of the architecture of the period.

The manuscript, written in ink on watermarked paper of c. 1700, consists of a hundred and six small folio pages and is entitled *Li Cinque Ordine dell' Architettura Civile nelle Mis. di Palladio, con Altri Studi appartenenti ad un Ingegnere o sia Architetto*. At the foot of this title page (which also contains further information in Italian concerning these additional studies) is written *Scrite e Disegnate da me' Giacomo Leoni 1708 Düsseldorff*. We thus know that Leoni was not more than twenty-two when the work was written, and that he was presumably already at this time working for the Elector Palatine. Düsseldorf is a considerable distance from the Palatinate, but it was at that time the residence of the Elector John William,



whose castle at Heidelberg had recently been destroyed by the troops of Louis XIV. The city was also a centre of heavy fighting during the wars of the Spanish Succession; a fact which has a certain relevance to the present enquiry, as will be seen later on.

The twenty or so pages devoted to Palladio's *Five Orders* are of little importance as regards the subject matter, since they were merely copied from the woodcuts appearing in the original 1570 edition of Palladio's treatise. They do however show not only that Leoni was already interested in Palladio at this time, but that he was aware of certain inexactitudes in



A sample page of the treatise, written in French, dealing with simple geometry. It is clear that the text is copied from an original, since by an error, the text of paragraph 20 has been incorporated in paragraph 19 and subsequently crossed out. Note also such Italianate mis-spellings as "una est base" (para. 19) and "tutte le lignes droites" (para. 21).

the original dimensions, since several of these are corrected in Leoni's drawings. In Leoni's preface to his English Palladio of 1715 (second edition 1721) he wrote: 'I have not only made all the Draughts my Self, and on a much larger Scale than my Author; but also made so many necessary Corrections with respect to Shading, Dimensions, Ornaments, etc., that the Work may in some sort be rather consider'd as an Original than an improvement'. In the 1708 manuscript, however, the corrections are not nearly as radical as in the 1715 publication, and the drawings are as barren of shading as the original wood-

cuts. No ornamentation whatsoever is shown, but there are good reasons to believe that the manuscript was never completed in this respect, so that this omission may not have been deliberate. The inscribed text, carefully incorporated amongst the drawings, is written in Italian, and is a slightly abbreviated version of Palladio's original.

The remaining eighty-two pages of text constitute an elementary treatise on arithmetic, solid geometry and draughtsmanship, and although almost certainly inscribed and drawn by Leoni (as he himself claimed on the title page), they are written in French. The problem therefore arises as to why Leoni should write in French, and how, being a Venetian, he should have such a command of the French language (even though his command of French spelling seems to have been as uninhibited as his spelling of Italian). The answer is almost certainly that this second part was not composed by Leoni at all, but by Nicholas Dubois, (c. 1665-1735) who employed Leoni as his draughtsman and copyist. Dubois was a Frenchman who had left his native country for England (probably because of the revocation of the Edict of Nantes) and who, between 1707 and 1711, was an engineer with Marlborough's troops in Flanders. That the manuscript treatise on arithmetic was written by a soldier for the use of soldiers is made fairly clear by the examples used in the calculations, which are so often concerned with the numbers of troops in certain formations, or with the time taken for prisoners to dig lengths of trench. It is also reasonable to assume that the book was written by an engineer, since the title explicitly states that the work contains 'studies which concern an engineer or an architect'. Engineers, as the history of Canadian architecture fully shows, were responsible for a great deal of architectural design, and most eighteenth century books on military engineering, such as the famous treatise in French by Beldor, began with a chapter on the Five Orders as a matter of course. That Leoni did not mention the true authorship is not necessarily uncharacteristic, since although Dubois was stated to be the translator of the 1715 English Palladio, Leoni did not mention him at all when the second edition was published in 1721.

We may thus see in Leoni's 1708 manuscript not only a unique example of his early draughtsmanship, but the beginnings of that partnership with Dubois which was later to lead to such great results in the following years. Indeed, as regards Dubois' eventual translation of Palladio, the collation of the 1708 manuscript has brought yet another curious fact to light. In Book I, Chapter 17 (dealing with the Corinthian Order), the last sentence in Palladio's Italian text (as transcribed in 1708 by Leoni) ends: 'due quadri a mezo con la grosseza d'esso arco', which means quite simply: 'two and a half squares including the thickness of the arch'. This is translated by Dubois into English as 'two squares and a half, the thickness of the said Arch being comprehended'; a statement which makes no sense at all. If, however, we look at the French 1650 edition of Palladio, translated by Fréart de Chambray, it will be seen that this passage, rendered as 'deux quarez & demy de sa largeur, y comprenant l'epaisseur du cintre de l'arc' is ambiguous, since 'y comprenant' can mean either 'including' or 'by which is understood'. We may therefore suspect that Dubois, who had never, as far as we know, been to Italy, relied for much of his translation on Fréart de Chambray rather than on "the Italian original" as Leoni claimed.

The 1715 Palladio was thus probably more truly 'Original' than its authors had ever intended. Yet in spite of their linguistic difficulties, an Italian and a Frenchman managed to impose a standard text on the English language, and a standard idiom on British architectural design which lasted nearly a century. Perhaps we may see in this remarkable but impractical bilingual manuscript, which has just been brought to light at McGill University, the beginning of that idea which eventually brought respect and fortune to both Leoni and Dubois as practising architects, and the origins of a strange partnership which, created perhaps by some chance acquaintanceship of war, was to influence the western hemisphere in a way which neither of them would have dared to imagine.

## Park Plaza Hotel, Toronto, Ontario

*Architects, Page & Steele*

*Structural Engineers, Hooper & Yolles*

*Electrical Contractors, Roxborough Electric Ltd.*

*Plumbing and Mechanical, J. A. Norton & Co. Ltd.*

*General Contractors, Yolles & Rotenberg Ltd.*



Since the end of the war, the accommodation at the Park Plaza Hotel has been inadequate. Parking facilities were poor, and goods receiving had always been a problem. The owners of the hotel had acquired the adjoining property to the north as far as Prince Arthur Avenue, and on this land, approximately 250 rooms complete with private baths and balconies were required, with a central reception foyer to serve the new and old buildings. In addition, a drive-in courtyard, (to eliminate stopping on Avenue Road) an underground receiving dock, and ample underground parking facilities were also to be provided.

The new north wing is 12 storeys high, containing ten typical floors of hotel rooms comprising 12 one room suites and 4 two room suites. The second floor has 3 large reception rooms, staff rooms and more hotel suites. The ground floor contains kitchens, a dining room, a cocktail lounge and an area suitable for renting store space.

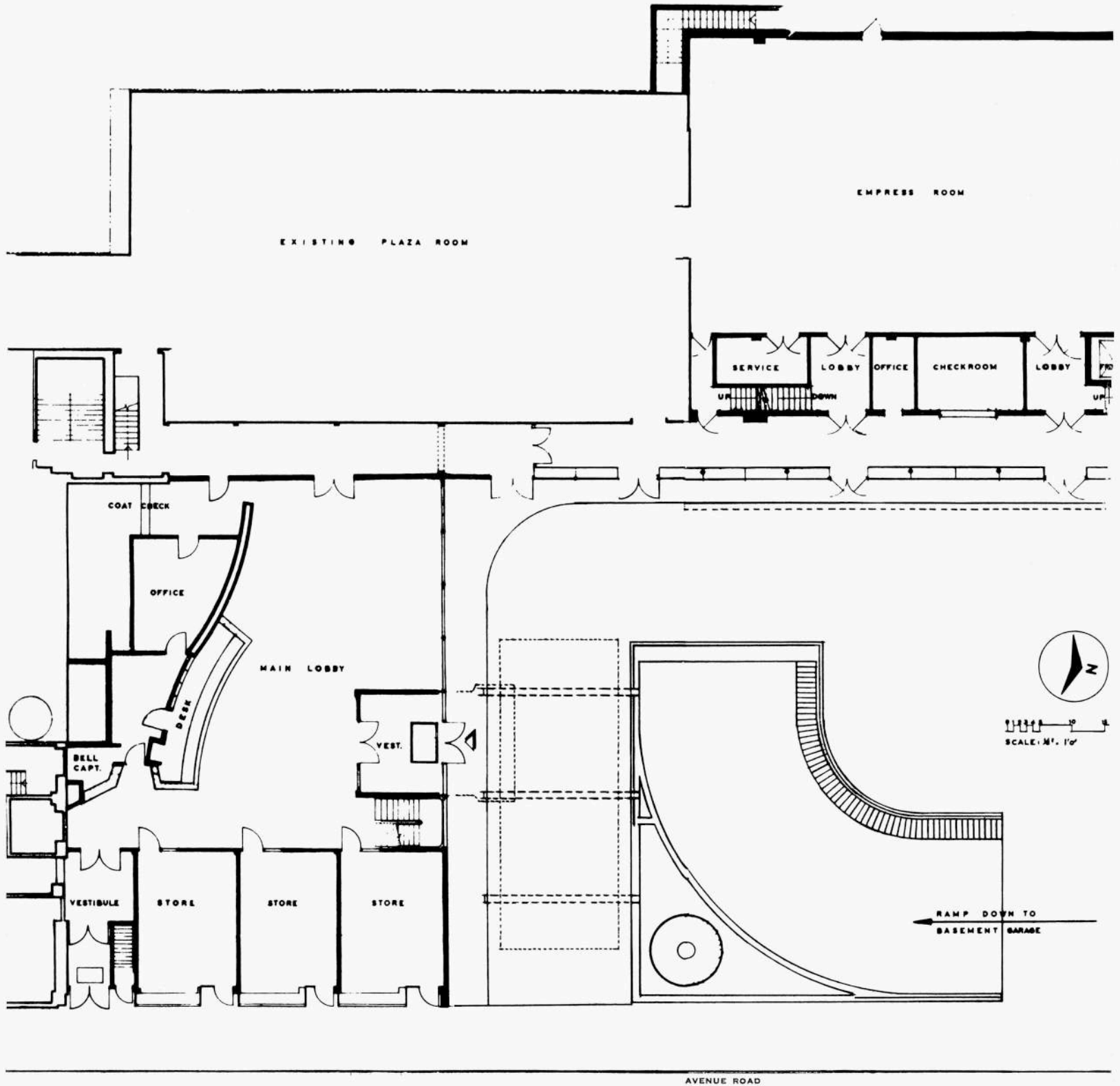
The reception foyer was sited adjacent to the old south wing and

from this all parts of the new and old buildings are easily reached. In addition to the reception desk and lounge area, three shops for letting were incorporated and the mezzanine accommodates the hotel offices and telephone switch room. A banquet room conveniently placed just off the corridor connecting the two wings, is also connected to the old Plaza room. All public areas are fully air-conditioned.

The construction is as follows: All work below grade is reinforced concrete. The north wing has concrete columns and concrete ribbed slab floors. The east and west walls are faced with glazed brick and all windows are standard steel sash, the spandrels being wired glass with painted asbestos back-up. The balcony partitions are alternately precast concrete and wired glass set in a steel frame. The block containing the reception foyer, etc. is framed in steel and has concrete floors. The east elevation and part of the north elevation is clad with aluminum curtain walling, the remainder being granite facing.



