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Cover photograph of Chicago Stock Exchange molding by Orlando Cabanban.



TH YEAR OF **PUBLISHING** 1892-1972

THE ARCHITECTURAL FORUM Vol 137 No 4, November issue

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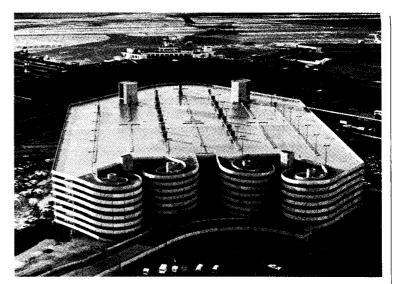
FOCUS

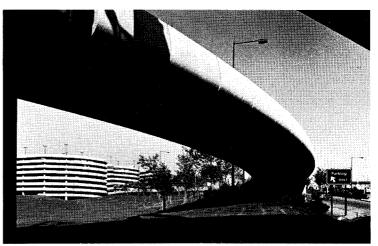
PACIFIC PARKING

The first phase of the Seattle-Tacoma International Airport parking garage (right and detail below) is complete. It can hold 4,675 cars and is capable of being expanded in two phases (see model photo) for a total of 9,000 cars. This structure also contains the main mechanical plant for the entire passenger terminal and has the capacity for the addition of a ninth floor heliport.

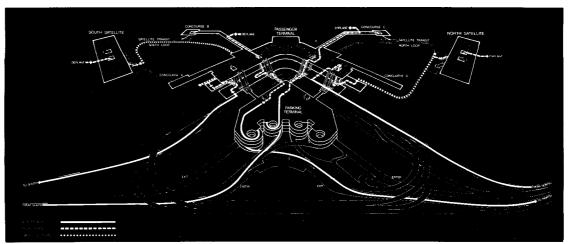
The Parking Terminal and the comprehensive plan for the airport (below) are the result of cooperation between The Richardson Associates, architects, engineers and planners, and the planning staff of the Port of Seattle. The Parking Terminal is in the elbow of the passenger terminal (see plan) which is an expansion of the terminal built in 1949. There are nearly five miles of access roads (middle), ramps, bridges, and tunnels. They are integrated with the landscaping which includes over 50 acres developed with ivy, Portugal laurel and over 4,000 deciduous and evergreen trees. The landscaping screens undesirable views and distracting headlight glare. Lighting and signing were considered simultaneously as were the baggage and transit facilities.



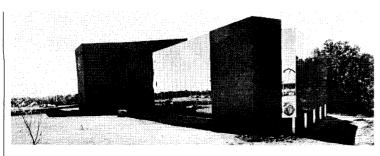








FORUM-NOVEMBER-1972 5



POSH PRACTICALITY

This "polished machine for working" is the Corporate Head-quarters of Mercedes-Benz of North America. The facade is of reflective glass with highly polished metal mullions. It is a three-level, 141,000 square foot building on a 20 acre site bordering the Garden State Parkway in Montvale, northern New Jersey.

The trapezoidal building can accommodate about 570 employees. With the addition of two more triangular segments around the central core—a plan which will recall the three-pointed-star Mercedes-Benz symbol—the building will handle 900 employees.

The building is a result of very thoroughgoing planning and cooperation among the architects, The Grad Partner-

ship; Hans Krieks Associates who did the interiors and furniture; and the Quickborner Team, management consultants, working under the direction of the Mercedes-Benz planning committee. The employees were surveyed by questionnaire and this democratic spirit permeated the design of all the interior furnishings. Everybody including the highest executives got the same basic equipment; except the President's and Vice-Presidents' furniture is English brown oak rather than laminated plastic.

The office landscape furnishings include acoustical movable screens, visual aid and pinup boards, trapezoidal work tables which can be placed together to form conference tables, multistorage units (for phone, books, in-box, purse), current file units

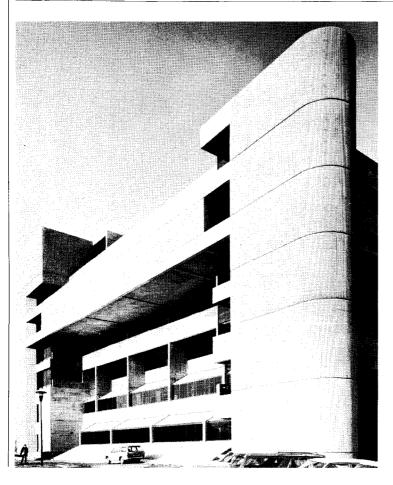
and typing tables. One aim was to make the office area a people rather than a paper environment. Thus the work tables are not to be used as files; and the central files—each with a legally designated throw-out date—are in the basement, accessible via a paper lift system that operates like a miniature train.

The 350 hexagonal planters provide additional screening. A moisture controlled air system designed for maximum comfort will keep the plants alive.

The ground floor has the main entrance and lobby, an automo-

bile display, the computer facility, a full kitchen and cafeteria (which can be converted into a movie theater), private dining facilities, a print shop, mechanical equipment room and shipping and receiving. The corporate offices are on the two upper floors. Columns in the open space are in a diagonal pattern and are hexagonal. The architects feel the hexagonal columns are less obstrusive and more nondirectional than square columns would be, thus creating greater flexibility of floor space between columns.





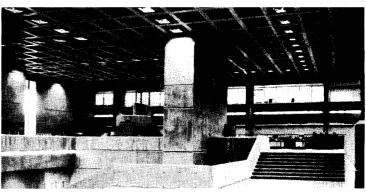
CAREFUL CONCRETE

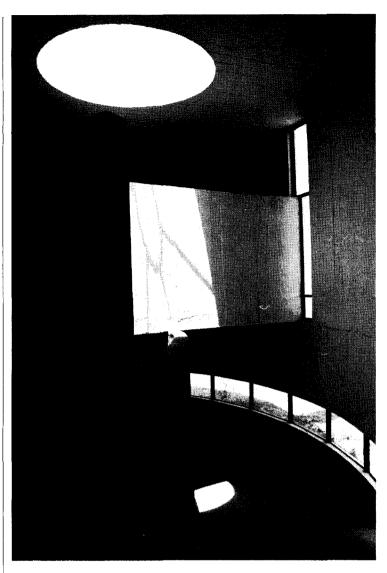
The D. B. Weldon Library of the University of Western Ontario in London, Canada by Ronald E. Murphy and John Andrews, with C. D. Carruthers & Wallace Consultants Ltd. as structural engineers and T. J. Escedi & Associates Ltd. consultants on prestressed design, has won one of ten awards in the 1972 Prestressed Concrete Institute Awards Program.

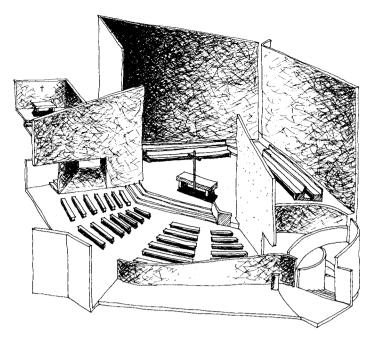
The jury was unanimous in selecting this building not only for itself but for the design of its pedestrian plazas. They said, "The cross section at the bridges and entrance suggests that these

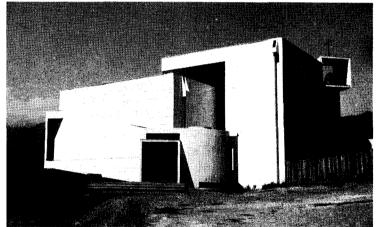
areas are most exciting and vital; a wonderful place to be."

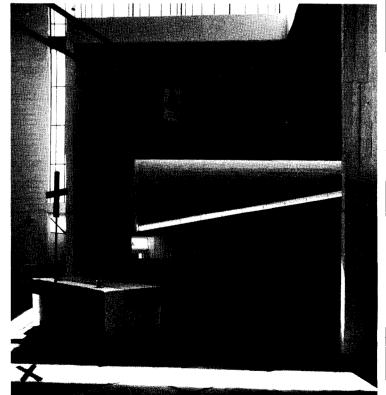
The graduate stack area required economical long spans which were achieved with large precast, prestressed concrete single tees and post-tensioned slabs spanning between the tees. Other uses of prestressed concrete include two-way reinforced concrete slabs supported on post-tensioned cast-in-place beams, and a reinforced concrete waffle slab hung from deep posttensioned wall-beams on the floor above. Such care was taken of the concrete that all cement and aggregates were stockpiled for uniform color.











CHILEAN CHURCH

While directing a Rice University architectural team working in Chile under a Ford Foundation grant, Paul Kennon, design partner with Caudill Rowlett Scott, discovered this Benedictine monastery church at Las Condes. He published it in an interesting series of booklets called "Architecture at Rice" with some inspired remarks from the architects, Brothers Gabriel and Martin, some of which are quoted here:

"In a church it is not so important to provide functional efficiency as to give the right atmosphere so the spirits may be led toward the sacredness of the space. Consequently, we attempted to create an atmosphere, a climate that reflects the mysteries of God, and moves one to meditation."

"... The spatial focus of the church is the altar, which is Christ. Walls, ceilings, lights, and shadows dynamically converge toward the altar. Over

it is the interior's highest altitude, which is a continuous crescendo from the entrance. . ."

"... This church evokes the desert, not only for a romantic and superficial resemblance (a figurative representation of some of its elements), but for an equivalence of a purifying effect in our soul. We desired to reproduce its silence, its simplicity, its nakedness, its vastness, its asceticism..."

". . . Much importance was given to light, which is the real vivifying soul of the whole. Light which leads upon entrance, from the door to the altar, by means of changes of intensity and coloring. Light which comes from above as in nature, and indirectly transforming the rough walls into fountains of light. . "

". . . It was desired that this church be both poor and magnificent at the same time, like a rock . . . like a rock that with its eloquent silence is always speaking to us of God."

PHOTOGRAPHS: Tom Daly.

If granite is strictly for building exteriors, why didn't someone tell Union Bank, San Francisco?

There are those that hold that the place for granite is the outside wall for that big, monumental building that comes along once every century. But the building owner and the management of the Union Bank of San Francisco and their architects had other ideas. They liked the warm, natural colors of granite. They were aware of how polished granite resists weather, stains and all types of traffic as no other building material is capable. They knew it requires virtually no maintenance. Doesn't fade or deteriorate. And that it would fit into their plans on a cost-in-place basis. So it was employed. On the plaza to cradle a fountain and pool. As exterior furniture. Inside it was used as facing for walls on the first floor, in heavy traffic areas. Focal points that at once blend and accent. Warm. Lasting. Beautiful.

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LETTERS

FORUM FERMENT

FORUM: Good work. I bet myself a long time ago that Forum would keep on top. This is the kind of bet I particularly like to win.

PHILIP WILL, JR., FAIA Perkins & Will Chicago

FORUM: Imagine my surprise, to be thumbing through the September issue and find a new face staring out at us.

Seriously, there is a good deal of work that can be done with the Forum, and I wish you the very best in your efforts to bringing it back to what it once was, and what it can be again. Chicago J. O. HEDRICH

FORUM: Forum's continued leadership in its field is vital to building in this country. The excellence of the Forum's leadership for the past twenty years will, I am sure, be maintained in the hands of its new editors. PAUL RUDOLPH Architect New York, N.Y.

FORUM: How delightful to find a new and younger generation hard at work in re-generating the batteries at the Forum! The September editorial hit just the right tone. Indeed, the watershed does seem full of promise. I look forward with renewed interest to my favorite architectural magazine, one that has invariably led the fight for the very best in design.

ROB CUSCADEN Architecture Critic, Chicago Sun-Tim

WOMEN IN ARCHITECTURE

FORUM: Ellen Perry Berkeley's article "Women in Architecture" was of unusual interest to me. Any woman who has studied architecture and seriously pursued a professional career in this and related fields, knows only too well from first hand experience the problems of prejudice. The article lets us all (men, women, architects or otherwise) know that the probblem does exist and that it is not peculiar to just one or two persons say part of the time. "The Case For Flexible Work Schedules" offered by WALAP is a creative solution for the women faced with career and family.

Hopefully, the article is read by the male majority. It could give the reader an awareness of the situation and so help to bring about a change for the better. It is a good step in the way of a long line of action that is needed to give the woman architect, landscape architect and planner appropriate status. JANE HALL

POMP AND CIRCUMSTANCE

FORUM: The Institute for Advanced Study at Princeton must be "the penthouse at the top of the ivory tower," as Architect Robert Geddes suggests. Could that be the reason for the pomposity of Kenneth Frampton's critique (Oct. '72 issue)? When will architects and, especially, architects who are academicians, learn that the more complex an idea, the more simple must be the means of explaining it? Apparently, the professor equates being pedantic with being profound. Geddes' building deserves better.

CONSTANCE STICKLER
New York City

ISOLATIONISM

FORUM: William Marlin's September editorial correctly implies that one of the chief failings of the architectural profession is its inability to communicate effectively with the rest of society. Third-rate design is seen everywhere not because, as many architects fear, people are contemptuous of the architect and his standards, but usually because they have not been made aware of them. The urgent need for popular education in this field is obvious; what is less understood by the profession and its institutions, however, is the genuine desire of the average person to know more about architectural design when presented in simple and understandable terms.

In an effort to bridge the gap between architect and public I wrote a book addressed to the average owner of an older house called "Remodeling Old Houses Without Destroying Their Character", which was published by Knopf last February. The object was, I think, a laudable one. By a simple explanation of some of the princi-

ples of good design, I tried to and the nurserymen/contracraise the standard of remodeling work - an increasingly important branch of architecture in which architects usually do not (or do not want to) get involved, and which most schools of architecture ignore as a special skill. Is this yet another example of the isolation of the architectural profession?

GEORGE STEPHEN Director of Rehabilitation Design Boston Redevelopment Authority

NEW DIRECTION
FORUM: Nat Owings—paradox exposed.

Women in Architecture. Aerodynamics.

Yes, Let's revive thinking! San Francisco STEVE H.

OPERATION "INTERFACE"

FORUM: The staff compilers of "a monthly review of events and ideas" must know that the rousing self-serving calls to public health and welfare greatness (italics yours in the July-August issue, p. 89) at the ASLA convention are grounded, beneath the rhetorical ajuga and vinca, in the landscape architects' ambition for more money and design-team leadership. In the growing number of states which have legislated licensing of practitioners of landscape architecture, with the lobbying help of ASLA chapters (whose members plead, "Don't say licensing, say 'registration'"), the laws granting them the examination-tested right to put a framed license on the office wall and seek fattened commissions in competition with licensed architects have had to be drafted and enacted on the premise that the men are engaged in work which shames nurserymen and landscape contractors by being high-mindedly "for the public health and welfare" if the licensing legislation is to withstand, hopefully, challenge on constitutional grounds.

I was around some of the lobbyists for New York State's law of the kind a few years ago -the back-room strategist subsequently became chairman of the licensing board and ASLA gratefully made him a Fellowand the unadmitted attitude seemed to be, "Look, fellas, since we can't seem to make it on our merits as designers or as job estimators and plant pricers, we better go the public health and welfare route. With this environmental crusade heating up, there's money on all sides of us"-meaning the architects' fees

tors' profits-"and all we need to latch on to more of it, with prestige yet, is the right kind of hunting license, heh, heh. I mean registration. So, aside from the constitution's backing us into a corner of rationalization, public-health-and-welfare is going to scare, I mean impress, the hell out of rich government, institutional, and corporate clients, right?"

Right. The nurserymen, organizationally if not individually cowed, have held back from challenge, I understand. Starting salaries of landscape architecture students such as Professor Fein's rapidly rose to equal those of chemistry majors' and have stayed there on environmentalcampaign fuel and licensure support. Young LA grads used to be relaxed, life-savoring free spirits with design excitement. Today's quickly become buttoned-up Organization Men specifying cotoneasters around Texaco gas stations in playing the money game. This is public health and welfare?

The question gets asked often enough, and you see how farsighted statesmen and practitioner-producers like MacHarg. Lewis, Fein, et al, all with experience in grantsmanship, put their heads together at the annual post-convention communion of the landscape architecture educators and are struck with the inspiration of getting a Ford Foundation grant for a study of the profession. Just as if I were there, I can hear one of them opening with, "Look, guys. Keeping the architects and nurserymen at bay isn't the problem anymore. We gotta Think Big. Now, with a properly-structured FF study and findings-how the findings are written is very important-we can take after the whole shootin' match of the social sciences. Medicine, even. Now, one thing we gotta be sure to do is coin a new verb, like the social scientists' changing 'structure' from a noun to a verb a while ago. How about 'interface'? It's perfect. We'll get the Ford Foundation to put it right in print that we, ASLA, are now interfacing with the scientists for the public health and welfare-not facing, or joining, or cooperating with, but interfacing. Isn't that great?"

It sure is. Tomorrow an ASLA world, eh?

CHARLES D. BONSTED City Planner

LETTERS

continued from page 10)

ENTRAL PARK SOUTH REVISITED

ORUM: Reference is made to ne news story in your Julyaugust issue (page 40) in conection with an apartment house n Central Park South. As a rst thing, let me set the facts traight:

1. The tenants' claims, particlarly as publicized by you, are n error and without foundation. n actual fact, there was a failre of the evaporator section of ne central air conditioning aborber unit, which failure was iscovered and verified toward ne latter part of May. A crash rogram was immediately emarked upon with repairs being nade on a "round the clock" asis by the equipment manuacturer. The tenancy was notied on June 5th that the equipent would be back on the line y June 15th. The equipment as back in full operation on une 15th and has been operatng in a satisfactory manner ver since.

2. The demonstration by the enants took place on June 13th nd was immediately enjoined y an order from the New York tate Supreme Court which, in as considered judgment, held the demonstration was imporper and unwarranted.

3. You state in your article: the landlord responded to these leas with admirable speed, not to the basement to repair the coling system, but to the State upreme Court. . . ". You are byiously in grievous error.

More fundamentally what is f great concern to me is the bvious fact that you made no ffort, whatsoever, to verify the rue nature of the matter in at at no time did you in any ray communicate with us. Had ou done so, I could have claried the situation.

As a professional engineer and uilder, I have been a subscriber of your magazine for many ears and have always accepted the assumption that you presented information in an objective fashion after careful intestigation, and that you didn't imply cull news tidbits and present them as news. You ob-

viously culled this story from *Time* magazine and did nothing whatsoever to verify it. Even the photograph you used is the same one they had printed. You might at least have telephoned us. Parenthetically, our office and the building in question are just down the street from your office.

Your article, which pretends to be news, is really "backfence" gossip. It has caused us considerable embarrassment and damage.

New York, N.Y.
FORUM'S July - August news story about the tenants of a luxury Manhattan apartment building, who hung out sheets from their balconies with messages announcing landlord troubles, was written from interviews with several of the tenants, their lawyer, and information supplied by The New York Times.

Two of the tenants, actress Ruth Gordon and her husband, playwright Garson Kanin, were quoted in the Times as saying, "Everything went downhill not long after the building opened in 1968. Calling the management to complain is a plot for a farce. They say, 'We're working on it' before you can tell them what's wrong."

We really must apologize to Mr. Spitzer for not interviewing him also at the time. However, we have since been in contact with him, and the tenants will be pleased to learn that Mr. Spitzer expended many thousands of dollars last summer to rush new equipment from a midwestern plant to insure that such breakdowns would not occur again.

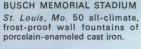
A recent check with several tenants and their lawyer revealed that the air conditioning worked very well, indeed, except for six occasions when they report that it collapsed again.

Mr. Spitzer emphatically denies this.

In living through (or living down?) this episode, the FOR-UM has become acutely aware that this sheet-hanging affair last summer is only one symptom of the larger tenant's rights movement across the nation, and it is one we shall report more fully in a coming issue of the magazine. We hope that Mr. Spitzer and his colleagues will be as accessible and quotable when we get around to that.—Ed.

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Cincinnati, Ohio. 45 all-climate, frost-proof wall fountains with stainless steel receptors.











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THE ASTRODOME

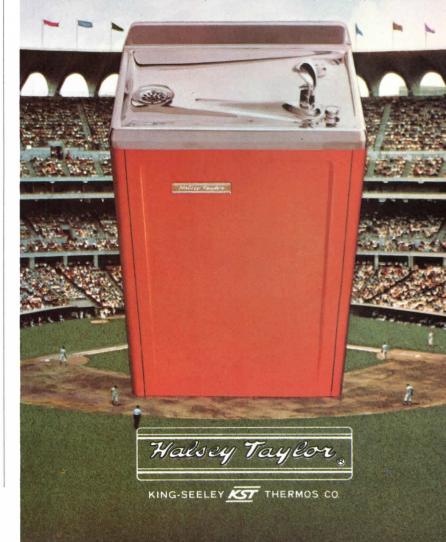
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PPG's Solarban' 575 Twindow' insulating glass and matching spandrel: a unique display of unity.

The developer of Denver's Greenwood Plaza had two thoughts in mind when design planning began for his three-building office complex: Design to give occupants full advantage of the view; but design so that the building will not intrude into the beautiful, natural setting.

The architects concurred. They chose PPG's Solarban 575 Twindow reflective insulating glass and the new matching Solarban spandrel units to complement the earthy tones of the aggregate structurals. The matching appearance of the Solarban glass units and the spandrel units (a new glass-metal type) combine to give the impres-



on of solid glass walls, with niform reflectivity of the natualized surroundings.

This total glass approach helps ettle the development into its site, and also preserves the natural eeling of spaciousness.

A great deal of practicality enters ne picture, too, since the high nermal performance of the Solarban 75 units contributes significantly occupant comfort. And the natching, reflective Solarban pandrel units outperform convenonal single-glazed spandrel prodets in both U-value and shading oefficient. Solarban spandrel units re opaque and need no backup

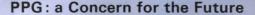
material for visual purposes. And because of the low U-values, field installation of backup insulation material is not required.

See PPG about Solarban Twindow units—and the new matching spandrel units—for your next building. Early in the design stages. Write PPG Industries, Inc., One Gateway Center, Pittsburgh, Pa. 15222.

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INTERROYAL OPENSCAPE—a system of partition-supported work surfaces and storage units with compatible floor-supported components.

problems...allow for continuity of growth with the efficiency and convenience of one source: InterRoyal

PREVIEW

NEIGHBORLY NAHB

When The Kling Partnership designed the National Association of Home Builders new national headquarters now under construction in Washington, D.C., they wanted the building to demonstrate NAHB's concern for bettering the environment. From top to toe the building shows consideration for its neighbors - especially those on high and those on foot.

