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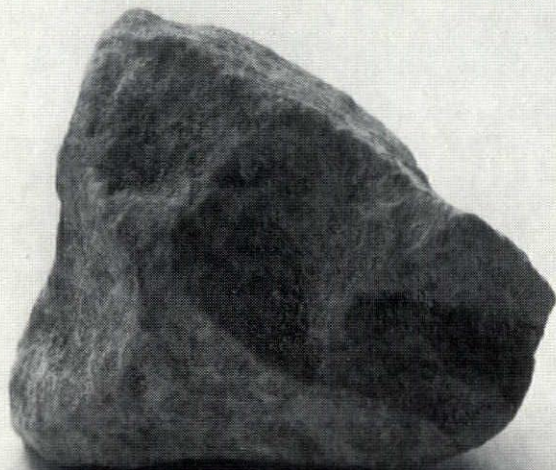
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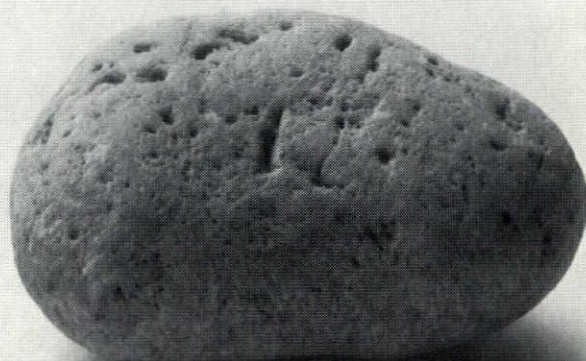
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# NORTHWEST ARCHITECT

May-June, 1972  
Volume XXXVI Number 3

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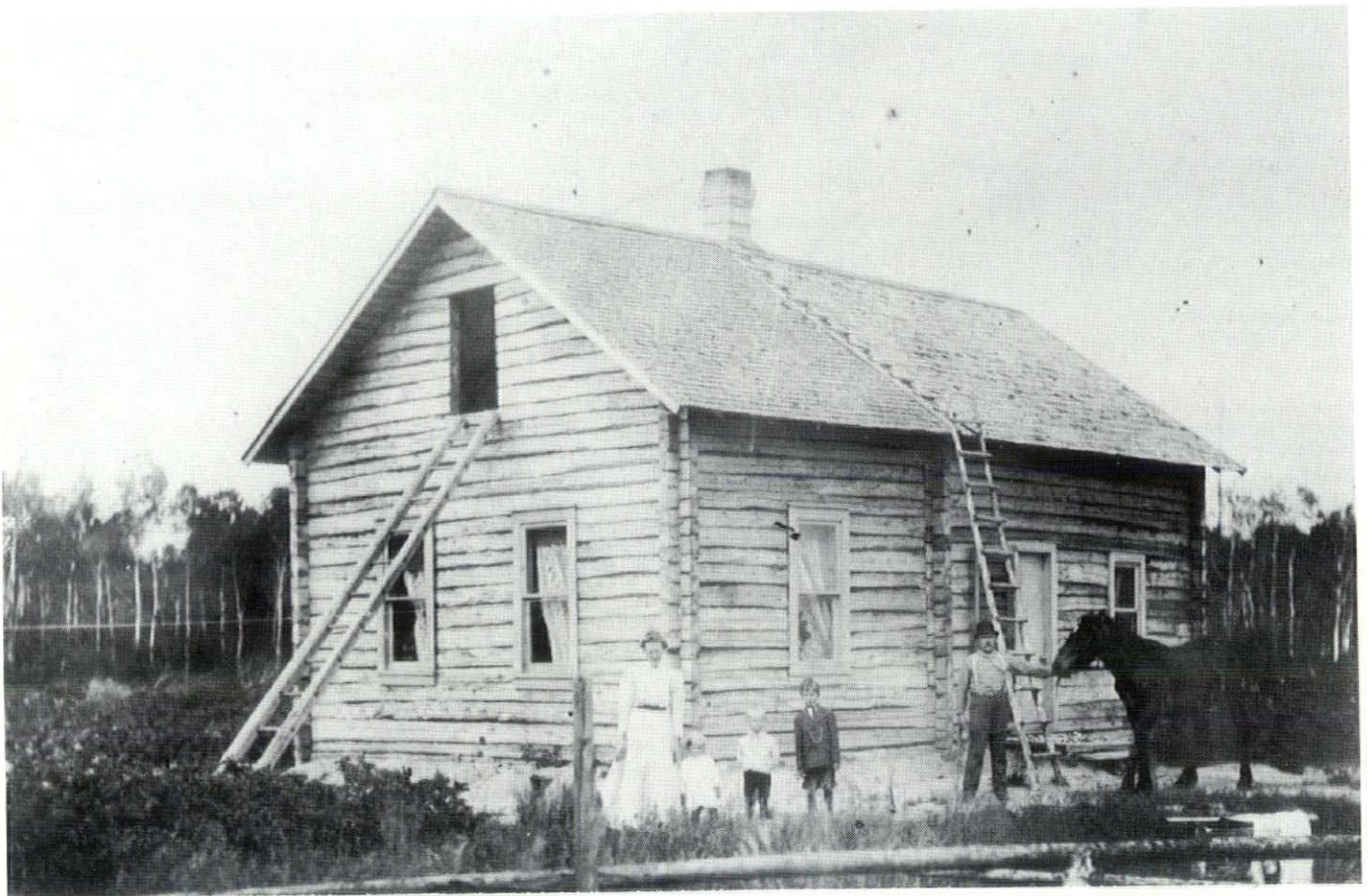
Richly aged natural logs which were used to construct the homes and service buildings on farms tilled by the early Finnish settlers of the Upper Midwest form the definite statement of our cover for this issue. They are now at that "ripe" stage in which nature has had her influence on their color but which has not brought decadence and rot to the structures. The article which presents the details of how these buildings were built begins on page 98.



# Northwoods Vernacular Architecture: Finnish Log Building in Minnesota

by Michael Karni and Robert Levin

*"Jos miehela on maata, niin maata se ruoki" — Finnish Proverb (If a man has land, it will surely feed him)*



*The Nestor Kutsi Homestead, Alango Township, St. Louis County, Minnesota, 1908.*

Minnesota's architectural heritage includes some fine examples of vernacular building — sturdy log structures built around the turn of the century by Finnish settlers in the Upper Midwest. Many of these buildings stubbornly persist, demonstrating the ability to endure in the face of northern Minnesota's climate.

The significance of this architecture arises from its value as cultural evidence and from what it reveals of craft techniques. The thousands of log buildings that still stud the northern Minnesota landscape demonstrate a versatility in application of woodworking techniques and skills that can properly be called vernacular art.

The study of vernacular architecture is not the study of intellectualized styles and modes as they are manifested in grand buildings. Rather, it is the study of how skilled craftsmen have met the building needs of their group by using the materials available to them. The examination of the vernacular must encompass a look at the circumstances — cultural as well as environmental — which influenced the folk craftsmen in their building.

In America the study of the vernacular must consider the adaptation of Old World techniques to the New World's environment. The best transplanted vernacular architecture in America shows the

ability of the craftsmen to apply the best of old folk building skills to new environmental conditions. In this way, using native materials, they produce buildings which are both functional and expressive of the group's cultural values and life style.

The truest expression of vernacular building usually shows the absence of pretentiousness in design and a lack of ornamentation. The design derives from specific functional requirements and site conditions, regardless of symmetry or generally accepted taste canons. There is a close identity between enclosing form and enclosed space; the plan of the building can be read in the walls,





*Finnish Creamery in Northern Minnesota*

as though they were transparent.

The Finnish immigrant builders of Northern Minnesota produced a distinctive vernacular architecture. A traveler going north from the Twin Cities notices that about 100 miles from town the mixed hardwood forests and rolling farmland give way to the rugged Canadian Shield with its evergreens and scrub hardwoods. At the same time the bright, frame-construction dairy farms of Isanti, Pine and Chisago counties give way to bleaker looking farms that seem like random collections of small dark buildings. These are the Finnish-American homestead farms, established largely between 1900 and 1915. They are mostly

concentrated in St. Louis County, in the lands adjacent to the Vermilion and Mesabi iron ranges and in the townships directly north of the city of Virginia.

From a distance these farms — now mostly abandoned or dotted with recently constructed frame buildings — appear bleak and ramshackle. But a closer inspection reveals that the bleakness is caused by the effects of fifty or sixty years of wind, rain and snow on deliberately unpainted pine and poplar logs. The ramshackle quality is due to the fact that Finns have more but smaller buildings than do most American farms, the Finns having brought with them two additional buildings — the

sauna and the hay-drying barn. In the true vernacular context, however, the Finnish farm took the form that it did because of the particular circumstances of the landscape, the life style of the Finns as a group and of the materials available to them.

There was a distinct pattern to the Finnish settlement. Men working in the iron mines and dreaming of farm land of their own would search the countryside during weekends, strikes and lay-offs. As soon as weather permitted, the former miner went to the site with as many friends and male relatives as he could gather and began to erect a sauna of logs. Once the sauna was com-



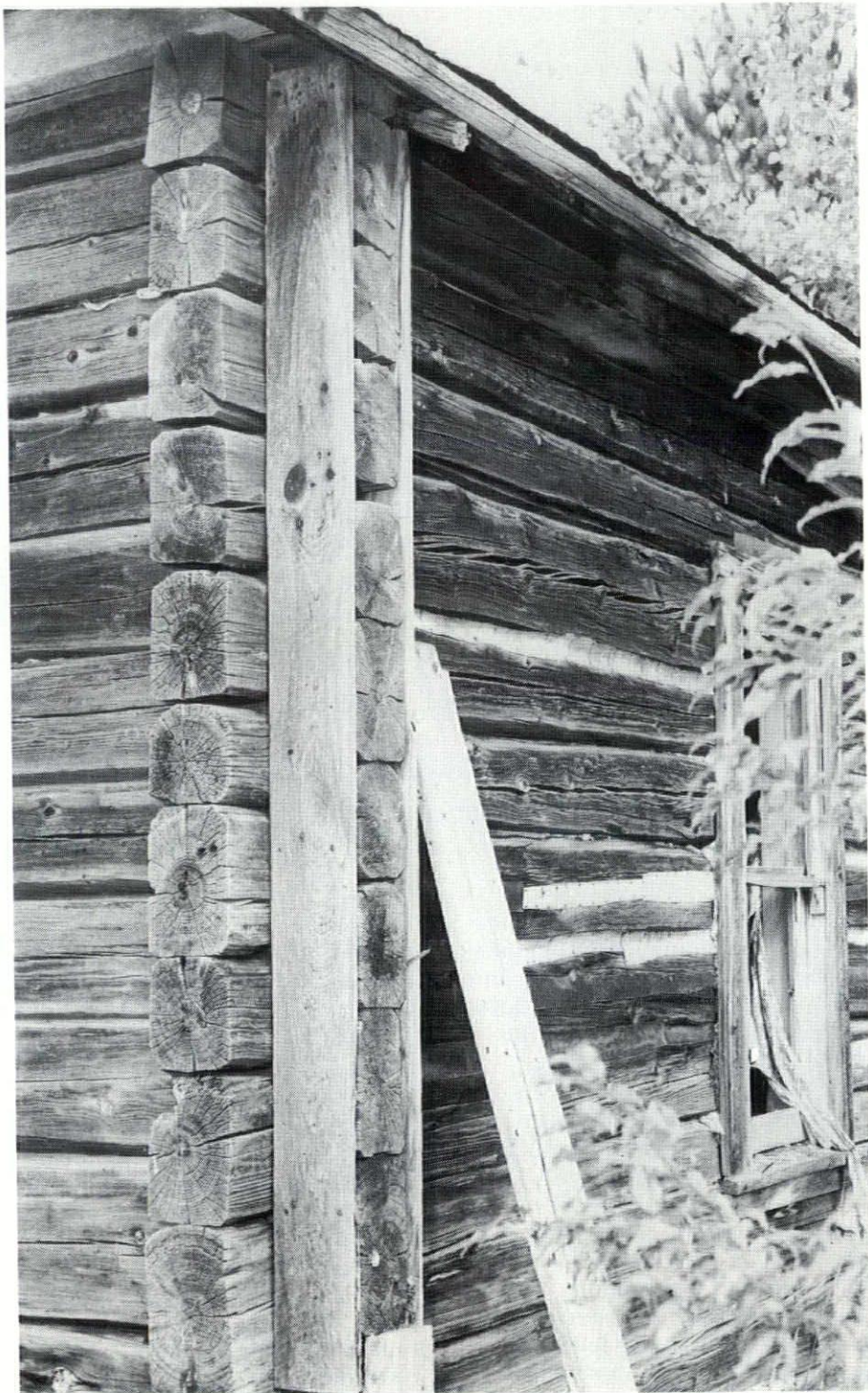
pleted, the rest of the family, with possessions, would be brought to the site. Living quarters would be temporarily established in the sauna and work would begin on clearing land and building a house and a barn.

The choice of the sauna for the first building is significant in many ways. In a future article we will discuss in detail the importance of the sauna. Here, however, we will generally describe the building processes and techniques that applied to all the buildings on the farm.

The tools and materials needed were few and simple. The most important element was skill in woodworking — especially in chopping and hewing, skills the immigrants had learned in the rural areas of Finland. There were no professional log builders among the immigrants. Occasionally carpenters and cabinetmakers would be pressed into service for what advice they could lend, but for the most part, each settler and his family and friends built what buildings were needed.

The homesteader for tools needed only a saw, two kinds of axes (a broad ax for hewing and an ordinary double-bitted ax for chopping), a plumb-line, an auger and a few pounds of roofing nails. The building materials were logs, stone and mortar (for the chimney) and, if the homesteader could afford them, glass windows (usually, however, greased paper sufficed). With these simple tools and materials a habitable dwelling could be erected within a few days.

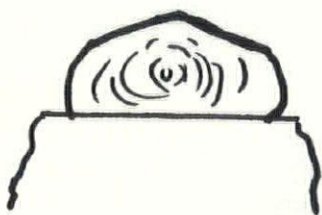
Logs were selected from the vicinity of the site. They were usually poplar or pine. A foundation was laid by placing four half-buried stones at corner points.



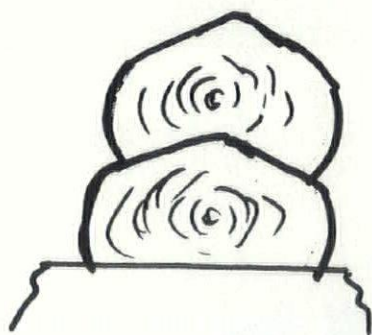
Wirtanen Farmhouse, Northern Minnesota  
(Photo by Mesabi Daily News)



Then the ends of the first course of logs were prepared. The logs were laid across the foundation stones and joined to form the perimeter of the building. The tops of the first course of logs were hewed convexly to form a broad inverted "V". The bottoms of the first course were hewed flat to rest squarely upon the foundation stones.

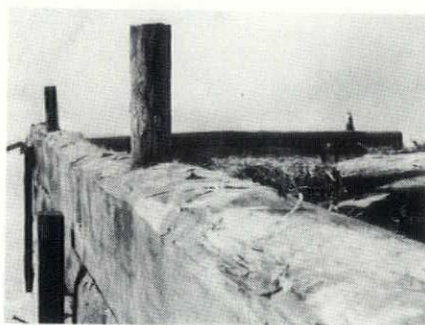


The bottoms of the next course were hewed concavely into a "V" to fit snugly over the logs beneath them and reduce the space between logs to a minimum.



After the first two courses were laid, holes were drilled into the ends (corner joints) and hand-carved dowels were inserted to bind the construction together. For added cohesion, holes were drilled at various points along the length of the log-course and dowels were inserted.

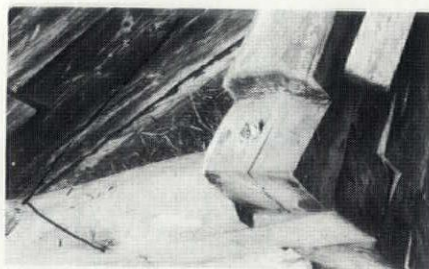
This procedure was followed until the desired ceiling height was reached. Rafters were strung and fastened by the mortise and tenon method; that is, the ends of



A



B



C

*Photo A shows hand-carved dowels inserted at two points along log-course. Note size of dowels. Photo B shows dowel inserted through corner joint. Note size of top log in photo. Photo C shows dowels through both corner joint and first point along log-course. Photos taken in August, 1971, at the Ongalo Farm in Alango township, St. Louis County, Minnesota. The building had recently struck by a toranado — thus providing the opportunity to study the construction methods used.*

the rafter logs were squared with an ax and sawed to fit square notches in the top log course. Gable ends were formed by gradually reducing the length of the logs on the end walls until a pyramid was formed. Finally, a sturdy ridge pole was laid between the end walls. The roof was of small poles (or rough dimension lumber if available) covered by hand-made shakes.

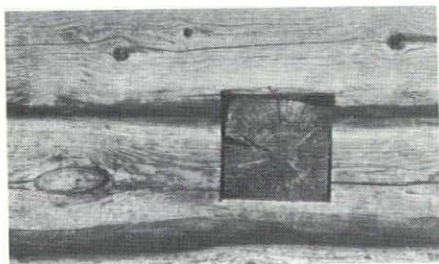
Once the walls were completed doors and windows were simply sawed out as desired. Next, the walls, both inside and out, were hewed square with a nine-pound broadax to give the building uniformly flat wall surfaces. Finally, chinking was inserted between logs where necessary. If the skill of the axman was great enough, however, the logs fit tightly enough together that chinking was not necessary. When the exterior was completed, it was left exactly as it was. No paints or preservatives were added.