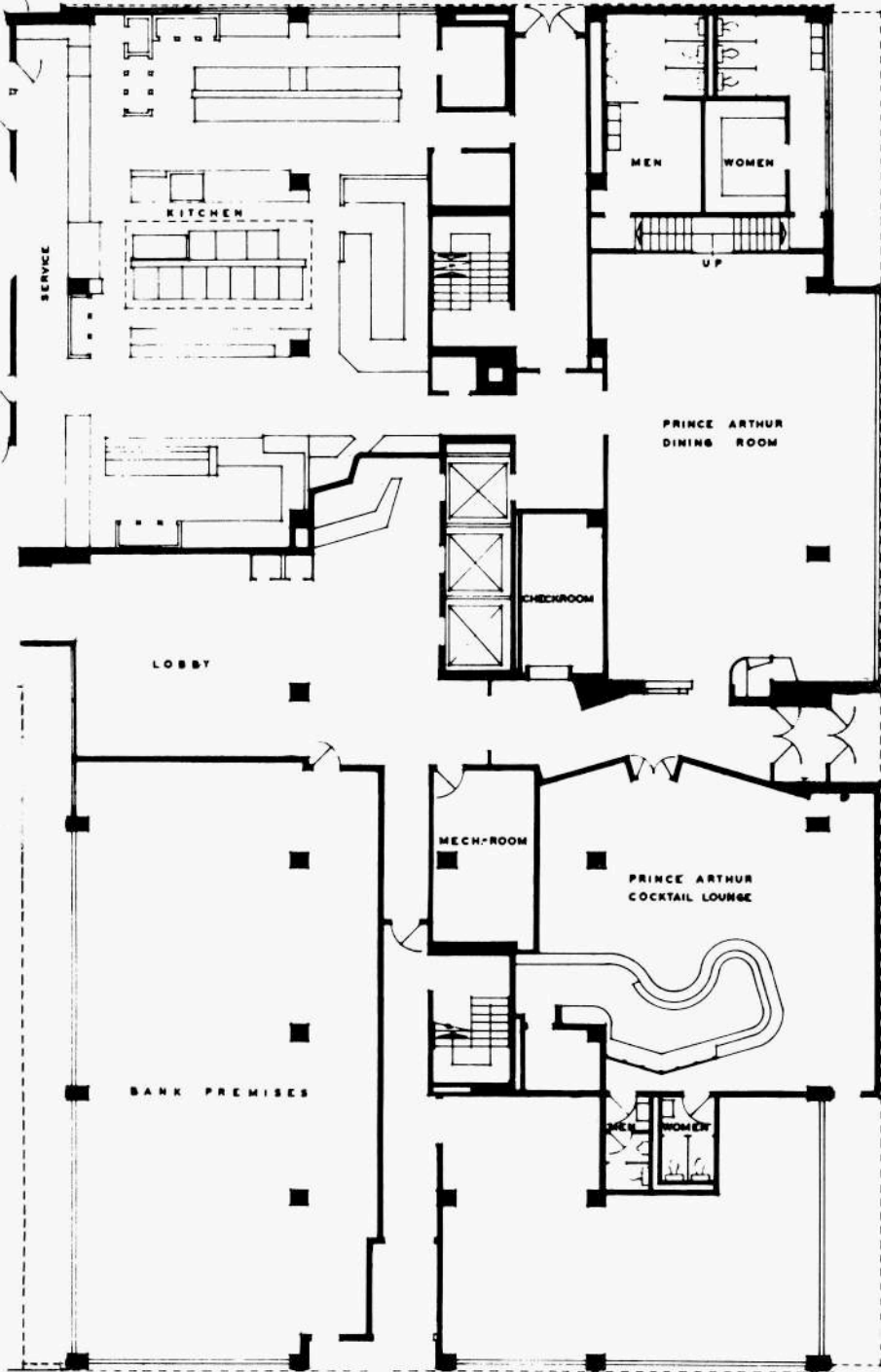
First floor plan



The banquet room



HUGH ROBERTSON-PANDA



Lobby looking into courtyard

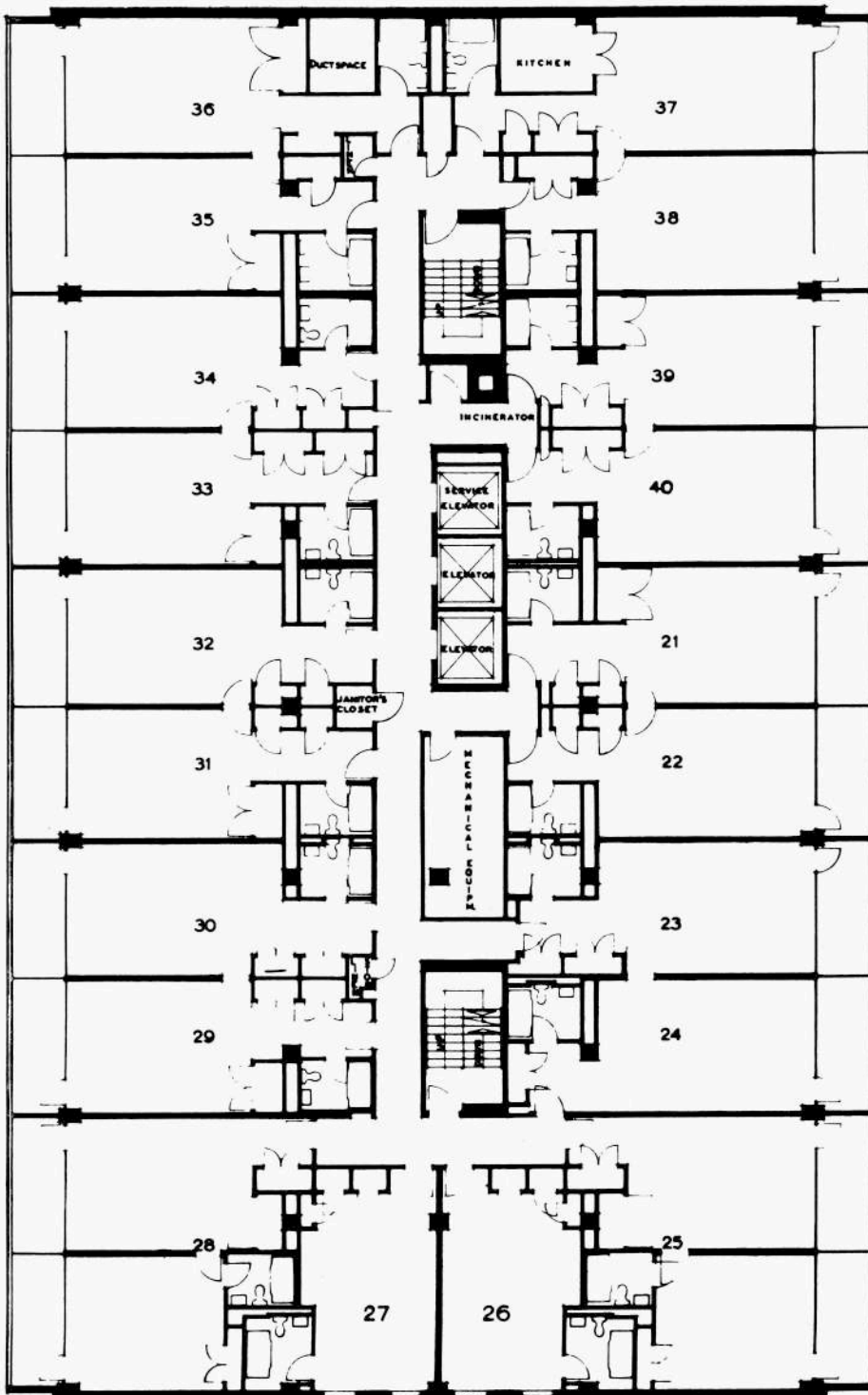


MAX FLEET

The hotel lobby



COLLINGWOOD



Typical floor plan

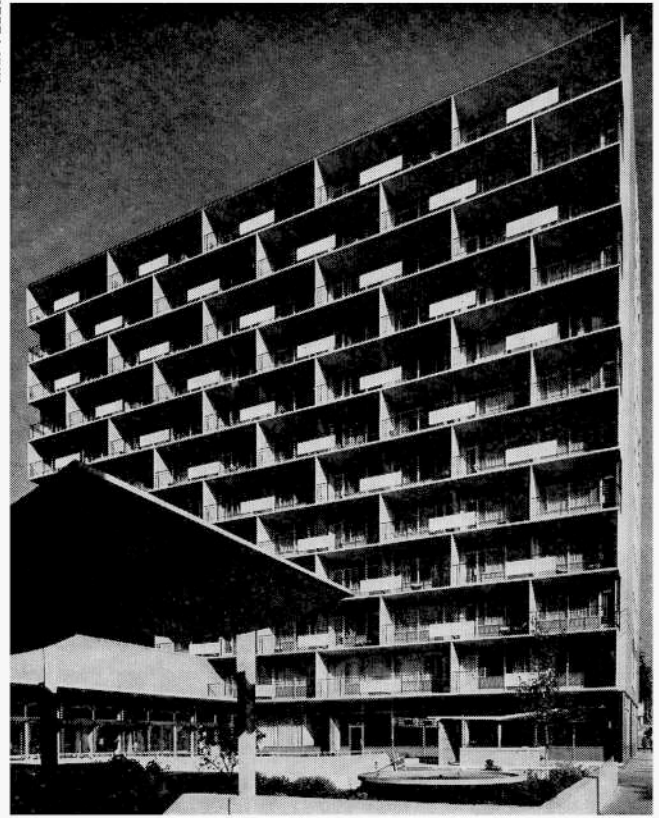


Detail of balconies



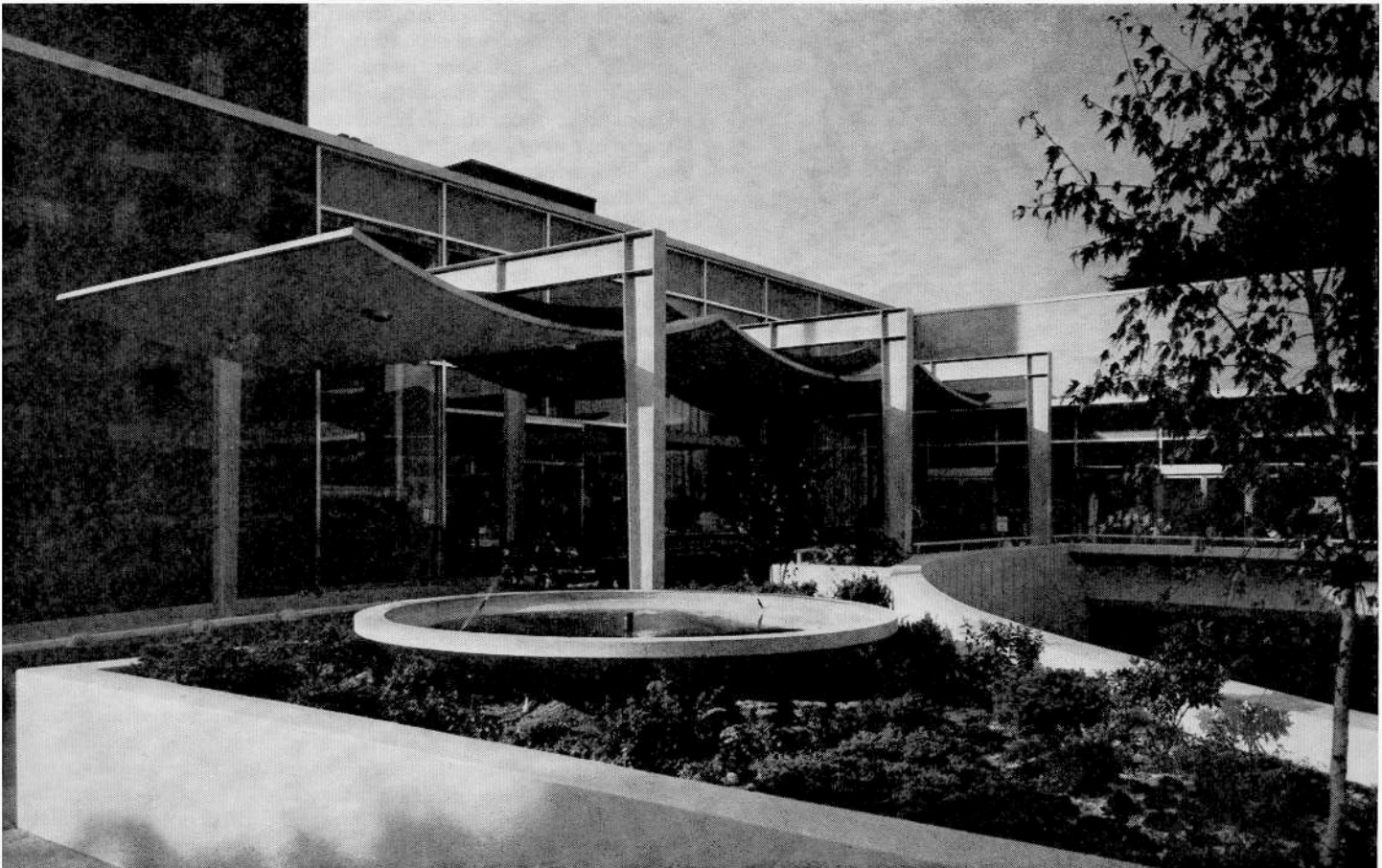
B. SHAWCROFT

MAX FLEET



South elevation

Entrance canopy and courtyard



MAX FLEET

# A New Concept in Theatre Design

BY NORMAN R. BRANSON

THE QUESTORS THEATRE LTD., for whom the designs of the new Playhouse have been prepared, is a non-profit distributing company limited by guarantee and with a membership of 1,500. It is recognized by the Inland Revenue as an educational charity and is the successor of the unincorporated association known as the Questors which was founded in 1929. Since 1933 the Questors has been operated as a private theatre club and is the owner of the freehold site upon which the new theatre will be built.

The architect's approach to his work must include research into the historical development of his subject. When designing a new theatre building he must be aware of the history of the playhouse and particularly of its more recent history. It is a striking fact that, whereas the whole long history of the playhouse has been one of gradually changing form, this process of change seems to have been arrested some eighty or a hundred years ago, since when there has been virtually no significant change in its architectural form. This, despite the fact that in all other fields of human activity and thought the period in question has seen the swiftest and most radical changes to have occurred in the whole history of man.

It is no part of my purpose today to investigate the reasons for this arrestment of progress — whether and how far it may be due to the restrictions of the theatre licensing regulations, which require the construction of a proscenium wall and the

provision of a safety curtain and thus do not allow of any theatrical form other than that of Victorian times when the regulations were brought into being, or whether it is because so few theatre buildings in this country have been associated with a developing artistic policy, or whether the picture frame or peephole theatre, with which we are all familiar, has reached a point beyond which it can develop no further. These matters are for the theatre historian to determine. The awareness of these possibilities may, however, affect the architect's approach to the problem of deciding what form a new theatre should take.

It must be remembered that there has been virtually no new theatre building at all in this country for some eighteen or maybe twenty years, so that in any event there has been a clear break in the tradition of theatre planning as long as that of the Commonwealth. These are but some of the historical considerations which seem to support the need for a fresh approach to the question of what a playhouse should be.

Basically, however, the need to find a theatrical form more satisfying than the picture-frame arrangement sprang, as far as the Questors were concerned, from their own practical artistic experience over the past 25 years. Their early productions were upon a somewhat shallow stage behind a conventional proscenium arch. Then a forestage in front of the picture frame began to be added for some classical plays such as those of Shakespeare and Sheridan. Later this was extended to certain modern plays written in a non-naturalistic vein such as Obey's *Noah* and Denis Johnston's *A Bride for the Unicorn*. This was done largely for utilitarian reasons to gain more space and to facilitate the flow of the play by giving, in effect, two playing areas — the mainstage and the forestage — between which the action could alternate as desired. It was found in practice that the use of the forestage resulted in a very pleasing and easy relationship between the actor and the audience.