NAHB kept their headquarters in Washington so they could remain effectively close to the scene where national environmental policies and laws are made. Then their architects came up with a building which on three sides makes notable

contributions to Washington's open space. It is rare for a private group to provide so many civic amenities. The building occupies less than 50 per cent of the site, leaving room for a generous public plaza, a park with flowering cherry trees and azaleas, and a tree-lined sidewalk which helps to preserve the character of Massachusetts Avenue.

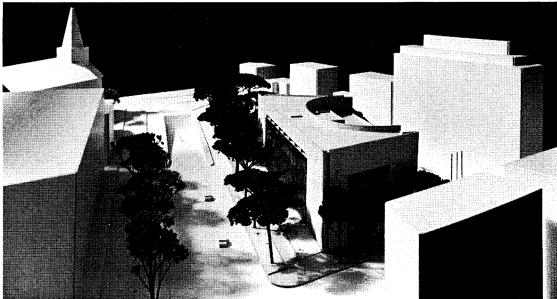
The plaza is essentially flat with steps on the south and west and a ramp for paraplegics on the east. A pool and fountain will relieve its flatness, humanize its scale and alleviate vehicle noise. NAHB will have exhibits here, usually photographic shows concerned with housing and the environment, but an occasional art show.

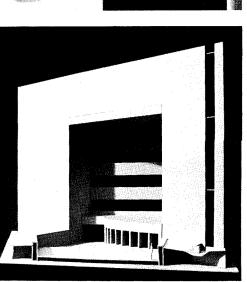
The park which fills out the eastern end of the site is demarcated by a low sloping wall which fences out the public as politely as possible without blocking the verdant view. NAHB wanted a courtyard and wooded path for the enjoyment of its employees, and then felt the need for "security." One can hardly hold the poignant decision in favor of a-fence-that isn't-a-fence against them. But at the same time it is sad to see another reaction to the current state of litter and crime built in to the environmenteven if there is a public park only a block and a half away.

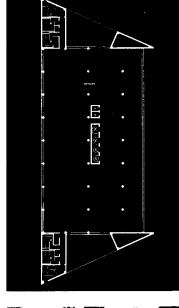
The building is trapezoidal because of the shape of the site, but the office space on the four floors above ground level is rectangular with utilities and lavatories in the triangular sections at each end (see plan). On the ground floor is a small theater, exhibition area, lounge, loading dock and office services. The basement houses a fan shaped conference center, kitch-

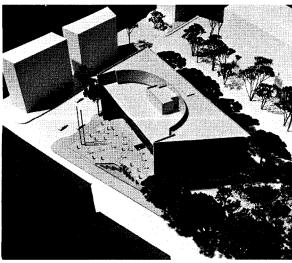
en, conference and committee rooms and storage. Beneath that is a 56 car garage, another welcome contribution to open

The building is emphatically sculptural, especially on the ends with the deeply inset office window walls, and the massive brick walls which frame the insets at a scale commensurate with the big space surrounding the building. (It can be seen from 500 feet away on the eastern, Thomas Circle side.) The curved facade of the lounge (bottom center) is a bold and graceful form which provides a close and expansive relationship to the park. The roof is also sculpturally conceived for the benefit of those in higher buildings nearby. The mechanical equipment area is marked off by a semi-circle which the rectilinear elevator penthouse punctuates.















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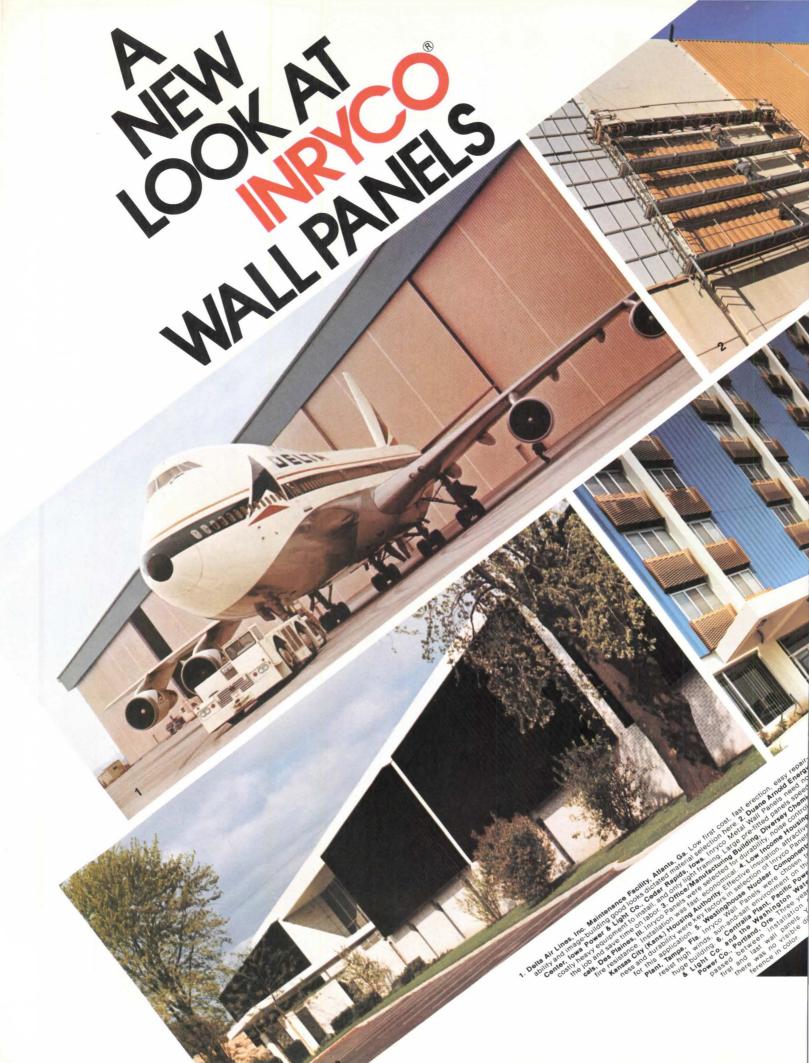
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BOOKS

A GOD WITHIN. By Rene Dubos. Charles Scribner's Sons, New York, N.Y. \$8.95.

REVIEWED BY FRAN P. HOSKEN

"Entheos"—a god within. From entheos is derived "enthusiasm," one of the most beautiful words in any language. So says Rene Dubos. And with great enthusiasm, I recommend to every architect, and all those concerned about the quality of life, Dubos' new book "A God Within".

Dubos provides the rationale and detailed documentation of what many of us believe but too few are able to live and practice. For architects and environmentalists, this book also provides detailed ammunitionby a highly respected and widely recognized scientist who speaks our language. He eloquently pleads what architects have pronounced. Indeed, I can only regret that Gropius, my teacher at Harvard, cannot join in speaking for the architectural profession. Because what Gropius said and taught is now backed up scientifically by Dubos' findings.

In a nutshell, one message of his book, especially important to those professionally concerned with the environment, is that the quality of our life, culture and well being are not the same as economic affluence and technological growth; on the contrary, as recent history has proven.

"A decline in the quality of life coinciding with an increase in economic affluence symbolizes the trend towards the absurd in technological societies." And Dubos eloquently argues against our hurtling headlong

Fran P. Hosken is FORUM'S CORRESPONDENT-AT-LARGE.

and blindly down the path of ever more sophisticated antihuman gamesmanship and technology. This is precisely what many thoughtful architects, and those concerned with building the human environment, have preached to unhearing ears. But never before have we had such an array of allies and never before has there been such important and growing support right from the heart of the scientific establishment.

All I can do is advocate becoming familiar with Dubos' excellent and eloquent work, so you can use its carefully documented findings when presenting your latest projects to the technology and growth-minded corporate establishment. Because in the final analysis, those who are implicated in building the future environment have also the best chance to act as educators, they must in their own work physically demonstrate to their clients the heart of the problem which is to rebuild the environment in more humane ways.

Dubos argues that because of our passive acceptance of technological and economic growth we are programed as victims, and fail to use technology as a tool for human needs and humanistic ends. It seems to me architects and builders have always faced this very problem, and they have at times magnificently dealt with it. Take, for instance, the superb dome by Brunelleschi of the cathedral of Florence where great technological innovation was bent to spiritual needs; or the masterbuilders of the medieval cathedrals, who were really superlative engineers. There are hundreds of examples. But what of today? Somehow it seems to me architects, especially in this country, have only paid lip service to the staggering problems of the environment.

To be sure, the media have pounced on this issue some time ago and have just about smothered it to death by their uncomprehending embrace. It is high time for a professional reappraisal and a more educated view after the media have abandoned these pastures and moved on to new excitement and greener fields. Certainly the architectural profession which has done spade work quietly, and for as long as I can remember, should step into this vacuum and take the lead of the wary public, which is becoming increasingly confused.

Now that the environment and the quality of life have become established issues, as documented by the U.N. Conference on the Human Environment in Stockholm this past June, it is important that those who have been professionally concerned with those problems reorganize and take the lead. This is the challenge to the profession. To put it in Dubos' words, "It is widely realized that hope for the future lies not in technological fixes but in more intelligent social design and in a reformulation of the intangible values and sanctions of our culture."

Certainly the architectural profession has always been concerned with using technical tools for human ends, of creating new human environments from the available arsenal of technological inventions. By the all important status as professional intermediaries between the human users and the often onesided profit and technologyoriented clients, the architect and designer is in a key position to redirect the whole process. He must represent the intangible values of the environ-With more thoughtful ment. scientists like Dubos, rather than the technology-prone computer feeders who have dominated the scene, some real changes can be made.

Certainly professional the schools across the country should take up this challenge in a much stronger way than they have. The young people who are going to be directly concerned in shaping the environment in which we live must take the lead and change traditional ways as well as their own schools where needed. Unfortunately professional schools, especially those who once were leaders such as the GSD (Graduate School of Design) at Harvard, have been silent in the important environmental concerns. The young architects and students in Stockholm that I met at the U.N. Conference on the Environment were outspoken and active. They not only initiate new ideas but work for them politically. They are contributing successfully to building a new environment and new attitudes.

Dubos was not only a speaker at the AIA Annual Convention

but he was a speaker at the U.N. Stockholm Conference. He shared the platform at the Folketshus, where the U.N. plenary meetings took place, with Barbara Ward, his co-author of another remarkable book, "Only One Earth-The Care and Maintenance of a Small Planet." This volume was prepared with the help of a 152 member committee of corresponding consultants from 58 countriessome of the most eminent experts from all environmental fields. It is a summary of the state of the art circa 1972. Maurice Strong, the Secretary-General of the U.N. Conference, commissioned the book as a rationale and summary of all the very broad concerns voiced at the conference. In his speech at Stockholm, Dubos referred to some of the themes of A God Within, praising environmental and biological diversity juxtaposed against our machinedictated uniformity, issues that are only too familiar to archi-

Dubos says, "Biological uniformity of mankind and the social diversity of human life are the paradox inherent in the dual nature of man." Biologically speaking, man has not changed for 50,000 years, but social and environmental diversity are not only facts, they also immensely enrich life. As a scientist, Dubos gives ample examples. But as an artist, he also addresses himself to the manifestations of diversity in our environment, which he calls the "genius loci" -the spirit of the place.

Dubos who also was a keynote speaker and a participant of the Ekistics meetings in Athens last July is an apostle for the environmental professions. He is one most important ally as he is firmly in the scientific camp. Others will have to be sought. Hopefully there will be architects who will come forth and speak up loudly, as Dubos is doing now, and join him to take the lead.

But to those who in very personal ways appreciate not only the quality of the environment but also the quality of language and words, I like to recommend once more that you read A God Within. Because Dubos is a master of the fine architecture of composing words to create rhythm and a quiet clarity of expression.



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Owner: Michelson Associates, Newport Beach, Calif. Architect: Riley & Bissel, Newport Beach. Structural Engineer: Robert Lawson, Newport Beach. Contractor: B. H. Miller Construction Co., Newport Beach.



columns=fire protection.



Should the columns be exposed to flame, the fluid inside the columns absorbs the heat, and convection currents circulate the water solution within the closedloop system. Heated fluid rises and cooler solution replaces it, literally giving heat the run-around.

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Owner: The Irvine Co., Irvine, Calif. Architects: Craig Ellwood Associates/James Tyler and Robert Bacon, Los Angeles. Structural Engineer: Norman-Epstein, Los Angeles. Me-chanical Engineer: (Liquid-filled col-umn system design) Paul S. Bennett, Los Angeles. General Contractor: J. B. Allen & Co., Anaheim. Fabricator/Erector: Lee & Daniel, Azusa.

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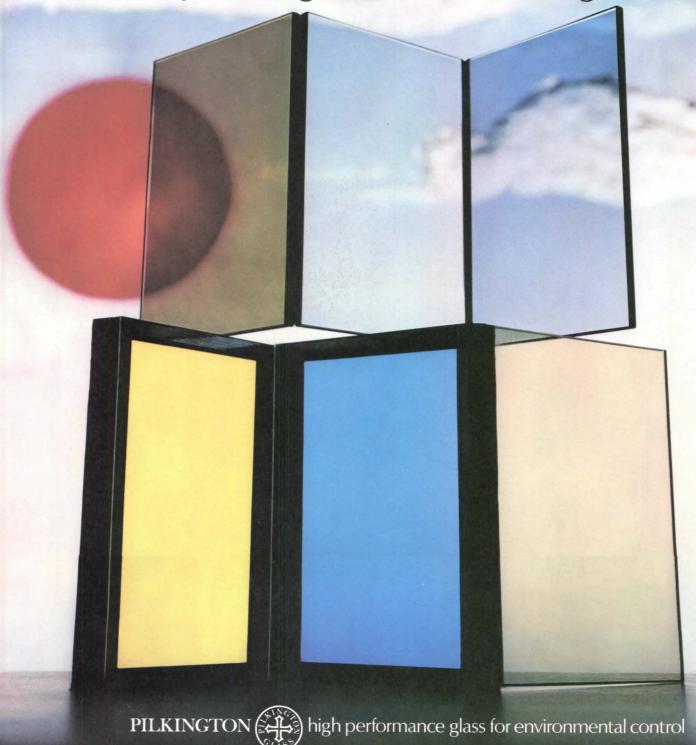
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FORUM

One of T. S. Eliot's favorite songs was "All Aboard St. Louis." That is only natural, considering he was born there. Trouble is, Eliot (like so many since) actually got aboard, and was content to enjoy the song (and the city) from afar.

In recent years, St. Louis has been suffering an increasing self-exile rate. But the temperament of this trek has little to do with poetry. It has to do with safety and stability, with protection and potatoes, and with the feeling that downtown just isn't the place to find them.

The opposite may turn out to be true. And there are rumblings of redemption to prove it.

The most resounding rumble came last spring when St. Louis blew the whistle on its public housing and blew up three of the 33 apartment blocks at Pruitt-Igoe, that two-generations-old detention facility in the north section of town.

Another rumble came last summer when HUD refused to fund further demolition, holding up redevelopment plans for the project, until the city approves a new convention center in the area. There are still about 600 families incarcerated in ten of the buildings, and there are heated questions about why HUD decided on this last-ditch effort to do nothing for them. Right now, the convention center seems assured. The 600 families languish.

The public debate about housing, now raging in St. Louis, has reached national proportions. The reason is *Defensible Space* by Oscar Newman, Director of New York University's Institute of Planning and Housing. Based on a three-year study which was commissioned by the National Institute of Law Enforcement and Criminal Justice, *Defensible Space* is not just the most important housing book in recent years. It is the most important human book as well. Sadly, on both counts, it is 20 years late.

Mr. Newman's study is a statistic-studded indictment of highrise public housing. The kind which lords over tenants in terms of physical scale, isolates them in terms of social scale, and consigns them to subsistence in terms of basic services. It reports that the highrise crime rate is seven times that in lowrise housing. And it documents the less blatant behavioral distortions brought on by the expedient, stock solutions of our housing agencies. Perhaps the most important aspect of Defensible Space is not the research it contains, but the research it calls for. While the socalled "soft" sciences have been given some very hard support here, the study clearly points to the need for sustained inquiry about how the design of our physical surroundings enrich or rob our citizens. That is an inquiry which architects, like Oscar Newman, must push for and participate in if architecture is to be, more than symbols of distinction, a source of sustenance for the daily lives of our people.

Pruitt-Igoe was, in many ways, the kind of "Wasteland" we needed. It has all of the pathologies, and none of the poetry, which T. S. Eliot imagined. There is no more room for deception. Now, almost 20 years after the start of Pruitt-Igoe, St. Louis has an opportunity to set a salutary standard in housing, just as it is setting a standard in preservation with the rescue of the Old Post Office for hotel and commercial purposes. Redeeming Pruitt-Igoe is no longer just a matter of conscience; it is a matter of conscience supported with statistics. 20th century life is a compromise between both, except that this time, human values, not dollar values, have taken priority. That, ultimately, is both the biggest savings—and the biggest dividend.—WILLIAM MARLIN

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"The time will come when New York will be built up, when all the grading and filling will be done, and when the picturesquely varied, rocky formations of the Island will have been converted into formations of rows of monotonous straight streets and rows of erect buildings."

EXHIBITS

OLMSTED REDIVIVUS

The two exhibitions of Frederick Law Olmsted's life and work now running concurrently at New York's Whitney Museum and the National Gallery in Washington, D.C. can be considered, in an unfortunate way, as avant garde history. For it will be years, at the rate we're going, before the environmental consciousness of this country catches up with Olmsted, at least to the extent that high school history texts will seem inadequate unless a few pages refer to this man and what he accomplished.

A century ago, he saw the need for extensive planning if American cities were to ever become civilized places for people to live and labor in. He was, as these exhibits so thoroughly

convince us, our greatest designer of urban parks and our first major conservationist. He was also the father of landscape architecture and our first urban theorist. Olmsted, and the talented Calvert Vaux, his architect friend and collaborator, changed and shaped the landscape of this country on a scale that will surprise many who visit these two shows.

The Washington exhibit is more national in scope, ranging from Yosemite National Park to the community of Riverside, Illinois, and to Boston's Fenway Park. The show at the Whitney focuses primarily on his New York parks, which include every major one: Prospect and Fort Greene, Morningside and Riverside Parks and, of course, his masterpiece, Central Park.

Yet the impact and meaning of both shows are equal. They present a man whose abilities

"It is the main duty of government, if it is not the sole duty of government, to provide means of protection for all its citizens in the pursuit of happiness against the obstacles otherwise insurmountable, which the selfishness of individuals or combinations of individuals is liable to interpose to that pursuit."

put him in the company of Jefferson and da Vinci. The breadth of his vision is dramatically conveyed by the panoramic scenes projected by a system called Circlescan, which was developed by Dr. Eugene Trachtman and used in the 1969 Boston Museum of Fine Arts Centennial. It gives a three dimensional effect through the projection of 360 degree images across a huge, circular screen.

The pictures, as well as the other exhibition materials, were drawn from thousands of items in the Library of Congress and other archives and museums. They include drawings by Vaux; plans, notebooks, photographs and personal papers and letters.

But there is more to these



ELEVATION

Drinking fountain design by Calvert Vaux and J. Wrey Mould.

exhibits than history and memorabilia, more than a feeling that a reputation has been magnificently restored. For, beside documenting Olmsted's resignations, reappointments, and the opposition he encountered in building and protecting his parks, the two shows remind us that the struggle to preserve them has never been won. The 19th century had its share of proposed intrusions (a world's fair, a horse track, Grant's tomb) and they keep emerging in the 20th century with alarming regularity.

But if history is written by the victors (and revised by their relatives) then Frederick Law Olmsted, with all his successful fights against politicians and self-aggrandizing patrons, should be guaranteed a few footnotes. At least, that is the effect one hopes these exhibits will have.

"DON'T MAUL THE MALL"

On the same night the Olmsted exhibit opened in New York dozens of pickets patrolled the entrance of the Whitney Museum, protesting a proposed sunken theatre in the current rehabilitation plans for the Central Park Mall.

The circular theatre which will be designed in consultation with Architect Edward Durrel Stone, would be part of a \$300, 000 project for which Blooming dale's department store has of fered to pay half the cost, seeing that it's their 100th anniversary

Joining the protestors were delegations concerned with the deterioration of two other parks in the city—Prospect Park and the historic Fort Greene Park where over 11,000 soldiers who fought in the American Revolution are buried.

BREUER RETROSPECTIVE

"Marcel Breuer, A Retrospective 1922-1960" opened at the Metropolitan Museum of Art November 30th. It will run through January 14th. Breuer is the only living architect to have a show at the Metropolitan. Clients former students, friends and colleagues have worked together on this show honoring him.

ENVIRONMENT

SQUEAKY CLEAN

In case your spirits were lifted by Congress's passage of the \$24.6 billion clean water bill the October 4 vote was 74 to 0 in the Senate and 366 to 11 in the House; and the vote over riding Nixon's veto was 52 to 12 in the Senate and 247 to 23 in the House—you might as wel know there is a rather discouraging explanation for it.

The bill provides that \$18 billion would be for the Federa share—75%—of the cost of waste treatment works. \$2.75 billion is earmarked to reimburse states and cities for the Federa share of projects already completed or under construction.

A year ago Nixon proposed a three-year program with \$6 billion as the Federal share for waste treatment plants, that is one third of the amount provided in the bill that has become law. In the Nixon proposal the Federal share would have beer 50% rather than 75% and there was no provision for reimbursing states or cities.

It has been pointed out that although the bill which came through appears to quadruple Nixon's request, the administration figure would have been spent over the next three fiscal years and the \$24.6 billion will be keyed to projects begun in the next three years but built over nine years.

The disappointing hitch is that legislators on both sides of the aisle, anticipating Nixon's objection that the bill would increase inflation and taxation, took pains to say that they intended the Federal share of \$18 billion as a ceiling; and Nixon, in vetoing the bill and calling its supporters "charge account Congressmen," was hasty to say that he would spend less. In revealing this The Wall Street Journal says, "Realization that all sides were coming out with some advantage explained the lopsided votes in both houses to override

Thus after two years of congressional deliberation this bill comes out smelling like a rose that has no thorns. Within a year the Environmental Protection Agency must issue guidelines on the "best practicable" control technology for polluting industries to use in reducing discharges of contaminants; and it must publish rules limiting effluents from newly constructed plants. The "best practicable" equipment must be applied to existing sources of industrial pollution by July 1, 1977. And the "best available" technology must be in use by all industrial polluters by July 1, 1983. The purpose is to end all discharges of contaminants by 1985, but the bill doesn't provide any penalties for plants that fail to meet that goal.