While saunas shared a common set of dimensions and patterns from farmstead to farmstead, houses and barns took widely varying sizes and shapes, depending on the builder's needs. Houses, in fact, range in size from small, one-room dwellings to giant three-story masterpieces of engineering skill. Finnish farm houses take their distinction not from any conformity to others in size and shape but for their unconscious adherence to the previously mentioned principle of identity of enclosing form and enclosed space. In almost all cases the plan of a Finnish log house can be read from the outside walls. This can be easily illustrated by reference to what is by far the finest log house in St. Louis County — the Musakka Home-



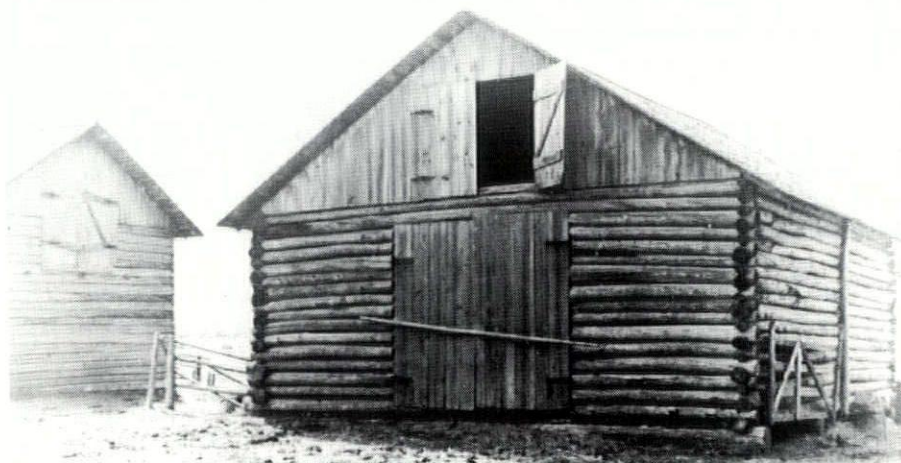
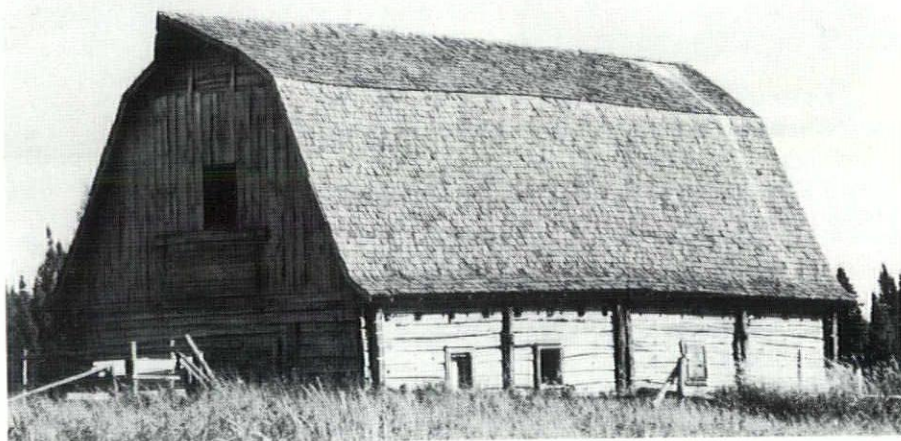
stead in Idington Township. It was built about 1910 by a Finnish immigrant from Viipuri, Finland.

The main floor is divided into three sections — kitchen, living room and master bedroom — which are clearly discernable by the jutting log ends of the log courses which serve as room dividers. The point at which the second story begins, although obscured in the photos, is clearly marked by rafter logs, the ends of which are squared and inserted into cuts in the twelfth log-course (as in close-up photo here).



Perhaps its most distinguishing feature, in terms of engineering and construction skill, is the second story. As the photos show, the middle section's wall is so constructed to interrupt what would be a disproportionately long rectangular house with a set of gable ends — nearly doubling the living space of the upstairs and producing a roof plan shaped like a cross. The Musakka house is the essence of simplicity in design and the essence of skill in log-fitting and erection but the house also has an austere beauty produced by a sensitivity to proportion and the weathering of the wood. It has now stood abandoned for more than 30 years but it still remains its beauty and sense of sturdiness.

The same adherence to the principle of identity between en-



Hay-drying barn (right) located next to a cattle barn. Note difference in log-fitting techniques. (Photo courtesy of Minnesota Historical Society)

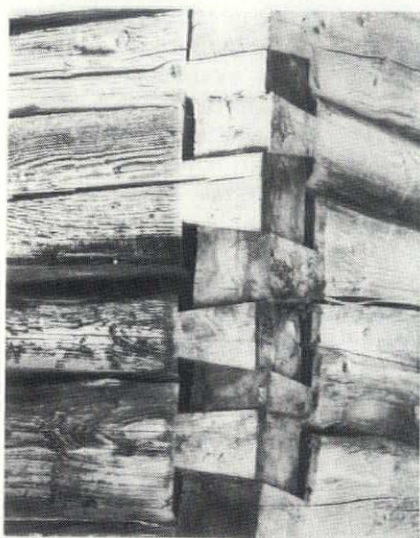


closing form and enclosed space can be noted in the construction of Finnish log barns.

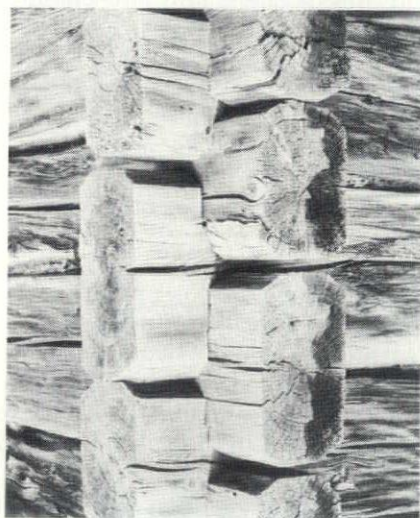
When discussing Finnish barns, it is important to note that there were two different kinds on Finnish homesteads, each designed to serve a specific function: the cattle barn and the hay-drying barn. The cattle barn (also used for storing hay) was located in the farm yard and was constructed of squared and tightly fitting logs to provide maximum shelter from the elements. The hay-drying barn, like those in the photos, was usually located in the meadow and was constructed of unsquared logs. Space was deliberately left between log courses to allow passage of air to dry the hay inside. When the hay was dried, it was transferred to the cattle barn in the farm yard.

An examination of the woodworking techniques employed by the Finnish-American builders shows that basically two methods were used to join logs, with variations to each method. Which method was to be used in a particular building was determined by what function the building was to serve. Saunas, houses and cattle barns demanded a system of joining logs tightly for protection from the weather. How successful a building was as a shelter from the elements was obviously determined by how tightly the logs fit together. How tightly they fit together was determined by how the ends were fashioned. Thus, three end-locking or fitting systems were used: simple dovetail (or *tasanurkka*), locking dovetail (or *lukkonurkka*) and common block (or *pitkanurkka*).

It was in fashioning the corners that all the woodworking skill of the Finnish builders was brought



Simple dovetail — *tasanurkka*.



Common block — *pitkanurkka*.

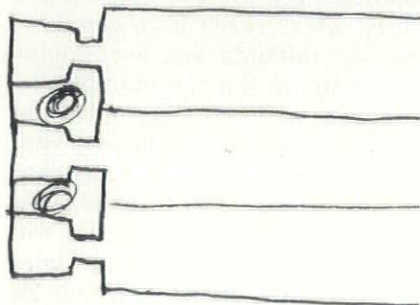


Diagram of locking dovetail — *lukkonurkka*  
(No photo available).

into play. Fashioning the ends was done solely with saw and ax. A vertical cut (in the case of simple dovetail) was made about six inches from the end of the log — on both top and bottom — with a saw. An inclining chop inward was made with a double-bitted ax until it met the vertical cut and the piece fell away. Finishing touches to make the joint smooth were accomplished by shaving excess wood with the ax. The principle of notching in this manner is simple but execution of a good end requires careful measurement and perfect chopping skill. Too deep a bite will ruin the log and too shallow a bite will prevent a tight fit. To complicate matters no two logs require the very same treatment because, of course, each is of a slightly different size and must be fitted to both the log above and below.

For hay-drying barns, pig-styes and other outbuildings, where complete protection from the elements was either undesired or unnecessary, a cruder type of end-joining was used. It is known as the dog collar (or *koiran kaula*) method. Dog collar ends were made simply by cutting rough notches, both on top and bottom of a log, about six inches away from the end. The rough notching, of course, prevents a right fit.

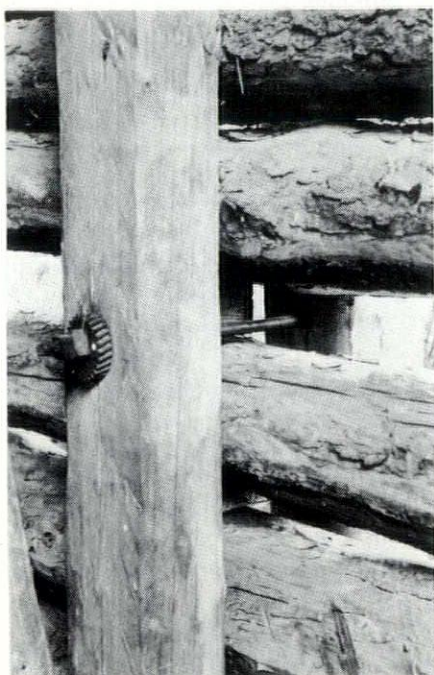
Since the dog collar method did not produce as sturdy walls as did other end-joining methods pole buttressing was used at various points to strengthen the walls. This was accomplished by placing two vertical poles, one inside the wall and the other outside, and fastening them together with bolts and washers (if available) or with long dowels driven through both poles and the intervening log.

(See photos following page)





*Dog collar — koiran kaula.*



*Photo showing methods of buttressing dog collar walls with vertical poles. Note in photo that a small gear from an automobile transmission has been used as a washer.*

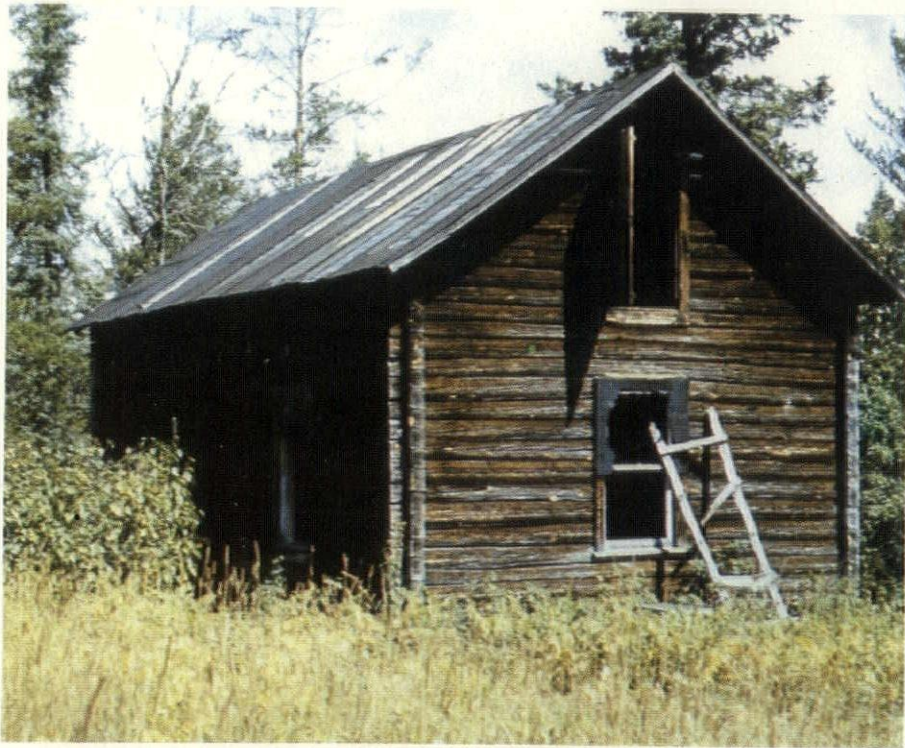
Finnish log architecture in Minnesota is unpretentious and unselfconscious. What beauty it has comes from the proportional arrangement of natural materials and the play of wind and weather on those materials. The materials are always local and are freely displayed both inside and out. There seems to have been absolutely no attempt to provide artificial ornament. As has been noted, paint was not even added to the logs. The most distinctive aesthetic qualities of the buildings, therefore, are their colors and the geometric patterns created by corner-joining practices. With age the unprotected logs, depending on their species, turn into one of several colors. Perhaps the most dominant color is the silver-pewter color of old poplar logs. Tamarack turns darker, generally, almost to black. Less frequently encountered are the reddish and mahogany shades of other local woods. None of these is a bright or sharp color — which contributes to the dark, almost somber appearance of Finnish farmsteads — but the colors have an off-key dignity that harmonizes with the physical environment, especially in winter when the frozen Minnesota landscape turns completely to a world of whites, grays and blacks.

More distinctive than color, perhaps, are the geometric patterns which result from corner-joining methods. The over-hanging logs used in the common block method, while creating a definite geometric pattern in themselves, produce areas of shadow at each corner which serve to emphasize the perimeter of the building with a border of black. The black border contrasts effectively with the slightly lighter color of the logs. More striking perhaps are the pat-

terns created by the dovetail method. Their "checkerboard" effect could almost be called an "organic" type of quoining blocks. More decorative than the corners of common block buildings, dovetailed corners also serve to emphasize building perimeters. They bring the almost monotonous horizontality of the logs to an abrupt halt with an eye-pleasing pattern. From a short distance the design seems machine-made. A close inspection, however, reveals that the pattern is not exactly uniform because each log is of slightly different size, making uniformity in pattern impossible. A close inspection also reminds the viewer that a man created the pattern, and the whole building, according to his skill and the dictates of his folk heritage. It is an expression of himself in the same manner as is a finely crafted folk artifact.

In this manner, then, did the Finnish immigrants transplant their folk architectural practices to northern Minnesota and for a decade or so the Finnish farms in Minnesota were nearly duplicates of the ones they had left in Finland. As time went by, however, the farms changed. When dimension lumber became available frame outbuildings began to sprout incongruously among the log buildings on Finnish farms and in the 1920's it became a sign of status to have the log walls of the home covered with siding. In some cases, in fact, new frame homes were built to replace the original log structures. By the 1940's, generally, at least one-half the buildings on Finnish farms were either sided to cover the logs or of frame construction. Thus, American culture had its impact on the Finns but the log architectural practices the immi-





A

grants had brought with them served the group well for a whole generation.

Most of the Finnish farms now lie abandoned. Because of the poor soil of northern Minnesota, the farms never were very profitable ventures. The worldly experiences gained by participation in two world wars and the lure of the cities easily enticed the second generation away from what it believed would be a life-time of grubbing stumps without much prospect of economic reward. The land is still owned by the descendants of the immigrants. Occasionally they drive out to the "old home place" to look around or hunt deer. So the once-proud farms continue to deteriorate but they do so grudgingly, as a building such as the Musakka house mutely attests.



B



C

*Photo A: Good example of mahogany color logs. Note "black border" caused by shadows surrounding common block ends, especially on right corner. Photo B: Good example of silver-pewter color logs and "organic" quoining blocks. Photo C: Good example of three most prevalent colors in aged logs (coincidentally found here in one building): mahogany, black and silver-pewter.*

Michael Karni, a native of St. Louis County, Minnesota, is the grandson of Finnish immigrants. He is completing his doctoral studies at the University of Minnesota, with special emphasis on Finnish-American culture.

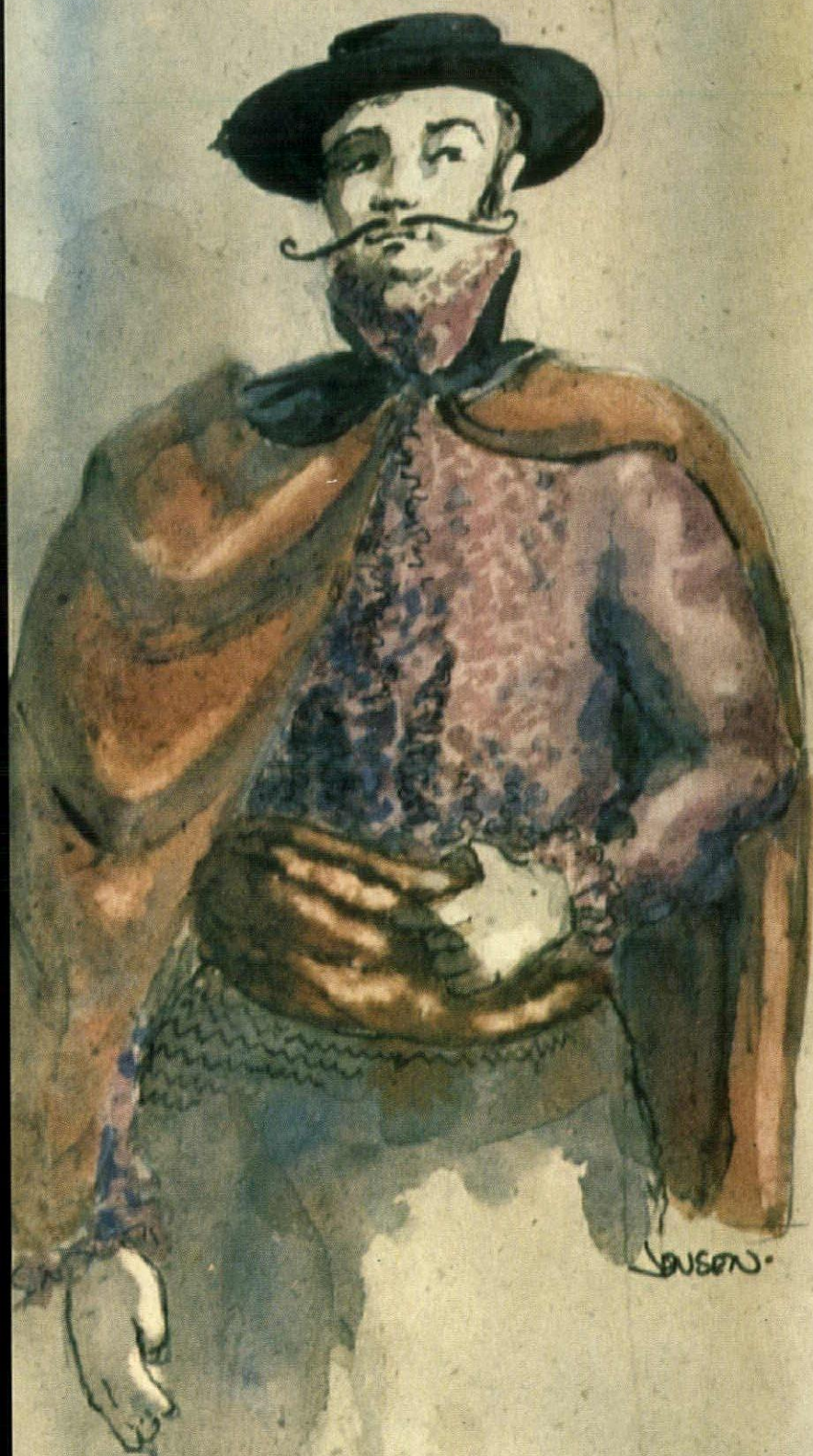
Robert Levin, newly appointed curator of architecture at the Minneapolis Institute of Arts, is the subject of a story on page 141.