It then came about that the forestage began to be used also for plays written in a purely naturalistic convention, starting with Ibsen's *A Doll's House*. That was ten years ago and since then the Questors have experimented with the use of a forestage in many different ways for all types of play, the forestage tending more and more to become not the alternative playing area as at first conceived but rather an extension forward of the main stage area. This unifying of the playing areas has ensured that the action of a play flows naturally and smoothly out towards the audience. New techniques of presentation had to be devised, first to discover and then to utilize the full possibilities of this arrangement. On occasion, and within the limitations of their present building, experiments have also been made with a stage extended further into the auditorium, thus giving an open stage arrangement with the audience on three sides of the actor. It is perhaps also interesting to mention that as far back as 1935 the Questors carried out a somewhat abortive experiment in 'Arena Theatre' in which the audience entirely surrounded the action. All this experiment was not, of

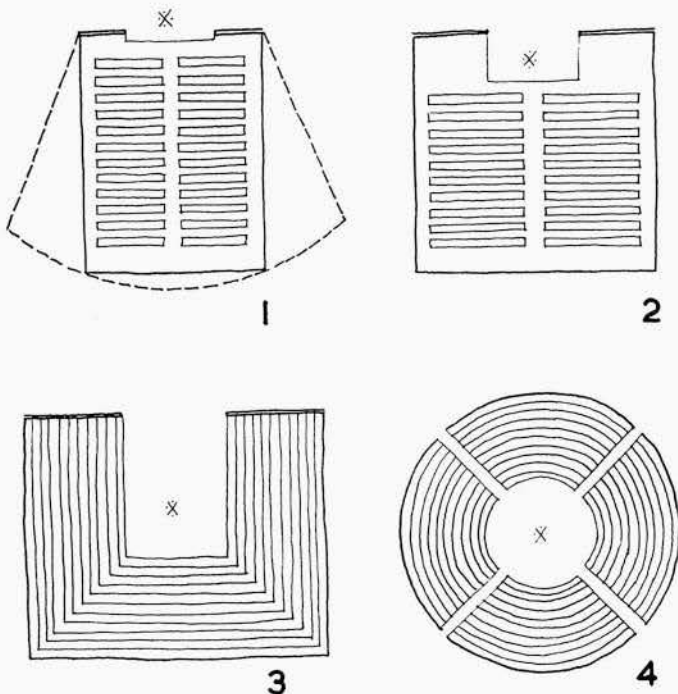


Figure 1 Actor-audience relationship



course, in isolation nor was there anything particularly new or unique about it.

The movement away from the picture-frame stage was probably started in this country by Terence Gray's Festival Theatre at Cambridge which opened in 1926. John English's 'Arena Theatre' has since 1948 been touring the country playing on an open stage in a large marquee. The Edinburgh Festival has been notable for its open stage performances in the Assembly Hall since Tyrone Guthrie's first production of *The Satire of the Three Estates* in 1948. Jack Mitchley for some years specialized in true arena productions and both professional and amateur groups have been experimenting with the same style of presentation. The deep forestage of the re-modelled Old Vic Theatre was a less bold step in the same direction, restricted perhaps by the architectural limitations of the old building. The currently popular ice shows use an arrangement of stage and scenery fundamentally the same as that of an open stage. A similar tendency is found in many countries abroad, notably in the United States, where there are a number of well-established theatres 'in the round'. In Paris a professional arena theatre was opened a little over a year ago.

One thing is clear from all this background – that there is a considerable movement in the theatre to break away from the picture-frame stage. The general direction of that movement also seems clear – towards a closer and more intimate relationship between the actor and the audience and towards a theatrical illusion which, with their collaboration, is created in the imagination of the audience. This form of illusion is quite distinct from that created in full naturalistic detail on the stage with a minimum of contributory effort by the observers. To sense that, however, is still a long way from finding the answer to the question 'What kind of playhouse, what shape, what physical arrangement' The Questors, therefore, set out consciously – even, perhaps, a little self-consciously – to re-study the basic principles which should govern contemporary theatre requirements. In this and in all stages of their thinking and planning they were assisted by an panel of eminent people of the theatre, among whom were Miss Muriel St. Clare Byrne, Mr John Allen, Mr Frederick P. Bentham, Mr E. Martin Browne, Mr George Devine, Mr Tyrone Guthrie, Mr Michael MacOwan, Mr Norman Marshall, Mr Bernard Miles, Mr Osborne Robinson, M. Michael Saint-Denis, Mr Glen Byam Shaw, Mr Richard Southern, Mr Andre Van Gyseghem, and Mr Michael Warre.

Initially their thought was directed towards the kind of actor-audience relationship which would best aid the imaginative illusion to which I have referred, as distinct from the naturalistic illusion. This led directly away from the picture

frame or other arbitrary barrier between the player and the audience. Further, it seems to require conditions which will help a ready sharing of experience between the actor and the audience: indeed, the sharing of experience may be the fundamental principle which makes the theatre work. At this point we become concerned not only with the relationship between actor and individual member of the audience but also with that between the actor and the body of the audience and between the individuals who make up the audience. That 'intimacy' is not merely the same as 'closeness' can be readily appreciated by considering a performance given to a small audience in a large theatre. Even if the audience be concentrated in the front two or three rows of the stalls, so that the distance between the actor and the furthest member of the audience is only a few feet, there would be little sense of intimacy. This sense depends upon the psychological relationship between the members of the audience and this is governed in part by their physical grouping.

Four problems, therefore, present themselves for consideration at the commencement:

- (a) The optimum distance between the actor and the audience.
- (b) The size of the auditorium.
- (c) The grouping of the audience in relation to the actor.
- (d) The grouping of the audience in relation to itself.

Having isolated the problems, the next step is to consider what shape of auditorium and what stage plan would best combine to promote the desired quality.

The first diagram in Figure I shows the actor confronting his audience from a stage enclosed by a proscenium wall and the audience in seats parallel with the stage. This is the conventional village hall plan. If it be extended at the sides, so that a fan shape is formed, this will give a typical cinema plan. If boxes be added together with a circle and gallery we have a simplified version of the conventional proscenium picture-frame theatre. The nearest point which the actor can approach the audience is that established by the proscenium arch and the play must be viewed through the invisible fourth wall. Little or no help is given towards the creation of a sense of intimacy by the audience grouping.

The second diagram indicates an extension of the main stage by the provision of a forestage. In this case the actor can be brought towards the audience beyond the confines of the proscenium wall. The audience, however, is still placed parallel with the stage in grouping which would give little help in creating a sense of corporate participation in the performance. The Restoration theatres achieved the latter quality by using a similar plan but with shallow balconies around the three walls

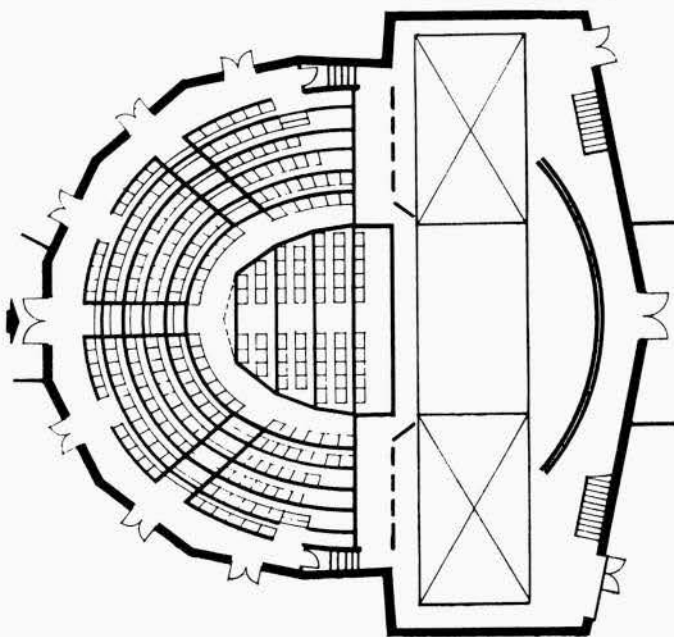


Figure 2 Picture-frame stage

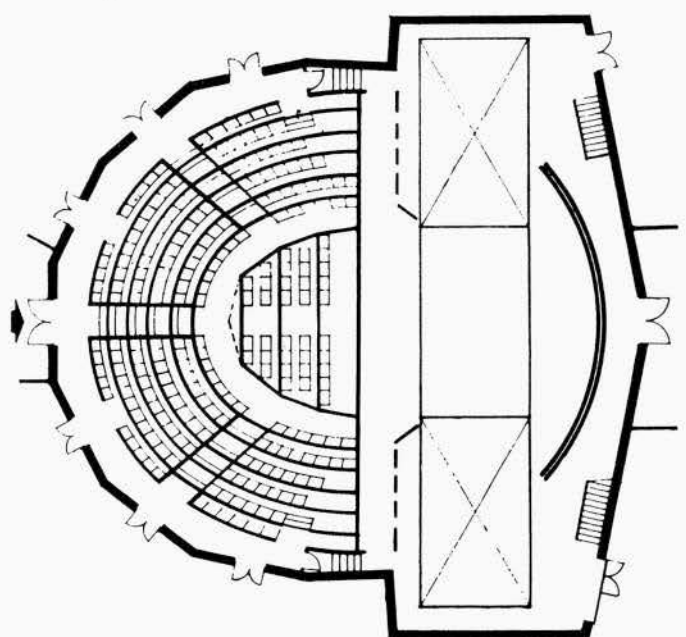


Figure 3 Proscenium stage with forestage



of the auditorium terminating in boxes on either side of the forestage.

The third diagram shows an entirely different arrangement with provision of an open stage set completely outside the proscenium wall and with the audience seated on three sides of the stage. Here the actor is within the auditorium in the position which he would have occupied in the Elizabethan theatre. The audience would have a keen sense of participation in the play and individuals helped towards a consciousness of being members of an audience.

The fourth diagram illustrates an auditorium wholly surrounding the stage as in a circus or at sporting tournaments. Here the actor is seen from all angles with the audience forming a background to his actions.

If a choice is to be made from among these four arrangements, which is it to be? It has already been concluded, though not without some temptations to the contrary, that the solution is to be found not in some revolutionary form (as, for instance, the last of my four illustrations) but rather by evolution or development from known and accepted theatrical forms. In an analysis of the development of the theatre is found a continuous progression of solutions each governed by the conditions of its time and each with variants to meet such conditions. No lasting movement has sprung from unrelated thought and only transients have been the product of a conscious desire to create a form out of a vacuum.

From what point, however, should one start? The rigid picture frame is still the most commonly accepted theatre form, a fact which cannot be ignored. On the other hand, to make that the starting point would seem retrogressive to the Questors, who had for all practical purposes abandoned the picture frame ten years ago. Each of the arrangements described might have contemporary validity – indeed each is an existing form of theatre.

At this point the case for an adaptable theatre was considered. It should be understood that the purpose of such an adaptable theatre is not for the production of old plays on the kind of stage for which they were written: Shakespeare on an Elizabethan stage; Sheridan with an eighteenth-century apron stage; Ibsen in a picture frame, and so on. A theatre designed for that purpose would be of academic interest only and would be unlikely to give stimulus to the playwright of today. In the theatre the drama must be re-interpreted for each generation in terms of its own time. An older play performed exactly as it was originally produced would fail to have the same effect on an audience of today and therefore the new theatre, while

providing for the production of such plays, must do so in a contemporary manner and not by imitating the past styles of playhouse form.

The case for an adaptable playhouse is rather that at this moment, when the theatre is in a state of flux, it is not yet possible to determine with certainty what kind of playhouse is wanted. Therefore it is desirable to have two- or three-in-one in order to experiment with them all and thus to discover the line along which to develop. This seemed particularly to apply in the case of the Questors who were quite deliberately offering themselves as a guinea pig. The conclusion was reached that there exists a convincing case for an adaptable theatre and the instructions given to the architect specifically stated that the new playhouse must be flexible in a contemporary way. By that was meant that the theatre must be adaptable to a full range of contemporary methods of staging rather than to the various styles of the past. The degree of flexibility required a stage-auditorium relationship to permit productions on

- (a) a picture frame stage with the acting area confined wholly within the proscenium arch;
- (b) a proscenium stage with a forestage;
- (c) an open stage;
- (d) an arena stage.

Site conditions play an important part in controlling any architectural concept, not only from the planning point of view which, in itself, is complicated by Acts, Regulations and By-laws, but also from the aesthetic aspect. In the case of the Questors Theatre it was found desirable and possible to plan the Playhouse as an entity separated from all ancillary units. This is particularly satisfying architecturally, because it allows the theatre to express its own essential form and in this country there are but few examples of theatres which have been designed in this way. The majority of theatres can only be viewed as a façade.

The basic shape of the auditorium was first established by resolving such practical problems as the angles of sight lines necessary for uninterrupted vision, the direction of the seating to provide comfortable posture for each stage use, the local authority Byelaws and their concern for widths of gangways, the number of seats in each row and the position of entrances and exits. It was also necessary to evolve a shape capable of giving the actor-audience relationship previously mentioned for each use without destroying the sense of unity of the whole.