William Ruckelshaus, administrator of the Environmental Protection Agency, said in the conclusion of a 33-page letter strongly recommending that the President sign this bill: "It seems reasonable to me to spend less than 1% of the Federal budget and two-tenths of 1% of the gross national product over the next several years to assure future generations the very survival of the gross national product." Well, if it has to be in terms of profit. But when will we be able to go swimming anywhere in the country without blowing bubbles and sloshing through dead fish.

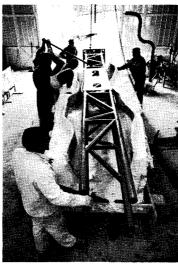


The leaves were moved in three parts; the trunks came whole.

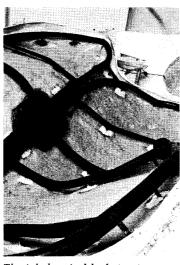
AR

SOMETHING ELSE!

In his remarks at the October unveiling of his Four Trees on the Chase Manhattan Plaza, Jean Dubuffet said that the L'Hourloupe cycle of which this sculpture is a part "is conceived as the figuration of a world other than our own . . ." It is hard to decide whether this piece is welcomely whimsical or ridiculous on its site. It is as if a little corner of an elfinland had misguidedly landed on one of those urban clearings known as a plaza. Its pert scalloped leaves and gnarled trunks, basically white with energetic black reticulations, pose either laughably or laughingly amid the somber, Wall Street, grey rectilinearities. This piece is less Mayan, less dragonish than much of Dubuffet's work and lacks its proliferation of caricature. Knowing his bold blues and reds one can hardly escape the thought that those who were responsible for eliminating color from this piece were overcome with the overseriousness of the place, of money and of art. This decision may be seen as an undertakerish bow to the powers that be, when they had a chance for a thoroughly spritely challenge. Anyway it is a wonder to stand among Four Trees and look up seeing the parallels of the sur-



One of the tubular trusses.



The tubular steel leaf structure.

(continued on page 67)

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SHARDS

Smashing evidence of Chicago's architectural heritage evokes both reverence and remorse

Everyone knows the past is for pulverizing. But that doesn't mean you can't make money off it. One of the hottest real estate games going involves the feverish antiquarian run on surviving fragments of the Chicago School.

Louis Sullivan himself might have taken it philosophically. We take it as insufferable. The decimation of the Old Stock Exchange earlier this year was, fundamentally, a cop-out on the economic and cultural potential of a living, working landmark.

In some ways, it's poetic justice that Windy City wheeler-dealers had to go all the way to Dallas to find an architect to design the landmark's successor there on LaSalle Street. Several Chicago firms flirted with the prospect but, in the end, turned it down. They deserve AIA commendations for, let's say, civic responsibility.

If you can't stand the tone of this, tough. There can be no sitting on fences — especially when those fences happen to be turning points in the history of architecture and urbanism.

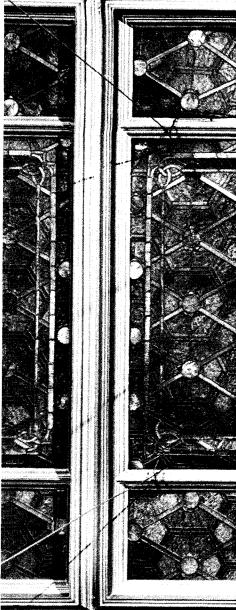
Caisson-anchored and glassic, the Stock Exchange was much more than a restoration problem. It meant regeneration of a downtown which has been, of late, all too given to tall towers and gaping plazas with no respect to the importance of its pioneer skyscrapers.

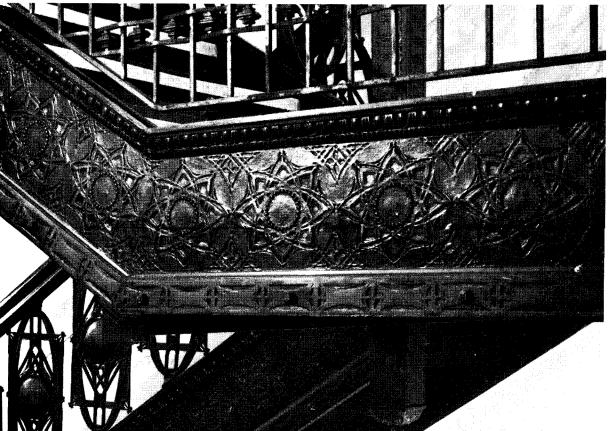
The irascible Sullivan once said that the social significance of the skyscraper is, in finality, its most important phase. It was that significance, as well as its profit potential, which escaped notice. The real estate men who spoke about their rights as property owners, about their rights to a fair return, couldn't have cared less for the fair return which saving this building could have represented for society. The trouble with these defenders of free enterprise was, in the end, that they refused to be enterprising enough. "Fair return" is a concept which "free enterprise" must expand







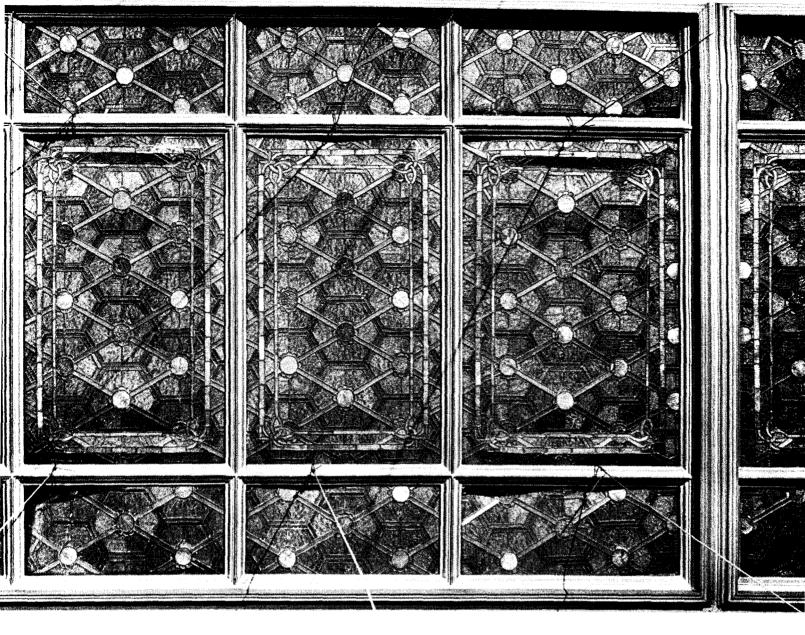




to include the community as well as cash aspects of development. This has occurred in other areas of industry. Will the area of property rights be the last stronghold of indifference to environmental values?

You can count the remaining masterworks of the Chicago School on two hands; you can count the initiatives to save them on two fingers.

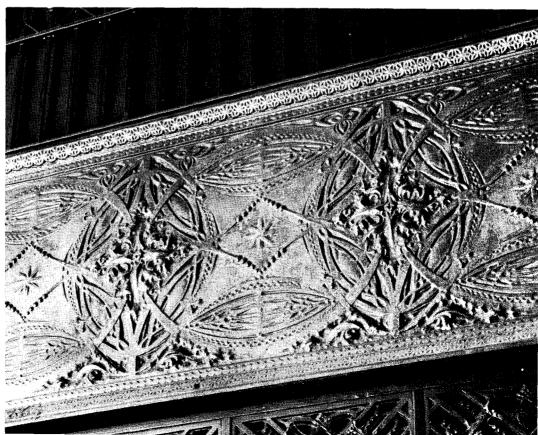
One is a special commission appointed by Mayor Richard Daley who, believe it or not, really wants to save and use Chicago's landmarks but, understandably, doesn't know quite how to go about it. This is being looked into by Architect William Hartman of the Chicago office of Skidmore, Owings and Merrill—the Mayor's close counsel on cultural matters. Mr. Hartman, working closely with the city's landmarks commission,



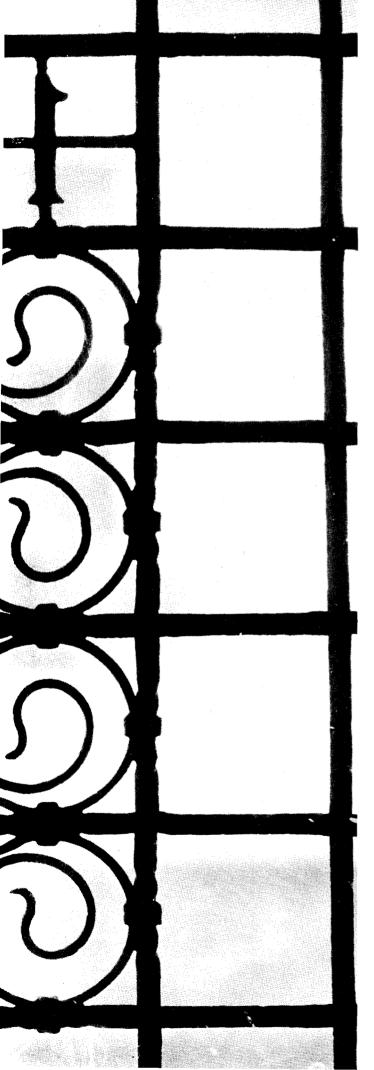
and with the economic and planning powers that be, is approaching the preservation of Loop landmarks as a single development package. The big challenge is to work out zoning incentives for adaptive use which are as rewarding as those which guarantee demolition.

A second initiative, covered in the next section of this issue, is really an educational one. The Chicago School of Architecture Foundation, housed in Richardson's Glessner House, is tackling the problem of arousing public interest in the city's architectural heritage, one which is at least as lasting as the Transcendental flowering of New England literature or the New Orleans genesis of Jazz. Ultimately, it is education that is basic to sustaining the cultural touchstones of a people.

PHOTOGRAPHS: By Orlando Cabanban, except pp. 30-31 by Richard Nickel.







GRANITE HUT

H. H. Richardson's Glessner House is sowing new oats on Chicago's South Prairie Avenue

BY M. W. NEWMAN

On one early autumn night this year, a Chicago School wind went hooting along Prairie Avenue a mile south of the Loop. It iced into the vinewalled sculpture garden of Glessner House and drove some 450 partygoers inside. Since everyone was there to celebrate the garden's restoration, this seemed rather a frigid salute, climatically speaking, to Henry Hobson Richardson's only remaining Chicago building.

But not at all. The granitic old fortress, a great big buster of a building, simply reached out with its Richardsonian bear hug and welcomed everyone in. At age 86, a certified Chicago landmark, it survives and flourishes, more serenely indifferent than ever to the buffeting of wind and rain and soot and all turns of fate. And why not? Richardson, after all, designed it that way.

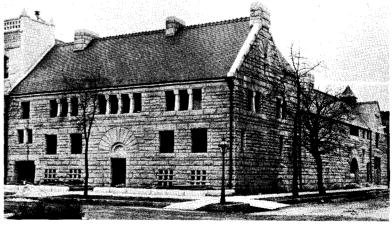
Glessner House, in fact, is leading an entirely new life. For it has become the very model of modern preservation, the new center of Chicago's vivid architectural life. One walks up those magnanimous, 12-foot-

Mr. Newman is Book Editor of The Chicago Daily News, Executive Editor of Inland Architect, and Chicago correspondent of FORUM. wide front steps and cheers this great save by the Chicago School of Architecture Foundation. Rooted as the foundation is in the city's architectural soil, it owns and is headquartered in this ground-hugging mansion that helped to clear the way for 20th century functional planning. Like the foundation's name, that is no small thing.

Hewn out of 8-inch-thick Wellesley granite and warmly oaken inside, Glessner House today serves as a center of architectural offices, education, exhibitions, meetings, lectures—and is a tourist attraction as well. Not bad for an old house, on a half-forgotten street, that nearly died of neglect six years ago.

As of now, Glessner House has gone about \$200,000 along the road toward a \$350,000 restoration job. Built into it is the concept of ongoing economic usefulness; it works for its living. The 35-room house, in short, is as robust and lively as Richardson himself ever was. It has had to be, to endure in a city that regularly, ruthlessly knocks off other architectural masterworks of its vintage and distinction.

Probably, in Lewis Mumford's words, it is Richardson's finest



Completed in 1886 (above) at a cost of \$74,500, Glessner House was built on three city lots. Its massive character is relieved by delicate details like the grillwork on the entrance door (opposite).





The upstairs reception area (left) as it appeared during the Glessners' day. This overlooks the main reception hall on the ground floor, which is shown restored and in public use (above).

house—even if the Mumford of Richardson's day, the esteemed critic Montgomery Schuyler, didn't think so. Writing in 1892, Schuyler grumped about Glessner House's heavy walls and few, small street windows. All this was defensible only in a military sense, he quipped. Schuyler's sally lives on.

And it may be that the house's Romanesque ruggedness has been its salvation; that, and the fact that it is out of the bull-dozing path of progress; no one (as of this writing, anyway) wants to rip it down and put up 50 stories in its place.

Defensible, then, the building clearly is; formidable, surely; but exceptionally functional as well, and that is what Schuyler somehow missed seeing. With foresight Richardson turned its burly back to the street, thrusting its low "L" shape right up to the corner lot line. How openly the spaces flow within (a revelation if not a revolution in 1886, when the standard was boxlike rooms around a central hall). And the whole thing is massed artfully around a spacious, serene courtyard-garden, where the house puts forth many large, arching windows to catch the sunlight.

Indeed, it is on record that a certain German architect, identified in the Chicago Daily News of April 7, 1939 as "L. Mies van der Rohe, recently arrived in Chicago," hastened to visit the house. "The same was true of L. Moholy-Nagy, who came here several years ago," the article went on, adding: "Both visitors caused surprise by revealing that they knew more about the architectural features of Glessner House than did its present occupants."

But is it all that surprising? Lurking behind those Richardsonian massings and muscled arches is a relationship between indoors and outdoors not all that different from Mies' court houses. In fact, when the time came to restore Richardson's master work, it turned out that Mies himself had the original drawings—make of that what you will.

Glessner House's metamorphosis into architectural center has been a long one, a remarkable one. Prophetically enough, it was John Jacob Glessner's very wish, stated in his will, that it be maintained as an architectural "museum, library,

gallery and educational institution. . ." He knew its importance, from the start.

Glessner, a vice-president of International Harvester Co., was one of those cultured businessmen-patrons of 19th century architecture. When he decided to build at 18th Street and Prairie, on a prime corner in what was then the city's Gold Coast, he wanted a substantial, useful, up-to-date but not showy house. His neighbors were Pullmans, Fields, Armours. And he wanted the supremely eminent Richardson as designer.

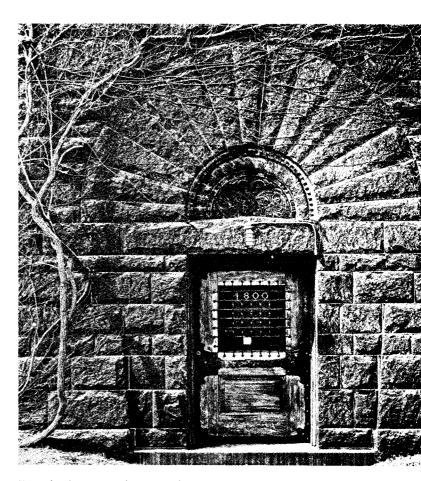
But would that master take on anything so small as this \$75,000 house? "Nonsense," the architect assured him, "I'll plan anything a man wants, from a cathedral to a chicken coop. That's how I make my living."

No chicken coop, Glessner got a 20,000-square-foot mansion (although Richardson did build a pigeon roost into the carriage house). Nearly 150 feet long on its 18th Street side, it started life rich with William Morris drapes and wallpaper (now vanished) and brown wainscoting and ceiling beams resting on wrought-iron hinges (still there). The main staircase is grand, the fireplaces marble, the spaces imposing. The house has a brandy-and-cigars flavor.

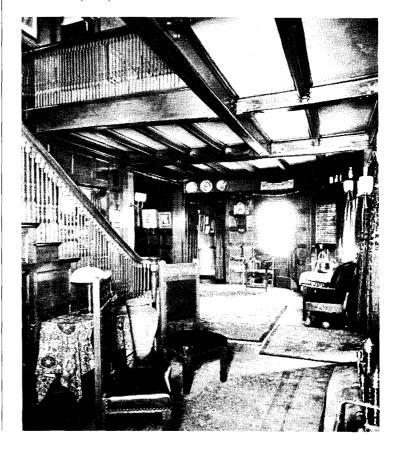
But, of course, it's no cathedral, either. The entranceway is rich, yet subdued; its ornamentation spare. For this was a city house for a smoky corner (the Michigan Central Railroad of those days was a block away, as the house's sooty patina reminds us), with a cloistered 100 x 40-foot courtyard. "Have you the courage to build the house without windows on the street side?" Richardson had asked Glessner, who gallantly said yes.

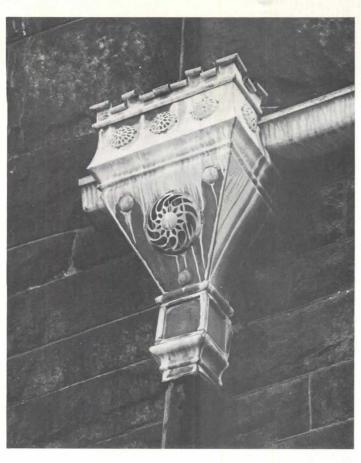
Cut down early by good living, the bon vivant architect died shortly before the house was finished, but the Glessners reared a family there; Mrs. Glessner's Monday literary salons were an institution. Not everyone, however, was as enchanted with the house as the landscape designer Frederick Law Olmsted, who thought it beautiful. Railroad car magnate George Pullman lived across the street and groaned, "I don't know what I have done to have that thing staring me in the face everytime I go out."

But all that was eons ago as

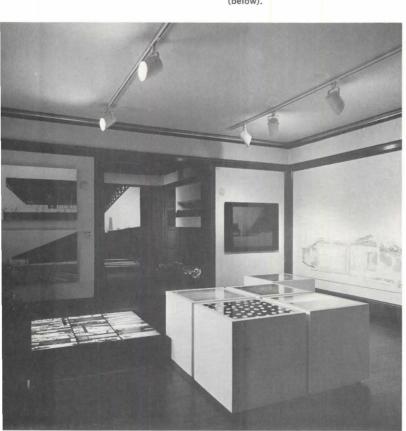


The deeply recessed main door (above) is a deceptive introduction for the open, fluid spaces within. In the early days of the house, such spaces were encrusted with voluptuous rugs and furniture by William Morris and Isaac Scott (below).





At Glessner House, even drainspouts were designed as works of art (above). Inside, the expansive parlor and dining room areas have been adapted for exhibition use, such as this show, early last year, about the new McCormick Place on the Lake (below).



we measure urban time. Pullman and his house and all those ghosts are gone; the Gold Coast long since has relocated uptown; and Prairie Avenue declined into a gap-toothed nondescript, mourning secret losses. By 1936, Glessner, aged 92, was dead, leaving his treasured fortress to the Chicago Chapter of the American Institute of Architects for use as an architectural center.

And here began 30 uncertain years for the house. Depressed by the Depression, the AIA was unable to accept, and returned the house to the Glessner heirs. In 1938 they passed it along to Armour Institute of Technology (now IIT). The university used it briefly for Moholy's New American Bauhaus and later as a research center, but in 1958 sold it to the Graphic Arts Technical Foundation. By 1966, the house was up for sale again, near death.

In New York, an alarmed Philip Johnson heard about all this and graciously offered to buy the house for the asking price of \$70,000 if some civic group would preserve and use it. (Johnson, an historianturned-architect, ranks Richardson as America's greatest 19th century architect.) Almost incredibly, there were no takers.

At this dismal juncture, Richard Wintergreen, a young draftsman in Mies' offices, went to look at the house (he happened to be looking for an apartment), knew what he had to do and did it. With several young friends, most of them only a year or two removed from school, he formed a not-for-profit organization to buy Glessner House. And that's how the Chicago School of Architecture Foundation was born.

The house's owners obligingly lowered the price to \$35,000, and architects Harry Weese and Ben Weese (who now is honorary president of the foundation) took charge of fund-raising. With gifts from them and other architects (including Philip Johnson) and architectural buffs, the foundation acquired the house and began repairs, which it needed aplenty. Vandals had stripped brass light fixtures, doorknobs and even the copper lining from old bathtubs. The roof leaked, the plumbing froze at the worst times, the electrical and heating systems required first aid, layers of paint

had to be peeled away, the courtyard had been paved over.

Volunteers began ripping out lab sinks and fluorescent lighting. And, quite slowly, progress was made. Architect Robert W. Peters, for example, began restoration of the first-floor library, whose centerpiece is a massive desk designed by Richardson. Collections of furniture and architectural ornament came in, and so did some of the Glessners' Victorian furniture—saved by their grandchildren on a New Hampshire farm and now on display.

In mid-1970, a management consultant firm was brought in, and a full-scale program for the house emerged. Architect Daniel Brenner was commissioned to remodel it for offices and other revenue-producing uses. Architectural buff Jeanette Fields signed on as executive secretary. Money began to feed in from various sources, and exhibitions of architectural work were launched.

The Chicago AIA, which had been unable to accept the house in 1936, quit its downtown offices in 1971 and set up shop in several large spaces on Glessner House's second floor. Other architectural groups also took space in remodeled bedrooms; the attic was converted into a library; the stable will become a 250-seat auditorium; some of the original wall coverings and carpets will be recreated as funds become available. With all this going on, perhaps even Prairie Avenue will regain luster.

Restoration has been a painstaking and tedious job for everyone concerned. The building leaked badly from top to bottom. The combined efforts of roofers and plumbers have now rejuvenated the east third of the house and all windows have been reworked and glazed to seal out the weather and function smoothly. The schoolroom fireplace is still effluorescing and some further exploration of driveway drainage may be necessary. The electrical work has been a major operation; first requiring the usual exploration, removals and replacements plus the additional lines to provide services equivalent to any of the new office buildings. Air conditioning, lighting systems and power for business machines have been installed. All wiring is concealed and all pub-



Henry Hobson Richardson looms lovingly over the library (above) where docents meet to plan architectural tours of the Chicago area. The original room (below) was, like the other spaces, heavy on furniture, most of it designed by Richardson's firm. Some of these pieces have been donated by Glessner heirs to aid the restoration.





The courtyard, recently restored, seems a little too Cartesian for so Romanesque a mansion. Already, however, it is being softened by intensive use and by a small grove of linden trees which surround a small fountain and fan-shaped pool that recalls the octagonal bay of the dining room area.