**A Conversation with John Jensen, Resident Designer, the Guthrie Theater, Minneapolis**

NWA — Architects are prone to believe that a stage designer has an unlimited freedom: he can build something for quick effect, without any great concern with structural integrity, maintenance costs or codes. Do you really enjoy this freedom?

Jensen — Yes, we do enjoy a certain amount of that freedom in the use of materials. However, there are a number of curiosities that we come up against which I think architects would appreciate as frustrating and difficult. For example, in this theatre the idea of quick effect and structural integrity is not quite true because the piece isn't just put on the stage and nailed down, sitting there for x number of performances, and then taken away. It in fact plays in repertory so it must be movable, flexible. It also must break into rather small modules to be stored. Also, actors, by what is asked of them in the script and by their very nature, do not treat things on stage the way they would treat them in their own homes. Something that would seem absolutely reasonable in a home, say a table or a chair, suddenly on the stage must appear either enormously heavy or very, very light but at the same time it is being used like a piece of gymnastic furniture. It must be very, very strong. Michael Langham and I have a running joke about the furniture I make because it tends to be rather heavy. My answer to that, when it is brought forward and it is often, is that if I make it light, then you have



LOVEWIT AS A DON  
MR. GOETZ



## Powerful Thing on the Stage Is the Actor

somebody stand on it or somebody throws it . . . For example, in *Cyrano de Bergerac* the benches for the bakery scene were quite heavy, they were made of 2" stock lumber and they weighed a good amount. I made them that heavy because I liked the look but I discovered that at the end of the scene the Gascons kicked the benches and they fell off the stage and all over the place. If they had been made of light materials, or laminated woods or something like that, they would have had to be rebuilt easily. As it was they stood up for all of the performances and are still usable.

NWA — Is the finish, the color of the stain, etc., part of your design?

Jensen — Yes indeed. Those benches, for example, the idea, the premise for them, was that they should look like pastry, or baked bread of some kind. So they were burned with acetylene torches, scrubbed with brushes and then dyed over.

NWA — So you get involved in the actual techniques?

Jensen — Oh yes, very much, because it so strongly affects the end. *Every detail adds up*. If you don't watch after them they go away.

NWA — That's a problem architects often have . . .

Jensen — Yes, I understand. I worked on some architectural projects when I was with Mielziner, in fact four or five theaters. One frustration I would find in being an architect is the *distance between conception and fact*. Here, for example, is *Midsummer Night's Dream* — it is just finishing being conceived and it will be on stage and built within six weeks; you see, it will be a fact in six weeks. In January this year

MAY-JUNE, 1972



*Cyrano de Bergerac*, The Bakery Scene — adaptation by Anthony Burgess

I knew what the first play was to be. So from the time I've thought about it, put it onto paper, drafted and build the model, to the time it is finished is very brief. One (architectural project) I worked on I know was worked on by people previous to me and has just now, in the last year, been opened and I know it was on the boards for ten years.

NWA — That is not typical in architecture, but the conception's becoming a fact is what makes architecture so very exciting.

Jensen — I have enjoyed some of the same thing. It is wonderfully exciting to walk into the scene shop, where there is something that I have known at 1/2":1' scale suddenly sitting in front of me 20 feet tall. It is wonderful because it suddenly divorces me from it — it's like looking at a drawing in a mirror — it suddenly seems like

somebody else did it. You appreciate that, certainly. That is very exciting.

NWA — How abstract can you get in the use of familiar and recognizable symbols? Is this the director's function or . . . ?

Jensen — Theater is in every way a community or team sport. Maybe that's the difference between it and architecture, or at least the great architects I've read about. They have a brilliant scheme and they carry it through with the assistance of a staff. In the theater you have two clients all of the time. One is the director and the other is the playwright. The playwright may be long since deceased but you still have a major obligation to him. For me all of the ideas really must somehow relate to or come out of the text. I'm very lucky here, working with Michael Langham, because



he likewise feels very strongly that way. We try to be very honest so that the inspiration comes out of it. So, if the author is abstract, if his use of metaphor, his use of language is very poetic or lyrical, I feel you have the right to do one of two things, either work diametrically opposed to that, to make the lyricism stand even more forward, or to go along. Those are the choices. Likewise, if it's a naturalistic, realistic sort of thing you still have those choices to make but it shows you at least the way the author was thinking about the piece. You can work within that framework.

NWA — In the case of architectural details, doors, windows or stoops, is the degree to which those are realistic a part of the total play?

Jensen — Yes indeed, and on this stage, on the open stage, there is another limitation and that is that however realistic you want to be at a certain time you must stop being totally realistic and indicate, suggest, because a real (detail) will simply prevent 20 people from seeing the play — and you can't do that.

NWA — Often an actor looking out in a certain direction will imply that he is looking out of a window . . .

Jensen — Right, with a certain lighting effect. The most powerful thing on the stage is the actor, you cannot be more powerful than he is. One of the joys of the open stage is that the designer cannot overpower. It is the actor's platform and it belongs to him and the playwright and the director. What you're doing is supporting. We talk a lot about that.

NWA — Are you ever tempted to make the whole house part of

the setting?

Jensen — Yes, I try always to be very aware of the architecture and relate the setting to the space it creates. I did a show in Milwaukee on the open stage where I actually upholstered the furniture in the play in exactly the same fabric as the theater seats and carpeted the stage so that there was really no sense of where the stage stopped and the audience took up.

I constantly relate to that beautiful shape that Tanya Moiseiwitsch created to work on . . . rarely are there things that I put on it, architectural things, that do not echo those angles, which are peculiar and strange — but that's my way of trying to make a unity out of it.

NWA — Sometimes aisles are very aggressively used . . .

Jensen — This year I'm trying a play using some new spaces that we haven't used, not in the audience, but in its area, just to see what happens. They become very exciting acting spaces to be in, because you're suddenly in the midst of all these people. It's a strange and interesting focus for the actor and I think it will work beautifully. The one problem that I face time and time again is the wraparound, the 280 degrees. It is nearly . . . it is *impossible*, I'll say it as simply as that, to put a piece of scenery on the stage that will not block sight lines, that everyone in the house can see. My great theory, "treats all round" I call it, is to design the sets so that indeed no one sees exactly the same setting but hopefully everyone sees a portion of it that is special for them, that says something to them that relates to the play. I also hope that in many cases they appreciate that what they are seeing is *not*

what anybody else can see. Especially when you're sitting on the side it makes you feel included in a special way.

NWA — Do you in your designs exaggerate the perspective?

Jensen — I don't. Some of the old tricks are verboten on this stage. Nobody *says* you can't do them but when you *try* to do them you're in trouble. Like false perspective — it just doesn't work because there is no king seat, there is no central place. Where is the horizon? Where is the vanishing point? The only way to use it successfully is if you *want* the scenery to look funny or to look scenic. I very often tip and slant and angle the walls at the top to relate to the clouds and to those angles I spoke of before, but I have never used forced perspective and for the few people that I have seen use it it has looked just strange.

NWA — The same must then hold true for scale. If you do a door it really has to be within reason related to the actors?

Jensen — Yes. I had a funny problem this year. You go along in your life thinking everybody is six feet tall and that's a sort of norm, and suddenly I am making a platform under which an actor who is 6'5" must run. . . Well again, to go back to the very first question, where an architect might say "Well, they can live with that," certainly Mr. Wright did that, "for the dramatic impact of it," in this case you cannot. As sure as you put it at 6'6" he would do something and come out scalped the first time and you'd be in trouble.

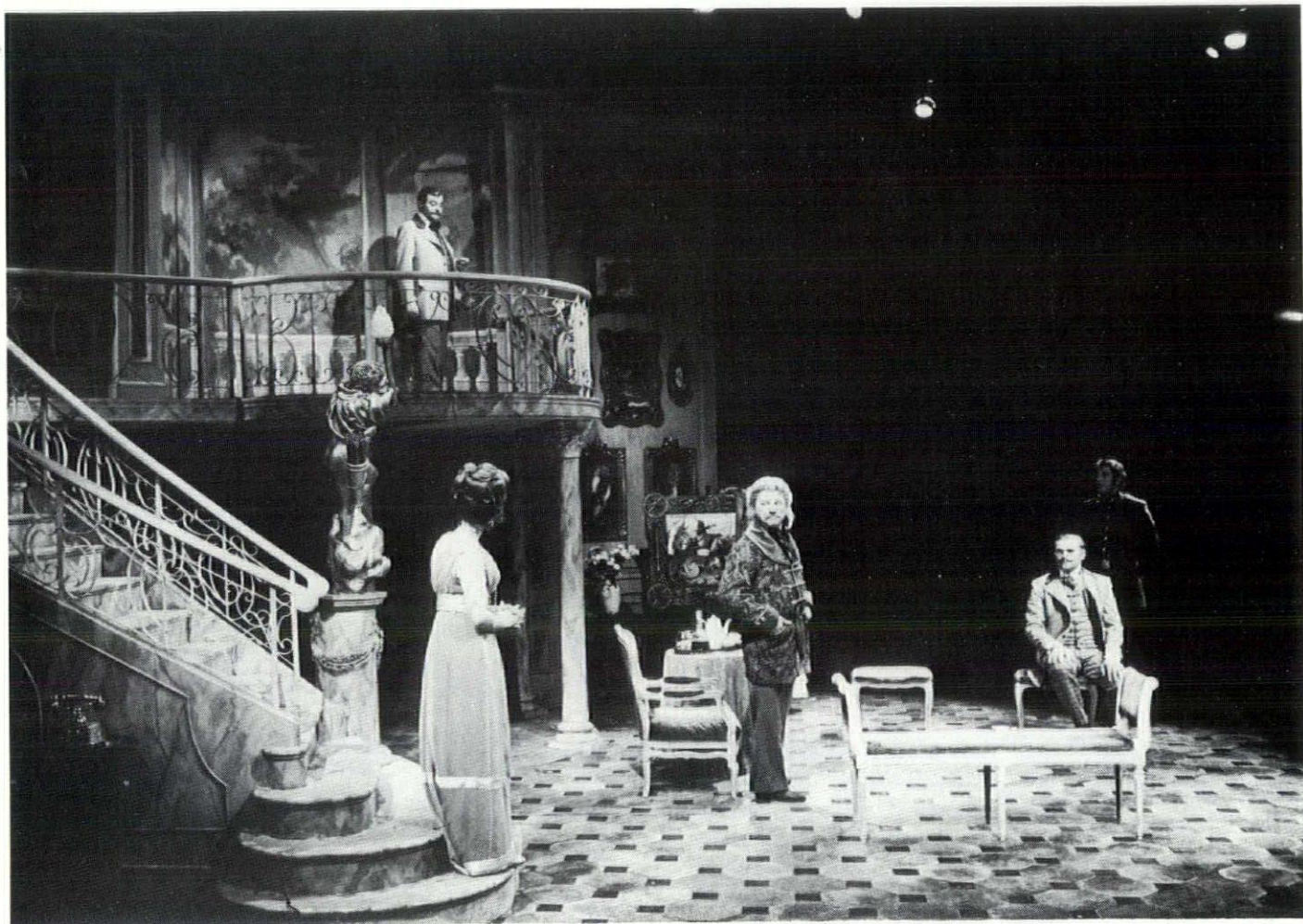
NWA — Given any particular play, let's say the Steinbeck play (Of Mice and Men) the same actors, the same director and even the same stage, would you expect





**"A Play" by Alexander Solzhenitsyn  
THE FIRST COMPOUND SCENE**





"Ardele" at the Crawford Livingston

your design to be different if the whole thing were moved to another city, say to San Francisco or New York?

Jensen — I expect it would be, in the case maybe of that play, but perhaps not overtly. One thing I was aware of here, when we started doing the barn and the stuff that's around, is that there are a lot of people here who know the difference between what might be on a farm that raises barley and what isn't on a farm that raises barley. Whereas

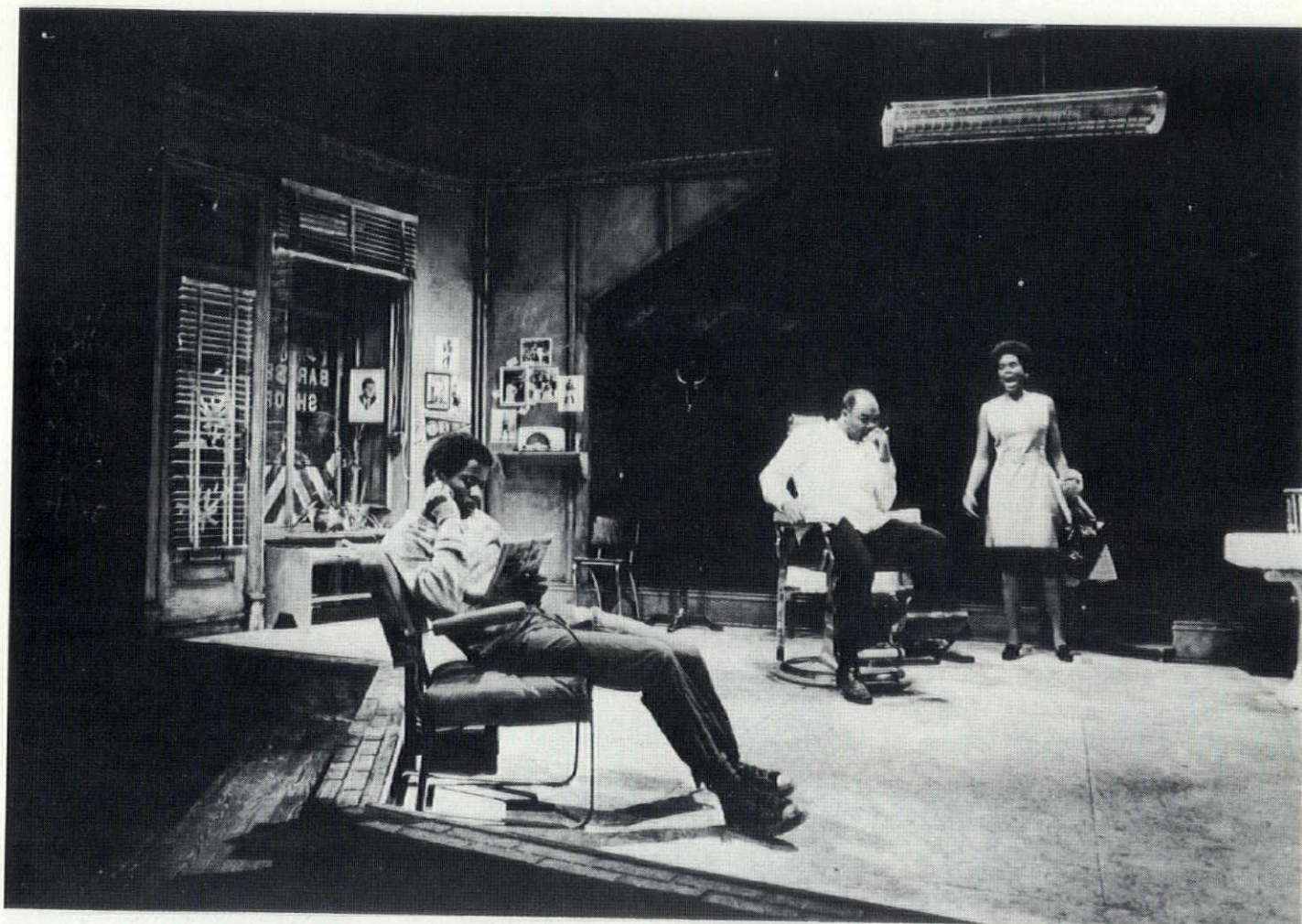
in New York City, if there are farm boys and girls, they have already forgotten about it. Or they simply wouldn't know, they would quite accept any piece of machinery as belonging on a farm. So there's some of that about the detail, yes.

NWA — Would you acknowledge an awareness of a local imagination? You've just said you do in the case of Steinbeck. Other than the rural heritage, are you influenced by the local architecture, the local habits?

Jensen — Maybe that's part of it. . . . But I have, on occasions, done some research — more to do with costumes than with scenery. I have gone and looked at certain groups of people, what certain groups of people look like in this town. I've gone to places where they go and I've looked them over, so that when I put the images on the stage . . . Let's take an example — nouveaux riches. I sort of investigated, at one stage, what their hangouts are and then I went and looked at

NORTHWEST ARCHITECT





"Ceremonies in Dark Old Men"

them and then compared them with what I know to be nouveaux riches in New York City, which is quite different. Then I translated and scrambled it all together in my head and came up with a version of a nouveau riche for this play. I knew that the symbols would read for here.

NWA — Can you be abstract and stretch the audience's imagination?

Jensen — I think you can, once you get the audience going with you, following your train of

thinking. You set up certain rules right away, as in a painting — you say "That's a thumb, right?" and then you draw the thumb — well, that's really the premise. If that's what the thumb is then the hand must look like this — 'til you get to the body. And if you start off with a Leonardo-drawn thumb, then you don't expect to see a Picasso head (unless inconsistency is indeed the consistency of the whole work.) In the theatre you sometimes start out, as you say, with windows which are

simply patterns of light on the floor. Once you accept that and the audience accepts it, then you begin to have all sorts of liberties.

NWA — Have these liberties become broader or wider than they were, say ten years ago?

Jensen — Yes, I believe they have. It has to do with a reassertion of belief in poetry and people, particularly young people, are willing to think about words, willing to allow words to kind of trickle in their heads and make things happen. It enables us to poetical-



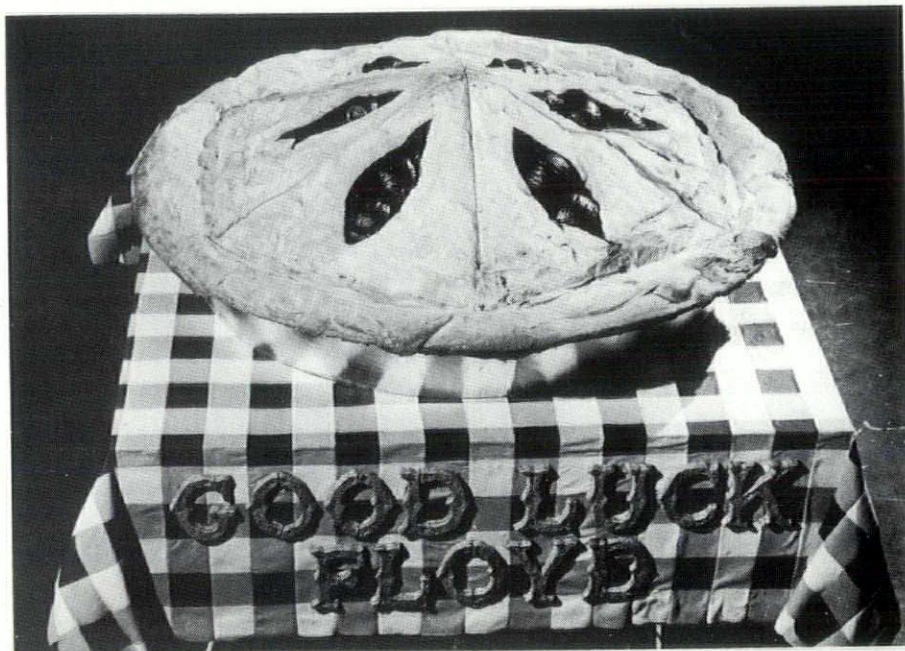
ly, visually suggest things or put strange objects together. They will not see two strange objects together but will see the total of the two objects.