The question of compromise was very much in mind at this stage because the result of endeavouring to provide one basic plan for four distinct uses could easily be the failure to give a

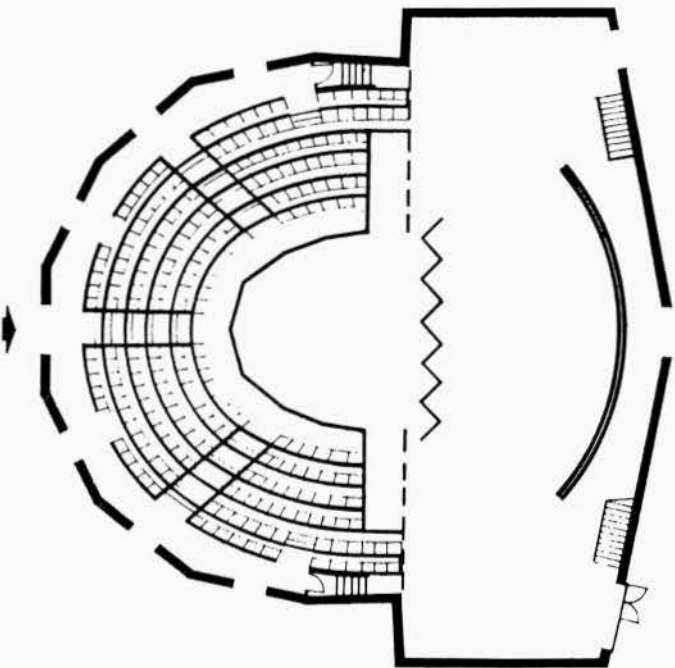


Figure 4 Open stage

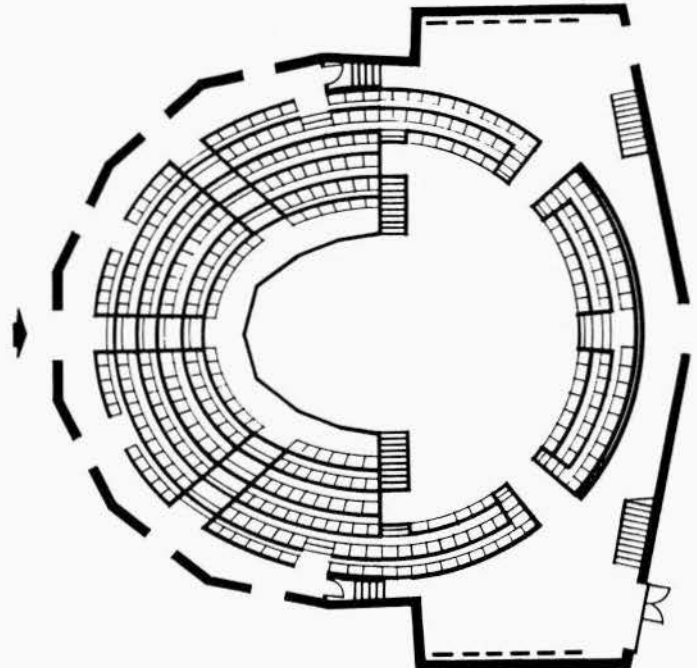


Figure 5 Arena stage

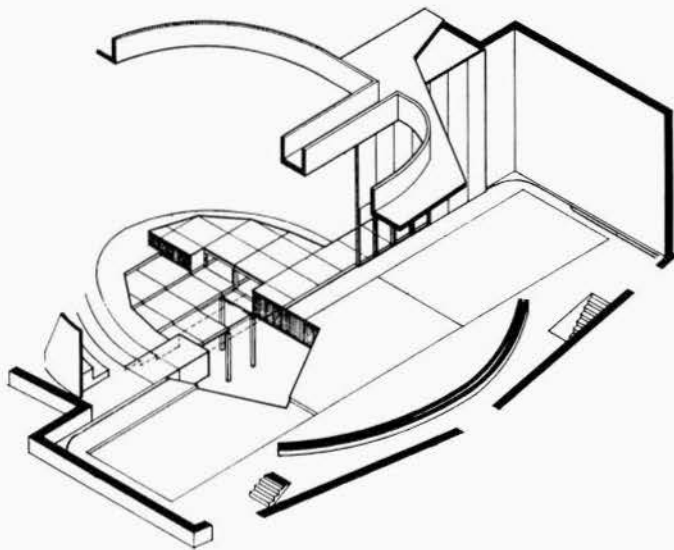


Figure 7 General arrangement of stage area

satisfactory solution for each. The Questors had decreed that, whereas with the picture frame stage some degree of compromise would be acceptable, no compromise would be allowed with either the proscenium stage with forestage or with the open stage. They were prepared, however, for some improvisation in the formation of the arena. It was found that a semiovoid planned around a small pit area would give the basic plan shape and, once this form was established, the stage area was designed as a complementary unit.

To achieve the desired degree of flexibility it was considered that whichever form the proscenium wall took it should be capable of providing any width of opening between the walls of the auditorium. This led to the design of metal screens sliding in tracks hung from above. The screens, which could be either manually or mechanically operated, could be readily moved into stage use or parked in the wings. Further consideration towards this end led to the idea that the small stepped pit area could be filled with moveable platforms, thereby providing a forestage and, if extended over the whole area, an open stage could be formed. When not required for stage purposes, the pit would accommodate seating and the platforms stored beneath the main stage.

At this time the design of the lighting gallery was clarified and it was established within the ceiling over the auditorium

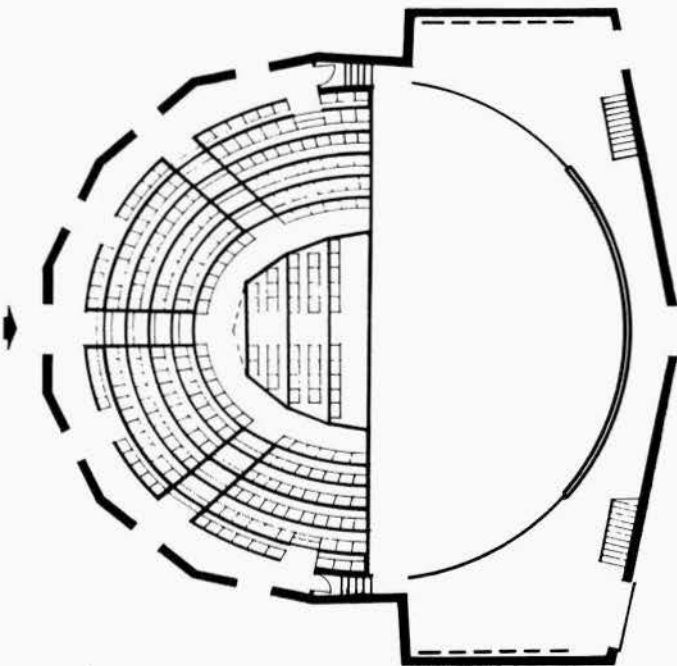


Figure 6 Space stage

and the main stage. The shape of the gallery, following the plan of the auditorium and of the stage, forms two voids in the ceiling separated by a bridge situated over the proscenium line and from which the metal screens could be hung. The lighting from this gallery and the bridge could be directed from any angle towards the stages.

Whilst the various factors were crystallizing into the definite plans, it had to be borne in mind that the essential quality of 'theatre atmosphere' must not be surrendered and that the ultimate design must suggest a place of entertainment and not a workshop.

Let us now consider the picture-frame stage, remembering that as each plan form is examined for each different use the Playhouse has been designed as one theatre and that the order of the plans is of no significance.

The development of the picture-frame stage has a very long and interesting history, growing from the proscenium of the Greek and Roman amphitheatres to a recognizable form in the Italian Renaissance Teatro Olimpico at Vicenza. Here the semi-elliptical auditorium faces a stage framed by columns with a permanent proscenium at the rear. This proscenium perforated with five openings was obviously very restrictive and in later theatres the central opening was enlarged and framed with an architrave as in the eighteenth century Scala at Milan.

The plan for the Teatro Alla Scala, Milan, gives better sight lines than the previous example and the sense of audience participation is enhanced by the introduction of the boxes encircling the auditorium up to the proscenium wall. The late nineteenth- and early twentieth-century English theatres have picture-frame stages, usually with encircling galleries terminating in one or two tiers of boxes adjacent to the proscenium. Thus a degree of intimacy was retained between the actor and the audience. The failure of designers in the years between the wars to appreciate the necessity for this quality resulted in the elimination of boxes and of theatre plans little or no different from those of the cinema.

The picture-frame stage designed for the Questors consists of six rows of tiered seating with the rear row enclosed to form boxes to assist the creation of theatre atmosphere. Seven rows of tiered seating are placed in the pit parallel with the stage. Three further rows of seats are accommodated in the balcony which encircles the auditorium and terminates on the line of the proscenium. The picture-frame opening is formed by the metal screens which are slid into position parallel with the front of the stage to give any desired width of opening, although it is anticipated that an opening 24 feet wide by 20 feet high would normally be used. The innermost screens are articulated to form tormentors should they be needed. The acting area can be permanently set or changed by means of the wagons. The stage is fully trapped to give access to the basement below. The rear of the acting area is enclosed by a permanent cyclorama behind which is the access to the dressing rooms, wardrobes and workshops *via* a fire-check lobby. The seating capacity for this use is 337 and of course is determined by the sight lines.

The second use of the theatre, that as a proscenium stage with forestage, is obtained by removing one or more rows of seating from the pit and extending the stage thereover towards the auditorium. The forestage thus formed can be of any depth but standard sections of platform have been designed in five feet multiples. The access to the forestage is from either side, from the main acting area or *via* stage openings from beneath as the standard platforms coincide with similar sized removable sections in the floor of the pit. It is possible to vary the height or the shape of the forestage by the use of rostra of differing dimensions.

The forestage is not intended to be used only whilst sets are being changed on the main stage but as an extension of the main stage. This being the case it is necessary for scenery to be erected thereon and to be changed. This is possible by reason of openings formed in the metal screens and which are capable of receiving door sections or flats.



The seating capacity for this use, with the ten feet wide forestage, is 315, and the arrangement gives the producer an acting area in close contact with the audience for scenes requiring greater intimacy than it is possible to obtain in a picture-frame stage. It is interesting to consider this plan with that prepared by Wren for a Restoration Theatre. The semi-circular auditorium, with boxes around the perimeter, extending to a large forestage with a square main stage at the rear, would have made a most exciting theatre. Before considering the other uses I think it would be advantageous if I were to describe the longitudinal section through the new Playhouse.

A drawing shows the tiered seating in the main body of the auditorium and in the small pit together with the three rows of seats in the balcony. The latter has been designed to ensure completely uninterrupted vision for all stage uses and encircles the perimeter of the auditorium. The tiers in the balcony have been restricted to three, as a larger number would result in too steep a rake as the sight lines must be described from the front of the open stage. In a larger theatre, with a balcony further from the open stage, the rake would, of course, be modified.

The floor of the pit is removable in sections so that access can be obtained to the area below the stage whenever the pit is covered with the platforms forming the forestage or open stage.

The lighting gallery over the auditorium and the stage is shown with the voids through which the lighting will be projected. For such uses as the open and arena stages it is necessary that the lighting should be from as vertical a source as possible, to avoid the light shining into the eyes of the audience. The main lighting source is from these openings, augmented by lights behind louvred openings in the ceiling. Such openings over the stage area behind the proscenium would be used for suspensions, although it is not intended that a full grid for flying scenery will be required. The lighting control system will be installed in the gallery and remote control extended to any part of the gallery. The bridge formed between the two openings in the ceilings is not only to be used for lighting purposes but supports the sliding gear of the metal proscenium screens. The lighting gallery will also accommodate the air extraction plant and the roof thereover contains sliding panels complying with the regulations governing natural ventilation.

Should an orchestra be required, it could either be placed within the pit area, particularly when an opera is being performed, or it could be stationed in the gallery.

The third use, that of the open stage, is obtained by removing all the seats from the pit and filling the area with the standard platforms previously mentioned. Additional seating is introduced at the sides, which more than compensates for that lost from the pit. The open stage thus formed is at a level one foot six inches above the floor of the surrounding tier. Shallow steps are placed around the perimeter of the stage to facilitate the grouping of the actors. Access to the stage is from any of the gangways, from the main stage, or from beneath. Any section or sections of the platforms used for forming the open stage may be omitted, thus giving access to the basement through coincidental openings in the pit floor. The rear of the acting area could be enclosed by some form of set established slightly upstage of the proscenium opening. There have been many notable productions upon open stages and it is hoped that this plan will enable the capture of that vital actor-audience relationship which characterized the Elizabethan theatre. The seating capacity for this use is 359.

An arena stage is formed by sliding the metal screens away from the front of the stage and parking them in positions along the o.p. and prompt side walls. This completely opens the main stage area and, from within the cyclorama cavity, curved panels are withdrawn to join the main structural walls. These panels, together with the cyclorama, provide a background in front of which three rows of tiered seats are placed to complete the enclosure of the arena stage. Access to the stage is either *via* the openings between the seats or from beneath the stage. This arrangement would ensure a high sense of audience-parti-

icipation and would be invaluable for certain types of play or spectacle produced wholly in the round. The seating capacity is 461.

When the planning of the Playhouse had proceeded thus far it was found that a further distinct use could be obtained from the facilities already created. This is particularly interesting because it suggests that the basic design is capable of greater flexibility than originally envisaged, and in the hands of an imaginative producer still further uses may be evolved. The arrangement has been christened the 'space stage' and is formed by clearing the main stage area and extending the curved panels from the cyclorama to a point five feet from the structural walls, thus providing a semi-circular stage enclosed by an horizon. In the auditorium, the seating may be returned to the pit, giving a capacity of 397. The playing area thus formed enables the producer to create his production with complete freedom of style and to incorporate therein an essential theatrical use of space.

A mediæval mystery play, with the mansions surroundings the semi-circle of the acting area, and in which simultaneous action must take place would be one such use; another would be the use of an extended naturalistic set with both interiors and exteriors. It is also possible to envisage an entirely abstract setting surrounded by the cyclorama and with the acting area defined only by light. A multiple set could be constructed and a revolving stage introduced. Another possibility to be explored would be the mobile set based upon Gordon Craig's screens and similar to that used in a recent production of *King Lear*, but with greater regard for spatial relationships. Lest it should be thought that this arrangement of stage and auditorium is without precedent, comparison should be made with the design produced by Inigo Jones around 1630 for the Cockpit-in-Court. The octagonal auditorium gives a fine sense of enclosure and the stage is backed by a semi-circular façade.

A sketch plan reputed to be by Wren should also be compared because, although it is something of a rogue and bears no relationship to any known theatre, it shows a remarkably clear-sighted solution of the problems of theatre design. The audience are seated in semi-circular tiers and the radius used is continued into the stage area to describe the perimeter of a semi-circle of periaktoi.

The general arrangement of the stage area designed for the Questors Playhouse is best illustrated by an isometric drawing. This shows the method of constructing the removable floor of the pit and the platforms forming the forestage, and the open stage. The sliding metal screens providing the picture-frame opening are designed to allow the insertion therein of doors, decorated flats, scenic panels, and so on. The cavity within the cyclorama which contains the curved panels is also shown together with the set wagons. The lighting gallery and the bridge are approached from a stairway at the rear of the main stage.

In this search for a new concept in theatre design, I have tried to discover what traditions are of significance to us to-day, what contemporary thought is based upon mere rootlessness, what compromises are invalid and what compromises have the power of development within them. The adaptable theatre is not necessarily the final solution – indeed, no solution can be a final one. Playhouse design must change and develop in the future as it has in the past. Our present dilemma arises precisely because of the absence of such development in the past eighty years or so. This concept, therefore, is to be regarded more in the nature of an experimental playhouse where the results may lead to the continuance for a time of the flexible theatre as itself answering contemporary needs, or it may lead to the rejection of certain of its uses and to the development of others. The Questors and I have not attempted to choose for the theatre but we have tried to take an important step towards restoring to the theatre a freedom of choice.