KEY TO PLANS

- 1. Book store
- 2. Coats
- 3. A.I.A. storage
- 4. Mail
- 5. Work space
- 6. Foundation storage
- 7. Custodian's apartment
- 8. Furniture storage
- 9. Catering kitchen
- 10. Mechanical
- 11. General storage
- 12. Restoration

- 13. Interpretation (exhibits)
- 14. Display and storage
- 15. Lounge
- 16. Auditorium and exhibition
- 17. A.I.A. offices
- 18. Conference
- 19. Reception
- 20. Foundation offices
- 21. Conference and lecture
- 22. Inland Architect offices
- 23. Landmarks Preservation Council
- 24. Future tenants
- 25. Library and archives

lic building code requirements for emergency lighting systems, cutoffs and exit signage are being met. Similarly all duct work has been snaked through walls and ceilings or occupied spaces, reactivating some of the grilles used in the original hot air system. All vestiges of the interim installation of steam heating have been removed and erased.

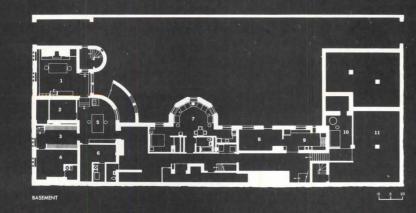
The main hall of the house has been a clear guide to its essential original quality. The oak paneling and trim set the basic Richardsonian character, obscured as it may have been by a Victorian compulsion to overload every exposed inch with furniture, rugs, lamps, draperies, throws, bric-a-brac and photos. Only a constant and determined corps of housemaids could ever have kept such a horde of objects in shape.

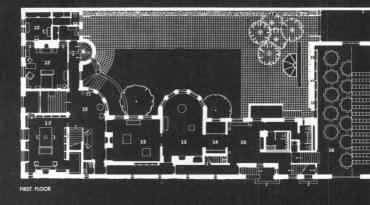
Those areas set aside for restoration, such as the front stair hall, library, musicians' balcony and court bedroom, now recall the original environment without too literal a recreation. Since the woodwork set a dominant tone the architect felt it essential to remove the encrustation of decades and echo the character of the remaining stair hall paneling. The woodwork operation was a joint effort of the carpenter and the students and required the kind of time and patience that only their unique collaboration made possible.

The second floor east bedroom section has undergone a major remodeling for the AIA. Considerable wall removal has provided an impressive general office space and a generous and attractive Director's office The corner bedroom functions as the Board Room serviced by a new kitchen in adjacent space. Walls and ceilings have been replastered or patched, and the walls are being covered with a durable, handsome fabric. The space is carpeted, together with all other areas in the east section; the main stair hall floor remains exposed, graced with oriental rugs. The Foundation is securing specially fabricated desks, files, cabinets, counters and tables which will be loaned to the tenants and guarantee a quality and consistency in their spaces.

So, the house, therefore, is no museum, no glazed fossil. Rather, it is a symbol of landmark-saving in a city that badly needs such demonstrations ("landmarks are assets, not liabilities," Ben Weese points out). Its basic role is to promote an understanding of Chicago's unique architectural heritage, yesterday's and today's. One of its most effective programs, funded by the Illinois Arts Council, has been the training of architectural tour guides. The Chicago area now is crisscrossed with these tours.

As Dan Brenner points out, recalling his early participation in the Foundation's activity, "The young architects who first saved this building felt they could demonstrate that a handsome 19th century landmark could be more than an antiquarian, Williamsburg-type, 'Ye Olde Curiousitie Shoppe.' Slap some paint on the walls, some





lights on the ceilings, gradually clean out the mess of wiring, plumbing and just plain junk from previous occupants, and a vital program of exhibitions, discussions and involvement in the city's problems would follow."

Brenner was on the committee which selected the first executive director of the Foundation and says that despite the fact that there were several youthful applicants for the job, the committee wanted a more established personage. During these years, the late '60s, there was a period of inactivity which, in Brenner's words, "managed to alienate and phase out many of the young people who had been of prime importance in saving the house. "After 20 years of teaching," Brenner continues, "I can't get accustomed to seeing the young turned off by the heavy weight of their more established associates. One of the pleasures of the current construction has been the renewed presence of architectural students who have brought back a real spirit to the old rooms and given them a meaning which transcends the antiquarian."

This, together with Mrs. Field's energetic leadership, has supplanted the Daughter-of-the-American-Revolution respectability which almost stifled the house during the Foundation's embryonic years.

One can quarrel, perhaps, with the character of some of the restoration; the lighting seems severe, and the courtyard, with its new granite paving and grassy rectangles, somehow too precise. But this is caviling. With chutzpah and luck and what was at first very little real cash, Chicago's architectural community and its allies saved this house.

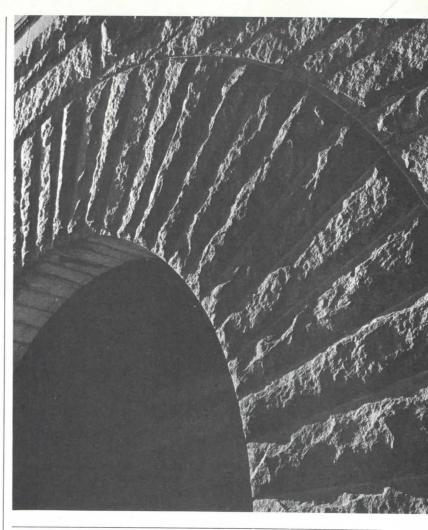
The assistance of manufacturers and suppliers has been gratifying. Steelcase, Pratt and L a m b e r t, Vicrtex, Durotest, Clark and Barlow, Bernard Fetters, General Cabinet and Lightolier, all have realized the unique opportunity of the Glessner House and responded accordingly. It turns out that, even for hard-nosed businessmen, public spirit is part of making a profit.

Even before completion, the new garden proved itself in a memorable ceremony June 21. The occasion was a memorial service for Richard Nickel, the photographer and architectural historian who died April 13 of this year when a section of Adler & Sullivan's Chicago Stock Exchange in the Loop fell in on him while it was being razed—senselessly razed.

Nickel, it was recalled, had helped mightily in the campaign to save Glessner House. But now the downtown wave of destruction was symbolizing man's destruction of himself, the architectural educator Alfred Caldwell told the mourners.

He spoke in rolling, resonant terms, somehow suitable to Glessner House. And he pinned his hopes for salvation on the young. "Richard, I give you my hope," said the orator.

The dusk closed in on the Glessner garden, and the oldnew house took everyone in, symbol of ongoing life that it is.

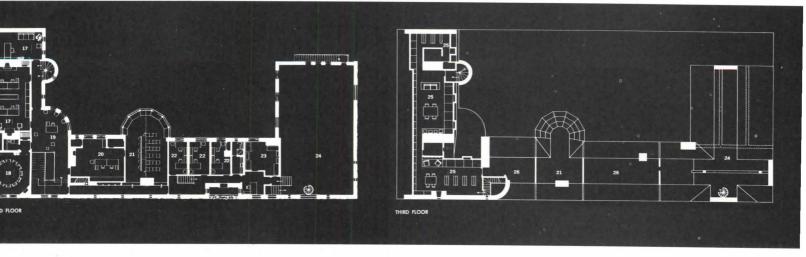


FACTS AND FIGURES

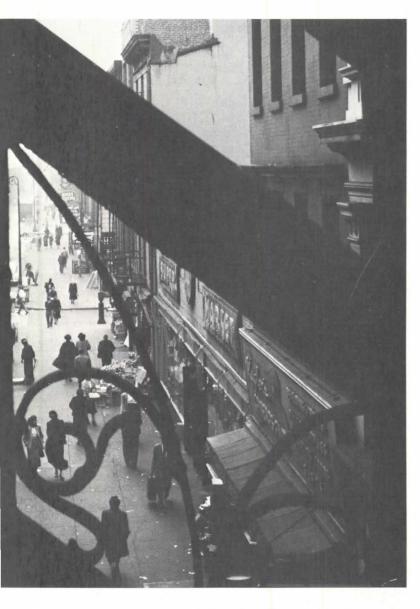
Glessner House Restoration and Renovation, 1800 South Prairie Avenue, Chicago, III. Owner: The Chicago School of Architecture Foundation. Architects: Brenner-Danforth-Rockwell (Daniel Brenner, partner-in-charge). Landscape Architect: Joe Karr. Interior Designer: Robert Peters. Consultants: Cosentini Assoc. (Garden); James Nagle; Hammond & Beeby; Ben

Weese. Contractors: Larson-Placko Service Co. (mechanical); Gerson Electric Construction Co. (electrical); Ashland Plumbing; Mortensen Roofing. Building Area: 18,000 sq. ft. (For a listing of key products used in this building, see p. 78.)

PHOTOGRAPHS: Richard Nickel except p. 40 (top) by Harold Nelson.



HOMING IN ON HOUSING



The design of all projects illustrated in this section are by Norman Hoberman and Joseph Wasserman. The project architects involved were Jacques Gerstenfeld, Gerald Hallissy, James Howie and Thomas Turkel.

Across the land, fallout from our housing failures is beginning to settle. And it is settling more or less evenly over all the forces which mandate, design and build our residential settings.

This fallout suggests that it is time to get back to basics, back to the warp and woof of human activity, back to the very human need for personal and community options. It is time to be hard enough on ourselves to admit that the so-called "soft" sciences have a central role to play in shaping places to live, places which people can truly enjoy.

The costs of not being basic enough have been grievous. In addition to the economic realities of mid-city real estate, which have solely dictated the character and configuration of public housing, there have been social and behavioral costs, those not often calculated, those which are controlled, in large measure, by the surroundings in which we grow up.

The audit sheet has been too convenient an excuse for ignoring such costs. It has been a rug under which to sweep human nature in the haste to house. The so-called "savings" which housing agencies proudly displayed have since been traced over with red ink.

This section of FORUM illustrates the housing alternatives of Architects Norman Hoberman and Joseph Wasserman. They are alternatives to the up-(and open-) ended tragedies of the last 20 years.

Perhaps the most radical aspect of this work is that it doesn't take all the oxygen out of the air with a lot of heated innovation. The architects have not wiped the slate clean. They have not pretended that nothing existed before. They have not presumed patents on some "final solution." They have not even said that the highrise is inherently immoral or, as recent studies indicate, inherently criminal. They have, simply, tried to reconcile economic, individual and community factors in a way that a "fair return" is possible on all fronts.

In essence, the five projects explained here have, so to speak, come down off it. There is nothing of what Neitzche, speaking of architecture, called "the oratory of power." There is nothing of the self-conscious symbolism and imagism in which design preconceptions are rationalized as "good for the people." Each project is a combination of lowrise and highrise elements. Each holds to a consistent palette of material, color, texture and detailing. Each holds to the streetscape. Each holds to the social contours of the surrounding neighborhood. And each sublimates itself to sheltering and servicing everyday needs. Given the state of housing, that is radical.

The most obvious advantage is that the usual, maddening anonymity of most highrise apartment buildings is sent packing; at the same time, densities required by program and economics are maintained. This also allows more control of building orientation with respect to light and shadow, and more control over open space. The architects have found it more successful to use land adjacent to lower elements for recreation.

There is also the pervasive public preference for lowrise housing, and for housing which relates. The use of low elements, close by the street, helps reinforce a neighborhood's character; far more than the typical, free-standing tower.

The schizoid housing schemes which separate high and low buildings too often have no design relationship between elements; something or other comes off as a kind of afterthought. And that which does is usually overwhelmed by the taller units. In contrast, Hoberman & Wasserman's work offers a plastic relationship. Low and high elements are cut from the same cloth, and a continuity of both plan and facade is assured.

Mr. Hoberman says, "We have found that the change of height

Hoberman & Wasserman beat the box by respecting human scale and the streetscape

within a single structure has a drama of its own. It's a simple thing. You can have plastic qualities and pleasing masses while still working with simple straight walls and straightforward window details."

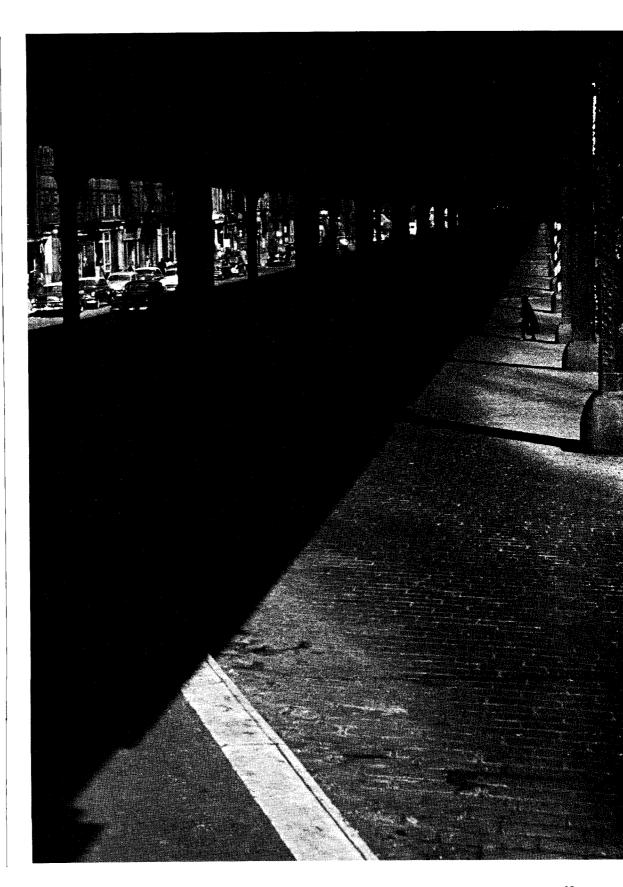
Which direction low and moderate income housing takes is, right now, up for grabs. Many theories are being propounded and, in some places, tried. Scatter-site housing, shared amenities and services, combining different income groups in single projects-all have had their say and, most usually, their day in court. So it is, in many respects, refreshing to find an approach to housing design which deals with "the art of the possible" — esthetically, financially, and in terms of community.

At the same time, this work should not be taken as an effort to placate. Its very straightforwardness is a provocation for further study of what the basics of housing really are.

Those basics range far beyond the work shown here, of course. But this kind of work is a buying of time in which we must assess our overall housing needs and the impact of housing on the conduct of life.

This nation has yet to decide what the non-financial parameters of housing are. In both the governmental and private sectors, scandal and abandonment are manifest. Suburbanites and ethnic groups have held up construction of minority housing in every major city. And, to aggravate the dilemma about direction, HUD has recently proposed turning over federal subsidy programs to the states, getting the private sector more involved, and paying housing allowances directly to needy individuals.

This is why Hoberman & Wasserman's projects have a lot to say, even though they avoid architectural oratory in the process. By doing as much as possible, they have made a very even-handed statement that what is now possible is, in the long term, just not enough.



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SOUTH BRONX

This 354-unit project was commissioned by the New York Housing and Development Administration, which acted as Turnkey developer to the Housing Authority.

The three-acre site borders two main streets, Intervale Avenue, which is extremely wide, and East 169th Street. The adjacent corner is occupied by an existing five-story apartment house and fire station, which remain.

The lower, seven-story elements line 169th Street and the less-traveled Stebbins Avenue, strengthening the streetscape. Since 169th is on the south side of the site, the lower elements do not block an undue amount of sun from the open space in the center of the site. Rising from the lower elements is a 27-story tower; its shadows fall on parking and service spaces.

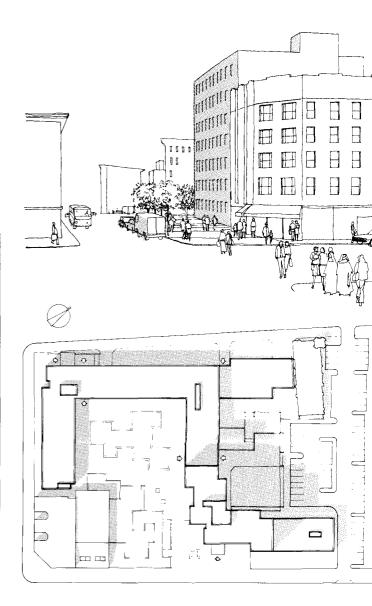
The low elements are done in a straightforward, economical manner—flat, unbroken walls with punched holes for windows. In contrast, a number of offsets are introduced in the tower to accent its verticality, at the same time keeping some of the tower walls in the same plane

as those of the lower ones.

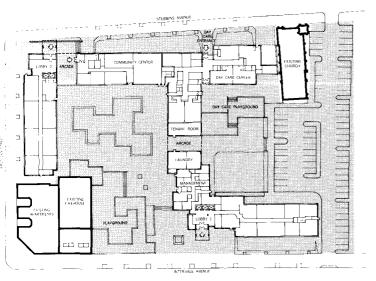
The construction is simple flat slab concrete and brick veneer. The open space is defined by the U-shape configuration of the building elements and nestles close to them. There are two arcades which penetrate the ground level of the building, permitting easy movement (as well as visual connection) from the two lobbies to parking, laundry and play areas. The sunken play area, next to the fire house, does not interfere with the apartments, yet allows adequate surveillance of children from the laundry and open space just outside it.

The tenant role in project design was assumed by the local Model Cities group and various community organizations. Naturally, low rents were a preference. So were low elements more closely aligned with community character. At the same time, it was realized that it would be necessary to create as many units as possible under zoning. Hence, this not-too-institutional response which has been further softened by the inclusion of day care and community facilities.









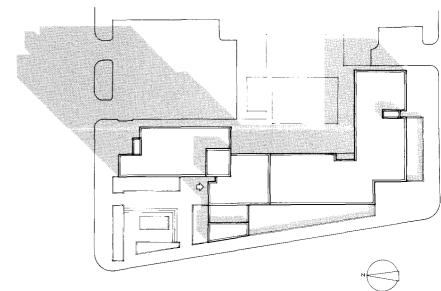
FACTS AND FIGURES

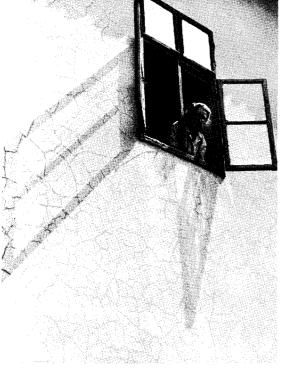
South Bronx, Model Cities Site 203, New York City. Architect: Hoberman & Wasserman. Engineers: Robert Rosenwasser (structural); Arthur L. Zigas & Associates (mechanical). Landscape architect: Zion & Breen. Building area: 397,000 sq. ft. Cost: \$11million (estimated).



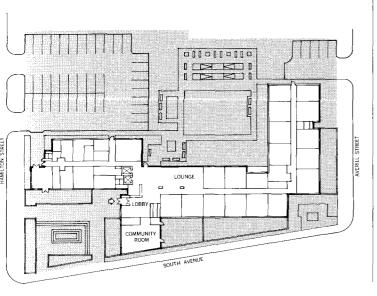
FACTS AND FIGURES

Housing for the Elderly, Site 5, Rochester, New York. Architect: Hoberman & Wasserman. Engineers: Gleit-Olenek & Associates (structural); Benjamin H. Silberstein & Associates (mechanical). Landscape architect: Carol R. Johnson & Associates. Building area: 177,000 sq. ft. Cost: \$5,100,000.









ROCHESTER

This 1.6-acre scatter-site project for the elderly was commissioned by the Urban Development Corporation of New York and fronts on a major street which is lined with a variety of residential and community buildings at walk-up scale.

An adjacent side street is lined with fairly stable one and two family houses.

In other words, things are going to stay pretty much as they are in the project area, and Rochester has no far-reaching urban design plan which suggests vigorous change in the near future.

This presented a unique problem for the architects, in contrast to their work in New York City. As Mr. Hoberman puts it, "There is no street wall worthy of the name, compared, say, to the Bronx. Previous development had no consistent height, material. Certainly no consistent style. "Still, the scale is low, small and repetitive, even if it is extremely chaotic and visually disorganized. And the last thing we wanted to do was reinforce this disparate quality with an isolated slab surrounded with keep-off-the-grass signs."

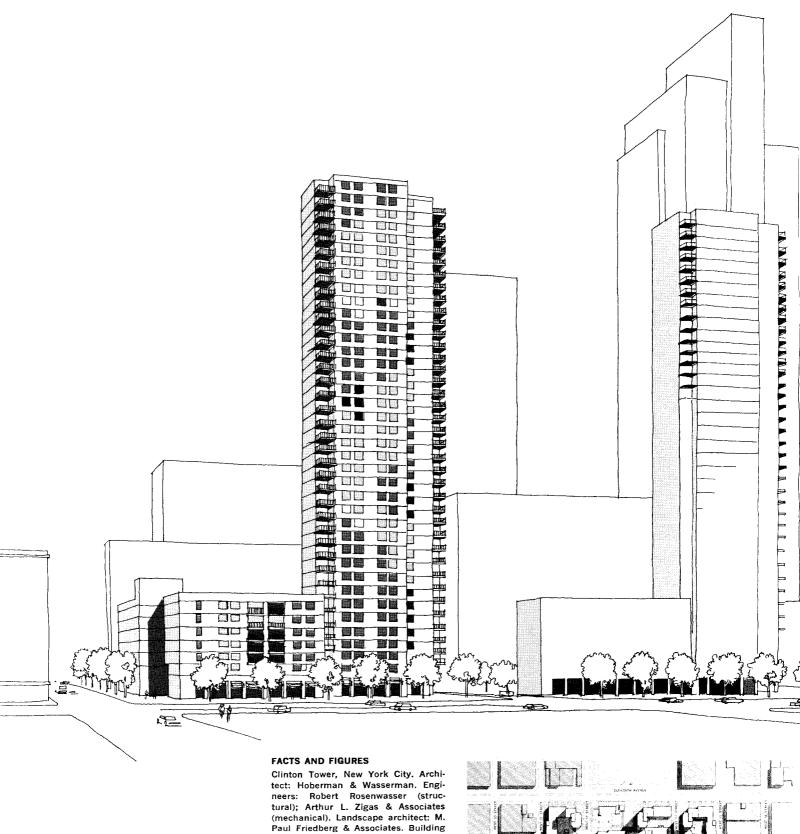
In response, the architects tried to establish a new pattern which, in their words, "can be picked up and reinforced in future development."

The Rochester project containing 264 units, steps down to the street—from 16, to 13, then to five stories, forming a link with the scale and density of the surrounding neighborhood.

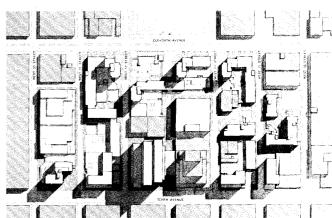
The higher elements have been held back from the street. Ground level apartments are screened from it, as are community rooms and public spaces.