NWA — Do you get involved with the lighting?

Jensen — I don't light the shows here although I have been, I think, more fortunate than one can imagine in having two fantastic lighting people to work with at various times. Gil Wechsler and Bob Scales, who was also the technical director. I sit down with the lighting designer and later on with the director and the lighting designer and go over point by point what I visualize as I put the model together and do the sketches. It is absolutely essential that you think about light as you go along.

NWA — What are some of your favorite buildings here, outside of the Guthrie?

Jensen — Well, the new IDS building; I'm fascinated to see it finishing. It's in one way consummately theatrical in the way it towers over and if you sit at the Walker and look out at it it seems as though the city were planned for it, it all works as a pedestal. Maybe the architect was given the site, I'm sure he didn't say I'll take that one. I think the Walker is wonderful. One thing I've been sad about since the Walker opened is that I had the pleasure of being able to wander around in it before the exhibits were in it, and those marvelous stair ways that unfolded room to room, they had no railings on them, and it was a wonderful feeling of the flow of space — but now, of course, its more practical. I think this is where architects and theater people have very similar problems — it is in that practicality.



Cherry Pie Supreme — six-foot round taste treat appeared in S. J. Perelman's "The Beauty Part."



You say, "Oh, that is a lovely idea, but . . ." You know, somebody's got to walk on it or it has to be carried by two little girls or something, so that you end up with that piece of practicality.

The only criticism I have of the Walker is that the tables in the lunch room are too low or the chairs are too high and I'm always missing my mouth.

Other buildings? I love the houses in Minnesota. They are not all architectural masterpieces but, back to symbols, they are symbols of a way of life in America that was very important, at the turn of the century and up into the Twenties.

All forms of building fascinate me and serve as a source for the work, particularly buildings where the affection of the craftsman shows.

For "Relapse," written by John Vanbrugh, who was an architect as well as being a playwright and did a couple of great big English homes, palaces really, I have used some of his own personal history, his attitude about architecture, in trying to create the set . . . I have architect friends and they do look down their noses with a little askance at this bastard art. I agree that we do play free and loose a lot with architectural form. I left my Banister Fletcher in New York and I'm going crazy.

**NWA** — How do you assess the success of a design?

**Jensen** — Well, A, if it pleases me and, B, if the actors are comfortable in it, if they do not feel alien to it. Especially not just in terms of a comfortable space but is it comfortable for the characters? And of course if it works for the director, which means also that it is comfortable for the actor. Then I do value the opinions of people who see it,



Jensen

and I don't mean critics. Also, of course, there's a great joy in pleasing another designer. ■

**John Jensen**, a University of Oregon graduate who began in theater as an actor, was design assistant to Jo Mielziner before coming to the Guthrie in 1968 to build props and costumes for a few months. He remained to assist Richard Hay with *The Resistant Rise of Arturo Ui* and Tanya Moiseiwitsch with *The House of Atreus* revival and designed the lighting for the New York and Los Angeles performances of these shows. He designed sets for the Guthrie's *Ardele*, *Ceremonies in Dark Old Men*, *Cyrano de Bergerac*, *The Taming of the Shrew*, *A Touch of the Poet* and *The Diary of a Scoundrel*, costumes for *The Homecoming* and sets and costumes for *The Alchemist*, *The Beauty Part*, *The Tempest* and Solzhenitsyn's *A Play*. Away from the Guthrie he designed the

*White House Murder Case* for the Milwaukee Repertory Theatre in December of '72 and this Spring he designed *Guys and Dolls* as guest artist at Dartmouth College. This season he is designing sets for the first four Guthrie productions.



## Vacation Houses

---

*build softly*

---

*We did not build this place  
it is not ours*

*a frozen vision  
a stifling void  
awaiting the angels of day break*

*ceilings without stars weigh me down  
walls that divide never embrace*

*together find  
a round and fertile place  
full of quiet voices  
build softly*

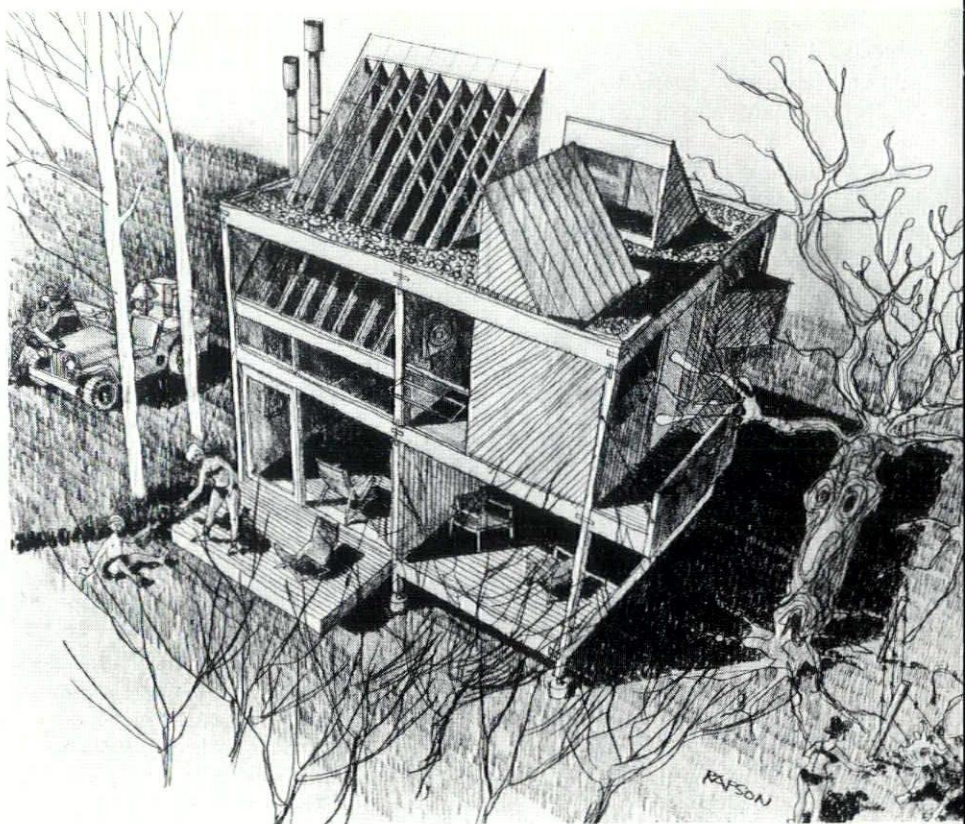
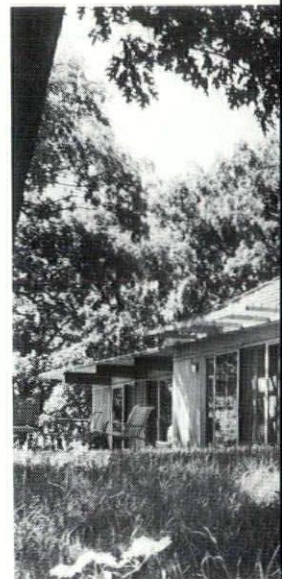
*a house grows from within  
tunnels lined with secret thoughts  
join chambers filled with light  
where we meet  
stars in their fullness*

*no floors cut earth from sky  
mind from body.*

*Sim Vander Ryn*  
courtesy Intellectual Digest

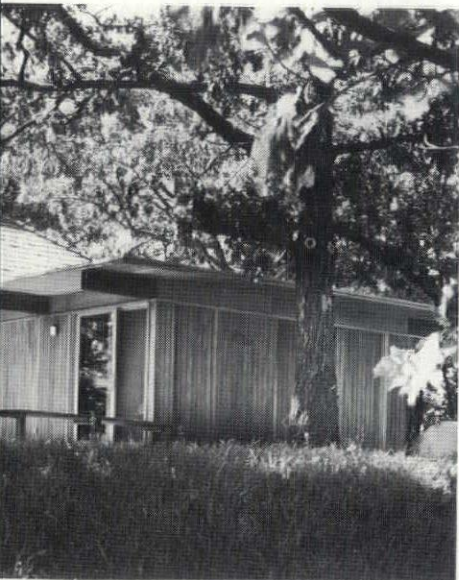
Vacation houses often tend to be more exuberant, more daring, more spirited than their parent homes in the city. Here are a few recent and proposed designs.

Wouldn't you rather live in them than just visit them?

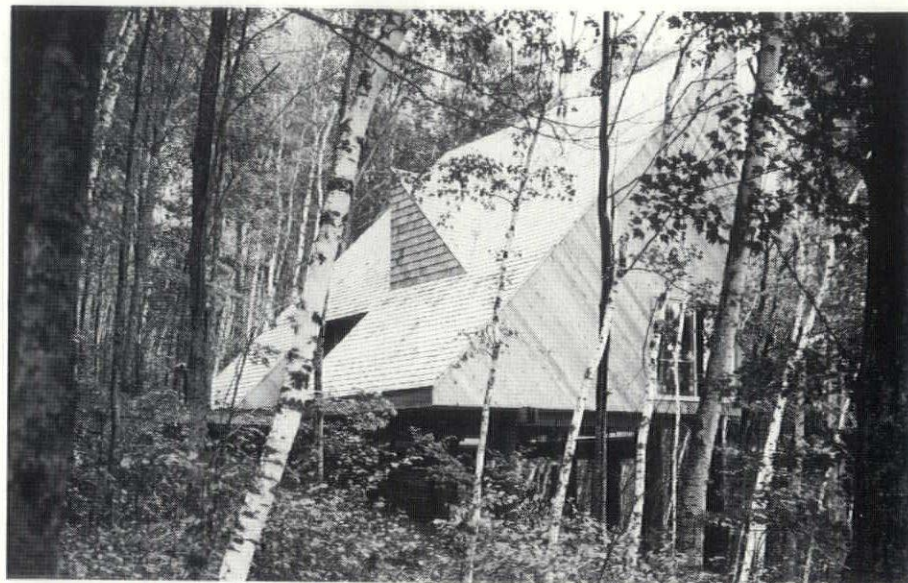


Design Ralph Rapson and Associates, Minneapolis





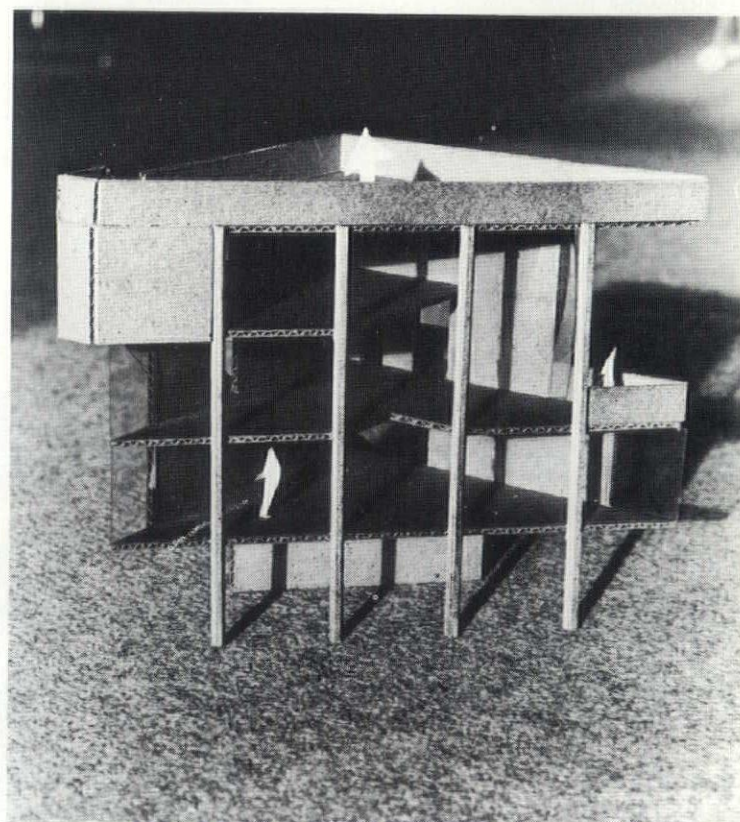
Prior Lake, Minnesota  
Arthur Dickey Associates, Minneapolis



Solen Springs, Wisconsin — Parker Klein Associates, Minneapolis



Medicine Lake, Minnesota  
Community Planning & Design Associates, Minneapolis



Model  
Team 70, Architects, Saint Paul



## A Meal With a View

With the first wave of warm weather Twin Cities residents stream out from their concrete and steel enclosures and head for pastoral scenes and relaxing dinners.

When they arrive for their meals-with-a-view they all too often discover four blank walls supporting fake beams over candles in plastic-mesh-encased glass. The only view is of the chef fighting with the waitress whenever the kitchen door swings.

Far easier to stay in town and enjoy the views there — and several restaurants have them.

One, in fact, is becoming a part of the view. The Richfield City Council recently approved an ordinance change that will allow the Heidelberg Dining Lounge to have a sidewalk cafe.

Until the restaurant atop the IDS tower opens, the widest view is from the Top of the Hilton, 11 E. Kellogg Blvd., St. Paul. A large rotating carousel in the center gives diners a tour with their meals. The decor is mostly just clean but the eye is riveted beyond the windows anyway.

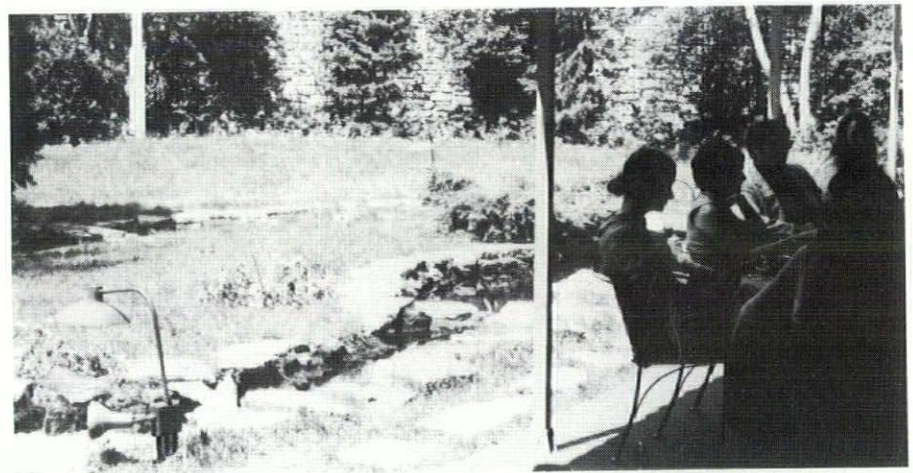
A smaller, lesser known but attractive view is from the dining room windows at Jax, 1928 University Ave., NE, Minneapolis. The windows look out on a backyard park with trout "stream" and flowers and strutting pheasants. After selecting and enjoying meals from an unusually extensive menu, diners can wander outside and work off a few calories in a postprandial stroll.

A short distance away the Edgewater Inn, 2420 Marshall Ave., NE, offers a view of the Mississippi River from the main dining room. Lower level meeting and dining rooms offer a similar scene. It's more romantic at night when local industry doesn't show.

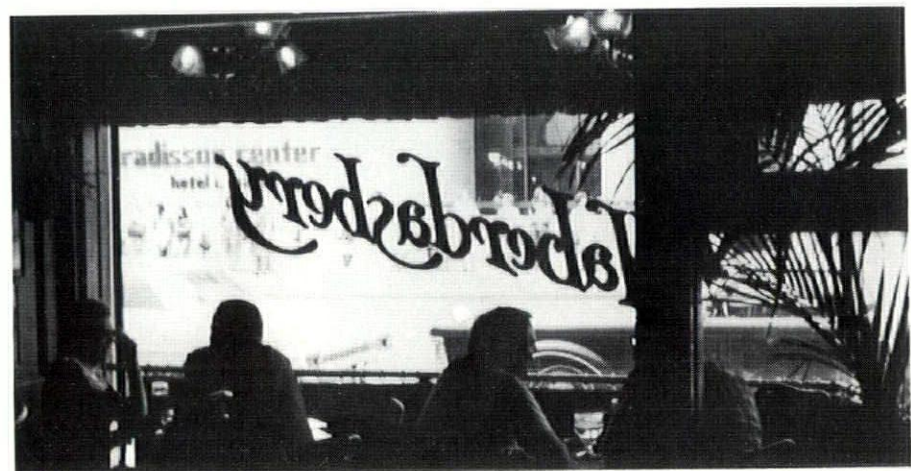
*(Continued on page 114)*



Miller on the Mall



Jax



The Haberdashery

Photos by T. E. Kelleher, D. R. Erickson and R. G. Wolfgramm

NORTHWEST ARCHITECT

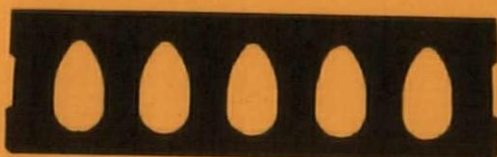


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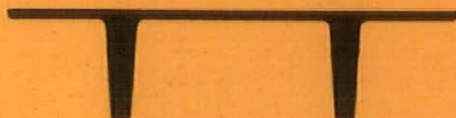
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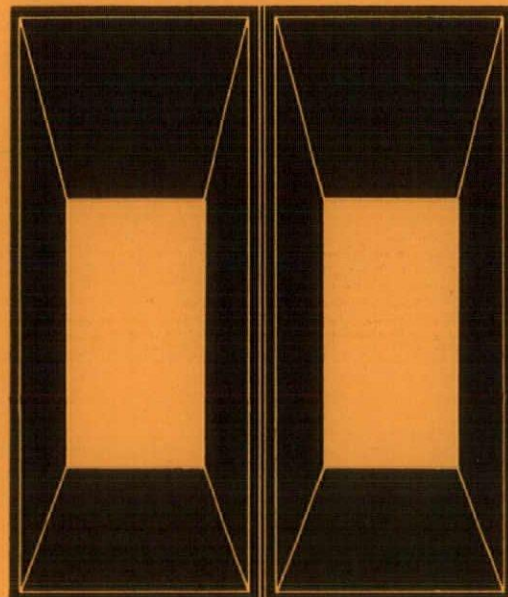
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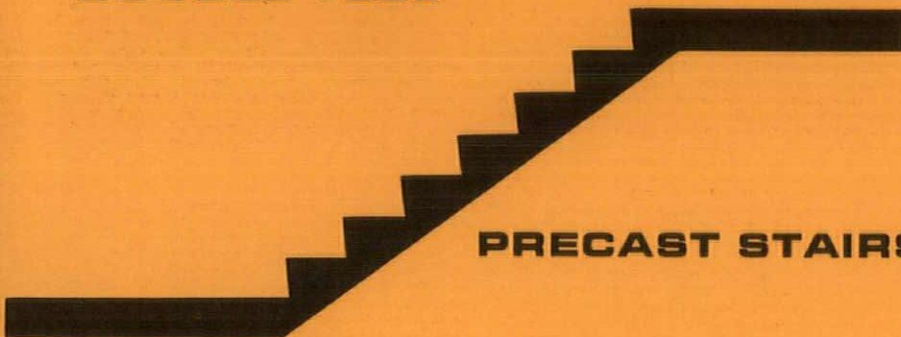
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## 20-YEAR-OLD SWIMMERS... 42-YEAR-OLD POOL!