*The above was a paper read to Royal Society of Arts, London, and is reprinted here with the kind permission of the Journal of the Society and of the author.*



## Calgary Civic Air Terminal, Alberta

*Architects, Clayton, Bond & Mogridge*

*Structural Engineers, Structural Engineering Services Ltd.*

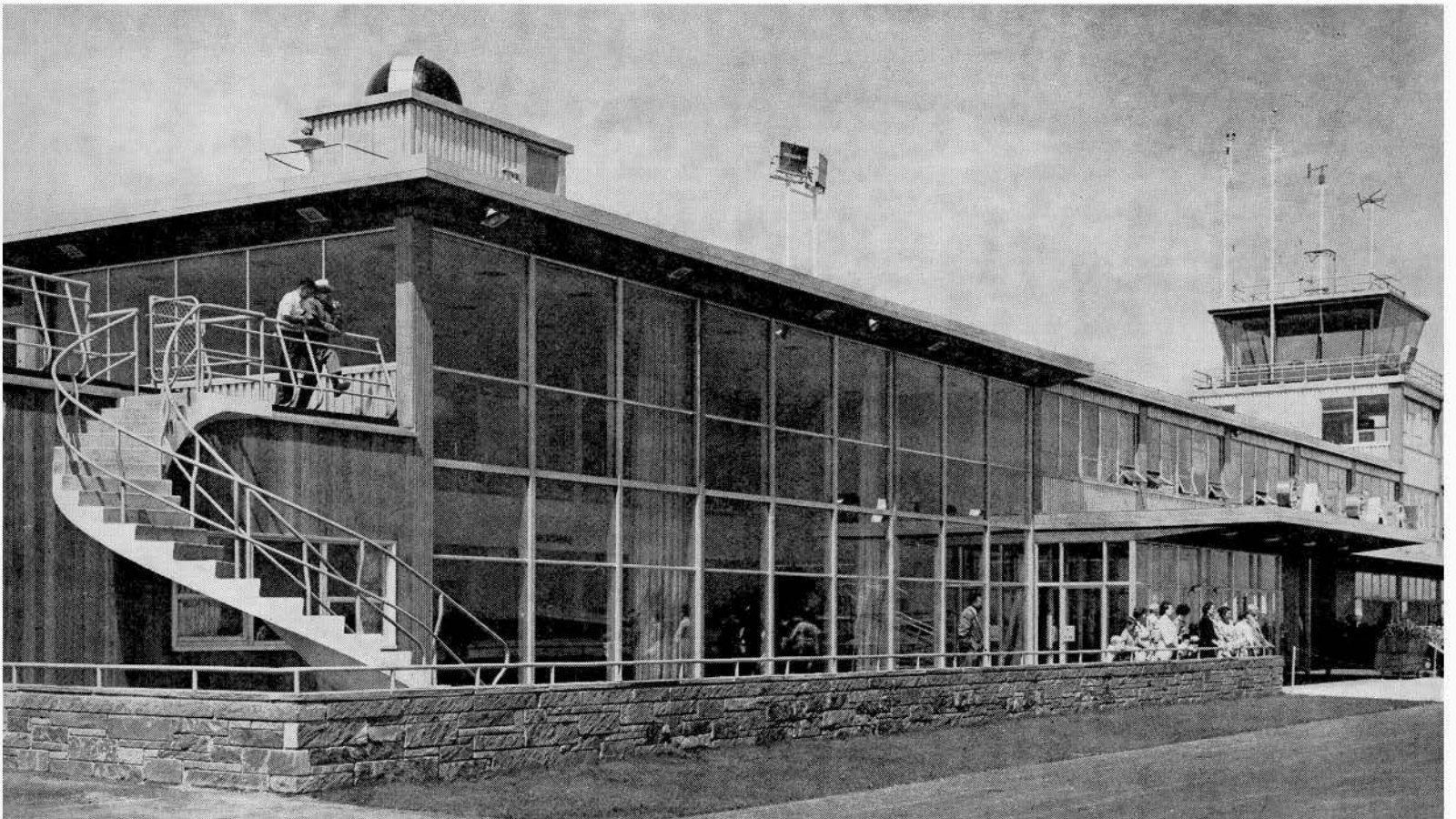
*Mechanical Engineers, Haddin, Davis & Brown Ltd.*



Elevation to east and field

Elevation facing the field

K. T. HYDE



Many excited comments have been registered about this building since it was officially opened by the Honorable George C. Marler, Federal Minister of Transport, in June of last year. G. E. G. Craig, the Airport Manager has been host to visiting airline and airport officials from many parts of North America, all expressing enthusiasm for not only the design but the operational efficiency of the building.

Trans-Canada Airlines inaugurated a new non-stop service from Calgary to Toronto, using giant Super-Constellations as soon as the new terminal went into operation, and this is just the beginning of an expansion of air traffic, the limits of which no one can foresee. In addition to scheduled airlines, executive and private aircraft of oil companies and their affiliates are increasing their use of the airport and terminal building each month. This new traffic is mainly due to the provision of modern, adequate and extremely pleasant facilities by the City of Calgary, the only municipal authority in the country to finance and build a terminal as a self-liquidating project.

It all began in 1949 when K. L. Bond, then a fourth year student at the University of Manitoba, consulted Mr Craig on its possibilities as a final thesis. The idea was met with enthusiasm and Mr Bond received full cooperation from Mr Craig and other city officials in preparing his thesis. Intensive research, and study of the most modern airport terminals at that time resulted in a scheme which was to become the basis of a million dollar project five years later.

In 1953, the City of Calgary decided to build a new terminal, and approached Mr Bond, who then joined the partnership of J. C. Clayton and Allan W. Mogridge. The scheme was analyzed in the light of changes since its first inception. Occupants, including TCA, CPA and other airlines; Department of Transport, which controls the Post Office, all were asked to submit their requirements. By the fall of 1953 sketch plans had been approved by all concerned and a model of the building and surrounding area built by the architects. This was put on display in the city a short time before voting was to take place on the money by-law of \$850,000.00. The by-law was approved, within a few weeks, the project was underway and the first flight out of the new terminal was despatched with suitable ceremony on March 1st, 1956.

One important feature kept in mind by the architects was that the non-travelling public were to be encouraged to use the amenities provided. At the same time, this must not interfere with the operation of what has become a busy terminal. Public facilities are completely and effectively separated from the operational wing by the east-west concourse, with the airline counters and offices completing this division.

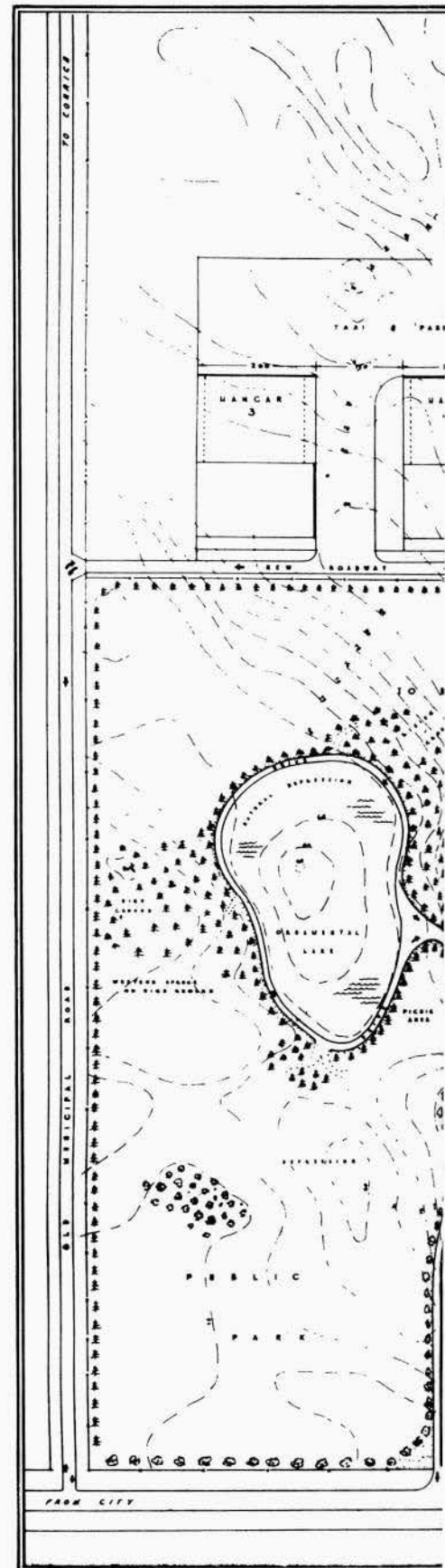
On the main floor the spacious lounge, two storeys high, has been partly enclosed from the concourse, which itself is large enough to contain seating and give complete freedom to travellers and their friends. The attractive coffee shop seats 45 people, and as there is a separate restaurant, is able to concentrate mainly on providing the quick service so often demanded by air passengers. Telephone and telegram booths are conveniently placed near the island information counter, services. The men's rest room has an ante-room and includes arrangements for shaving and 'fresh-up'. An interesting feature and since found most useful is the babies' room located off the ladies' rest room and fitted with suitably sized equipment. The main kitchen, flight kitchen and customs facilities complete the south wing on the main floor.

Baggage vehicles traverse the full length of the baggage concourse off which is the CPA cargo room. The larger cargo areas of TCA may also be entered directly from the apron. The post-office area and ramp-storage complete the main floor layout of the building.

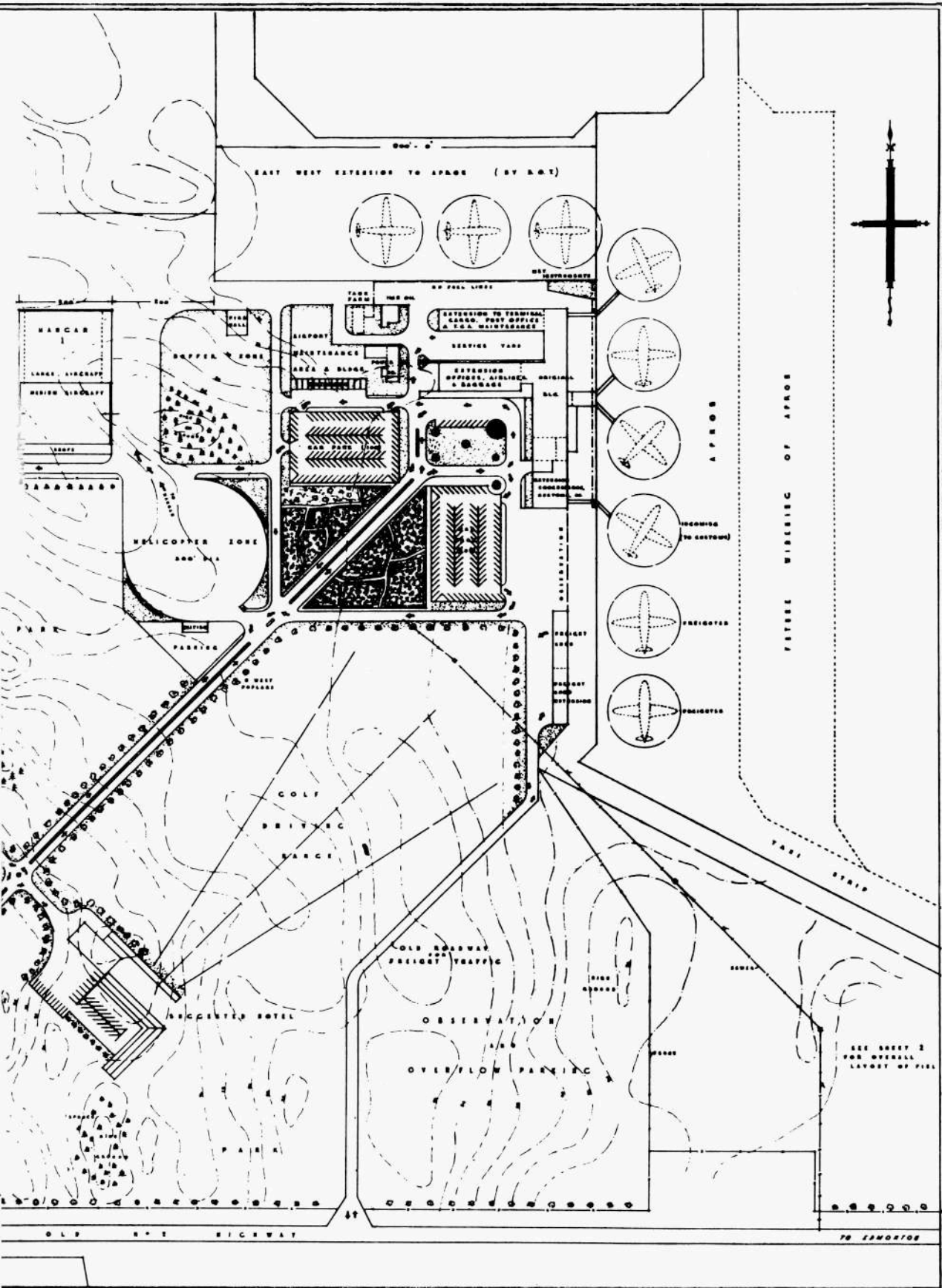
The control tower incorporates the latest recommendations in design and layout and is provided with its own separate heating and air conditioning systems. The meteorological office has been fitted with some equipment not yet installed anywhere else in Western Canada.

The terminal building is designed to extend in three directions, shown by arrows on the floor plans on page 18.