In contrast to the Bronx project, previously shown, Rochester is a "systems" job. All walls and slabs are precast Jesperson components.

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Area: 394,000 sq. ft. (residential); 6,300 sq. ft. (commercial); 10,000 sq. ft. (day care); 36,100 sq. ft. (garage). Cost: \$3,600,000.



MANHATTAN

Clinton Tower occupies a 1.2-acre blockfront in a proposed renewal project for six blocks on the West Side of Manhattan. It is sponsored by the Clinton Housing Association and the city's Housing and Development Administration. While the Tower anticipates the repetition of high/low elements along 11th Avenue, its success also depends upon implementation of the total six-block scheme.

The objective of the renewal plan, worked out by Hoberman & Wasserman, was to preserve the intimate residential scale of the east-west streets. Required densities resulted in 39story tower elements which may, at first glance, seem anything but intimate. These are brought down to curbside by the use of low, seven-story elements which enclose open space. The penetration of light and air into these spaces has been controlled by the architects' careful siting of the tall elements.

In the case of Clinton Tower, containing 397 units, the deep, landscaped setback along 11th Avenue will set the scale of the three blockfronts to the south. The Tower's 6,300 sq. ft. of commercial space at ground level will be encouraged along the Avenue.

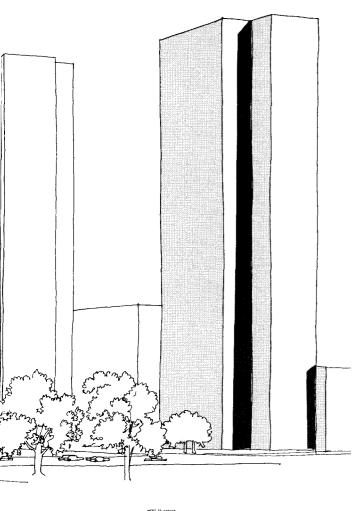
Off-street parking will be set partially under the building and under a raised terrace within it.

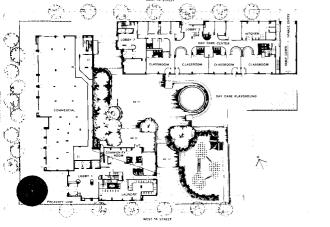
Changes in level will help dif-



ferentiate a variety of outdoor spaces—a private play area for the day care center, a playground for both the building and the neighborhood, and various rest and recreation spots for older residents.

An important aspect of Clinton is its accessibility to those who do not live there. While off-street spaces are enclosed by building elements, there are points of entry from the street through which pedestrians will be able to pass without undermining the security of the building itself. Thus, the open space created becomes a resource for the neighbors in the same way that the tower and its low elements relate to them in terms of scale. Together with its array of stores and services, Clinton Tower, though rising from 11th Street, in no way betrays the better instincts of the surrounding community.





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CONEY ISLAND SURF AVENUE

This 3.3-acre project, just now being occupied, is the genesis of Hoberman & Wasserman's approach.

The two-parcel site is on the north side of Surf Avenue, an extravagantly wide thoroughfare which, in earlier times, had been lined with a continuous "wall" of buildings. One parcel actually fronts on Surf, while the other sort of skirts around an existing synagogue. The latter parcel was not large enough for a separate project, so the architects bridged intervening 28th Street. Though costly (adding one percent to project costs), it has turned out to be a great success, for the street now seems as pleasant an experience as the building, and you don't come away with the feeling that the project has "done in" the neighborhood.

Surf Avenue's kinetic qualities have, in recent years, been all but sabotaged by "project" development — or dishevelment. Again, free-standing slabs, aloof from the streetscape, undermined its uniqueness and unity. An urban renewal plan for the area, prepared by Alex Cooper, has since suggested that new development be more sympathetic to the street—preferably, close by and parallel to it.

In line with this, the architects placed their low, five-story elements along, or just back from, Surf Avenue. The overall effect is that the project "steps up" from the curb, emphatically holds the line of the main street, gently bridges a side street and, gestures done, takes off from there in the form of two, 24-story towers.

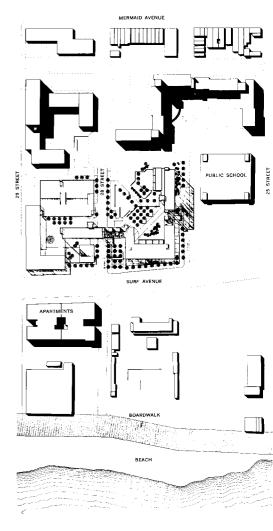
placed to cut down on shadows in the enclosed open spaces, and to allow better views and greater privacy for the 332 apartments. The tower on the east part of the site overlooks the open space of an adjacent elementary school; the tower on the west part, facing Surf, is adjacent to a new 140-car garage which was placed just north of the tower because that portion of the site is mostly in shadow.

The larger tower apartments are duplexes located inside an open gallery. The lower elements are more conventional, double-loaded buildings containing efficiency and one-bedroom units. Thus, a not-too-severe separation of family and nonfamily units is gained. What mixes the life-styles are the amenities (cum necessities) which include community and meeting rooms, and a quickservice delicatessen. These are located at the center of the project, and keep it alive all day and most evenings. There is also an 80-child day care center with its own enclosed play area; this, in turn, is adjacent to a larger playground and recreation space for all residents.

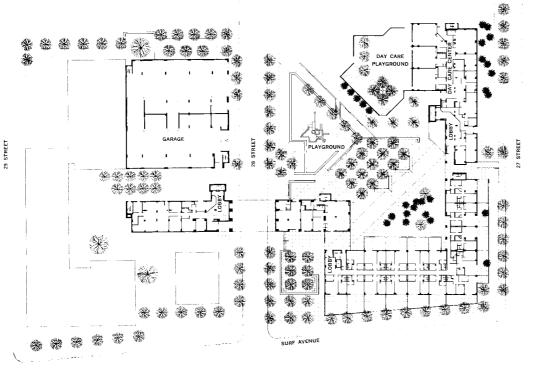
Throughout, there is a valuable sense of what Jane Jacobs called "eyes on the street," as well as eyes off of it. Besides being approachable, despite its bigness, it evokes the kind of spirit, activity and interdependence so essential to keeping a project alive and well. How well remains to be seen, of course. After it has undergone the ordeal of use awhile, we'll let you know.











FACTS AND FIGURES

Housing Project for the Urban Development Corporation of New York, Coney Island, Site 5/6. Architect: Hoberman & Wasserman. Engineers: Robert Rosenwasser (structural); Barrett Associates (mechanical). Landscape Architect: Nicholas Quennell. Building area: 384,000 sq. ft. (residential); 8,000 sq. ft. (day care); 57,000 sq. ft. (garage). Cost: \$11,600,000.

51

CONEY ISLAND NEPTUNE AVENUE

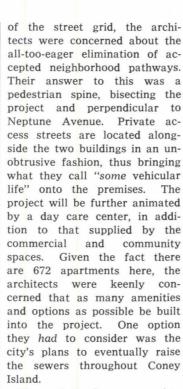
One-half mile from the previous, completed project is a 10.5-acre superblock which is to be, if the city has its way, part of a 20-acre development, free of streets.

The Urban Development Corporation asked the architects to repeat the previous project, twofold, on the bigger, vacant parcel. Although the design for Site 5/6 was tailored to a unique site problem, the new site offered a number of ways in which the original concept could be adapted.

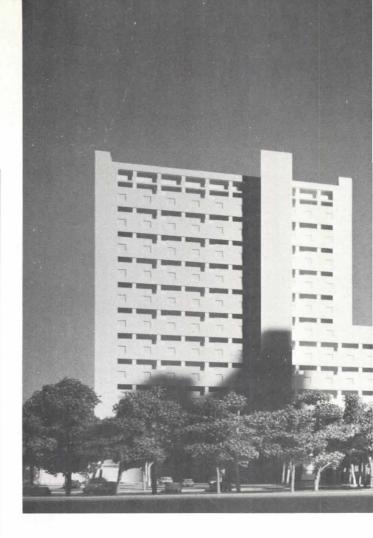
In the previous project, the architects were, essentially, trying to complement an existing streetscape. In this project, they were faced with creating one-specifically, along Neptune Avenue. In line with this, they specified continuous development of commercial and community facilities, almost at curbside, in order to restore definition to the wide street which had, in spatial terms, "seeped out" into the vacant, blighted acres.

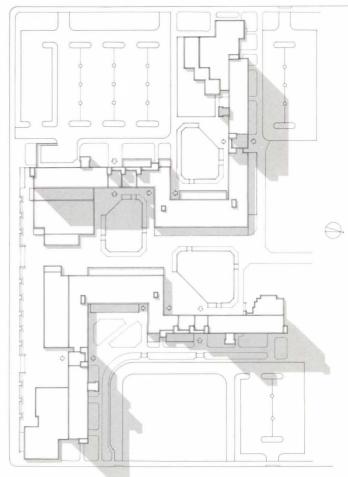
Another thing. The city, in looking forward to its 20-acre scheme, which would get rid

Thus, all the large recreation spaces here are sand-filled, and set at the original grade about three feet below the adjacent pathways-all this against the time when housing, too, may hit the fan.

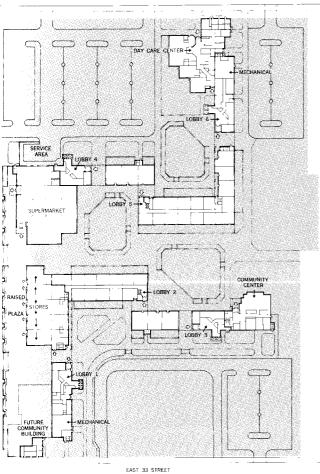


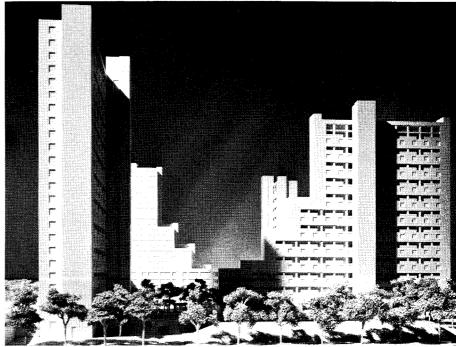










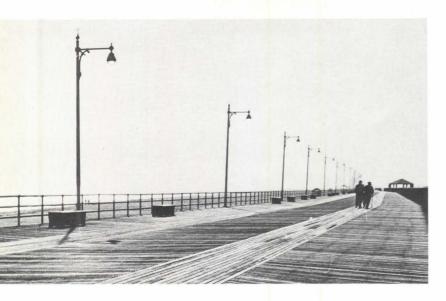


FACTS AND FIGURES

Housing project for the Urban Development Corporation of New York, Coney Island, Site 4A. Architect: Hoberman & Wasserman. Engineers: Robert Rosenwasser (structural); Barrett Associates (mechanical). Landscape architect: Zion & Breen. Building area: 795,000 sq. ft. Cost: \$23,650,000.

53

CONEY ISLAND SURF AVENUE TWO



This 197-unit building for the elderly is owned and operated by the Jewish Association for Services for the Aged. It was commissioned by the Urban Development Corporation (acting as developer) about the same time as the other Surf Avenue project, just a few blocks east. Its 1.3-acre site is smaller and more limiting than that of the previous scheme.

The main part of the building is a simple double-loaded tower of 19 stories. Just below this, it begins to edge outward with a single-loaded corridor, terminating toward the ground with the lower, fourstory element—all in a Z-shape plan.

Shared balcony areas are located on every floor of the high element, taking into account the extensive socializing which active, elderly tenants like.

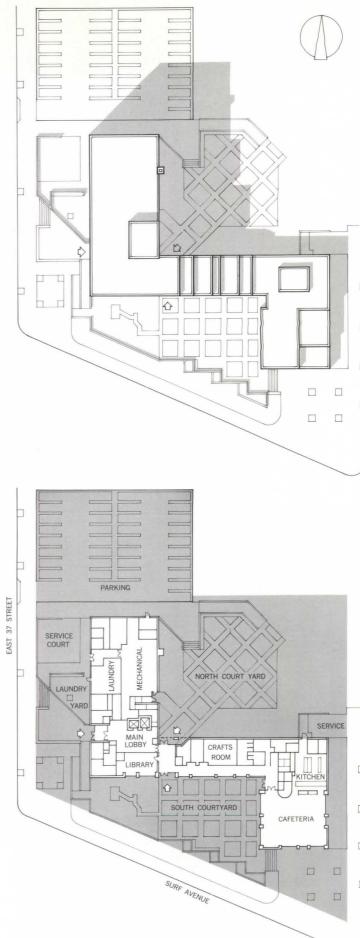
The scheme can, and probably will, be expanded along 36th Street (drawing), with an extension of the finished low element rising up to another, identical tower. This would further enclose a generous north courtyard which has been provided in the first phase.

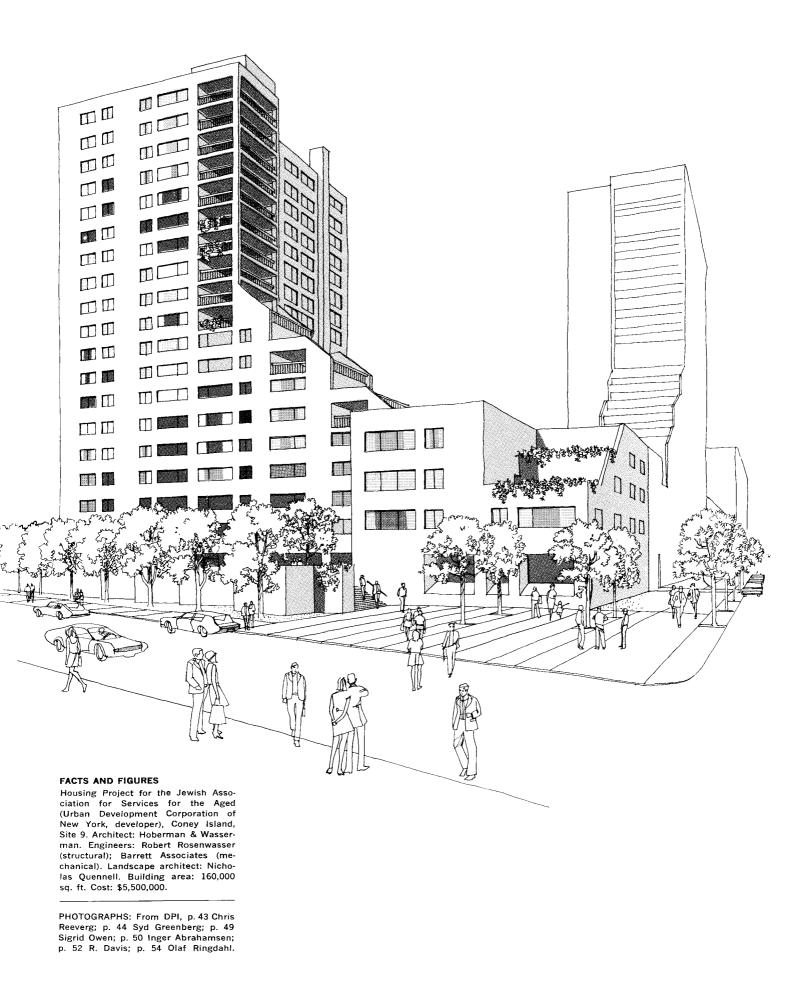
The principal outdoor areas are, however, on the Surf Avenue side. A terrace, elevated slightly above the street, will be screened-off from it by a brick wall that enhances the street line. Immediately inside the terrace, a large cafeteria is placed on the ground level of the four-story element, readily accessible to both project and neighborhood residents. A library, crafts room, and various social service facilities have also been provided. Thus, in a working sense, the building will be a real asset for the surrounding community, in no way reinforcing the isolation which often aggravates the aged.

Like all the projects explained here, this one makes the most of our deranged dependence on high density, which has been, until recently, solely economic in motive. But, given the realities (and the ruts) of agency procedure, Hoberman & Wasserman have modulated density requirements in the direction of human scale, and they have shown that high density, by design, is really preferable to the scatter-shot stunts which our low and moderate income citizens have had to settle for in years past.

This straight-forward approach may not seem all that revolutionary; yet that is its strength. It is, at least, a reflection of a scale of values, a careful edging toward answers about what values public housing must ultimately express.

-WILLIAM MARLIN





ROCK 'N ROLL SCHOOL

New York City's Acorn School is an ingenius and economical use of found space

As our problems get bigger, many are turning to smaller, more provisional and manageable solutions. The Wall Street Journal recently, wondering what had happened to the peace movement, found the doves scattered. Discouraged by bigness-the pettiness of big politics for one thing-they were no longer marching in formation against Washington but had found civic, political, or even some capitalist niches in which they could more effectively spread their wings for a cause.

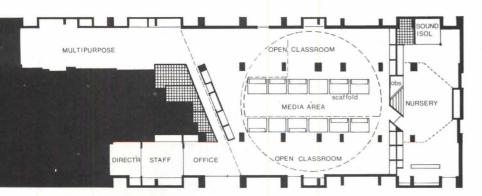
Along with neighborhood city halls, community health centers and planning boards, the Acorn School is a manifestation of this change in scale and the move away from massive, monolithic institutional answers to urban problems. It is part of the "power to the people" spirit which reasserts faith in individual, private and local resource-fulness.

The Acorn School is a small, parent-owned community school for three non-graded classes of 25 children, ages five to 11, and for a morning and afternoon session of 22 kindergartners. It is in what was originally intended to be 5100 sq. ft. of professional space on the ground floor of a new, federally sponsored apartment building in Manhattan on 26th Street between First and Second Avenues.

The entrance is on the inside of the block off the building's landscaped plaza.

It's an active pleasure-principle school with no bad conscience about fun. When I walked in the kids lacing flour-and-water-paste-covered twine over balloons to the rock and roll of the Beatles. When their structures harden and the balloons are punctured there will be the scaffoldings of masks, which may turn out to be either Halloween or African style. If these kids have scaffoldings on the brain, it should come as no surprise. Their school is essentially made of standard aluminum movable scaffoldings in modules of 4'6" x 6' (photos page 59). These are the rocks and the roll in the design by Architects Mayers and Schiff. As shown in the plan, they were arranged in two parallel rows between the open classrooms. As they are arranged now, they form a maze of particular spaces: a sewing corner, a social studies area, a library nook.

Perhaps the more we have to suffer as part of a migrating horde, the more we need to enjoy flexible, individualized space; the more we need spaces of our own, doing with them what we will on a provisional basis. The provisional aspect of these scaffoldings is in tune with the current do-your-own-



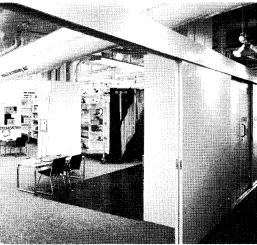
The floor plan (above) and photo (right) show The Acorn School arranged in pristine geometrical forms. The circle indicates hospital cubicle curtain tracks for hanging banners which can be pulled to form a theater in the round. The multi-purpose scaffoldings which are the heart of the design (overleaf) are shown arranged in parallel rows. There is a zig zag of curtain track in the center of the circle which allows banners to be pulled to close off a scaffolding for privacy. Contrary to the drawing, but in accordance with the architects' conception, the school in action is a maze of private, specialized spaces.





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The entrance to the school (top) is off a landscaped plaza in the center of the block. Having the main entrance here contributes to the intimacy and security of the school and enhances its home-like atmosphere. Children who live in the building can get to school without contacting the hostile city. Adjacent to the entrance vestibule is a staff or teacher's preparation room (right) and beyond that the director's office. Both may be closed off by sliding glass doors and banners designating their users. Both the staff and the director wanted to be accessible and yet have the option of privacy. On the right side of the entry is a wall of sliding panels (above) which separate the open classroom from the janitor's closet and lavatories and form a corridor to the multi-purpose room.

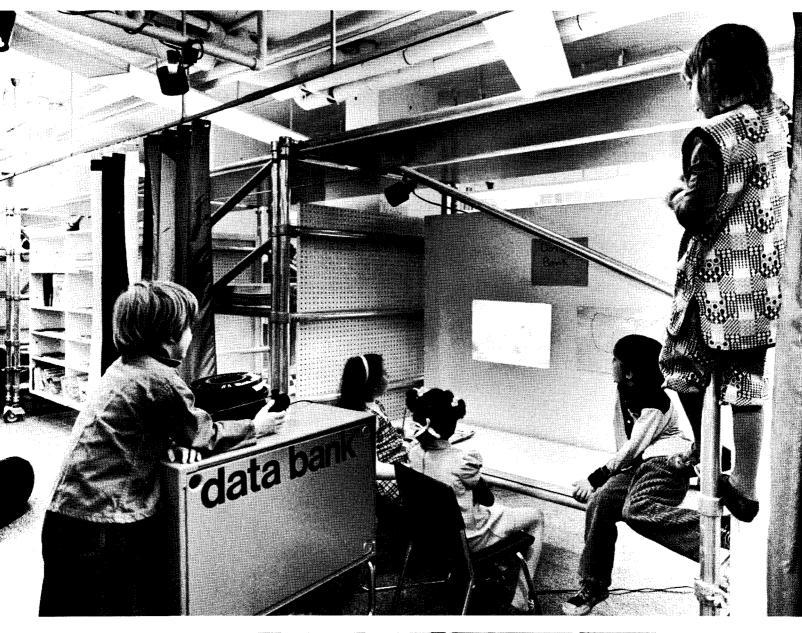
thing attitudes about life that have made the fox trot, for example, almost extinct. It is a feeling that fate is loose, not fixed, and that the instructions cannot be written on or with walls. By accommodating this sense of transiency and chanciness, the architects eliminate the anxiety which nomads feel if stuck with overstuffed chairs or bolted down desks.

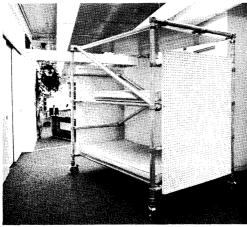
Very much in tune with the scaffoldings are the superloop sofas (photo page 59) which no nomad would want unless they were stuffed with down. After a good deal of deliberate skidding around while cleaning up the wet-area floor (top right, page 60), some of the kids flopped into one of the four sofas. It looked great for a good sprawl-or brawl or bawl -and for indulging in cozy comfortable chats or reading which. as a teacher pointed out, adults do slouching, not in straight backed chairs.

Many notable educators have visited Acorn, among them Dr. August Gold, who is Administrator of the New York City Board of Education's Division of School Planning and Research. What he likes about the school is that it is portable and consists primarily of purchasable items that can be loaded into a truck.