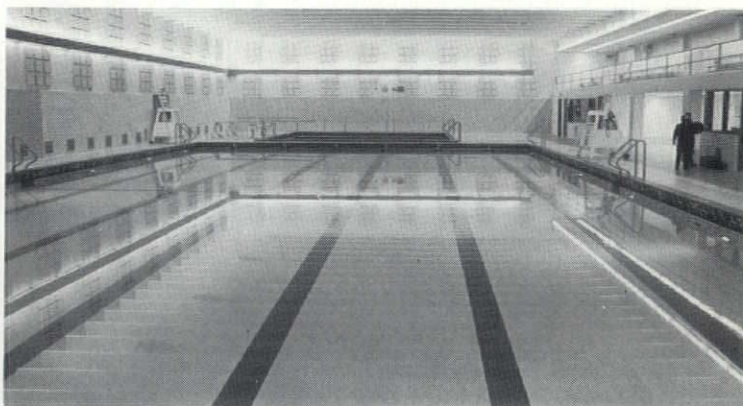
This pool at the College of St. Catherine in St. Paul was built in 1929. The beautiful and functional design of Ceramic Tile is the reason this 42-year-old pool is still in use.

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New diving and olympic pools at Fairview Junior High School in Roseville, Minnesota, features Ceramic Tile Construction for easy maintenance and long life.



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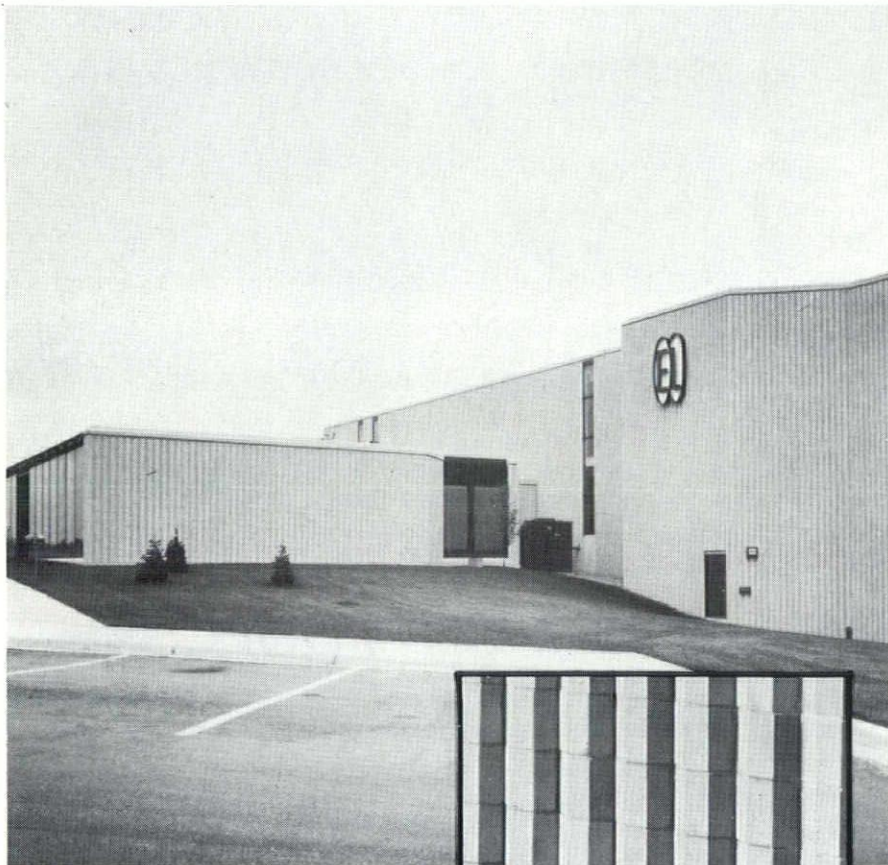
Malcolm Willey residence, Minneapolis

by Frank Lloyd Wright 1934

## FOR SALE

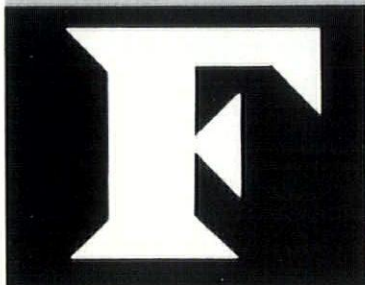
of Brick and Cypress, this house is a milestone in Mr. Wright's career, contains many of the features which appear subsequently in the **USONIAN HOUSES**. Pictured in **THE NATURAL HOUSE, IN THE NATURE OF MATERIALS**, and **NORTHWEST ARCHITECT** 1969, etc.

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PLANTS IN ST. LOUIS PARK, OSSEO AND  
LAKEVILLE\* (\*under construction)

Meal with a View

(Continued from page 118)

Television addicts who find they must watch something while eating might find more action from the Fuji-ya, 420 So. 1st St., Minneapolis. Those who pass up the booths in back to eat semi-Japanese style (cross-legged and shoeless before a low table) get a lovely view of the Mississippi at St. Anthony Falls by the locks. An occasional boat floats past and out of sight into the locks. An additional treat is a passing railroad train with a friendly engineer who waves at diners struggling with chopsticks.

Views of nature aren't the only popular draws. In downtown Minneapolis, at the Sheraton-Ritz Hotel, diners in the Cheshire Cheese can look at the street scene and pool area and La Brasserie diners below get an even closer look at bathing beauties, moving outside when weather permits.

Crowds shuffling down 7th St. provide the attraction for the Haberdashery, 45 S. 7th St. The hamburgers aren't bad either.

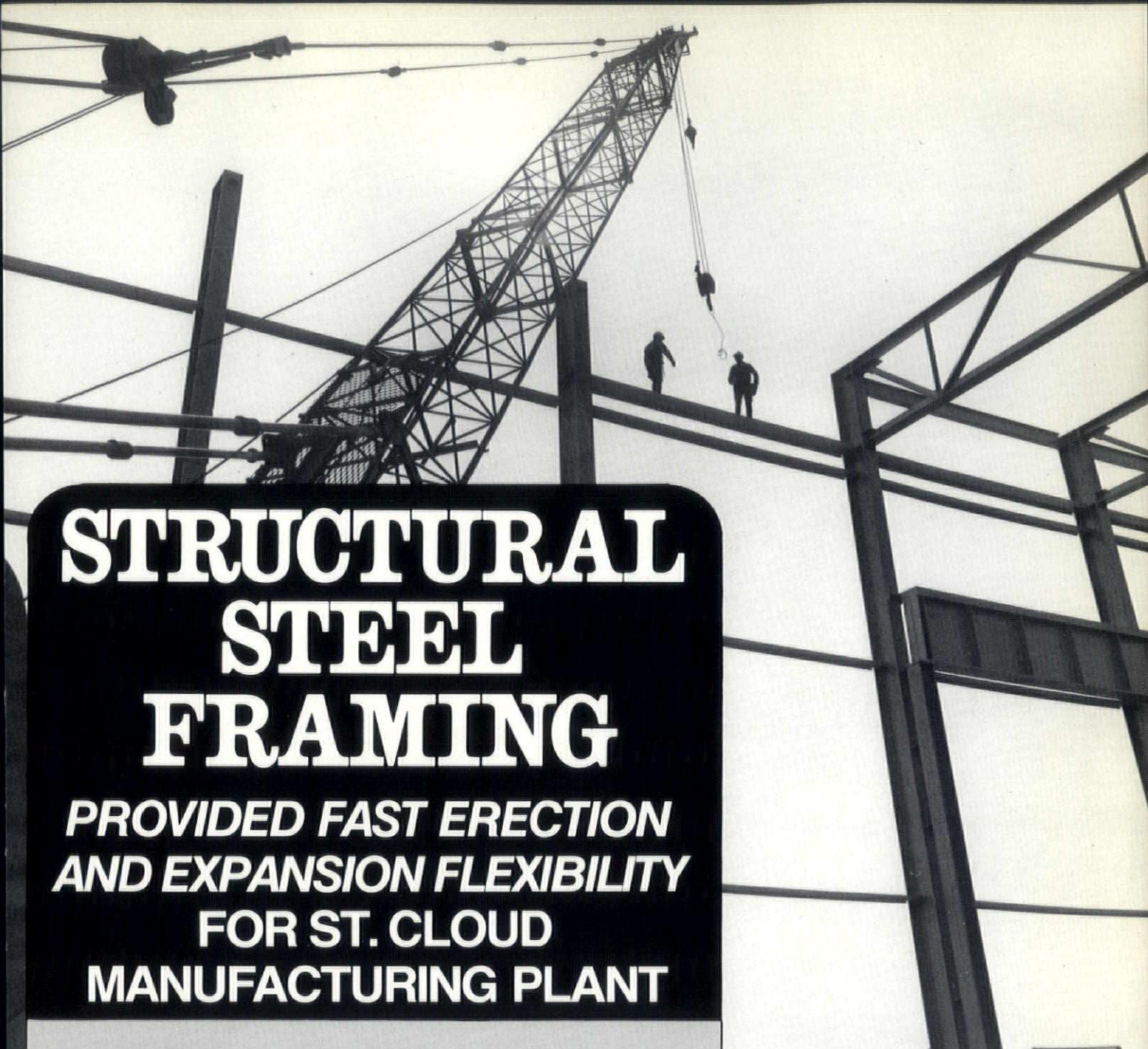
Culturally inclined vista freaks will be most at home at Walker Art Center, where one can lunch at the rooftop and stare back at the IDS Tower. The lunchroom is open Tuesday through Saturday from 11:30 a.m. to 2 p.m. for lunch, 2-4 p.m. for light refreshments and Sunday from noon to 4 p.m.

Construction fans can relax at Miller on the Mall in the Nicollet Hotel, lunching at leisure while the new Federal Reserve Bank of Minneapolis takes shape.

Decorating costs can be exorbitant but the outside is there and free. Some wise restaurateurs have figured that out and their views get more raves than the coqau vin. A chicken is a chicken but the passing scene is a show. ■

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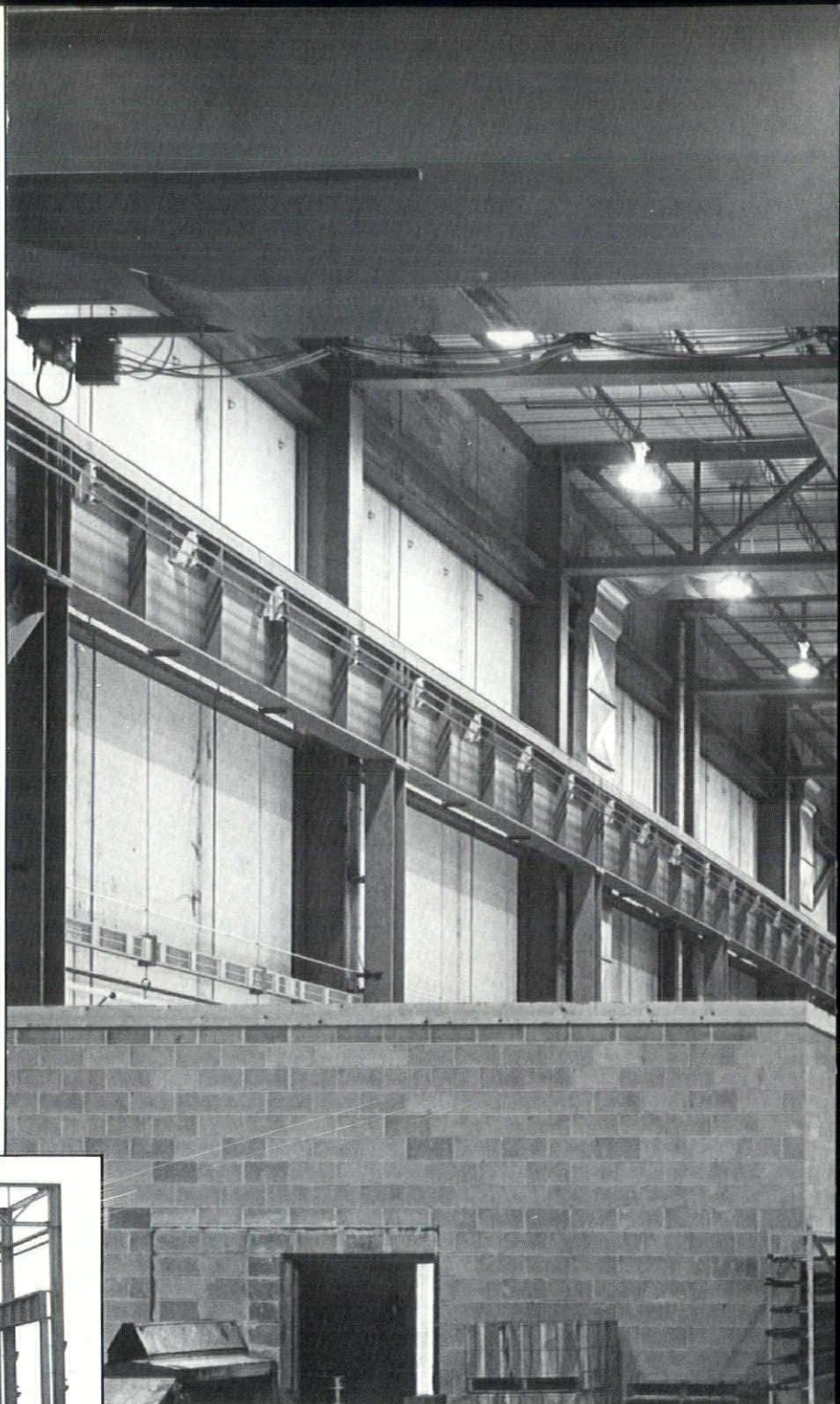
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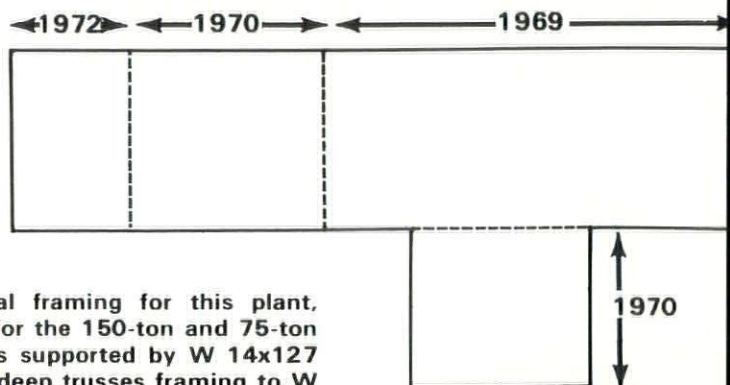


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without once  
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Two interdependent steel systems provide the structural framing for this plant, shown above under construction. The crane support system for the 150-ton and 75-ton bridge cranes consists of five-foot deep welded plate girders supported by W 14x127 columns. The roof and wall structural system has eight foot-deep trusses framing to W 27x177 and W 27x160 columns. These columns have moment connections at both the top and base to resist wind loads and crane side thrust loads.

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The equivalent of five stories high and now almost a quarter-mile long, Electric Machinery's Mfg. Company's new turbo-generator division plant at St. Cloud is another example of a project where steel does the building job best.

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"The project epitomized challenge from the moment the owners requested we design and have ready for partial occupancy — within seven months — a new building approximately 625 feet long and 60 feet high, capable of supporting

two giant cranes of 150-ton and 75-ton capacity. Furthermore, a building system was required that would permit work to continue even in the dead of winter.

"Steel framing was the obvious answer. And seven months later, in mid-1969, workers were already in training within the main plant area, thus meeting the owners' deadline right on schedule," Mr. Frankosky continued.

In the intervening years, three major additions to the plant have been built, bringing the total length to 1,146 feet and also providing a 260-foot lateral expansion to the south. Here again steel framing was utilized . . . with the construction job proceeding so smoothly that production work within the completed building was never once interrupted.

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# The Life of a Community Flows About Us

By Albert Hofstede  
Chairman, Metropolitan Council

People frequently see the home as an outer shell of the self. Where a person lives and how he lives determine the view which he has of his place in the community — his role, his status and his style of life. Consequently a major change in housing conditions implies a major adjustment to a person's self concept.

Housing thus forms a bridge between individual and public life. Substandard housing must be seen as a source of disease, crime and other hazards, as well as an intrinsically undesirable social phenomenon. In addition housing

must be seen as a fulcrum at which desirable changes in people's lives can be initiated.

Unfortunately, to a large proportion of the public today subsidized housing is seen as a "government repository for socially unfit families." It is essential to realize, however, that when we speak of building subsidized housing, we are *not* just talking about housing welfare recipients. Depending on the program and the municipality, the qualifying limits for admission to federally subsidized housing range from just under \$5,000 for a single person to almost \$10,000 for a large family. This means that teachers, policemen, laborers, programmers and thousands of other wage

earners whose incomes fall within this range qualify for the government subsidized program. In addition young families and elderly persons, caught in the economic crunch of fixed or low incomes, could also benefit from the development of low and moderate income housing.

The magnitude of our housing needs are such that by the year 2000 the Twin Cities area will have to double the present number of existing housing units.