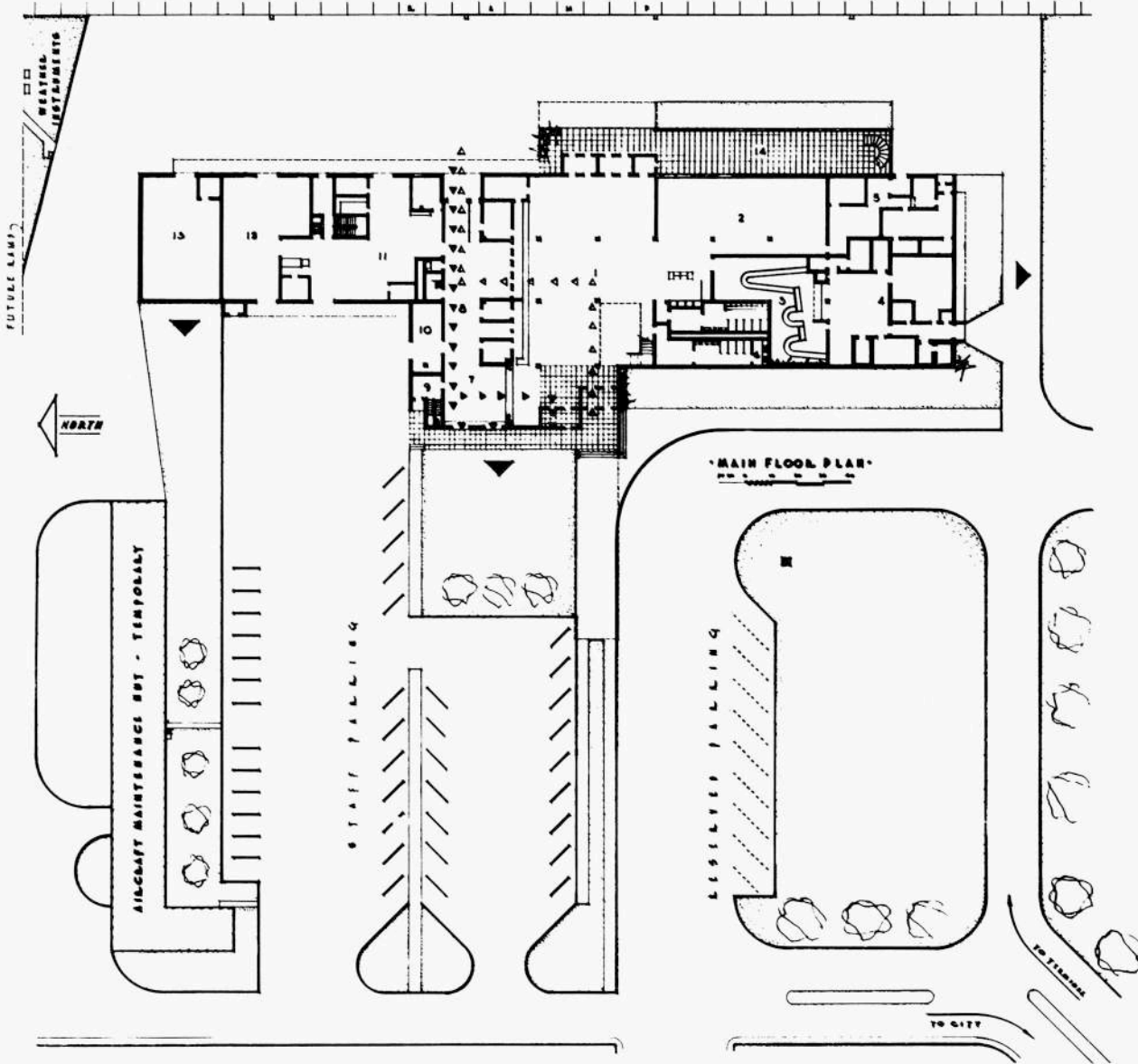
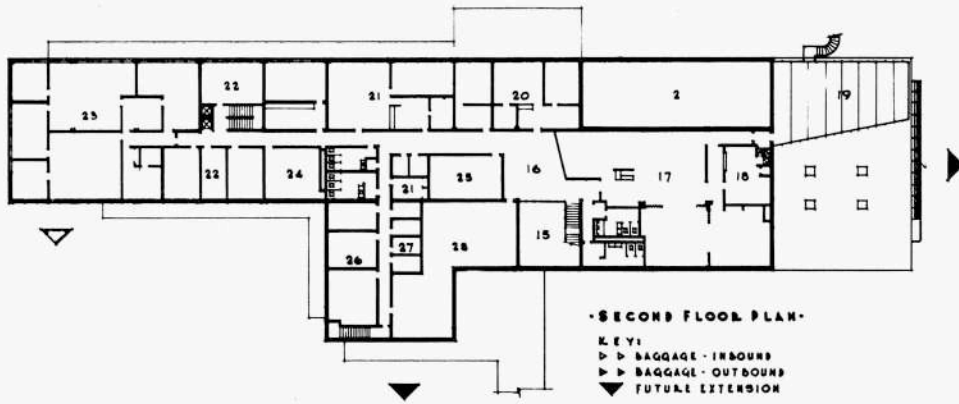
The architects were also commissioned by the city for all interior decoration, furnishings and kitchen equipment.



Master Plan showing suggested future development







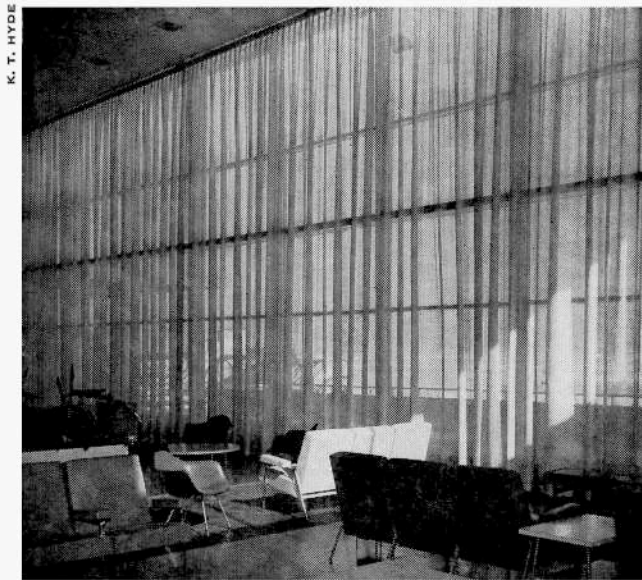
**MAIN FLOOR**

- 1 Public Concourse
- 2 Lounge
- 3 Coffee Shop
- 4 Kitchens
- 5 Customs Area
- 6 Babies Room
- 7 Baggage Out
- 8 Baggage Concourse
- 9 Staff Entrance
- 10 CPA Cargo Room
- 11 TCA Cargo Room
- 12 Post Office
- 13 Ramp Storage
- 14 Viewing Terrace

**SECOND FLOOR**

- 15 Stairwell
- 16 Upper part of Lounge
- 17 Restaurant
- 18 Servery
- 19 Observation Deck
- 20 Airport Manager
- 21 Airline Operations
- 22 Communications
- 23 DOT Weather Office
- 24 Pilots' Lounge
- 25 Board Room
- 26 Flight Personnel
- 27 Roomettes
- 28 Office Rental

Canopy to west entrance



The lounge



Plane arrival from lounge



Concourse looking toward coffee shop

# Expansible Intersections for Metal Curtain Walls

BY H. E. VOEGELI

IN DESIGNING THE EXTERIOR WALLS for tall buildings one must face a perplexing problem, that of mastering expansion and contraction caused by climatic and diurnal changes in temperature. In cold climates the force of frost must also be reckoned with.

In the past tall buildings have generally been enclosed with curtain walls of brick. This material has a favorable coefficient of expansion, it being quite similar to that of structural steel. Even so, with a considerable temperature gradient from the outside to the inner face of the wall the bond in the mortar joints, in time, becomes weakened and less water proof. Weaving and resultant shear due to the force of winds is sometimes a contributing factor. Expansion joints in the length of a building are common, but not in its height. In the latter the weight of the material, to a large extent, nullifies the expansive force in the masonry.

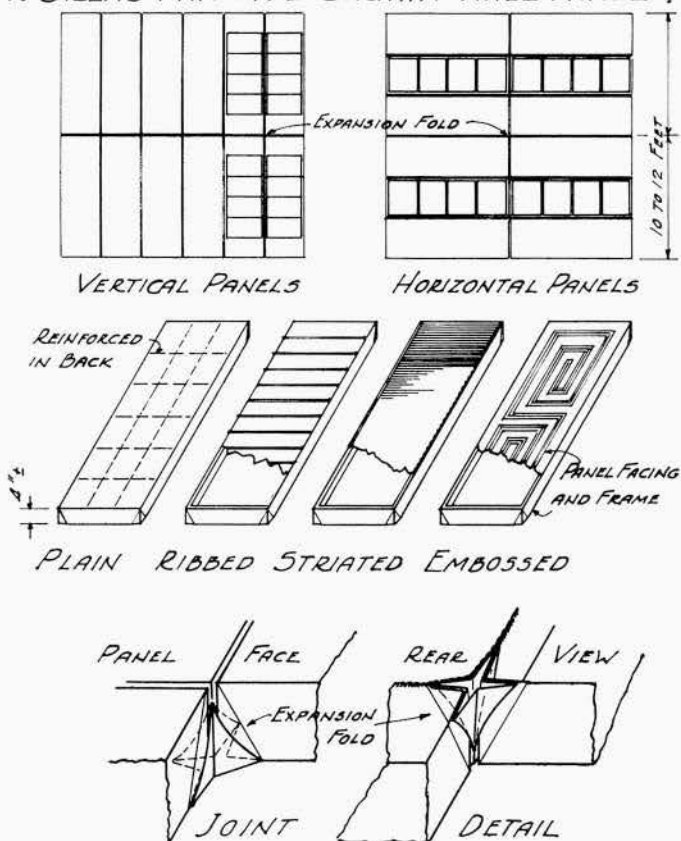
At present, metal facings are making a bid to replace curtain walls of brick. In this endeavor the problem is no less difficult. The architect and the engineer must strive for architectural beauty, soundness of construction and the control over buckling or movement of the metal. Experience is still very limited, but so far there are two types of metal curtain walls in use; the bread pan type as on the Aluminum Company of America building in Pittsburgh, and the batten or mullion type as on Lever House and on the House of Seagram on Park Avenue, New York City. The new Socony-Mobil building in New York might be considered a blend of the two.

Lasting improvement always comes slowly. It seems that no matter how good a basic idea may be, it takes a great deal of time for its perfecting and refining. The faithful dependence on caulking compounds for making joints in metal curtain wall construction seems unwarranted and is reminiscent of the caulking in the hulls of wooden ships. In due time, as in the evolution of the modern ocean liner, better systems of construction will be developed. It is interesting to observe that in ship building the problems of expansion and buckling were solved quite admirably. The changes in temperature simply place a mild stress in the materials of the structure and the curvature of the hull obliterates any sign of buckling even though the shell of the ship is relatively thin. Witness the fact that a ship as great in length as the height of the Empire State Building, has no expansion joints, and its surface is so gracefully rounded and smooth as if

carved from a solid block. Unsightly buckling in sheet metal has also been overcome in the design of the automobile body and the airplane through the use of curves.

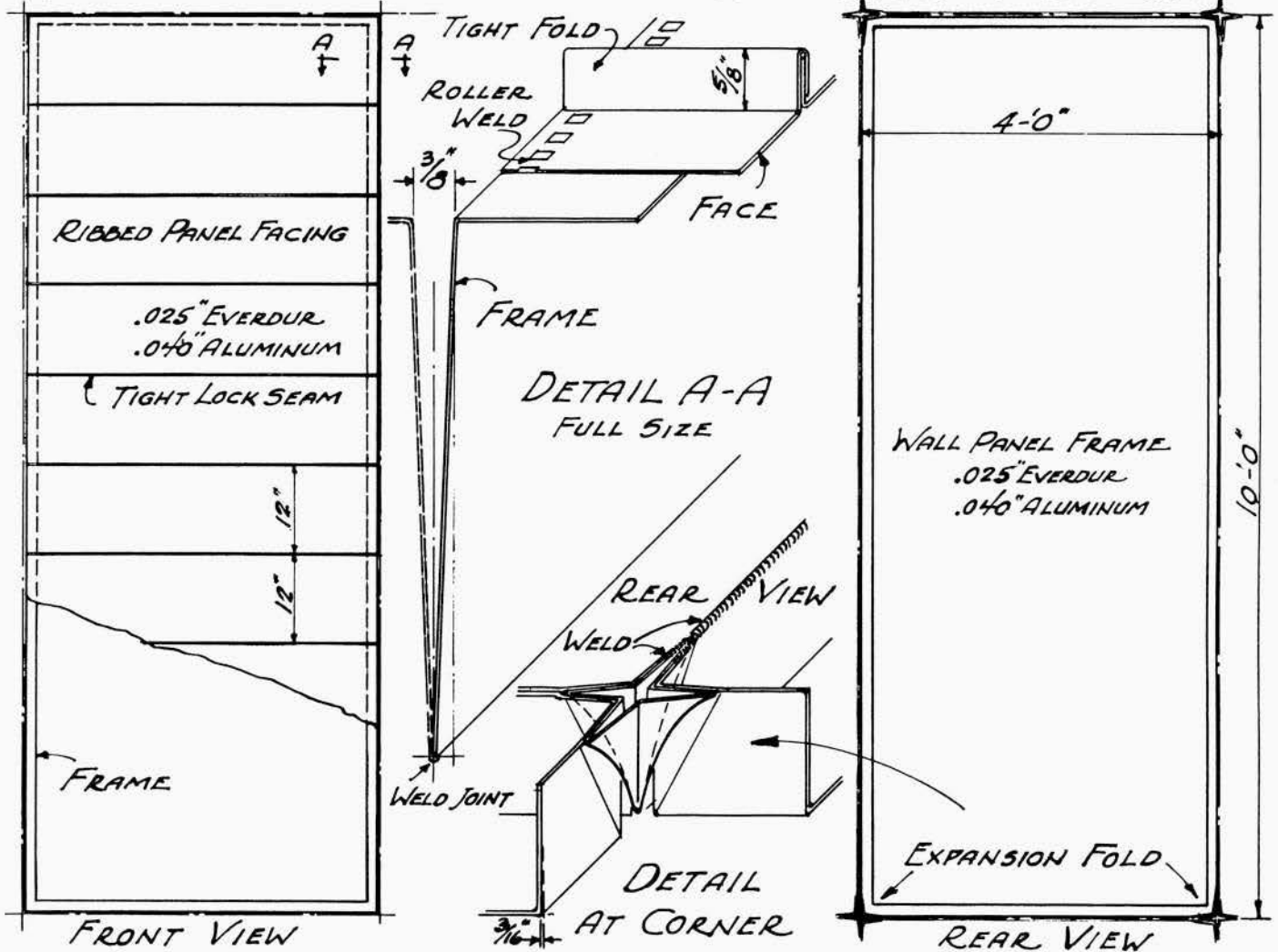
It may be that eventually curved metal surfaces will become a part of building design, but at the present we must try to adapt sheet metal of economical thickness to the straight walls of buildings of contemporary design. One idea is to weld the return flanges of the bread pan type wall panels together, and to insert deep drawn expansible metal intersections at the corners of the panels to make a permanently wind-tight and weather-tight construction that will absorb movement of expansion or contraction without buckling the face of the panels. The metal expansion folds at the corners are intended to be relatively thin so as to yield easily to the forces of expansion or contraction, whereas the metal of the panels must be of a thickness commensurate with its strength and

BREAD PAN TYPE CURTAIN WALL PANELS





# FRAME AND FACE OF CURTAIN WALL PANEL—WELDED JOINTS



stiffness and in proportion to the size of the panels; or, the panels may be in two parts, the frame and the facing, thereby offering a great deal of latitude in design and decoration.