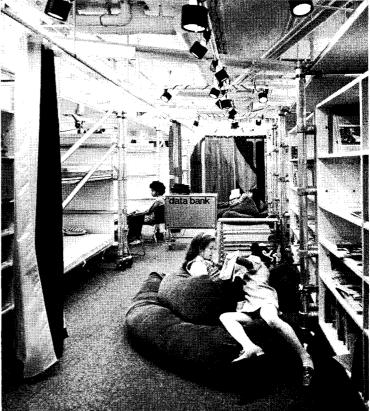
Dr. Gold has also pointed out something interesting in his foreword to "Urban Educational Facilities Options," the final report of the New York City School Space Study Committee. A subhead says "If it can be done in New York City, it can be done anywhere . . ." Dr. Gold says that although the frontier was declared officially at an end eighty years ago, we have until recently still been hung up on frontier planning concepts and continued to think it necessary to stake out separate claims for buildings with distinct functions as if we still had plenty of time and wilderness to cut into.

A letter, quoted in the same report from Chancellor Scribner of New York City's Board of Education to the Chairman of the Planning Commission, succinctly states the case for the "found space" alternative to frontier thinking: "Given the need to provide each student with a full day of school ir quality space, the high costs of new construction, the difficulties of relocation to clear sites, the extent of overcrowding in many



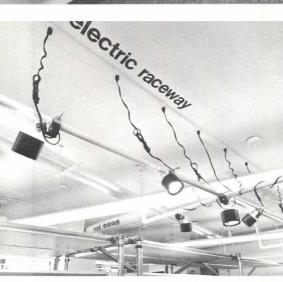


The chief furnishings of the school are the scaffoldings which, with counters attached, become work areas, study carrels and projection booths (top). When arranged so that a bookcase (the back of which forms a projection plane) faces a scaffolding fitted with mattresses (above) a library nook is formed. Other arrangements make good club houses and castles. Also expressive of the innate flexibility and sensitivity of this design are the superloop sofas cast about in various inviting postures and nooks.











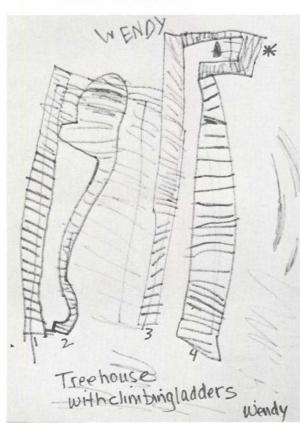
The children are responsible for keeping the school clean and tidy and the architects made this as easy as possible. In the alphabetical bins (top left) the kids store an object according to what letter its name begins with. The paint holders and drip catchers in the wet area (top right) easily unhook from galvanized rails. Both items were adapted from an industrial storage technique. Plastic drawers (rear, top left) are coordinated to fit into the adjustable height desks (bottom right). Other plastic drawers, also stored in custom shelving (top right), are for each child to keep his creations in. The lighting is flexible and convenient. The incandescent lights plug into raceways out of the children's reach and are on dimmers. The raceways enable lights, tape recorders and projectors to be plugged in anywhere. The fluorescent lights can be switched on in patches, eliminating an overall supermarket or institutional effect. By adjusting the two systems many atmospheres can be created. The columns (like the furred out concrete block walls) are covered with self-healing vinyl (pinholes close in a day or so) and, along with the peg-boarded ends of the scaffoldings, make good display areas. The drawing (right) is one of the students' answers to what the school should be like.

FACTS AND FIGURES

The Acorn School, New York City. Architects: Mayers & Schiff. Engineers: Andreassen Associates (mechanical, electrical). General contractor: Harvy Construction Corp. Building area: 5,400 sq. ft. Construction cost: \$104,000. Furnishing and equipment cost: \$5,000.

(For a listing of key products used in this building see p. 78.)

PHOTOGRAPHS: Bill Maris



of the city's schools, the large number of proposed housing developments and the desirability of smaller educational units, I am respectfully requesting the City Planning Commission to require, as a matter of policy, that all developers of housing provide some space for education in their projects.

"Such a policy, continued over a period of years, would enable the city to absorb large numbers of students generated by new housing who, under the present system of constructing schools, face an inordinate lag between the need for space and the reality of getting it. Use of an openspace school design would enable the developers to have easily reconvertible space if and when the need no longer exists for the Board of Education to lease it." The report also points out that the inclusion of school space in housing enhances the marketability of a project as it appeals to those who do not want their children to have to travel hostile distances to school.

Dr. Harold Gores, President of Educational Facilities Laboratories, says of the Acorn School: "In this kind of design there is less arrogance. Mostly we design forever; this is tentative, for now; we haven't locked them in. There is a sense of trusteeship towards our successes rather than something final and monumental. This building will not have trapped you. And we didn't have to wait around for seven years to get the school either; we haven't that kind of time in the cities."

This design received a Certificate of Merit from the New York State Association of Architects, and was a finalist in the Lumen Awards for lighting given by the Illuminating Engineering Society.

Except for the wet areas which are covered with vinyl asbestos tile, the school is carpetedanother effort to make it home-Unfortunately it is so homelike that it was broken into recently and vandalizedglue all over the rugs-by jealous neighborhood kids, it is rumored. This may result in closing up the clerestory-like windows through which the vandals entered. There is so much seethroughability in the school that it won't become oppressive without windows. But how many more signs of the times do we need?-JANET BLOOM



The lower school is another big room separate from the upper school. In the center is a mini-amphitheater created by a wedge of carpeted stairs (below) facing a stage-like area, set off by shelves for the Montessori equipment, and illuminated by swinging loading-dock lights. Here the children gather to decide on the day's activities, to hear a story, or watch the chalkboard across the room. Under the clock (right) is the window of the sound isolation booth for noisy or musical children. To the left are the mirrored panes of the observation booth which many visiting educators use to see things in progress.



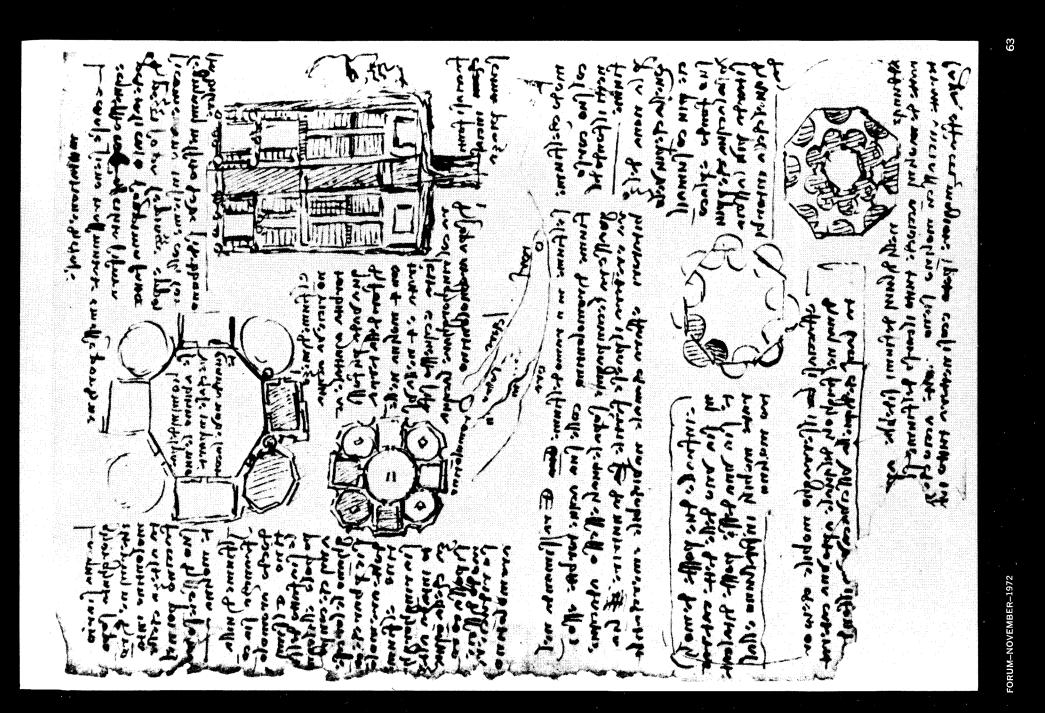


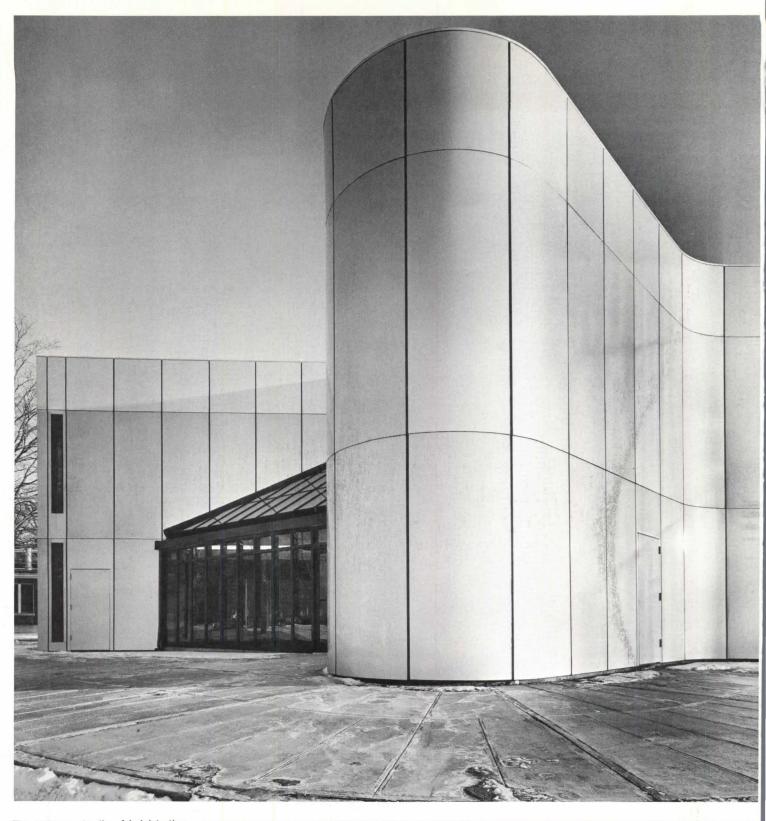
LEONARDOS LAST DESIGN

Da Vinci's notes and sketches reveal palace plans

Standing in the Roman Forum one may feel obliged to be reverent and then admit a devout, empty wish that someone would piece it all together. A similar syndrome may arise confronting the sketchy evidence of Leonardo's last project, a royal palace and town plan for Romorantin in northern France, and the highly conjectural but well-illustrated connections Professor Carlo Pedretti makes between a few sketches, earlier designs by Leonardo and his predecessors, and subsequent buildings. "Leonardo da Vinci: The Royal Palace at Romorantin," Pedretti's recent book, is a painstaking piece of historical detective work about a building that was perhaps begun, but never completed. The king's mother, who was to live there, died; Leonardo died; and there was a plague in the town. One wishes the story were as satisfyingly fleshed out as a detail of a horse's leg which it happens to include.

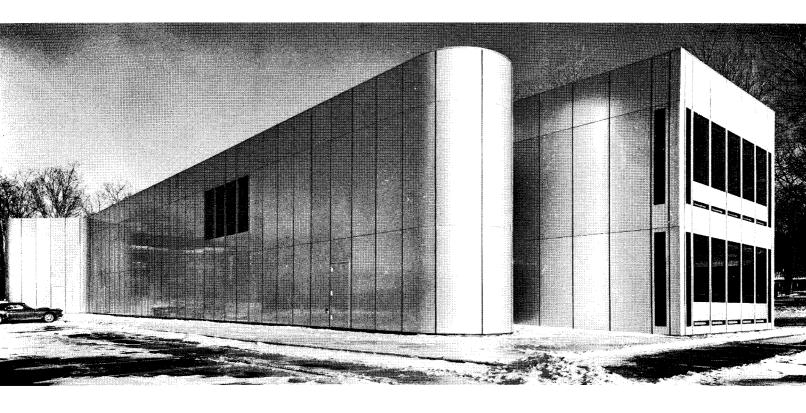
There are about half a dozen pages of Leonardo drawings which may definitely pertain to the Romorantin palace. Except for one partial elevation and a window study, the drawings are all plans. The major page (right) shows twin palaces on opposite sides of a river (diagonals) that courses between them and in canals around them. Pedretti says, "It is easy to recognize the . . . system of streets and the open space of the piazzas; but there is no way to know whether the remaining area, which is shaded with horizontal lines of hatching, was intended for garden or for houses—or for both." The note to the left of this plan says, "The river in the middle should not receive the turbid water, but the water should go by through ditches on the outside of town . . ." The notes beneath a topographical sketch of the region are about the canal system operations. The plans of octagonal structures may be for a bath pavilion, temple or palace. This is history with all its dropped stitches showing, and it will strike you as frustrating, pathetic or as a fascinating puzzle.





The entrance to the Administration Building (above and overleaf) of Middletown State Hospital is a light and airy wedge of glass and mullions. It is enclosed by the forking off of the translucent office side of the building from its opaque core side (plans). The aluminum sheathed side (opposite) shields its occupants from the parking lot and the mixed blessing of a powerhouse and coal pile with railroad trestle.





iet in a brickyard

rentice & Chan, Ohlhausen anted to give the patients of iddletown State Hospital in ew York a new and cheerful uilding, one that would make e place seem as if it were ive and growing, rather than oandoned. (There are a large umber of deserted buildings ere which are awaiting demolion funds and in the meantime ave the presence of a large npty stare.) They wanted to righten up the gloomy spirits nd surroundings. So they deded to make a fresh statement nd try in no way to conform the red brick campus vernacur. With the previous addions to the hospital in mind, cluding an unhappy moderne laptation of Tudor half-timberg which looks like a public thool, and another complex hich looks like public housing,

one can imagine the architects reasoning that even the most stunning brick building would get lost in the crowd and would certainly not seem new. So they landed a jet in a brickyard.

The technical reason for going to a factory-made, styrofoam core, aluminum panel to be exposed both inside and out was to get the best quality control on a job in an area that doesn't have sophisticated craftsmanship.

This building is the flagship of the hospital's operation. It houses the directors, supervisors, post office, cashier and switchboard. And the architects wanted it to be a showcase of sanity. Going along with current feelings for making the authorities visible, and thereby more accessible, the architects thought it would be reassuring

to have the sane members of the community on display rather than hidden. Thus all the offices have long windows facing a major pedestrian path.

Wanting to emphasize the translucence of this building and contrast it with the opacity of neighboring buildings, the architects designed a greenhouse-like entrance. The clients were leary of it for maintenance reasons, so the architects went to Albany, as they put it, "... armed with glass palaces, the Milan Sports Palace, The Ford Foundation building ... and this got to look so modest."

The photographs of this building showed it to be as sleek as a seal freshly emerging from the sea. Unhappily, when you see it in person, the first thing you notice is that it seems to have malnutrition or leprosy. It looks as if huge, free-form puddles of oil had been spilled on the panels. This is one of those long hairy architectural stories which might remain a mystery even after thoroughgoing detective work. Suffice it to say that the clear organic coating, which, it is said, was supposed to protect the panels from construction soiling and then weather away, had begun to peel even before they arrived at the site. An attempt was made to patch up the spots, but since parts of the dip finish had suffered exposure, mottling appeared. A perhaps less than satisfactory attempt was made to find a solvent that would remove the coating altogether. Another effort may be made. Otherwise it will just be left to weather off to "approach uniformity."

Despite this the building is



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unquestionably handsome and its plan well-conceived. It slips most elegantly into its long narrow site between an alle of trees and a long coal pile topped by a railroad trestle. The core functions of the building-janitors' closets, lavatories, darkroom, records rooms, stairs-are separate from the office functions and distinctively housed in a slim opaque container like a cigar case with cylindrical ends for the stairwells. One anomaly in this neat separation of functions, and of translucency and opacity, is the lounge whose large window punctuates an otherwise blank and gleaming facade. From the outside this looks bold and good. From the inside however it seems a little questionable. The window looks straight out on the coal pile and railroad trestle which are in their way beautiful, but looming over them is the powerhouse which is no beauty and is not redeemed by the grace of its smokestack. The architects wanted the employees who had been looking out the other side

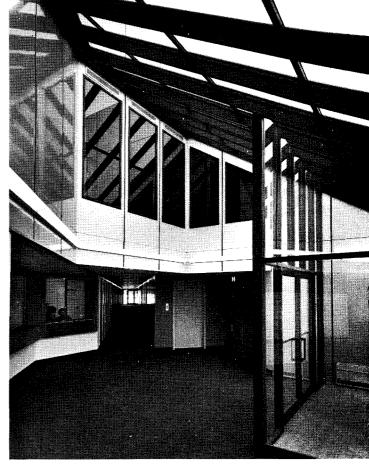
of the building all the time they were working to have another view during breaks, and to have the feeling when they crossed the corridor that they had gone into another building and gotten away from their offices.

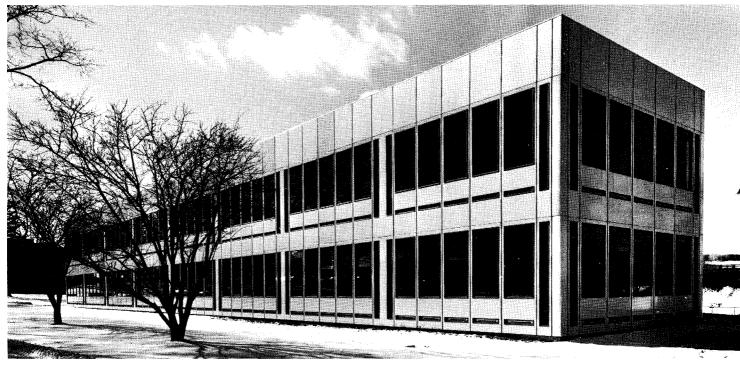
One can be glad for the existence of this building, despite its exigencies, as it answers clean, stouthearted questions in kind.—Janet Bloom

FACTS AND FIGURES

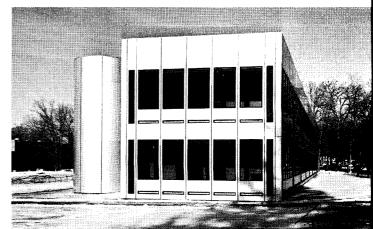
New Administration Building, Middletown State Hospital, Middletown, N.Y. Owner: Health & Mental Hygiene Facilities Improvement Corp. Architect: Prentice & Chan, Ohlhausen (Francis Wickham, associate-in-charge; Donald Cosham, job captain). Engineers: Geiger - Berger (structural); Hecht Associates (mechanical and electrical). Consultants: Alan Gershon (specifications). Contractors: Edward M. Swallow & Sons (general); Mechanical Construction Corp. (mechanical); M. Eisenberg & Brothers (electrical); Garthco Corp. (sanitary). Building area: 17,700 sq. ft. Construction cost: \$1,000,000.

(For a listing of key products used in this building, see p. 78.) PHOTOGRAPHS: Norman McGrath





The translucent aspects of the building are shown by the entrance (top) and the office side (middle and bottom). The glass of the large windows is flush with the aluminum panels, with an intervening gasket. But the glass in the vertical slot windows is mounted near the inside of the panels. The reduced reflectiveness of these lights (which reflect the black gaskets more than sky or trees) emphasizes the columns which they surround.



FORUM

(continued from page 27)

rounding architecture going off to infinity in the interstices of its fig-like leaves. What would it be like huddling there in a rain storm or blizzard?

Dubuffet said, "I do not believe that these four trees, which I hope will not be taken as representations of real trees, but as semblances of the thrust and fertility of human thought, bear contradiction in any way to the site upon which they now stand. Indeed . . . they give an impression . . . of feverish intoxication. But they seem to me, by this same febrility, to manifest the ardent source of the enormous intellectual machinery of which this plaza is the core."

However just before that he said, "In this plaza, and in the prodigious buildings which rise above and surround it, unfolds an extraordinary celebration of reason, logic and calculation." It is easy to agree with this, and it is hard not to see his work as a mushrooming celebration of the irrational, irregular and spontaneous set against a computer print-out.

Four Trees is 42-ft. high and is made of an epoxy-coated sandwich of layers of fiberglass pressed by hand into a mold, topped by a flexible honey-comb of aluminum, which is topped by more layers of fiberglass. Inserts such as are used in aircraft construction are embedded in the sandwich (Photos p. 27) in order to attach it to the structure of steel tubes. Each trunk is a tubular space truss. The structure, designed by Paul Weidlinger, was installed in France. Manholes and armholes were left in the leaves and trunks to enable workmen to make the final bolted connections.

The site for the sculpture was determined long before a sculptor was chosen. It was to be on the plaza's east-west axis which reaches towards the World Trade Center. The plaza had been reinforced to carry the weight of a sculpture—this one weighs 25 tons—and steel plates for anchoring it were set into the concrete slabs.

Gordon Bunshaft of Skidmore, Owings & Merrill, design architect of the building, was responsible for inviting Dubuffet to consider the project. David Rockefeller has contributed the sculpture to mark his 25th anniversary on Wall Street.

TOYS

Bonnier International Design, which was formed in 1971 with the objective of commissioning, producing and distributing items of practical value by fine artists, commissioned a collection of toys. From 40 designs 9 toys were selected to be produced in limited editions of 2,000 in small craft shops in Milan, Turin, Geneva and London. These are now being exhibited in over 100 museums throughout the world.

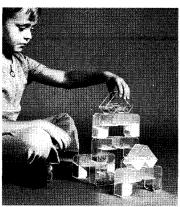
One of them is "Flying Man", a kite of knitted nylon (below) by Jean-Michel Folon who gave



Jean-Michel Folon's Flying Man.

up his architectural studies for drawing. He says, "I have made a Flying Man because I fly all day long. To fly is the only serious thing in my life. When one flies, one is free. I believe that a kite is the freest object there is. Kites have something we will never have—they can hold conversations with the wind. I miss this very much, therefore, I have made a giant kite which resembles a man so that he will come back and tell us what he has heard of the wind."

Milton Glaser's polystyrene L Blocks (bottom) are a new kind



Milton Glaser's L-Blocks.

of building block containing movable weights. Six are filled with steel bearings and six with sand. They produce a variety of structural possibilities including the cantilever.

Giorgio Scarpa's Geoform is based on a two-dimensional geometric figure which explores the properties of a twice-trisected triangle, forming seven triangles consisting of polyvinyl-chloride tubes joined together with a cord which is threaded through and tied.