Our metropolitan area is already a geographic and economic entity, even though it is composed of scores, even hundreds, of largely independent and often overlapping political units. Fur-

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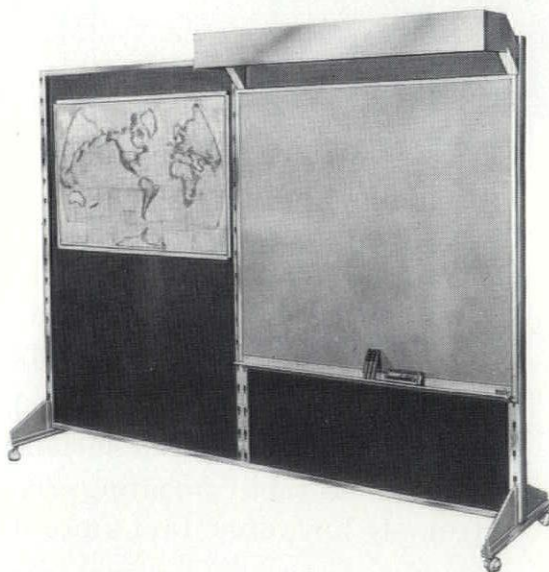
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thermore, and even more important for us, is that *our metropolitan sprawl*, which in the past has been characterized by a split between a culture of poverty, overpopulation, and unemployment, and a culture of affluence, *will dramatically change directions in the 70's*. A 1969 Presidential Task Force on suburban problems reported that many suburban communities are becoming characterized by a high crime rate, inadequate police protection, decaying housing, obsolete sewage disposal facilities, intense air pollution and lack of access to employment and cultural centers because of deteriorating or nonexistent public transportation systems. Please note that the commission was talking about *the suburbs*, not the inner core of urban life — *the suburbs*. What is the picture of our own area?

Over the past 14 months the Metropolitan Council has directed a study which is designed to forecast population and employment distribution in the Twin Cities

area. The study posits an empiric model which makes use of past information, future regional forecasts and quantifiable policy information.

The data indicate that high income families will continue to move further out of the inner city and first ring of suburbs. This will be followed by neighborhoods going through declining income categories. *It is important to note that this phenomena will not be restricted to the central cities.*

*This means that unless new policies and programs are adopted to coordinate and regulate growth and development many of our metropolitan areas could become the slums of the next generation. I should like to describe a plan that the Metropolitan Council has recently completed which we feel will aid in preventing uncontrolled sprawl and help insure orderly growth and development in our suburban areas.*

The plan I am referring to is called an Interim Allocation Plan for Subsidized Housing. It is titled

an "Allocations Plan" in that it is a short term (two-year) measure that addresses itself to the question of where low and moderate income housing should be developed in the immediate future. As such it is designed as a preventive measure against the unfavorable effects of metropolitan sprawl.

This is how the plan will work.

General portions of the region have been identified in terms of their priority for developing low and moderate income housing.

The first priority area is that portion of the region where subsidized housing is more desirable — applications for building in these areas will as a general rule receive first priority. Similarly areas are ranked as second or third in priority for residential development. The fourth general area is that portion of the region generally considered inappropriate for housing in the next two years — this land is largely rural and undeveloped.

This plan, then, assigns top



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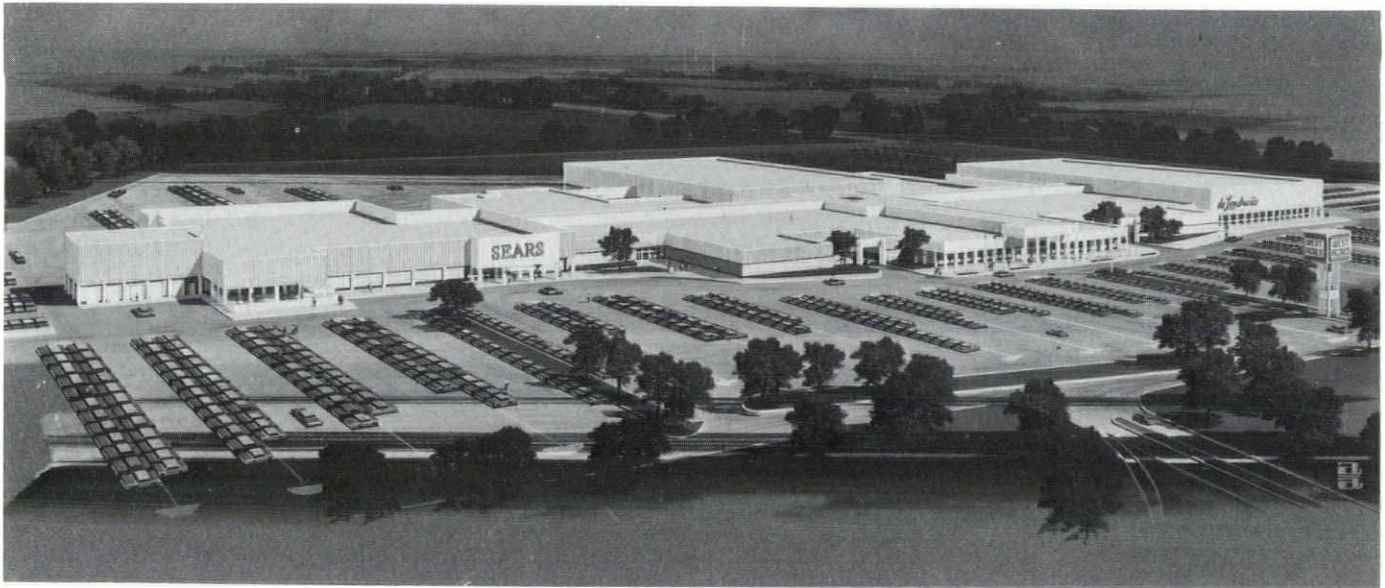
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priority to proposed developments in those areas that have all the necessary services in place but do not have housing opportunities for low and moderate income people. In this way, the available land in such areas as Roseville, St. Louis Park, Edina, Richfield, Maplewood and so forth could be developed before expanding new services and facilities into largely rural and undeveloped land. Services such as sewers, police and fire protection, libraries, schools, shopping etc. would then be available for low and moderate income families. This would help improve the life style of our citizens by making housing available in areas that already have the services necessary for quality living.

*To insure orderly growth, to maximize the use of existing community services and to open up more housing opportunities for the growing number of young and old in our communities, these are our objectives.*

In short, the council is assuming a leadership role in determin-

ing where low and moderate income houses will be built in the Metropolitan Area. *We are doing this with the conviction that the life of a community flows about us, foul or pure; we swim in it, drink in it, go to sleep in it and wake to a new day to find it still about us. We belong to it, it nourishes us or starves us, it gives us the substance of life. Our primary concern is with helping to create a community which cannot but help us grow toward achieving a quality of life for our citizens. Nothing but a community can do this.*

City and suburbs — regional government and metropolitan planning — community growth and community education — all are important, each is pressing. Every one is significant. Yet above them all looms an overriding central issue of housing. There is no higher priority for communities anywhere!

Remarks at a housing conference sponsored by the Metropolitan Council.

## Letters

Northwest Architect:

We feel that your comments on the editorial presentation of the 19th Annual P/A Design Awards deserve a reply, if only to enlighten you on the basic rules of this program. True, the editors often do present "fragmented" winning designs "as objects without context." We are the first ones to wish that every winner could be published in six or eight pages. However, this is the jury's show. Editors observe the deliberations each year but make no comments and have no voice in either the specific awards or their number. Carrying this policy further, we publish only what the jurors saw in the submission.

For several years jury members have become more and more critical of submissions that do not have adequate site plans and descriptions of the physical context. Yet the architects have been slow

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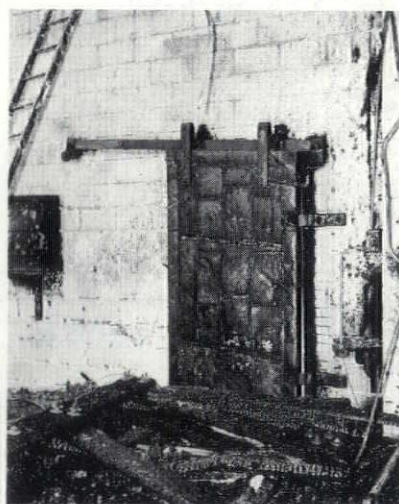


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to pick up on this important trend. It is ironic, though, that the long commentary on environment in the 1972 Jury Discussion was sparked by the fully-documented site plan of a non-winner.

Looking forward to better submissions, we will announce the 20th Design Awards Program in our June and July issues.

*Rita Robison*  
Managing Editor  
Progressive Architecture

#### Northwest Architect:

I wanted you to know how pleased we are with the tribute to my father, Edwin Lundie. So very well done. It has a quiet dignity that would have pleased him so very much.

I was quite overwhelmed by the photo taken at the Augsburg College exhibit. So very good. I have seen that very expression on his face often.

Please express my pleasure to the members of your staff.

*Ellen L. Thompson*  
Fargo, N.D.

#### Northwest Architect:

With the demolition of Louis Sullivan's Old Stock Exchange I had been convinced that cultural barbarism, like clout, was a Chicago phenomenon but having received news of acquisition by the Metropolitan Museum of Art of the Little-Stevenson house in Deephaven, designed 1912-13 by Frank Lloyd Wright, and dismantling for shipment to New York, it would appear the Twin Cities shares our famous characteristics.

It is more than a decade since I left Minneapolis after the demolition of the Metropolitan Building, yet the memory of its open court and the promise that held to anchor the Gateway Center renewal about an unsurpassed historic focus remain to haunt my infrequent visits. What a grand contrast the Federal Reserve Bank would be now, slung across its tilted tree plain, viewed from the roof garden of that old red granite fortress.

May 26, 1972

O.K. — forget that — and forget the insatiable gluttony with which the Metropolitan is known to gobble up buildings in New England and the Southeast to fill its American wing. (Perhaps the Summer Room of the Stevenson House will replace the Stock Exchange Arch in Kevin Roche's new glass-enclosed court adjacent to the Egyptian Temple, since Chicago will now keep the Arch and exchange Trading Room at home and install them in the Art Institute's new wing, for which Walter Netsch is designing a special space.)

Forget also the New York Times account with reference to the new presumably smaller, house the Stevensons will build on their property as "French Provincial." The vision of that gracious lady, who was married in the great Summer Living Room and whose presence is so much a part of the house's ambience, ensconced with one of those five-piece living room sets of distressed pecan from Boutell's in a

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pink rambler decidedly provincial and supposedly French brings tears to my eyes.

Forget that of Wright's great houses this one is most situational, dependent on its site, riding that ridge above the trees with long ribbons of leaded glass framing the lake view. Surely walking from the cozy winter living room into the high-ceilinged summer room and across the terrace to stand in the porch high above Lake Minnetonka, looking through those stretched mullionless screen walls, was to understand the expanding human spirit of a middle-western summer. How will this experience be evoked inside the Metropolitan?

Cut up like a sausage, it is to be eaten by museums. (I've heard Chicago has already been approached to buy a room.) Where was everybody this past year? The museums? The university? The city fathers? Barbara Flanagan? Fund Raising for their own additions, no doubt, to chic imported designs by Barnes (M.Y.), Tenge (Tokyo), Warnecke (S.F.), Johnson (N.Y.), T.A.C. (Boston), or promoting more objects to fill the Nicollet Mall. Where were the architects and the AIA? What a perfect conference center the house would be!

The tragedy is not Mrs. Stevenson's for she and her family will retain their memories of the house her father built! It is that Minneapolitans will never know the generosity of those subtle spaces, which formed in the Middlewest a uniquely American domestic architecture. We are not likely to see their equal.

In Deephaven has occurred a National Tragedy. My sympathy to the survivors.

*Robert W. Peters*

*Mr. Peters is a native of Minneapolis, graduated from Minnesota and Yale and is a participating associate partner in the Chicago Office of Skidmore, Owings and Merrill. He is a trustee of the Chicago School of Architecture Foundation, which owns and operates H. H. Richardson's historic Glessner House, Chicago's first Official Architectural Landmark.*



# Public Money

What people say about public money is usually **negative**.

Public money comes from taxes, and taxes are too high. Part of the reason is that public money is sometimes mis-spent, or otherwise wasted.

So instances where public money is spent wisely and efficiently are worth noting.

For example, construction of public works in New Jersey and California. Those states require both separate and single contract bids on public construction projects. Comparisons of bid prices show that **in at least 85% of the cases, separate bids were lower than single bids.**

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**AIA and Bricklayers' Union  
Announce  
Louis Sullivan Award**

The Louis Sullivan Award for Architecture, a biennial award honoring a practicing U.S. or Canadian architect whose work in masonry exemplifies the ideals and accomplishments of one of America's greatest architects, has been established by the Bricklayers, Masons & Plasterers International Union. The award program will be administered by The American Institute of Architects.

This is the first national award memorializing Sullivan, who in the late 19th century designed buildings in Chicago and other cities which are recognized as landmarks in American architecture. Historian Henry Steele Commager called Sullivan "the most remarkable figure in the history of American architecture between Jefferson and Frank Lloyd Wright . . . the father (or at least the godfather) of modern American architecture."

In 1970 the BM&PIU established a Thomas Jefferson Award for Architecture, which was won that year by Ulrich Franzen, FAIA. Subsequently, the union decided to change the name of the Jefferson Award to avoid confusion with the pre-existing Thomas Jefferson Medal of the University of Virginia. The Jefferson Award is now reconstituted as the Louis Sullivan Award.

Three members of each Sullivan Award jury will be chosen by the AIA and two members will be named by the BM&PIU. Members of the first jury are:

William W. Caudill, FAIA of Houston, chairman, Robert G. Cerny, FAIA of Minneapolis, Ulrich Franzen, FAIA of New York City, Statler Gilfillen, student at Kent State University, and John T. Joyce, secretary of BM&PIU.

**Walking Tours of  
Frank Lloyd Wright Structures**

Frank Lloyd Wright structures in Oak Park-River Forest will be on the itinerary of walking tours this summer, it has been announced by the Chicago School of

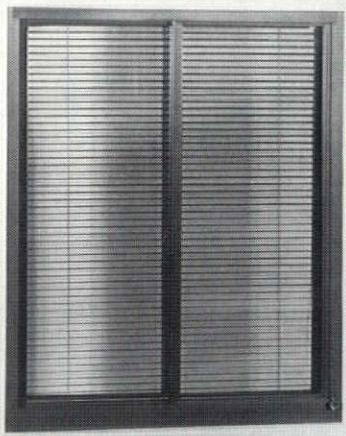
Architecture Foundation. Tours will be given on the second and fourth Sundays of each month, continuing through September.

The walks will start at 2 p.m. at Wright's Unity Church with a tour of the famous national landmark church. The tours will include seeing more than 20 of the his houses and will present a complete development of his "Prairie House" style. Frank Lloyd

Wright lived in Oak Park from 1889 until 1910 and the houses he designed during this period completely revolutionized domestic architecture.

The tours are all given by specially trained volunteer architectural guides who have taken an eight-week training program sponsored by the Illinois Arts Council together with the Chicago School of Architecture Foundation. ■

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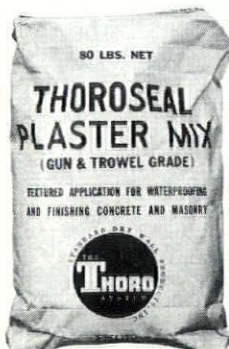
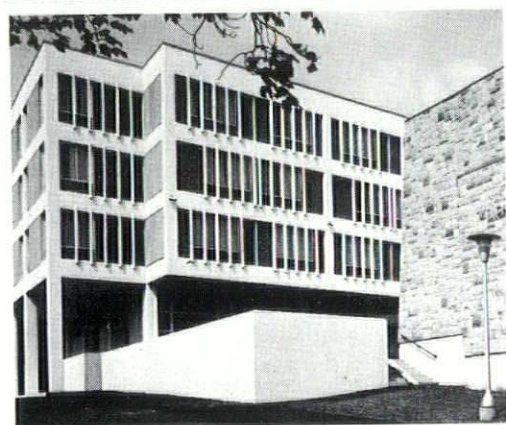
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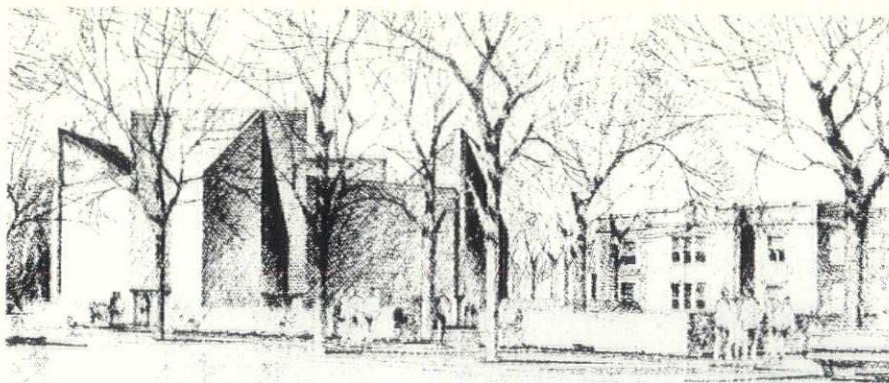


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### New Student Union

Scheduled to be completed in time for the beginning of the 1972-73 college year, a new student union has been designed for Concordia College in St. Paul by Frederick Bentz/Milo Thompson & Associates, Minneapolis architects and urban designers.

The site is a corner which faces a busy city street on the edge of the campus of a small liberal arts college and it serves as an entrance for the commuter population. It slopes into the heart of a quadrangle area and its west-

ern edge is heavily wooded.

The architects responded to the problem of designing for an indefinite set of activities by providing a volume divided vertically into a basement, a main floor and two mezzanines above.

The basement provides for functions which are permanent (mechanical and service rooms) or for functions which require control (book store and mail room) and for activities requiring physical or acoustical isolation (meeting rooms and offices).

The main floor and the mezzanines provide definition of space

but little separation and accommodate simultaneous use by groups engaged in different activities. When occasion demands the use of the entire building — a dance or large party — a feeling of unity and single purpose is achieved because the entire three-story volume is open.

It is presumed that the various activities accommodated on the three floors will at least have in common a tolerance for a generally high level of noise. The architects maintain that the noise will characterize the building appropriately and will offer privacy of a kind to the separate groups or activities and have not, therefore, provided extensive acoustic treatment to reduce the noise level.