This construction does away with the need for caulking compound or other soft jointing materials except at the window glass. The completely welded skin avoids the problem of water laden updraft which is usually so troublesome with tall buildings. Whether the panels are story high or smaller they can be assembled on steel framing in the shop, in units of a size that can be handled with available equipment. There should be a space of one inch between the welded edges of the panels and the insulated fireproof inner wall to prevent condensation of

vapor on the back of the panels. That space, in addition to providing ventilation will induce air flow behind the metal facing in hot weather and carry off much of the heat that ordinarily penetrates the walls of buildings.

The expansible intersection is particularly adaptable to curtain wall panels of the bread pan type, but it can serve perfectly well with a modified batten construction.

This type of exterior wall has a place in the windowless topmost stories of every tall building where the ventilating and the air conditioning equipment is housed. Large window walls should also be designed with V type welded expansion frames and with expansion folds at the intersections.

## Fourwinds Apartment House, Montreal, Quebec

*Architect, Philip F. Goodfellow*

*Structural Engineer, Irving S. Backler*

*General Contractors, Tratt Construction Co.*

*Accommodation: 90 suites, bachelor and three-rooms, lobby, services and garage*

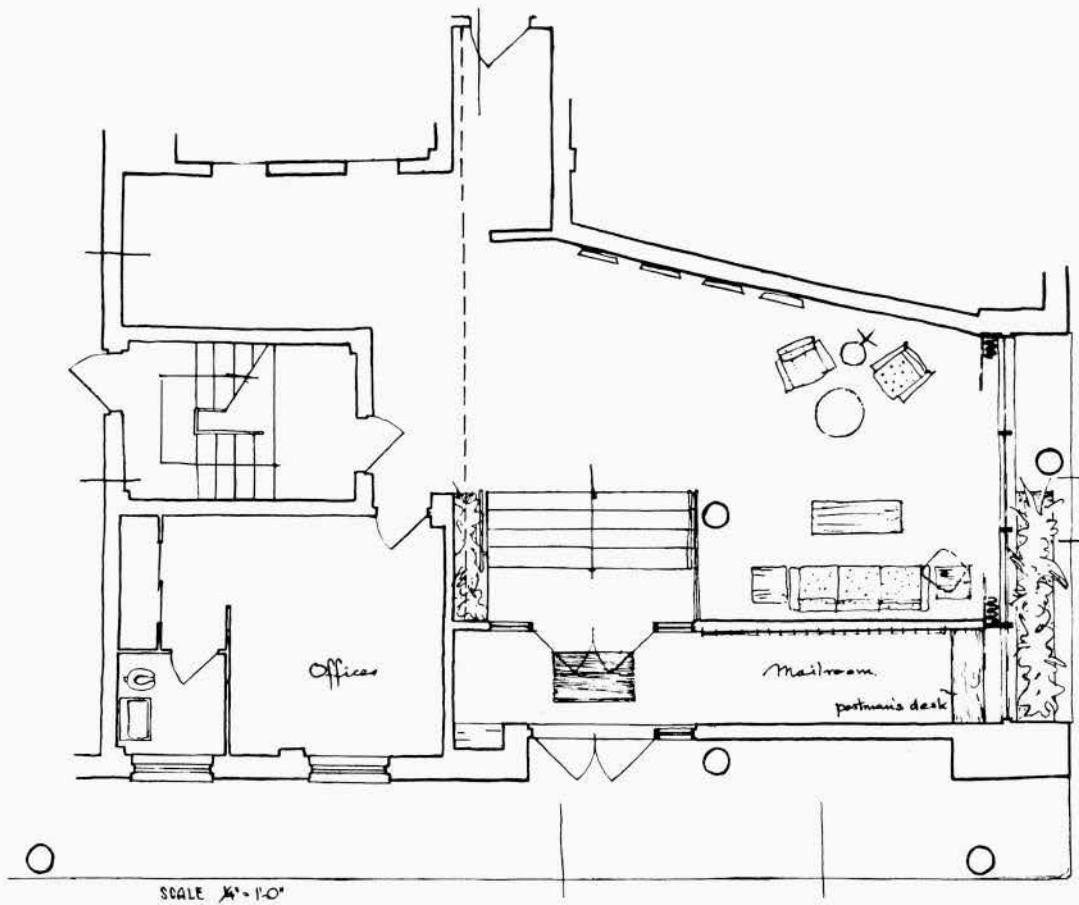
*Structure: reinforced concrete, brick and terracotta wall, cork insulation*



STUDIO ALAIN

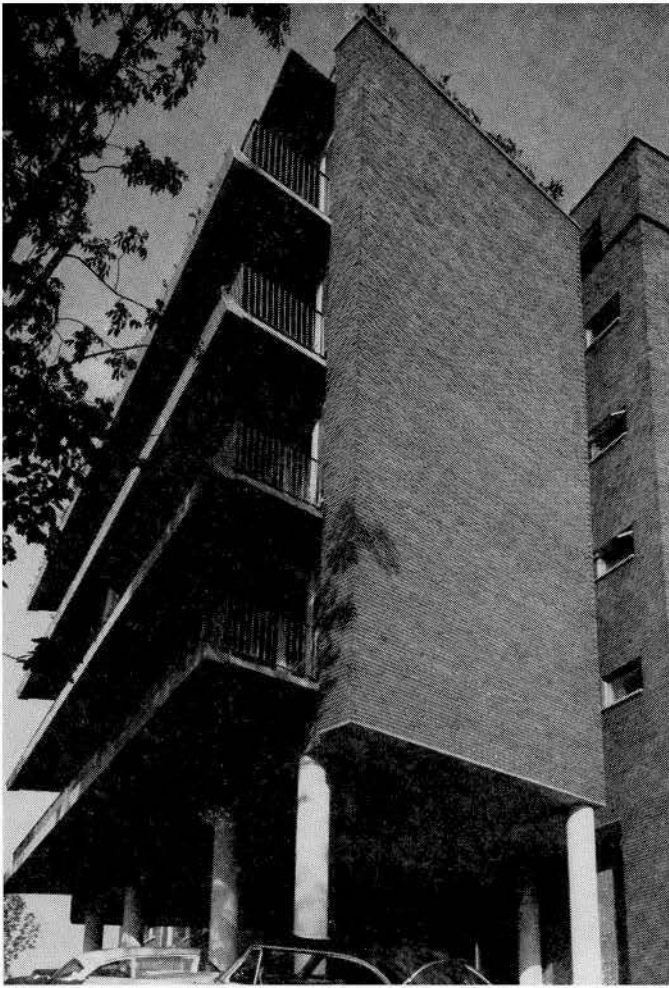


The lobby



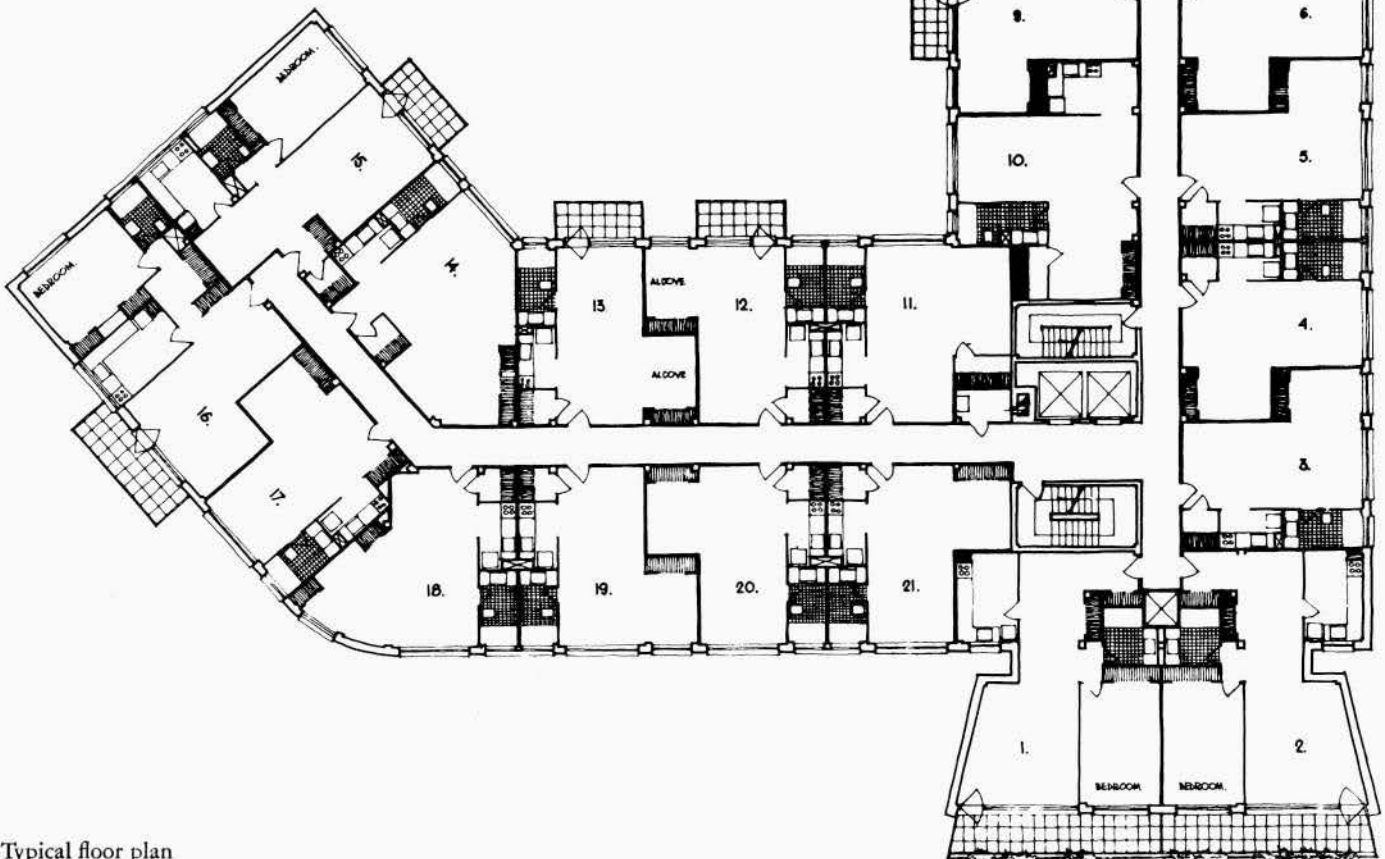
Plan of lobby





STUDIO ALAIN

Entrance driveway



Typical floor plan



Main entrance  
Ceramic mosaic mural by Louis Archambault

View from Côte des Neiges



# VIEWPOINT

*When the client's immediate financial interests appear to conflict with the architect's conception of town planning practices, what attitude should the architect adopt?*

I think it was a trade association of morticians, seeking (for tax purposes) to be called a profession, that were told by Mr Justice Brandeis what 'profession' means. He included these essential characteristics:

- (a) possessed of learning as distinct from mere knowledge or skill;
- (b) measuring its success other than by emoluments;
- (c) responsible for its performance to society as a whole, not solely to individual employers.

The "architect's conception of town planning practices" is a part of his feeling of professional responsibility to the wider community. Fortunately for him, most towns in Canada where he is likely to practise already have town planning officers, whose job is precisely to define the community's interest in proposed buildings. So the architect should first look to the Town Hall to see if his own conception of public requirements is indeed the official one. His conduct so far is quite like that when the client wants something that the architect thinks might conflict with building by-laws: to check with the public officer in charge.

If the Town Hall's answer is that the client cannot have his way, the architect's part is to submit a re-design to satisfy both the law and (as far as may be) the client. When his professional sense had told him there ought to be a municipal ruling, the architect can hardly advise his client to appeal once he finds that civic law confirms his hunch.

Suppose the Town Hall has no view in conflict with the client's wishes. Then the architect owes it to himself, I think, to find out why the Town does not share his professional "conception". If he is persuaded to alter his conception on what he hears, then all is clear sailing on the client's job. If, however, the Town seems too short-sighted or crippled to do what the architect thinks it should, then he owes his client another expression of his own misgivings, with the admission that they are professional and personal, not official or legal – perhaps adding: "*non omne quod licet honestum est, you know.*"

If the client still insists on making money by what the architect is convinced is an important breach of civic morality, there is the final recourse of resigning the commission. This has often been done in circumstances that made it far harder than it is in today's building boom. It may be that the best kind of public relations grow out of a general impression that this is the way the profession behaves.

(It occurs to me that the question may refer to conflict with professional practices in town planning conducted by others. On that the architect can only review his commission against his competence. Not a fully satisfactory measure of his probabilities, but a ready one, is the number of architects admitted to the Town Planning Institute of Canada. At present they number about fifty men.) *Alan H. Armstrong, Ottawa*

At present the use of the words "town planning practices" are indicative of a stereotyped system of manoeuvres for placing buildings along streets designed according to the previous findings of a traffic engineer. I should prefer to look upon towns as the creation of a community bent upon allowing the human citizen to reach full development. If most of the communities resources are expended upon making the best of bigger and safer materialistic accumulations, the architect should be one of the first to feel the inadequacy and folly of life in this unbalanced society.