Luis F. Benedit, a graduate architect, has become interested in designing animal habitats. Of his Bird and Hamster Habitats (below) in this series of toys he says, both "are physical spaces inhabited and explored by their protagonists (the animals) under our eyes . . . (their) principal value is the display of



Hamster Habitat by Luis F. Benedit.

behaviour which our urban civilization normally prevents us from observing."

The other toys include The Electronic Tune Doodler, a Money-Box, a Magnetic Sandbox, and a White Book. Bonnier International Design is now working with established artists throughout the world on the development of other functional things including gourmet objects, textiles, furniture, table accessories and clothing.

FILM FEST

The Columbia University School of Architecture is sponsoring a Film Festival for professional or amateur 16mm films pertaining to any aspect of architecture, planning or architectural technology. It will be held at the University in April, 1973.

The films may be expressions or impressions of the man-made environment. They may deal with historic or contemporary

architecture. They may be abstract or realistic. They may deal with landscape or environmental issues; the human condition as affected by the built environment, or the built environment as affected by humanity; cities, in whole or part, their evolution and dissolution; the importance of building technology; the list is limitless. There are no absolute constraints, but preferably, the films should not be shorter than five minutes nor longer than thirty. They may be with or without sound and the sound may be magnetic or optical.

An eminent jury of professionals and film makers will review the films and select the best ones for showing. All films chosen will be described in a permanent catalog (including stills), to be published at the time of the Festival. And whether shown or not, the films submitted will be listed in a bibliography to be contained in the catalog.

There is no entry fee and the following prizes will be awarded: First Prize, \$2,000; Second Prize, \$1,000; Third and Fourth Prize, \$500. Commercial films which require a rental fee will not be eligible for monetary prizes. The films selected will be retained by the School of Architecture to be copied at the School's expense (with the permission of the entrant) and will become part of a film lending library.

If there are films you wish to have considered you must send the following information to the University: 1. title, 2. subject matter (a brief precis), 3. the individual or group responsible for making the film, 4. its length, 5. sound type or no sound, 6. color or black and white, 7. miscellaneous information. The films must be received no later than January 1, 1973.

For further information contact: Francois Confino, Film Festival Director, 405 Avery Hall, School of Architecture, Columbia University, New York, New York 10027. (212) 280-3504

PEOPLE

MINORITY TRUST FUND

W. C. Fuller worked for 30 years in a wealthy Dallas neighborhood as a gardener. Fuller

died on October 12 and two weeks later it was revealed he left a hundred thousand dollar trust fund, to be used to pay the college tuition of black children who want to be landscape architects.

NEW EDITOR FOR JAE

Arthur Hacker, Assistant Professor of Architecture at the University of Houston, has been named Editor of the Journal of Architectural Education. The editorship is for a renewable two year term and Hacker's first issue will appear in February.

PRESERVATION

LEANING TOO

The Milan Cathedral which was started in 1386 is sinking due to a remarkable change in groundwater level due to both public and industrial use of water. At the end of World War II groundwater was a few feet below grade. Now it is more than 130-ft. down. Officials believe this has caused the wood pilings to dry out and rot to the point that restoring the water level will not stop the sinking.

Because of the splintering of the marble veneer on the main pillars some areas of the church have been closed off. Settlement in the center has been almost 8/10 of an inch over the past three years. And the south facade is leaning about 1/10 of an inch more each year.

All vehicular traffic around the cathedral has been banned and a nearby subway must reduce its speed to 10 mph in this vicinity. Possible cures include rebuilding and enlarging the column foundations or injecting grout under the foundations. Preliminary estimates say redressing the situation may cost \$17 million.

The Milan Cathedral is one of an estimated 80 million national monuments, all of them suffering from what Professor Pasquale Rotondo, director of the Central Institute for Restoration, calls "climatic age." This is not historic age. It has to do with the radical change in climate in the last few decades, an unforeseen change in the chemical composition of the atmosphere caused by corrosive substances, gases and other pollutants generated by modern urban and industrial complexes. Stonework is the chief victim of these agents, but all surface materials are vulnerable. The bronze horses which dominate the facade of St. Mark's in Venice will be taken down and stored because of damage caused by humidity and air pollution. And the golden doors of the Baptistry in Florence are suffering from corrosion. Equally damaging is vibration from modern modes of transport. According to a recent survey just cataloguing Italy's monuments at the current rate of 120,000 per year would take a century and a half. Restoration efforts are hampered by a lack of money - the annual budget of the Central Institute of Restoration is about \$39,600 which they are trying to raise to \$84,000, and they have a staff of only 14. There is also inadequate and antiquated legislation governing restoration. But with climatic ageing perhaps no amount of money or manpower could solve the problem.

HONORS

The United Nations Association of the United States honored Architect Wallace K. Harrison with a citation for his role as Chairman of the Board of Design and Director of Planning for the permanent headquarters of the United Nations at annual UN Day ceremonies. He was presented with an album of sterling silver United Nations commemorative medals, each in a first day cover bearing a matching UN stamp postmarked on the first day of issue.

I GOVERNMENT

ARCHITECTS WANTED

57 architects wanted to design schools, hospitals, low cost housing, municipal buildings, public works projects in: Iran, Thailand, Micronesia, Brazil, Honduras, Morocco, Tunisia, Sierra Leone, Cameroon, Guatemala, British Honduras, Eastern Caribbean, Korea, Afghanistan. Contact: Peace Corps, 90 Church Street, New York, New York, 10007.

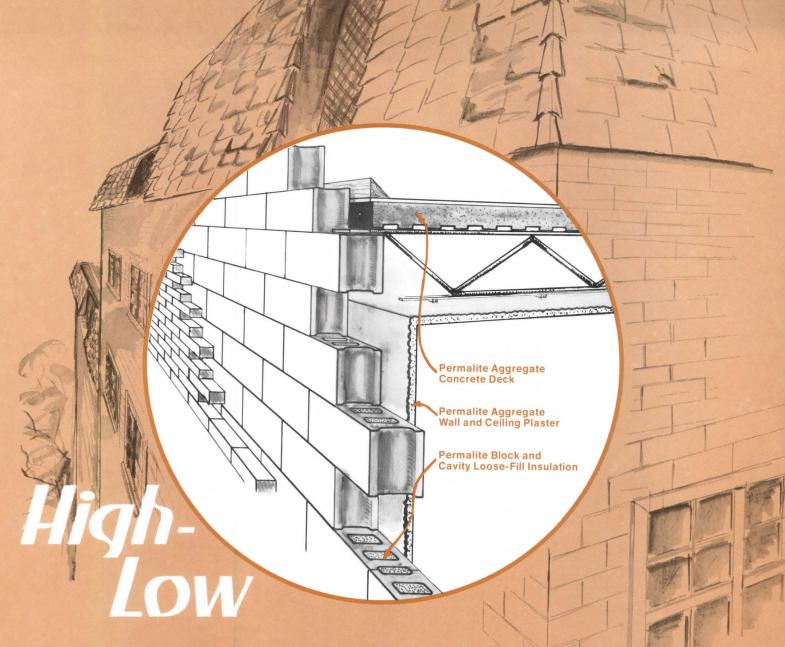
ADDENDUM

Addendum is, among other things, a polite word for after-thought. And this afterthought is particularly embarassing. Trouble is, we somehow deleted photo credits from our story last month about the Boston Public Facilities Department, and we really do apologize.

We hope the following photographers will forgive us for the oversights on the following contributions to our October issue: Carol Rankin, pp. 42 (top), 43 (bottom), and 45; Edward Jacoby, p. 42 (bottom); Phokion Karas, p. 44; Stephen F. Rosenthal, p. 46; Randolph Langenbach, pp. 47, 49.

Milan Cathedral.

PHOTOS: P. 26 (middle) by Geoffrey Clements. P. 27 (top and middle) by Arthur Lavine.



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PRODUCT REVIEW

This month's Product Review concentrates on security systems for home and office.

MOTION DETECTORS

The Holmes Marketing Corp. has introduced several electronic systems for detecting unauthorized entries. Model 1800-3R (photo right) is a solid state photoelectric system which is a signal initiating device. An invisible modulated infrared light beam is transmitted to initiate a signal upon detection of an interruption in that beam. No interconnecting wires are required between transmitter and receiver and the system operates on 12V AC. An internally mounted rechargeable nickel cadmium battery in both the transmitter and receiver provides up to 16 hours of standby operation with automatic recharge when power resumes.

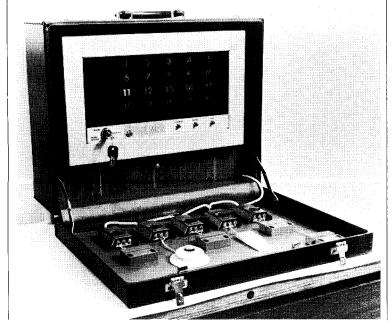
Model DS-300 is a motion detector that through the use of infra-red waves, creates an alarm condition when the circuit is broken. This compact system, smaller than a shoe box, can be adapted to either a central station or a local alarm system and is easily installed in



both residential and commercial establishments.

Model 803 (photo below) is an annunciator system which requires only a single three-wire installation. Supplied in increments from 5 to 100 zone capability, the system is available in either desk top, wall or surface mounting consoles. Systems are expandable with plugin modules, each activated by normally opened, closed or the use of both contact configurations.

On Reader Service Card, circle 224.





INTRUSION DETECTOR

The Systron-Donner Corp. has a new UD-M Ultrasonic System for protection of one, two or three rooms. The system is recommended for protection of retail stores and other high-risk locations. The detector is said to provide coverage up to 600 square feet depending on the acoustics of the space protected,

and detects an intruder's movement in any direction.

The UD-M is self-contained, having both transmitting and receiving transducers, a motion detection circuit, and an alarm relay enclosed in a 20" x 6" x 6" wood cabinet with an 8-hour standby battery.

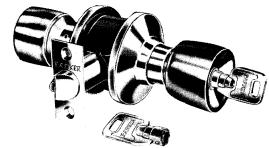
On Reader Service Card, circle 225.

IDENTIFONE

Identifone, a new controlled entry computer system that utilizes regular telephone communication is available from the Identifone Corp., and can be installed in both new and existing residence and office units. Advantages of the system are minimum maintenance, simple operation, and a reduced vacancy factor. Legitimate visitors gain entrance by dialing a specific code number into the special lobby telephone. Tenant responds by regular telephone and permits entry by releasing an electronic lobby door lock by using a special electronic device in conjunction with the same telephone.

On Reader Service Card, circle 226.



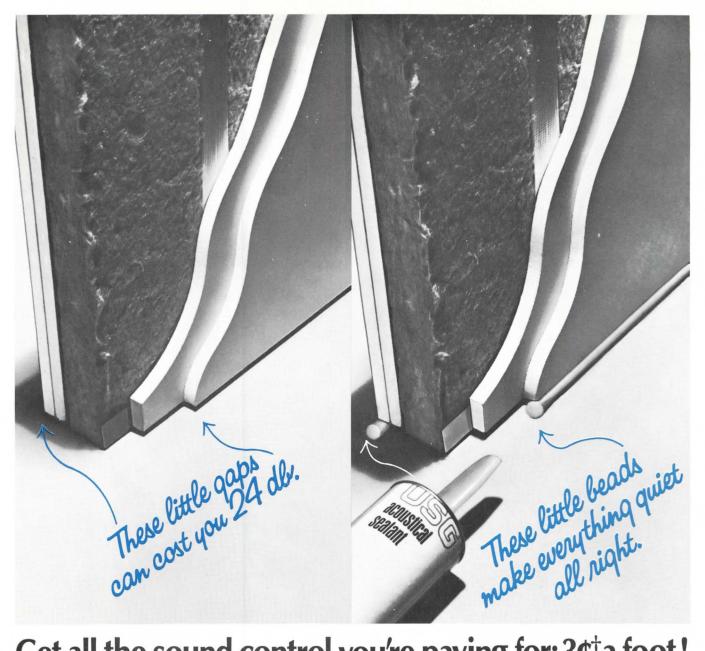


EXTERIOR LOCKSET

Designed similar to public vending machine locks, the #2637 Exterior Lockset made available from the S. Parker Hardware Mfg. Corp., has seven pins that circle the tumbler, affording pick-resistant protection. To lock outside knob, push and turn button on inside knob to horizontal position. The locked

knob cannot be released for entry until button is returned to vertical position manually or by use of round key in outside knob. Latch-bolt automatically deadlocks for added security. Inside knob is always free for immediate exit. Available in polished brass or satin chrome. On Reader Service Card, circle 227.

(continued on page 76)



Get all the sound control you're paying for: 3¢†a foot!



USG® ACOUSTICAL SEALANT gives maximum drywall system sound control when beads are applied to periphery of both base layers, and around all cut-outs. Assemblies tested at U.S.G.'s acoustical research facility consisted of 2½" USG Metal Studs 24" o.c.; double-layer ½" SHEETROCK* SW Gypsum Panels each side; and ½" THERMAFIBER* Sound Attenuation Blankets between studs. Using the two-bead method, this assembly resulted in optimum sealant performance when partition perimeter relief did not exceed ½-inch. And tests showed USG Acoustical Sealant provided good adhesion to both porous and non-porous materials. Permanent flexibility, high resilience, low shrinkage, long life and non-staining qualities of this superior sealant add up to positive sound control for pennies a foot. It's available in ¼-gallon disposable cartridges and 5-gallon bulk containers. See your U.S.G. Representative. Or write to us for literature. 101 S. Wacker Dr., Chicago, Ill. 60606, Dept. AF-112.

†Approx. cost per lin. ft. of Sealant, materials only.

UNITED STATES GYPSUM BUILDING AMERICA



NODERN OWERS,

1 ANCIENT WINDOW PRINCIPLE.

New York's four newest office towers share a window-covering based on one of the world's oldest kind: an offspring of a venetian blind. Because, through the centuries, only blinds have offered infinite light control, privacy and unmatched design latitude.

But not just any blind. For these four buildings, the architects used the Levolor Riviera blind.

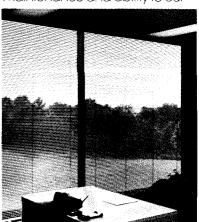
Rivieras enhance design, regardless of structure. Their less than one-inch-narrow slats and lace-like ladders "disappear" when viewed from a distance. And Levolor's Top-Lok keeps blinds uniform: they are either fully up or fully down.

While each building uses Rivieras with distinctive modifications, all four enjoy their easy maintenance and ability to cut

air-conditioning power costs; two bonuses master builders of past ages didn't ask of their blinds.

But you can ask today, for tomorrow, and get them from Levolor—in 60 colors and designs, in two color siats, in perforated slats, in metallics. · · ·

For complete details on Rivieras and other Levolor blinds, write to Levolor-Lorentzen, Inc., 720 Monroe Street, Hoboken, N.J. 07030.



THE UNOBTRUSIVE BLIND

LEVOLOR RIVIERA BLINDS

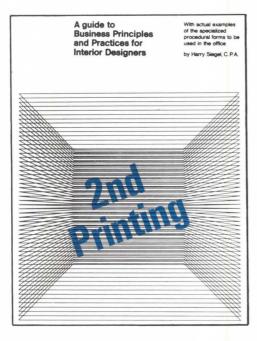
A fresh old idea...unsuccessfully imitated the world over

A guide to Business Principles and Practices for Interior Designers

With actual examples of the specialized procedural forms to be used in the office

by Harry Siegel, C.P.A.

This book won't tell you one blessed thing about design but it may well be the most important book ever published for interior designers, space planners, architects and students.



A long time consultant to design firms, Mr. Siegel has put together a clear-cut guide to the business routines which often frustrate the independent designer. He explains everything from the mechanics of setting up as a professional to estimating job time, billing and collecting.

This business guide includes actual samples of specialized work forms, letters of agreement, and contracts designed by Mr. Siegel for such satisfied clients of his as Melanie Kahane, Michael Greer, Daren Pierce and Ellen Lehman McCluskey.

His book tells you what you need to know to protect yourself from financial losses . . . to estimate the value of your talent and effort . . . to calculate operating costs . . . to arrive at satisfactory

fees . . . and to explain your charges to your client.

He shows you how to make initial proposals for a job . . . to make safe and binding agreements . . . to collect from clients . . . to protect yourself from losses due to client defections and vacillations . . . to control the flow of orders to suppliers, work rooms, carriers, contractors . . . and helps you protect yourself from errors and financial hazards.

He guides you to simple business routines that help you take the business side of your profession in your stride—without being obsessed by business problems.

This is a book that is a must for the man who knows much about designing but not enough about making money.

Chapter Headings

The Job Book Other Working Forms

Basic Elements of Bookkeeping and Accounting for Interior Designers

Interior Design as a Profession Divisions of the Profession **Business Formations** Location and Nature of the Business Essential Counsel and Assistance Initial Contact with Client Letter of Agreement Confirmation of Contract Proposals Methods of Determining Fees and Compensations Other Job Factors in Setting Fees The Client's Budget Estimation and Control of the Budget Purchase Orders Client's Inventory and Billing Control Billing and Collecting The Non-Residential Field Initial Contact with the Non-Residential Client Fees and Compensations in Non-Residential Work Letter of Agreement in Non-Residential Work Estimates and Procedures in Non-Residential Work Contract Breakdown Relations with Trade Sources Theory, Objectives and Methods of Recording Time Insurance

A guide to Business Principles and Practices for Interior Designers by Harry Siegel, C.P.A. 176 pages more than 40 illustrated forms \$13.95

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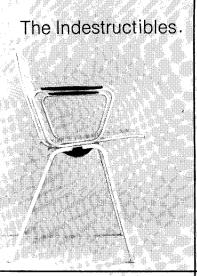
Total Cost \$

Postage paid on shipments within the U.S., if payment accompanies order. Otherwise, and for all books to be shipped outside the U.S., please add 50¢ per book for postage. All New York State residents add 4% for N.Y. State Tax plus your local sales tax rate. (EX.: N.Y. City residents add total 7% Sales Tax.)



Thonet Cantilevers. The Great Profile chairs. Great from every viewpoint. And comfortable, too. Polished chrome with black wood framed cane or upholstered seat and back. Arm chair, side chair and two bar stools. Coordinating tables available. The Cantilevers, designed by Arthur Umanoff. And, like all Thonet furniture, built to endure. See them at the Thonet Center of Design. New York. Chicago. Los Angeles. San Francisco. Dallas. Miami. Or write Thonet Industries, Inc., One Park Avenue, New York, New York 10016.



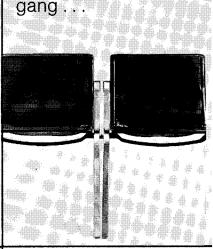


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Solid aluminum bar stock frame Built-in no nonsense ganging device. One piece seat bonded to frame by patented method. 7 colors. Die cast substructure provides strength and stability.

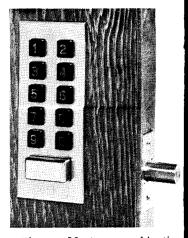


PRODUCT

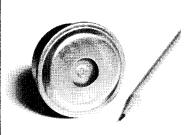
(continued from page 70)

PUSHBUTTON COMBINATION LOCK

The "Hercules" model LT-8102, a four-digit pushbutton combination door lock, has been introduced by Preso-Matic Lock Co., Inc. By pressing the digital combination the door unlocks from the outside, and is locked by pressing the reset bar. There are 10 million possible combinations and a massive bolt which cannot be sawed or jimmied. Combinations are easily changed and all doors can have the same



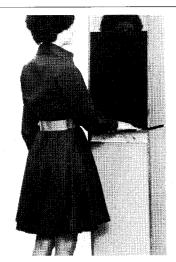
Master systems are available for multidwelling or commercial use. On Reader Service Card, circle 228.



MIDI-HORNS

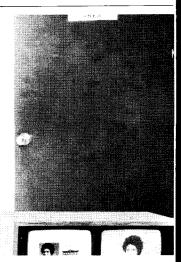
A compact AC horn with a loud, penetrating sound has been developed by the Edwards Co. Only 2" in diameter, it is UL- listed and meets NFPA specifications for alarm sounding devices in residential warning systems. The horns have low power drain (5 VA), high output (106 db @ 1 ft.), and are lightweight (3 oz.). They are available in all standard AC voltages up to 120V and will operate in temperatures between -40°F to +180°F. The steel housing may be panel or bracket mounted: it measures 12/16" deep and the rear mounting bracket is drilled and tapped for a #8-32 screw.

On Reader Service Card, circle 229.



SURVEILLANCE SYSTEM

Mardix Security Systems has introduced a series of personnel identification and access control systems for single door entrances. Called the Videogard 100/200A Series the new systems combine closed-circuit television with remote, central control of entrances. Featuring a modular design, each system is



furnished complete, including a single or dual monitor control console, an identification console, a surveillance camera, an intercom between the entrance and the control console, an electronic door strike and a door status alarm. Installation takes less than a day and no building modifications are needed.

> On Reader Service Card, circle 230. (continued on page 78)

On Reader Service Card, Circle



Sargent
Maximum Security
System:

restrict-a-key

This new concept in access control provides a practical solution to security problems involving perimeter doors, vital record storage areas, computer rooms, communications centers, or any other high security areas.

Built upon the Sargent Maximum Security System, with its proprietary keying, pick-resistant cylinders and full key control, the No. 4500 Restrict-A-Key Series offers mechanical security with a remote electrical lockout capability, and selective by-pass of this remote lockout. As required, the instantaneous lockout of all keys in the system can be achieved by the turn of a switch in the central control station or other remote location. Or, activation of a by-pass switch enables owners of a special master key to override the electrical lockout and still retain access to an area. A third level lockout totally secures the restricted area.

In this way, areas may be secured from persons working beyond a given time frame, while supervisory personnel retain access to these same areas. Complete lockout also may be achieved in yet another time period against all comers, or in the case of a security crisis.

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COMPANY		
STREET		
СІТУ	STATE	ZIP

PRODUCT REVIEW

(continued from page 76)

PIVOT LOCK

A new home security device called Pivot Lock has been introduced by the Ajax Hardware Corp. It is installed on a door jamb and has a pivoting leaf that swings over a door and locks into position. To unlock, the leaf is pivoted in the opposite position over the door jamb. The device is constructed of

high carbon steel with a polished brass finish. It is a secondary lock device and prevents entry by "jimmying" locks.

On Reader Service Card, circle 231.



SECURITY WINDOW

The Crossly Window Division has announced plans for a residential "security" window that contains a concealed built-in burglar alarm. Battery operated, the alarm is controlled by an on-off switch. With the switch on, the alarm is activated when pressure is exerted to force the window open or if an attempt is made to move

the window from any of a number of preset open positions. The alarm is to be built directly into the aluminum extrusion of the window so as to be completely invisible, and can be adapted for sliding and rolling windows and for patio doors. It will be available in 3 to 4 months.