The building is designed to "look in" on itself and its activities. The limited window area, particularly the four corner skylights, are designed to provide natural light and especially at night to act as "lanterns," announcing the activity or event to the user as he comes to the building. ■



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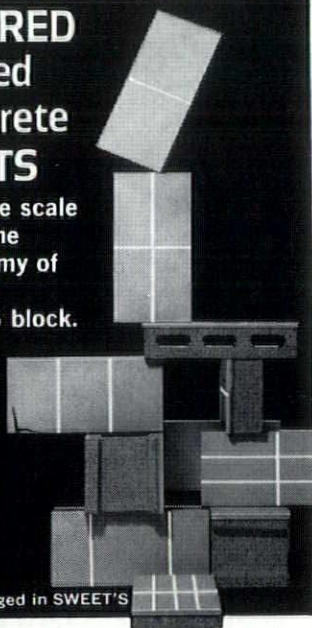
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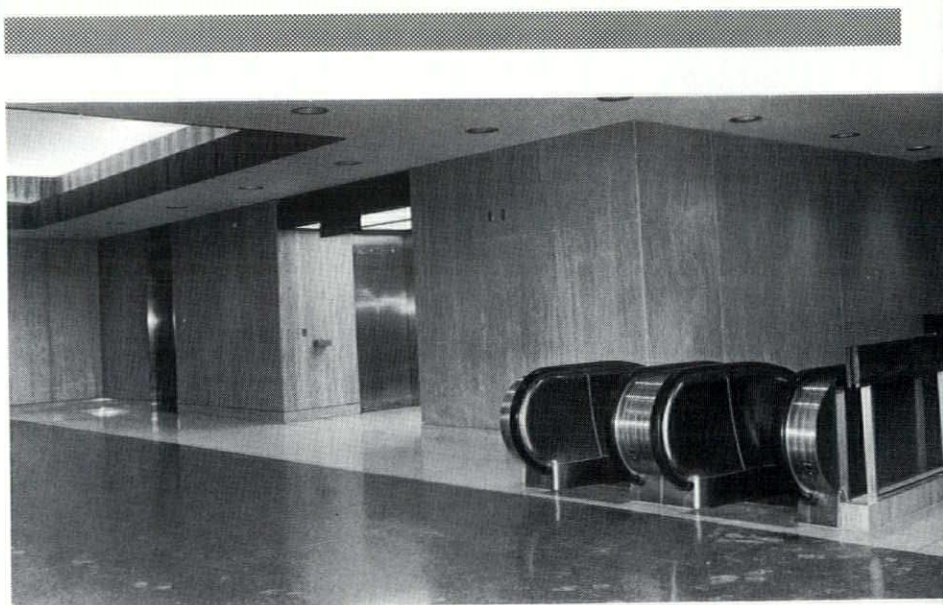


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### Louis Lundgren Forms New Firm

The St. Paul architectural firm of Haarstick, Lundgren & Associates, Inc., formally became The Lundgren Associates, Inc., after Louis R. Lundgren FAIA bought out his partner of 23 years, Donald S. Haarstick. Lundgren said that the firm, under its new name, will "continue to process all existing contracts and honor all of its obligations."

Corporate officers of the firm include Lundgren as president, George A. Johnson as vice-president-engineering, Thomas Thompson as vice-president-projects under construction, June Lundgren as secretary, and Myron Frick as treasurer. The firm will continue to maintain offices in the Hamm Building, St. Paul.

Since its founding in 1949 Haarstick, Lundgren & Associates had designed more than 300 school buildings, mostly in Minnesota, as well as numerous business and civic structures. During the past 16 years 23 projects have been recognized for excellence by the American Association of School Administrators. ■

### Thoma Becomes Shefchik V-P

Thomas J. Shefchik, president of Thomas J. Shefchik & Associates, has announced that Arthur G. Thoma has been elected vice-president of the Duluth-based architectural office.

Thoma, a graduate of the University of Michigan, has been with the firm four years, serving as project architect for its St. Luke's Hospital and Riverview Junior College projects.

He is on the advisory committee to the Architectural Department of the Duluth Area Institute of Technology and was recently elected a Director of the Minnesota Society of Architects.

Prior to moving to Duluth in 1964, Thoma was in Denver, Colorado, working with I. M. Pei & Associates and James Sudler & Associates.

Now in its 50th year of continuous practice, Thomas J. Shefchik & Associates was established in 1922 by Thomas J. Shefchik, Sr., and has offices in Duluth, Minn., and Ashland, Wis. ■

### Adkins-Jackels Adds

Adkins-Jackels Associates, Architects and Planners, St. Paul and Minneapolis, have announced that Robert L. Morgan and Gene S. Peterson, both of Minneapolis, are now officers and part owners of the corporation.

Robert T. Jackels has been elected president, Morgan elected secretary and treasurer and Peterson elected vice-president. All three are members of the American Institute of Architects and the Minnesota Society of Architects; Peterson is also an associate of

the American Institute of Planners.

The firm was first incorporated in 1961 as Adkins Associates by its founder, the late Lonnie O. Adkins, who died in 1971. The firm has been engaged in the development of a wide variety of structures, including church worship centers and educational units, public and parochial schools, civic buildings, government structures and public housing.

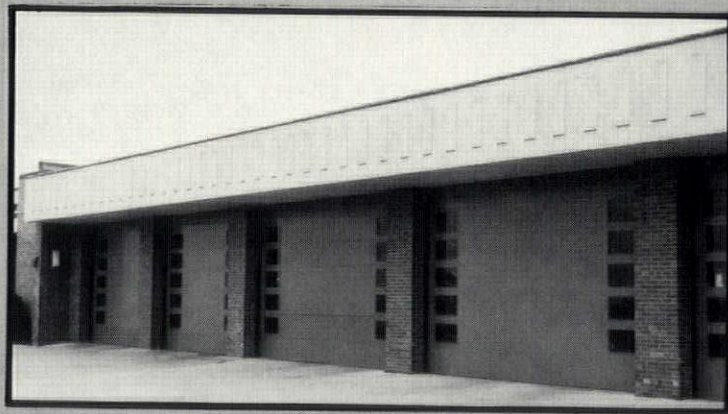
Jackels joined the firm in 1965. A University of Minnesota graduate, he is registered in Min-

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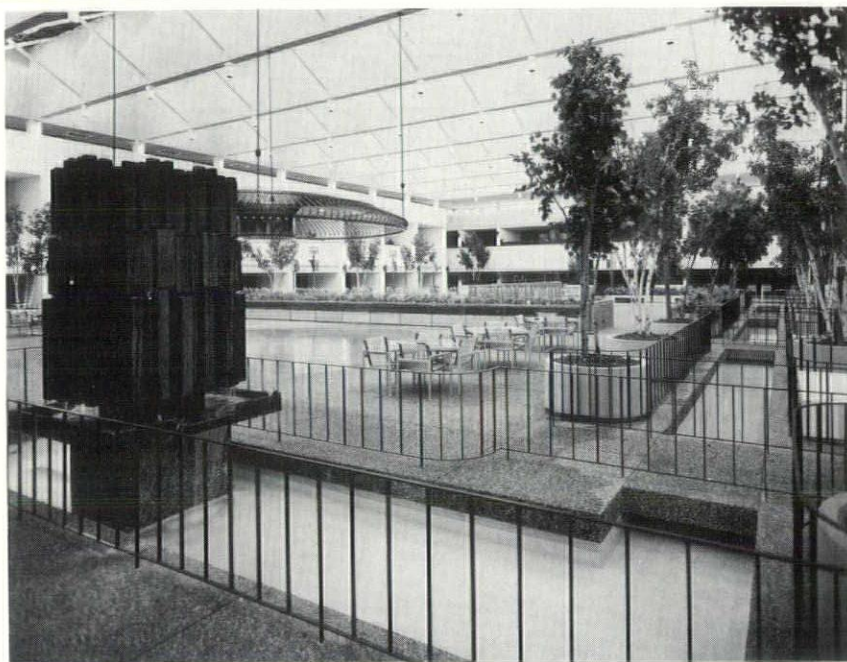
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Peterson



Morgan



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nesota and Wisconsin. He has a wide experience in the educational field as well as civic and religious architecture.

Morgan joined the firm in 1969 and holds a B. Arch. from Kansas State University. He is chairman of the Task Force on Social and Professional Responsibility for the Minnesota Society of Architects and chairman of the board of directors of the Minnesota Community Design Center. He is registered in Minnesota. Mr. Morgan's background has been oriented toward public housing, as well as the educational field.

Peterson has been with the organization for one year. He holds architectural degrees from the University of Colorado and MIT, with additional graduate work at the University of Minnesota. He was a Fulbright scholar at the Ion Mincu Institute of Architecture in Bucharest. He is registered in Minnesota, Wisconsin and Iowa. His experience includes urban renewal and community planning. ■

### **Haarstick Associates Organized in Bloomington**

Donald S. Haarstick, formerly president of Haarstick & Lundgren Associates, St. Paul architects, has announced formation of Haarstick Associates, Inc., with offices in Bloomington, Minn., following transfer of his interest in the former firm to his partner. He and Louis Lundgren had been associated for more than 23 years.

Haarstick Associates' practice will continue to be in those areas of design in which Haarstick has been working for the past many years. The former firm had specialized in school construction and had received a number of state and other awards for designs of the 300-plus school structures they had planned.

Haarstick is a past president of the Minnesota Society of Architects and has served several times on the editorial committee for Northwest Architect. ■



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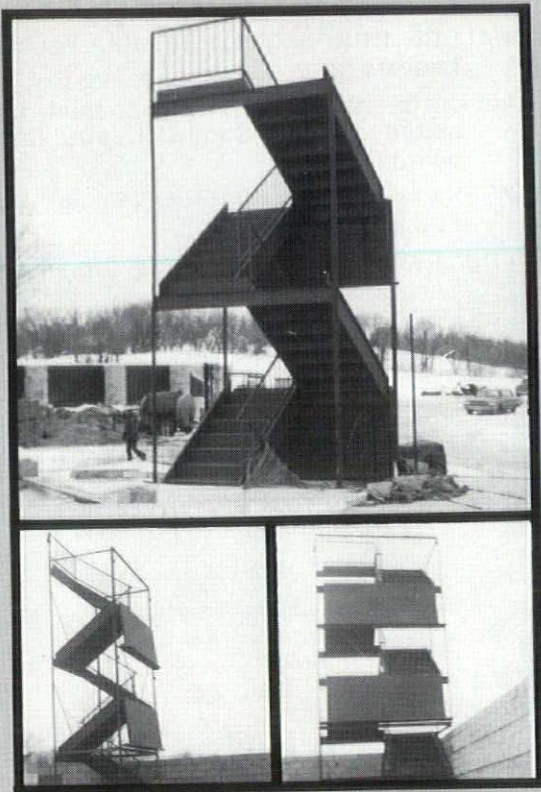
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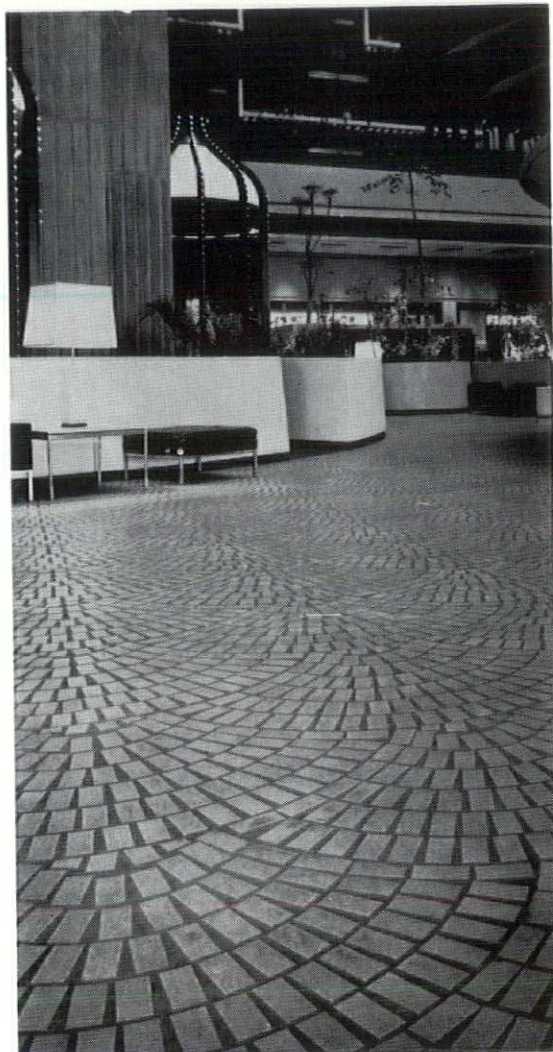
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### **Mastny, Paulsen Form Partnership**

George G. Mastny and Bent A. Paulsen have formed the firm of Mastny Paulsen Architects. The main office will remain in Minnetonka, Minn., where Mr. Mastny is located, having practiced in his own firm of Mastny Associates for the last 15 years.

Mr. Paulsen has been with architectural firms in Minneapolis for the last 18 years, having practiced as a registered architect for approximately 14 years.

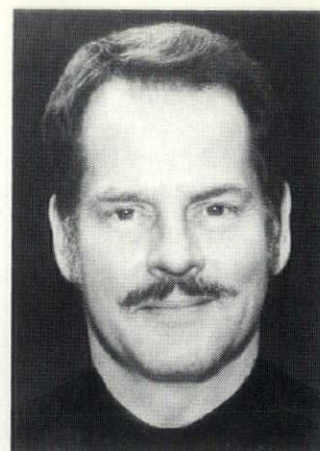
The new firm is opening a second office in St. Paul.

"Mastny Paulsen Architects

presents a broadened scope of service and experience in the construction of shopping centers, churches, schools, hospitals, nursing homes and commercial buildings," the announcement said. "Their architectural practice includes land use, project development, site feasibility, interior design, color coordination and construction management." ■

I expect to live the rest of my life in the future so I want to be reasonably sure of what kind of future it is going to be. This is my reason for planning.

*Charles Kettering*



### **Mindrum Joins Bakke & Kopp**

Bakke & Kopp, Inc., consulting engineers, have announced appointment of Joseph H. Mindrum, P.E., to their staff and expansion of operations to provide complete engineering services. These will now include mechanical and electrical engineering in addition to structural engineering design.

"Joseph Mindrum brings to our staff more than 20 years 'know-how' in the mechanical and electrical engineering fields and in environmental control, both in industry and as a private consultant," stated Elmer Kopp, president.

Mindrum is a registered professional engineer and holds registrations in both mechanical and electrical engineering. A graduate of the University of Minnesota, he has been associated with Twin Cities architectural and business firms. Among his specialties is development of systems for air conditioning and environmental control of large commercial and industrial complexes.

Mindrum is a member and former director of the Consulting Engineers Council of Minnesota. Other memberships include the Minnesota Society of Professional Engineers, Air Pollution Control Association and American Society for Heating, Refrigerating and Air Conditioning Engineers.

Since it was formed in 1967, Bakke & Kopp has completed structural design for more than \$200,000,000 in construction, including bridges, hospitals, schools, shopping centers, high-rise housing, office buildings and warehouses. ■

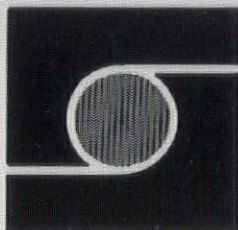
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### Pink Becomes President

Paul Pink has assumed the office of president of Gingold-Pink Architecture, acquiring ownership of all the stock, and Benjamin A. Gingold, Jr. has become Senior Vice President, according to Mr. Gingold.

Two staff members have been appointed officers of the corporation — William F. Wharton as vice-president/engineering and Paul Katz as asst. vice-president/commercial interiors. ■

### Hamblin Is "Engineer of Year"

The Minnesota Federation of Engineers' Societies has named Clifford Hamblin as "Engineer of the Year." Hamblin, who is general manager of the St. Paul Water Department, received the honor for his concern for "the proper use of the environment." Among other things he has done he is noted for direction of the construction of the first lime recalcinating and backwash water recovery plant in the state. He is president-elect of the American Water Works Association. ■

### Minneapolis to Host Public Works Congress

More than 6,000 public works officials from the United States and Canada are expected to attend the 1972 Public Works Congress and Equipment Show, September 23-27, in the Minneapolis Auditorium and Convention Hall. The Equipment Show, which includes more than 65,000 square feet of exhibits, is the largest and most diversified annual display of its kind to be found in North America.

Technical sessions covering a wide range of current public works activities, analyzing problems and investigating possible solutions, highlight the program. Symposiums on solid wastes, municipal engineering, transportation, water resources, equipment management, buildings and grounds and administrative management are included. ■

### AIA Convention Adopts Growth Policy

The American Institute of Architects has adopted a wide-ranging program intended to influence the nation's urban growth policies over the next 30 years as delegates to the national convention voted nearly unanimously to accept the recommendations of the institute's National Policy Task Force.

The program calls for new public policies to change the "ground rules" that shape, or distort the shape of, American communities, creation of a new scale for planning and building in urban areas and a national commitment to a major land acquisition policy to guide development in and around key urban centers.

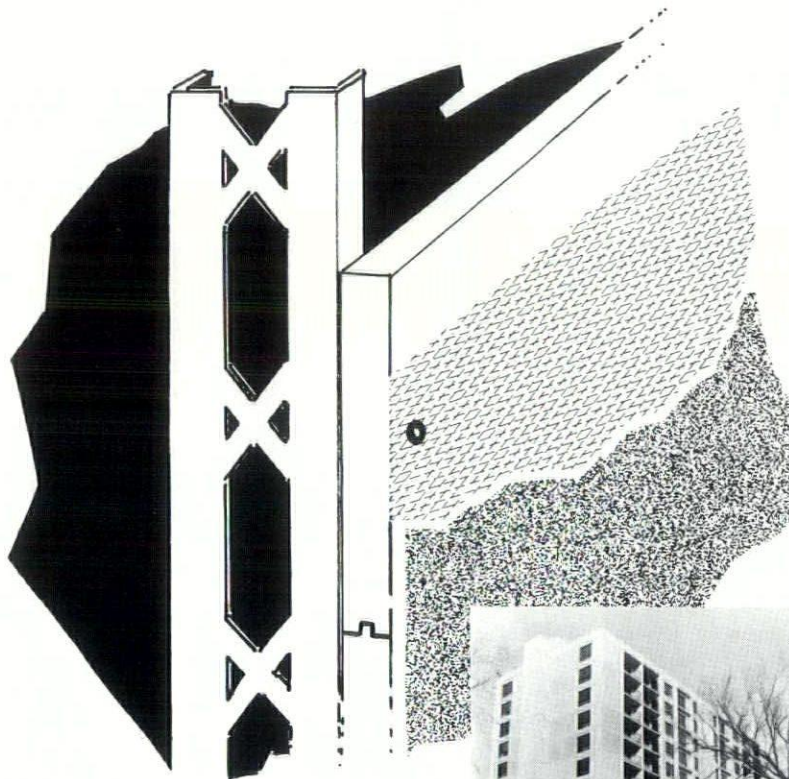
The ground rules for which the task force urges basic changes include tax policy, governmental organization, revenue sharing and site development. The new scale for planning and building in urban areas is essentially a neighborhood scale — a "growth unit" that ensures open occupancy, environmental integrity and a full range of essential facilities and services.