However, as architects, we are the servants and advisers to the client and regardless of personal views with respect to his business and investment interests, our job is to satisfy his needs

including protection of his financial interests.

The responsibility for setting up the standards of environment fall directly upon the community. The architect, along with other citizens of a free society, should be willing and energetic in promoting the elevating influences to produce those conditions in which he feels he can work with all his ideals intact. *Michael Bach, Toronto*

An architect is frequently running into problems of conflicting interest. An architect should maintain his professional independence and express his opinion as to the most suitable solution to his client's problems. The architect's primary responsibility as laid down by Acts of Provincial Legislatures is to the citizens as a whole. Where this conflict develops the architect should explain fully to his client his interpretation of the client's requirements and how he has resolved them, taking into consideration his conception of town planning practices. He should endeavour to secure an appreciation of his conception from the client. *H. K. Black, Regina*

The architect planner is often the only one with the professional knowledge and understanding to bridge the gap between town planning and the client developer. Usually this client is unaware of the vital necessity of accepting his particular building problem in relation to a community pattern. The architect's duty is therefore quite clear. He must show his client the reasons for and advantages of integrating his particular building into long range town planning, even though the client's immediate financial interests may seem to be adversely affected. If selfish interests for rapid financial gain are at the expense of the community and prevail, the architect's responsibility after all means of discussion or presentation have been exhausted is to relinquish his commission.

The architect's attitude should, if possible, be to consider the planning interest of the community above that of an individual client, determined to oppose considered and accepted town planning practices. *Roderick Clack, Victoria*

It seems to me to be the same old problem, the conflict between the client's financial interest (too much, or too little) and the architect's conception of general architectural and town planning practices, as well as his professional standards. Quite often, I think, the architect may not be in a position to oppose the client's interests too strongly. He could lose a job. However, the architect should have a standard of quality which he should abide by. If in the architect's opinion, the financial interest of a client would create a result of sub-standard quality, it is his professional duty to do all he can to try to change the mind of his client, or limit the scope of the project. Should he not succeed, it is my firm belief that the architect should retire from the job. It can only do harm to our profession to have the word architect attached to anything of sub-standard quality. However, I also believe that the architect, with his experience and knowledge, and perhaps a little more concentration, should in most cases be able to satisfy the client's financial interest as well as his own integrity and the standards of our profession. *Asbjorn R. Gathe, Vancouver*

In this situation, the architect should inform his client of the benefits and advantages in conforming with town planning practices and try to persuade him to adjust his objectives in order to conform. On the other hand, many planning by-laws and parts of planning by-laws are unrealistic in their assessment of the effect upon the individual project. In such cases, the architect should definitely try to arrange a compromise solution, which will be both fair to his client and constructive to the town planning intent. *John Layng, Toronto*



# News from the Institute

## CALENDAR OF EVENTS

*Annual Meetings of the Provincial Associations:*

Quebec, Alpine Inn, Ste. Marguerite, February 1st to 3rd, 1957.

Ontario, Royal York Hotel, Toronto, February 15th and 16th, 1957.

Nova Scotia, Lord Nelson Hotel, Halifax, May 17th, 1957.

1957 Convention of the Royal Australian Institute of Architects, Melbourne, April 1st to 6th.

1957 Annual Convention of the American Institute of Architects, 100th Anniversary, Washington, D.C., May 14th to 17th.

1957 Annual Assembly of the Royal Architectural Institute of Canada, 50th Anniversary, Chateau Laurier Hotel, Ottawa, Ont., May 29th to June 1st.

Annual Meeting of the Engineering Institute of Canada, Banff Springs Hotel, Banff, Alta., June 12th to 14th, 1957.

British Architects' Conference, Oxford, England, July 10th to 13th, 1957.

## NORTHWESTERN ONTARIO

The development of basic resources of mine and forest, and to a lesser extent agriculture and manufacturing, has had a dynamic effect on this section of Canada.

The area known as Northwestern Ontario, comprising Thunder Bay, Kenora, Rainy River and Patricia Districts, has become a major development area of the Dominion. The focal and distributing centre of this vast area is the cities of Fort William and Port Arthur, commonly called "The Lakehead", situated at the head of navigation on the Great Lakes.

This progress has greatly affected the prosperity of the Lakehead architectural firms in particular, and the profession as a whole. The increased number of architects in this region has made possible the establishment of the Lakehead Chapter of the Ontario Association of Architects, a dream come true to those who worked towards this accomplishment for years.

Last year the architects of the Sudbury area were excellent hosts to the President and Councillors of the OAA, as well as the Fort William and Port Arthur delegation and their wives. The formal ceremonies were impressive, with past president, George Gibson, presiding in his own inimitable manner at the formal presentation of the charters to the Northern Ontario and Lakehead Chapters. Engraved gavels were presented to the two Chapter chairmen by Robert Calvert.

A new Electoral District was created as a result of the formation of the new Chapters, which gives all of Northern Ontario representation on the OAA Council.

The present prosperity of Northwestern Ontario has resulted in an exceptional amount of construction in the region, which has benefited the architectural and engineering professions. Travelling time and distance to supervise work in this district presents a real problem. To visit one project in the course of

construction, can mean a return trip of from one hundred and fifty to eight hundred miles.

The northern giant is growing and along with it the practice of architecture.

*L. Y. McIntosh, Fort William*

## QUEBEC

On Monday, November 5th, 1956, the dinner in honor of the Past Presidents, and reception to new members, took place at the Hélène de Champlain Restaurant on Ste. Helen's Island. It was a great success and attended by one hundred and ninety-two persons. It started at 6.30 p.m., with cocktails in the salons, and dinner at 7.30 p.m. We had an excellent menu and I feel that the Hélène de Champlain Restaurant deserves our congratulations for this fine food well served. Everyone who attended this dinner was pleased beyond expectations. Our President, Mr Henri Mercier made some appropriate remarks in honoring our Past Presidents present and in welcoming into our midst some forty-nine new members to whom certificates were presented later in the evening. Addressing the new members, Mr Mercier reminded them of their responsibilities to society, to the profession, and to themselves, and encouraged them to take model from some of their elderly confrères, especially Mr A. J. C. Paine, to whom we were paying our respects in presenting him with a commemorative autographed silver plate for his fine achievements and the high ideals that he has set up for us to follow. Mr Paine, after receiving this token of appreciation, expressed his deep gratitude for this gesture and presented the RAIC Medal to each of the best students of our Schools of Architecture. For the Ecole des Beaux-Arts, the medal was awarded to Mr Romeo Savoie and for McGill School of Architecture, to Mr Irving Kessler.

Our First Vice-President, Mr Hugh Valentine, then presented our guest speaker, Dr J. B. Stirling, who gave us a most interesting talk on the financial aspect of the construction industry and the close collaboration that exists between our profession and general contractors. He reminded our governments to handle its construction enterprises in the same business-like manner that private enterprises do, by confiding more in our profession and thus avoid too much departmental red tape that in many cases is the cause of excessive construction cost. Mr Gerard Venne, our Second Vice-President, thanked the speaker.

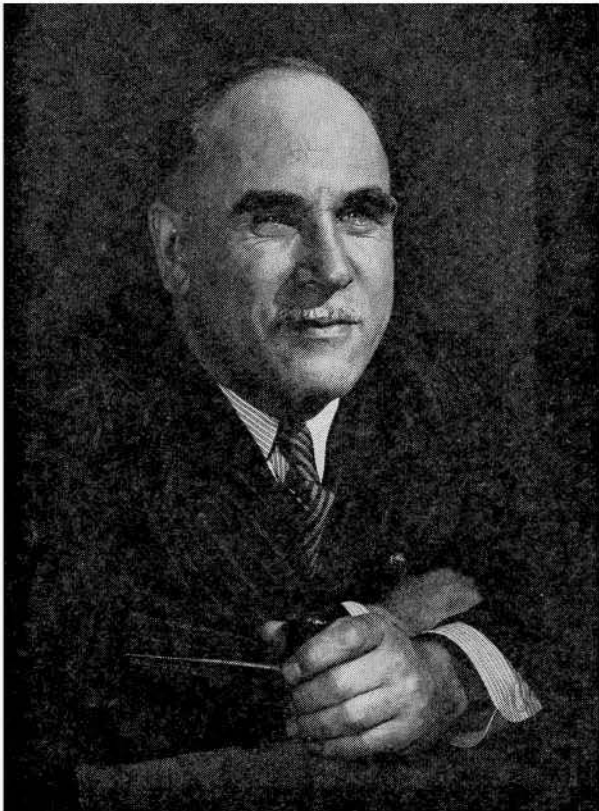
The marked increase in the attendance as compared to those of previous years when such a dinner was held in town is, I believe, a very good omen for the success of our coming annual convention in Sainte-Marguerite.

*Paul G. Brassard, Montreal*

## OBITUARY

**Arthur Hunter Eadie**, 59, a capable architect and a fine citizen, died suddenly on December 4th, 1956. He had been at his office the day prior to his death so his many friends were totally unprepared for the sad news.

Arthur Eadie was educated in the public and technical schools of Toronto and, some fifteen years later, returned as teacher of technical school evening classes. He commenced his architectural career with the firm of Chadwick & Beckett from 1912 to 1916 and in 1918, after the war, became a member of the staff of the late John M. Lyle with whom he remained



WALLACE PORTRAITS

Arthur H. Eadie

until 1929 when he put in a year or so with Marani, Lawson & Morris. He then returned to Mr Lyle's office and remained until 1943 when the partnership of Beck & Eadie was formed. Mr Beck retired in December 1953 and Mr Eadie continued the practice under his own name.

In 1929 Mr Eadie was admitted to membership in the OAA and in 1946 was elected to the Editorial Board. In 1949 he became Chairman of that Board, which office he occupied with distinction until April 1953. For his distinguished architecture as evidenced by the Geo. H. Lock Memorial Library, the Deer Park and Oshawa Libraries, General Electric Company plants in Barrie, Oakville and Peterborough, his work in association with Mathers & Haldenby on the main banking room of the Head Office of the Bank of Nova Scotia in Toronto and other notable buildings, and for his services to the profession, he was created a Fellow of the Royal Architectural Institute of Canada in 1954.

Mr Eadie had been a member of St. Georges United Church for twenty-five years, a member of the Board of Stewards for nine years and treasurer of the Church School for seven years. At the funeral service held in the Church, the Rev. Dr John Short referred to him as a lover of beauty, a perfectionist, and "a workman that needed not to be ashamed". Dr Short pointed to the panelling in the chancel of the church and to the beautiful war memorial as additional evidence of Mr Eadie's professional skill and to a life given to the creation of beauty.

His Toronto colleagues knew Arthur Eadie as a kindly, friendly man always willing to assume his full share of work to be done for the Association and the Institute. His lengthy and successful Chairmanship of the Editorial Board brought him into touch with architects all across Canada, all of whom will be saddened by the loss of a true friend. Meetings of the Editorial Board will not be the same without Arthur Eadie.

It can be truly said that his forthrightness of character, his wisdom in Council, his firmness of action earned for him the respect and affection of his fellows.

*Forsey Page*

## LETTER TO THE EDITOR

Dear Sir,

After having re-read several of the recent issues of the *Journal*, I would like to compliment your organization on producing a fine magazine with interesting material, a lively feeling and some stimulating thought. It is a welcome relief to feel that the RAIC can produce something to counteract the glossy "slicks" from across the border. The new section on *Viewpoint* is a welcome addition and it is hoped that the *Journal* can function as the discussion platform for Canadian architects.

A trend which is gratifying to note is that the descriptions of building do not so often begin with "The structure is of reinforced concrete frame with precast . . ." or some other technical summary. We would all like to think that the architect has given the project more basic consideration than purely those details. Perhaps it would be interesting to hear more about special client requirements, site character or the architect's own feelings. A simple list of materials used is of little value because of regional variations, but if we wish to stress the technical aspect then a good wall section or detail well-noted is more valuable. From my limited experience in Europe, this aspect has become more noticeable. Whereas the European architect is more concerned about the relationship of the building and its parts to the community and environment, often to the detriment of the final execution, my impressions of Canadian architecture are filled with costs per square foot, metal windows, gravel stops and prefabricated toilet stalls. It may seem to the experienced architect like a rather scholastic approach but perhaps the *Journal* could encourage this more profound appraisal of architectural problems. In the end I am sure that Canadian architecture would benefit from this more balanced emphasis.

Yours very truly,

*K. G. Terriss, MRAIC, Stockholm, Sweden*

## FUTURE ISSUES

February	Branch Banks
March	Students Issue* (Ecole des Beaux-Arts)
April	General
May	Schools*
June	Industrial
July	RAIC Golden Jubilee*
August	Farm Buildings
September	General

N.B. Only those months marked with an asterisk represent special issues. The others are general issues with an emphasis on the subject mentioned.

## POSITIONS VACANT

Two Architectural Assistants are wanted by Kerr & Cullingworth, Architects, 102 Ross Building, Saskatoon, Saskatchewan—one young qualified Architect and one Draughtsman with several years' experience. Apply in writing, stating age, experience, marital status, etc.

## CONTRIBUTORS TO THIS ISSUE

**Norman R. Branson**, ARIBA, trained at the Birmingham School of Architecture and in private practice. From 1936 until the commencement of the war, he was employed by Sir John Brown and A. E. Henson. During the war Mr Branson was employed by War Department and other Service Departments. In 1946, he joined the firm of Messrs W. S. Hattrell & Partners, London, and became a Partner in 1948. Specialises in stage design and sculpture. Other works include offices, department stores, industrial projects, banks, hospitals, schools.

**Peter Collins** See October 1956 *Journal*, page 406.

**H. E. Voegeli** is recognized for his experience in connexion with modern metal applications. He is Development Engineer for The American Brass Company, Waterbury, Connecticut.