On Reader Service Card, circle 232.

The following is a listing of the key products incorporated in some of the buildings featured in this issue:

GLESSNED HOUSE RESTORATION AND RENOVATION. ARCHITECTS: Brenner-Danforth-Rockwell. (Materials & Manufacturers as submitted by the architects.) STONE: Cold Springs Granite. HARDWARE: Clark & Barlow. INTERIOR MATERIALS: Vicretex. PAINT: Pratt & Lambert. LIGHTING FIXTURES, LAMPS: Lightolier, Duro Test. AIR CONDITIONING COM-PRESSOR, FAN UNIT: Coplematic.
VENETIAN BLINDS & SHADES: Royalcrest. KITCHEN, LAUNDRY EQUIP .: Dwyer, FINISH FLOORING & CARPET-ING: Fetters. FURNITURE & SEATING: Steelcase, General Cabinet, FABRICS. UPHOLSTERY & DRAPERIES: Art Drapery Studios, American Leather. DRAPERY HARDWARE: Kirsch.

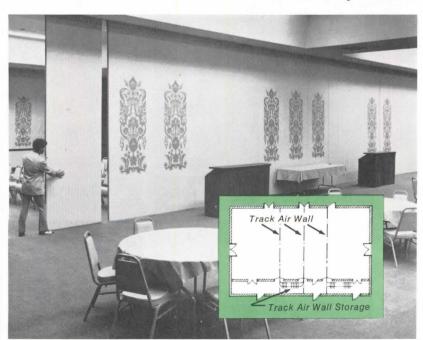
THE ACORN SCHOOL. ARCHITECTS: Mayers & Schiff. (Materials and manufacturers as submitted by the architects.) ACOUSTICAL MATERIALS: Armstrong Accessible Tile System. GLASS: Safety Glass. PANELING: Boltaflex Vinyl. PAINT: Benjamin Moore. ELECTRICAL EQUIPMENT: Leviton Centura Switches. LIGHTING FIXTURES: Lighting Systems, Inc.; Lightolier, Legion. AIR CONDITIONING: Carrier. DIFFUSERS, DUCTS, PUMPS, ETC.: Titus Grilles & Registers. CEILING MATERIALS: Armstrong Accessible Tile System. MOVABLE PARTITIONS: Scaffold

modules by Mayers & Schiff. VENE-TIAN BLINDS AND SHADES: Levolor Lorentzen Rivier. CARPETING: Olefin Fiber. FURNITURE AND SEAT-ING: Cameron McIndoo Ltd.; American Seating Co. FABRICS: Foam-Tex Inc.

NEW ADMINISTRATION BUILDING, Middletown State Hospital. ARCHI-TECTS: Prentice & Chan, Ohlhausen, (Materials & Manufacturers as sub-mitted by the architects.) BRICK, BLOCK: Plasticrete. STRUCTURAL STEEL: Bethlehem. CURTAIN-WALL: Whelan "Alply". FLOOR & DECK SYS-TEMS: Epicore. ROOF MATERIALS: Barrett. THERMAL INSULATION: Whelan "Alply", FENESTRATION: Kawaneer Storefront (at entrance only). GLASS: Libbey Owens Ford Co. ELE-VATORS & ELECTRIC STAIRWAYS: Dover. HARDWARE: Corbin. PAINT: Pittsburgh Plate Glass. ELECTRICAL DUCTS & WIRING: Jones & Laughlin. ELECTRICAL EQUIP: G.E. LIGHTING FIXTURES, LAMPS: Lightron. PLUMB-ING FIXTURES, TOILET SEATS: Eljer. UNIT HEATERS: Electromode, UNIT VENTILATORS, RADIATORS, CONVEC-TORS: York Fan Coil Units. HEATING VALVES, PIPING, CONTROLS: Barber Coleman/Thrush Pumps. AIR CONDI-TIONING COMPRESSOR, FAN UNIT: York Fan Coil Units. FIRE PROTECTION EOUIP: Fire Alarm Systems, CEILING MATERIALS: Celotex/Eastern Products Corn WATER COOLERS: Sun Roc. MOVABLE PARTITIONS: Quick Change. MAIL BOXES & CHUTES: Auth. VENE-TIAN BLINDS & SHADES: Alcan. FINISH FLOORING & CARPETING: Milliken. OTHER: Fisher Skylights.

Trak Wall Partitions at Royal Inns

AID TO PROFITABLE BANQUET/MEETING ROOM OPERATION



Easily installed by one man, Trak Air Wall partitions complement room decor, offer several room arrangements.

Three Richards-Wilcox Trak Air Wall systems assure quick, quiet banquet/meeting room partitioning for the lavish new San Diego Embarcadero Convention Center of Royal Inns of America, Inc. According to James L. Haslam, Royal Inns vice president, architecture, the important factors in supplier selection were intelligent service, follow-up and guidance.

Here are major reasons for Royal Inns' choice of Trak Air Wall partitions:

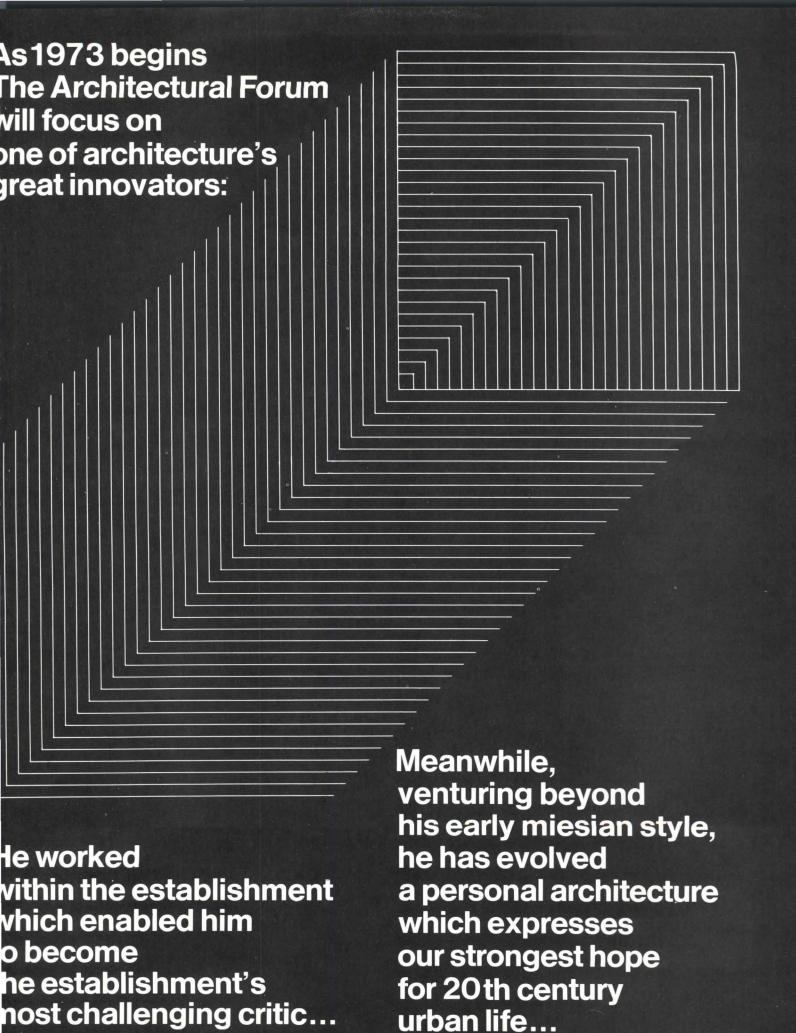
■ Offer excellent combination of features—both portable pneumatic partitions and overhead track systems ■ Pneumatic sealing assures superior sound control ■ Offer unlimited choice of surfaces to suit decorating schemes ■ Out-of-sight storage is fast, easy. Ask your nearby R-W sales engineer to show you an installation.

Free — Specifier's Guide



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In a special January-February 1973 issue the audience of The Architectural Forum will meet

The Seagram Building may have brought Mies van der Rohe's International Style to its zenith, but the zenith is still ahead for Mies's co-architect. The glass and bronze tower became Philip Johnson's professional home, but also his point of departure. His urbane, independent mind has since ranged far afield in many directions—directions which one can only hope future architecture will pursue. In this hope, the ARCHITECTURAL FORUM will assess Johnson's latest plans and structures in a major January-February issue.

What approach will the FORUM's editors take? Remember those two major publishing events of 1972: "The World of Buckminster Fuller" which celebrated the FORUM's 80th year last January, and "The Mind of Louis Kahn" which appeared in July. The coming Philip Johnson issue will have the same eclat as these, but this double-number of the FORUM will be—as it can only be —purely Johnsonian.

A featured writer of this issue will be Johnson himself, speaking out once again with the flair for criticism that marks him as one of the few truly eloquent voices in architecture. In other areas of the issue, the FORUM's editors will cover his latest thrusts towards a more socially oriented and humane environment.

His elegant new buildings fit into the broad patterns of time and history, but also meet the immediate, desperate needs of modern city life. He has enriched our urban culture with structures, lobbies and parks which complement their surroundings and give the pedestrian public a fresh feeling of expansiveness, indoors and out. He has raised the grammar of masonry and concrete construction to a high level of refinement. He has mapped out some of our finest new city development plans.

He has beaten the box and shown how many workable forms a skyscraper may take. He has given the office building facade strong new textures and compelling rhythms. And meanwhile, though a leader of the establishment, he has criticized, more eloquently than anyone, the prevailing domination of the dollar which often condemns building projects to esthetic bankruptcy.

Johnson's new buildings, seen in the January-February '73 issue of the FORUM, reflect the evolutionary steps which this architect has taken in his mid-sixties:

In Minneapolis, his *IDS Center*, a strong octagonal skyscraper, now dominates the skyline, rising more than 50 stories from its base where a glass honeycomb encloses a lobby that is one of the most exciting public spaces the corporate world has seen.

In Niagara Falls, New York, he has created a convention center where a web of steel supports a magnificent arched roof with a clear span of 385 feet.

At Montvale, New Jersey, he planned the *Mercedes Benz headquarters* to enhance that company's reputation for sophisticated design.

For Allentown, Pennsylvania, Corpus Christi, Texas and Purchase, New York, he has designed art museums with a strong art of their own, seen in such dramatics as an oval masonry turret, sawtooth skylights, a lobby roofed by a lofty glass gable, a broad masonry wall punctured by narrow windows rhythmically spaced to create a fresh architectural syncopation.

For Boston, Mass., he has designed a *library annex* as an elegant gesture to historic Copley Square.

For Houston, Texas, he has developed a major skyscraper project—a pair of buildings joined at the base by a mutual entrance lobby of crystaline glass and steel.

For New York City, he has mapped out new development plans for Welfare Island and Lower Broadway, designed the Lehman Brothers office tower, planned a state office building for Harlem, and a heavy masonry contemporary structure that will stand handsomely in the historic repose of Washington Square.

At his own New Canaan, Conn. estate, already an architectural mecca, he has created a timeless cluster of domestic buildings which the FORUM will assess along with a photographic essay in the January-February issue.

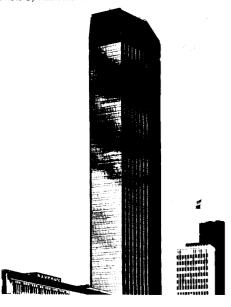
Memo to Advertisers

Advertising forms for the January-February issue of The Architectural Forum will close on December 15.

The Architectural Forum Whitney Publications, Inc. 130 East 59th Street New York, New York 10022

Philip Johnson

I.D.S. Center Minneapolis, Minnesota Photo by Nathaniel Lieberman





Pennzoil Place Houston, Texas Photo by Ezra Stoller

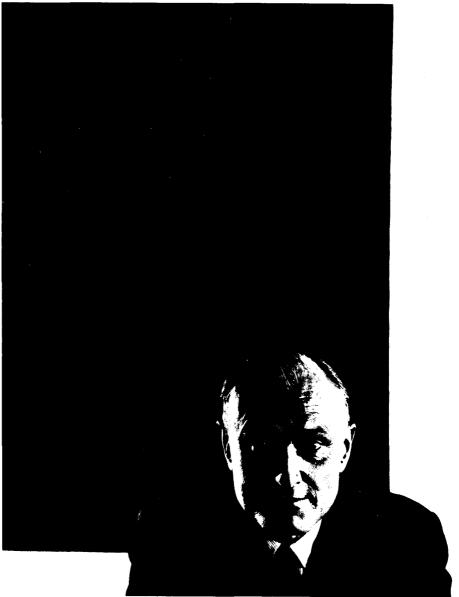


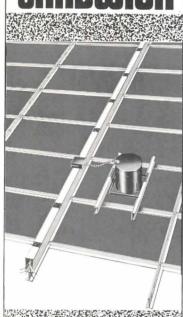
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OFFICE FURNITURE

A new, 16-page catalog illustrating the new TEMPO 8 line of wood office furniture has been published by Stow/Davis. This coordinated series includes executive and secretarial desks, credenzas, occasional tables, chairs and sofas. On Reader Service Card, circle 200.

PLYWOOD SUPPORTS

TECO has announced the availability of a product design and specification sheet on its line of TECO H Clip Plywood supports. Presented is information on sizes available and recommended usage. Designed as an economical support for plywood roof sheathing, these clips meet HUD Construction standards as substitutes for solid blocking. The clip provides for a tight, snug fit. A "leveling arm" insures easy installation. On Reader Service Card, circle 201.

WATER COOLERS

A new eight-page brochure by Sunroc Corp. presents the "Circle of Refreshment" line of water coolers. The brochure depicts wall hung, free-standing and explosion proof models. Highlighting the brochure is the semirecessed SRC unit, that protrudes only 8½ inches from the wall. Most models are available with stainless steel or laminated vinyl aprons that come in six decorator colors. Sunroc water coolers are all UL approved and U. S. National Bureau of Standards approved. On Reader Service Card, circle 202.

WASHROOM EQUIPMENT

The Charles Parker Co. has released its 1973 sales catalog. The 48-page edition covers Parker's complete lines of washroom equipment, bathroom accessories, shelves, mirrors and cabinets. A 12-page condensed version is also available. On Reader Service Card, circle 203.

WALL PANEL SYSTEMS

"The Quiet Wall" is the heading of the new brochure by the Vicracoustic® DW of L. E. Carpenter. The inner core does the work and the outer vinyl covering adds the decorative touch. Vicracoustic wall panels are easy to install and easy to care for. They are factory-assembled with either one inch or two inch cores. On Reader Service Card, circle 204.

FLOOR SYSTEMS

A 24-page brochure explains Inryco® Floor Systems by Inland-Ryerson. Featured are the Hi-bond deck, which eliminates the need for positive reinforcing bars; celluflor makes possible greater composite slab design savings because of their patented V-lock joint. Selection charts for the various floor systems are included in the brochure. Fire ratings, finishes design data and specifications are also included. On Reader Service Card, circle 205.

ELECTRONIC MONITORING SYSTEMS

A new eight-page brochure from Universal Sentry Systems describes in detail the complete line of electronic alarm annunciating systems and complementary accessories. Included are simplified diagrams of typical installations and applications information. Three systems are featured. The Low Cost Sigmatic System is a self contained, solid state system. The Monitron provides several alarm functions and is Factory Mutual Approved for Fire Alarm Systems. Dyna-Plex System can observe more than 3,500 separate functions. On Reader Service Card, circle 206.

PANEL AND LAP SIDINGS

Two new data sheets from Forest Fiber Products Co. describe the company's forest TP Roughsawn panel and lap sidings. Architectural specifications and detailed information are given in separate sheets for each of the new hardboard products. On Reader Service Card, circle 207.

WATERPROOFING SYSTEM

Rubber and Plastics Compound Co. Inc. has a paper which explains newly published technical data on the product Nervastral 600. It can be stitched and shaped, it flexes freely at -20° F. and it resists alkali, acid, mildew, fungi and bacteria. Clear diagram and detailed information are included. On Reader Service Card, circle 208.

ROOFING MEMBRANE

A new acrylic-asbestos roofing membrane for single ply built-up roofing construction, Kortex (tm) Roofing membrane was recently introduced by Latex Fiber Industries. Offered as a complete roofing system, with adhesives, seam finishing tape and flashing, the membrane is a light, pliable laminate. Long-term durability and weather resistance are claimed. On Reader Service Card, circle 209.

INTERCOM SYSTEM

The savings in phone bills are pointed up in a new brochure by Phillips Business Systems Inc. The Norelco M-100 Intercom station more than pays for itself by eliminating unnecessary callbacks. The M-100 system accommodates up to 100 stations connected by a single, eight-pair cable. The brochure also discusses other intercom cost savings. On Reader Service Card, circle 210.

NONWELDED PIPE RAILING

A brochure by Julius Blume Inc. describes CONNECTORAIL® an easily asembled, non-welded pipe railing system. A revised engineering section permits rapid selection of railing systems to meet recently issued national building codes. Some other features are a guide to specification, angle temperature and loading table. On Reader Service Card, circle 211.

JOINT TREATMENT GUIDE

"Architects Guide to Joint Treatment a new eight-page brochure from U. Gypsum Co., provides data for us in selecting and specifying drywa joint finishing systems. The guidescribes the features of various kinds of joint treatment compound their compatibility and the meri of hand and machine application A joint system selector and joint system selector and joint spection procedures are include On Reader Service Card, circle 212.

HARDWOOD FLOORING

Harris Manufacturing Co. has released a new catalog covering the entire line of hardwood flooring proucts. The catalog features illustration and description of all Bondwood Parquet patterns, Harris Plank flooring designs and straight-edge flooring. Complete specification data provided. On Reader Service Carcircle 213.

AUTOMATED STORAGE SYSTEM

A new booklet diagrams and explain the Clark Automated Storage System and its component parts. Feature is a fixed-path stacker that operating aisles only six inches wider that he load. It can transfer between two or more adjacent aisles through use of a transfer car. Clark Equiment Co. On Reader Service Carcircle 214.

WASH & RINSE MACHINE

Metalwash Machinery Corp. has brochure available which illustrat and describes in detail the new Rot Table Wash and Rinse machine. is designed for fast, economic clean-up of pots, pans, utensils a similar objects that necessita thorough sanitary washdown. The bletin includes service requiremen dimensions and construction. (Reader Service Card, circle 215.

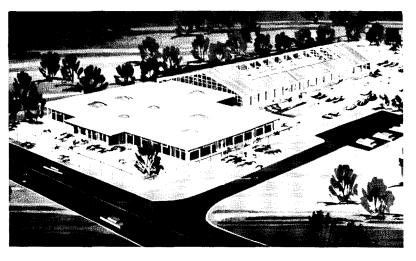
DESKS

The Sturgis Co. has published a callog describing its new 376 Seri Desks. The desks are ruggedly costructed and feature sound deade ing felt sheathing in the pedesta Box drawers slide on nylon slid and file drawers are equipped w fully progressive ball-bearing suspessions. On Reader Service Card, circ 216.

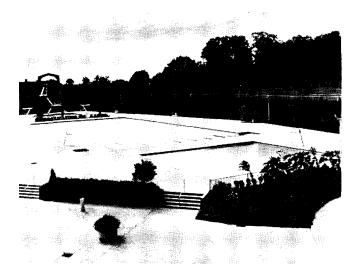
THERMOPANE

Libby-Owens-Ford Co. has a book explaining how Thermopane is appropriate sash design and adartiself equally well to any style architecture. It also explains how adds comfort by reducing heat traffer, while minimizing or elimination condensation on the glass and drafor cold spots near the windows. special section explains the built protective benefits of Thermopa insulating glass. There is also infination on tinted Thermopane insuling glass. On Reader Service Cacircle 217.

The Paddock Swimming Pool System



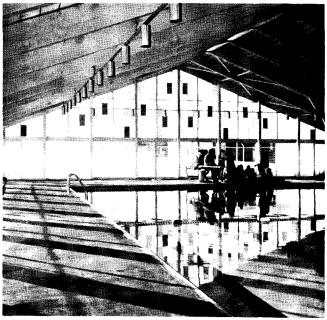
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TIMEPLACE

What Time Is This Place?

by Kevin Lynch

In 1960, The MIT Press published Kevin Lynch's *The Image of the City*, a widely influential book that explored the differences between one's personal sense of place and "official," "objective" maps. In his new book, *What Time Is This Place?*, he takes a complementary view of the human sense of time, a biological rhythm that follows a different beat from most "official," "objective" timepieces. The center of his interest is on how this innate sense affects the ways we view and change—or conserve, or destroy—our physical environment, especially in the cities. Beyond this, the book reveals that the sense of time and the sense of place are inextricably meshed: Time-place is a continuum of the mind, as fundamental as the space-time that may be the ultimate reality of the material world.

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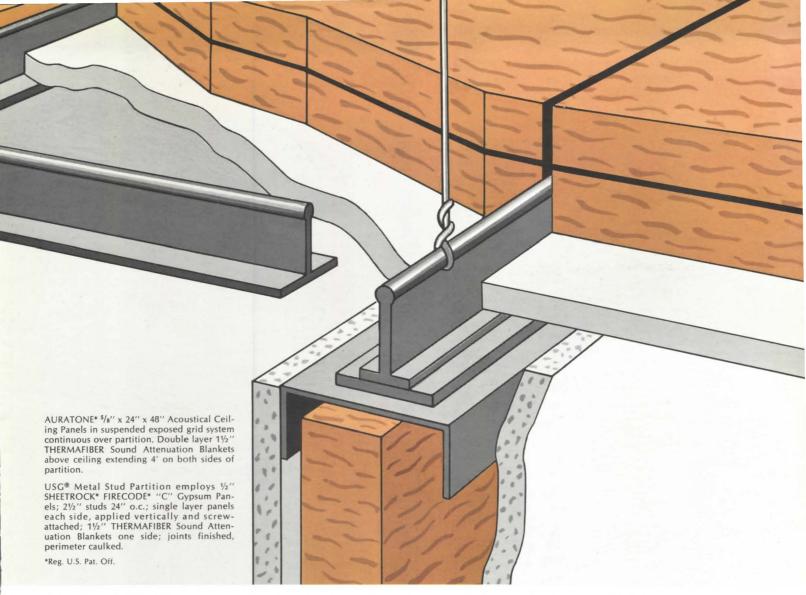
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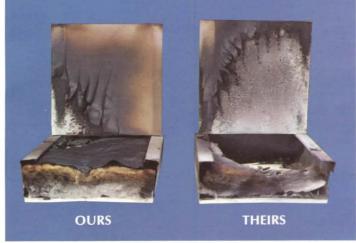
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