(Continued on page 144)

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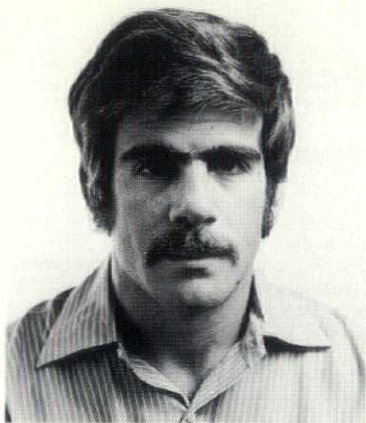
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### Levin Named Nation's First Architecture Curator

Robert Levin has been appointed to fill the newly created position of Curator of Architecture at The Minneapolis Institute of Arts, reportedly the first such curatorship in the United States.

Levin has been an instructor in the HELP (Higher Education for Low Income People) Center at the University of Minnesota while working toward his doctorate in American Studies, with emphasis on American architecture and urban history.

As the institute's first curator of architecture, he will promote local and national interest in quality architecture through programs and exhibitions concerned with accomplishments of the past and present. The curatorship is supported by the Minneapolis chapter of the Minnesota Society of Architects. A native of Philadelphia, Levin was a Neighborhood Youth Corps coordinator there before coming to Minnesota in 1968.

"Architecture in this country is generally arrogant and short-sighted," Levin has said. "But I see a trend among architects toward more social awareness. At last year's American Institute of Architects convention some members admitted that architects may have played a part in producing the miserable conditions of our cities today. That's progress. Buckminster Fuller and Paolo Soleri have something to contribute as architects and/or engineers but as social critics separately or through their work, no."

James Stageberg, Minneapolis architect and president of the Minneapolis AIA chapter com-

mented that, "We think we were exceptionally fortunate to find a young man with so profound an understanding of the architectural profession."

Levin has expressed himself vigorously on many aspects of architecture, city planning, suburban sprawl, new towns and other phases of today's urban and related problems, indicating that he will bring to his new job fresh outlooks and the ability to present to visitors in the institute chal-

lenging and enlightening displays.

Seeking to make "the museum an exciting place to visit," Levin and those who chose him for the new curatorship intentionally left definite programs out of the preliminary "specifications." He will have quite a free hand in developing the exhibitions so they will be absolutely current, present old problems in fresh ways and perhaps even incite viewers to become parts of the solutions, it was pointed out. ■

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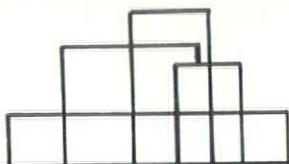
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## DeVAC Gets Record Replacement

One of the largest programs of window replacement in an American office building — 65,000 square feet of window area — currently is underway at the famed Wrigley Building in Chicago and the windows will be cleaned by a unique new system in which the dirty window is removed and replaced by a clean one in seconds.

DeVAC, Inc., Minneapolis, has been awarded the contract to replace approximately 2,300 wood-frame windows with aluminum sash, frame and cover and is providing the cleaning system. The interior window frame is a hard-coat anodized light bronze and the exterior is an applied polyester coating in dark "Wrigley" green, the color of the present windows.

More than 150,000 pounds of aluminum billet, produced by Reynolds Metal Company, is being used in the manufacture of the special aluminum window units.

Frank W. Hetman, DeVAC president, said the project, largest ever undertaken by his firm, will involve the replacement of all operating windows in both towers of the structure from the second floor up. The building contains more than 50 different sizes of windows with an average size of 4 1/2 x 7 1/2 feet.

The project includes a new automatic sash washer system developed by DeVAC to wash the removable sash. The washer, measuring 30" wide and 65" high, is mobile, with the cleaning operation performed in the corridor and hallway areas.

With two men operating the washer, an initial load of clean sash is installed as dirty sashes are removed. The soiled sashes are run through the washer, which cleans and dries each sash in less than 30 seconds. The Wrigley Building washer installation will be the first to use the unique washing device in an office building.

## New Marlite Catalog

A new four-color catalog, containing complete information on its line of pre-hung doors and aluminum adjustable frames, has been prepared by Marlite Paneling. This line of solid and hollow core doors combines Marlite's washable plastic finish with a choice of more than 40 different colors, textures and patterns. Available with five different core constructions, Marlite prefinished doors are covered by the standard door guarantee of the National Woodwork Manufacturers Association.

This new 12-page catalog contains details on architectural specifications, including types available and manufacturing options. Marlite's adjustable door frames adjust quickly to fit almost any wall thickness. They can be installed in less than 30 minutes. The aluminum door frames come in four finishes.

For a copy of the catalog, write Marlite Paneling, Dover, Ohio 44622.

## New Terrazzo Design Data Book

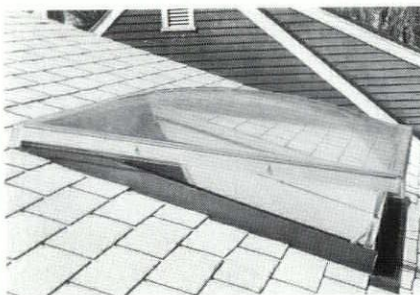
The National Terrazzo and Mosaic Association is releasing a new Terrazzo Design Data Book.

The new book contains the general information necessary for architects to design terrazzo and mosaic work and also contains 121 color plates showing basic designs, patterns and

color combinations formulated by professional color consultants. Color illustrations include conventional terrazzo, synthetic resin terrazzo, venetian terrazzo, palladiana, conductive terrazzo and textured mosaics.

Notwithstanding all the precautions taken by the association to assure accurate color it cautions designers to obtain a physical sample prior to installation. Contained in the product information section of the book is such vital criteria as cost factors, definitions, dead load values, geographic origins of materials and limitations.

Copies are available to architects, designers and specifiers through local terrazzo contractor members of the National Terrazzo and Mosaic Association or from regional terrazzo associations or the National Terrazzo and Mosaic Association. Because of the substantial cost of the book the color plates are also available in 3" x 3" swatch forms at a nominal cost.



## Light and Ventilation

Light and ventilation with maximum protection against the weather are provided in the molded plastic dome marketed under the name of Ventarama Skylight. The increased interest in using skylights in homes and other structures has been obvious in recent years.

In Ventarama, its makers point out, they have combined a Plexiglas skylight with the operational features of a standard window. It was designed to be installed in either new or existing structures and is available in six sizes up to four feet square. Units are completely assembled with curbing, screen and copper flashing for either shingle or flat roofing. Units can be supplied with manual, pole or motorized operation.

Further details can be obtained from Ventarama Skylight Corp., 174 Main St., Port Washington, N.Y. 11050.

## Automatic Doors by Overhead Division

Horton Automatics, a division of the Overhead Door Corporation, has been awarded a contract to supply automatic door operators for Airtrans, the automated transportation system that will serve the first phase of the new Dallas/Ft. Worth Regional Airport.

The Horton operators will be installed on 51 cars of Airtrans and at 28 passenger boarding stations along the Airtrans route. Horton also designed, engineered and is manufacturing the automatic door, its frame and the door wall for each station.

When a passenger car stops at one of the boarding stations, the Airtrans system will signal both the Horton operator on the car and

the operator at the corresponding station to activate the doors.

The Horton automatic door operators operate pneumatically rather than electrically. This affords the highest degree of passenger safety and also a long, maintenance-free operating life.

The Dallas/Ft. Worth Regional Airport, when fully completed, will be the largest in the world.

## Infinite Graphics Presents Advanced Techniques

Advanced techniques in graphics of value to the practicing architect were presented during a seminar held by Infinite Graphics, Inc., in Minneapolis recently. The sessions were attended by architects, engineers and others.

"Hole Control" was presented by Ing Siverts of IGI. This new concept for a drafting system utilizes registration holes provided by the company on all drafting and sensitized materials, both photo and diazo. The technique, Siverts said, allows control of flexibility in handling everything from the beginning of the job to working drawings, during which considerable saving of time and material is realized.

In presenting a discussion of "Graphics" Greg Bownds of IGI outlined techniques in handling photo and diazo materials which can provide architects with new tools to make client presentations more attractive and understandable.

Material and personal information on the new techniques can be obtained from either Siverts and Bownds at Infinite Graphics, 725 So. 4th St., Minneapolis, Minn. 55415.



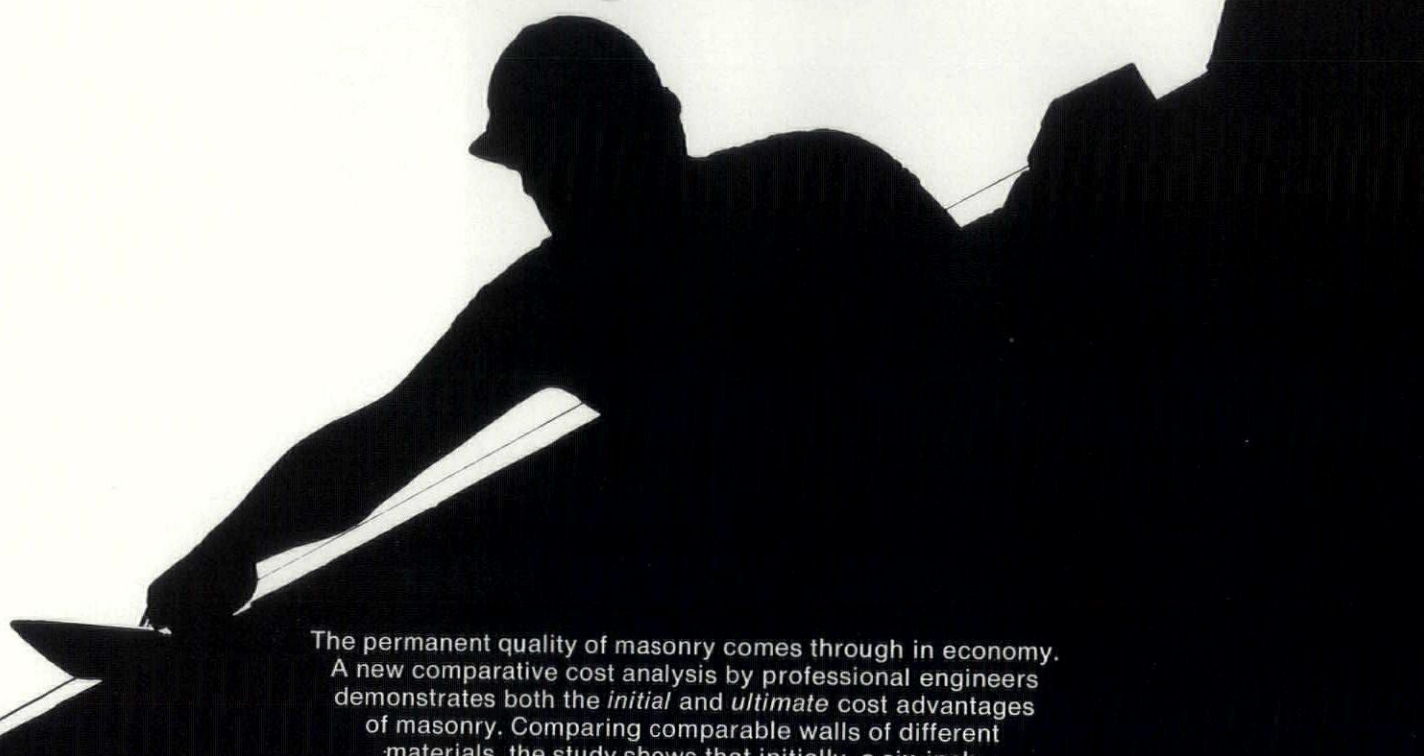
## Sterner Announces Mariner-Lite

A lighting fixture named Mariner-Lite, complete with appropriate pole, has been announced by Sterner Lighting, Winsted, Minn. 55395. As shown here, it is 15 inches square and 30 inches high, made in cast aluminum. Pole is 3 inches in diameter. The cast aluminum door is designed for easy access to lamp and ballast.

Lamp wattage limit is 250-watt mercury vapor, with ballast in head and polycarbonate chimney. The 400-watt mercury vapor lamp with remote ballast is without chimney. Panels in the lamp are available in acrylic, butyrate and polycarbonate in a variety of colors and patterns.



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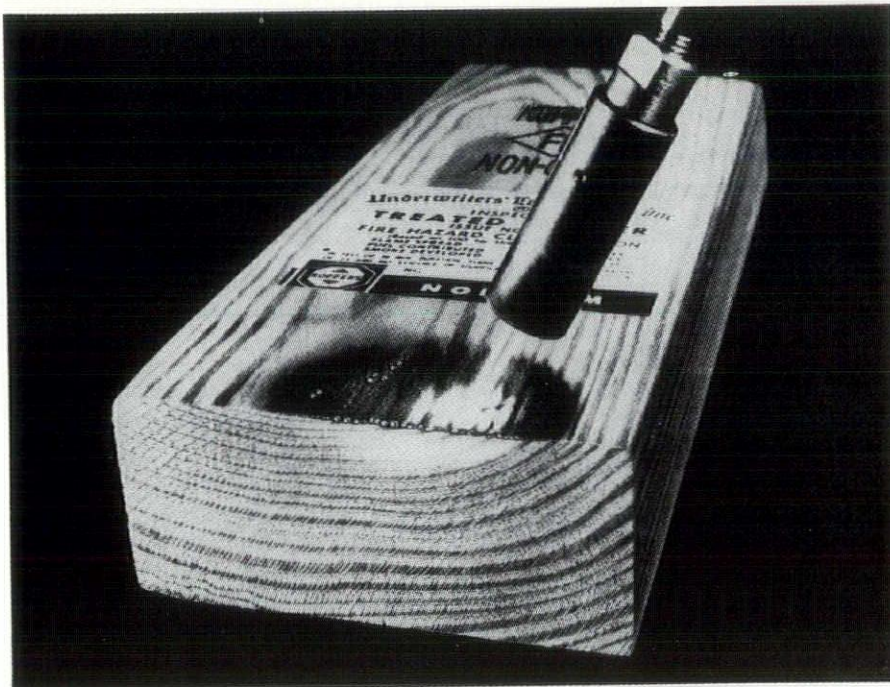
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## AIA Policy (Continued)

The proposed land acquisition policy calls for a partnership of federal, state and local governments to assemble 1,000,000 acres in 65 metropolitan areas and prepare the land for private development under community-approved guidelines.

The estimated \$5 billion cost of this land — bought first in central cities and then on the metropolitan periphery — would be recovered in a few years, with appreciation in the value of the land being used to recover all of the initial cost and much of the cost of preparing the land for development.

As envisaged by the task force, this "Strategy for Building a Better America" would create sites large enough to be economically attractive to private developers. The ground rules for such development would encourage cohesive "growth units" of neighborhood scale at pre-determined locations along transportation and utility corridors.

Each growth unit would include from 500 to 3,000 housing units. Expanded in multiples over 1,000,000 acres nationally, with the addition of high schools, community colleges, hospitals, regional shopping centers and mass transit, these growth units would be adequate to accommodate a third of the nation's expected urban growth by the year 2000. ■

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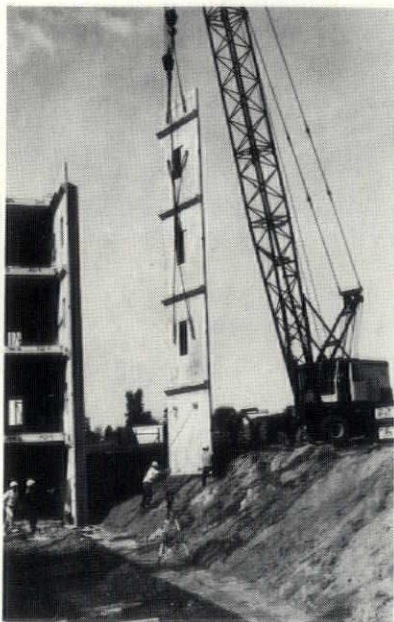
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**PROJECT:** Valley Office Park II, 10800 South Lyndale, Minneapolis, Minnesota 55420

**OWNER:** Investment Dynamics Corporation, Minneapolis, Minnesota

**ARCHITECT AND ENGINEERS:** Grover-Diamond Associates, Inc., St. Paul, Minnesota

**CONTRACTOR:** Concord Development Corp., Minneapolis, Minn.

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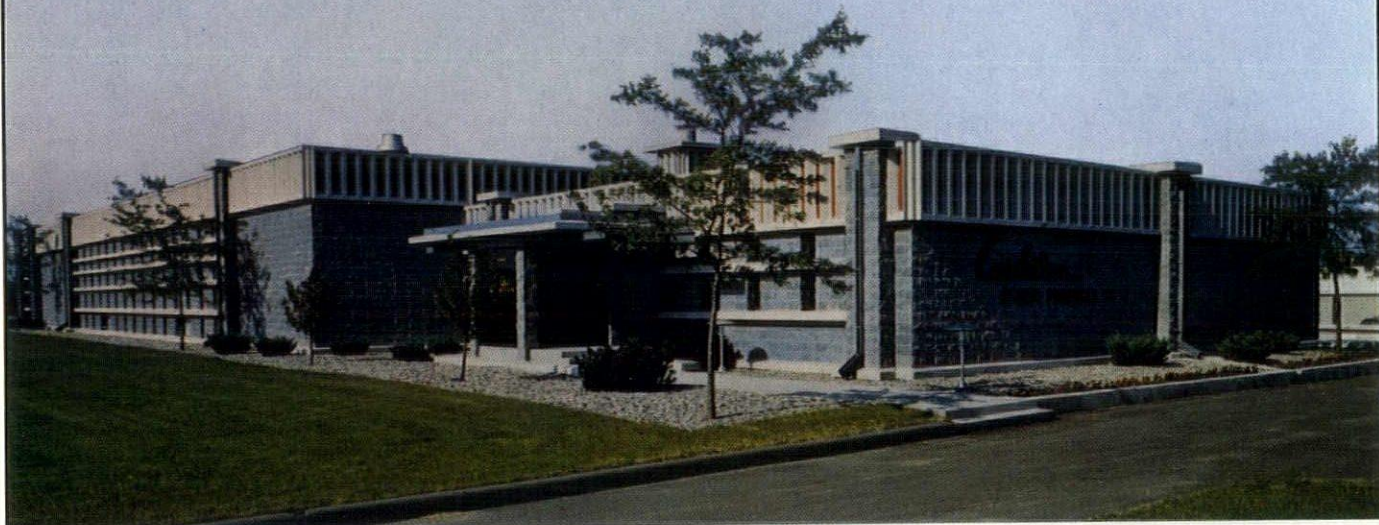


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DESIGNER — KAYE WESTERLUND

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