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Design by Peter Bradford

THE ARCHITECTURAL FORUM  
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PUBLISHER'S NOTE

One of the recurrent compliments from our readers that we find especially pleasing is that we are "noncommercial." We accept the compliment as meaning that editorial material is selected, always and without exception, for the reader, not the advertiser. (We hasten to add that we are not anti-commercial!)

This principle of complete separation of church and state can lead us into some peculiar situations, and the issue at hand is a case in point. The principle forced us, this month, stubbornly to stick to earlier editorial plans to present not one, but *two* buildings of oxidizing steel—the kind that rusts for a while, then takes on a fine permanent patina—even though it turned out that we were going to run an imposing eight-page ad for the manufacturer of the very same steel. Let the impure in heart make what they will of this coincidence.

Actually, it is by no means an unhappy situation. Advertising, at its best, can be an important medium of professional communication. Thus, our readers can learn this month about the Chicago Civic Center from two distinct points of view: ours, and the manufacturer's.

Another triple-header occurs in the "Books" section: a Philip Johnson review of Philip Johnson's book on Philip Johnson's architecture, supplemented elsewhere by a publisher's ad for the resplendent volume. As the editorial footnote to the review points out, we just couldn't find a better qualified Boswell for Johnson than Johnson. This may well be the first time an author has been asked to review his own book—and it should, possibly, be the last. Anyway, we have now added to autobiography the art of auto-critique.

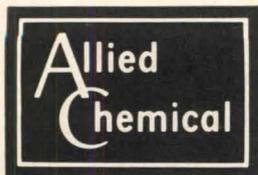
Reviewer Johnson speaks of the "Technicolor" presentation of his buildings in the context of past attempts at "self-advertising" by such architects as Wright and Le Corbusier. Be that as it may, we insist on regarding his review as editorial matter. L.W.M.

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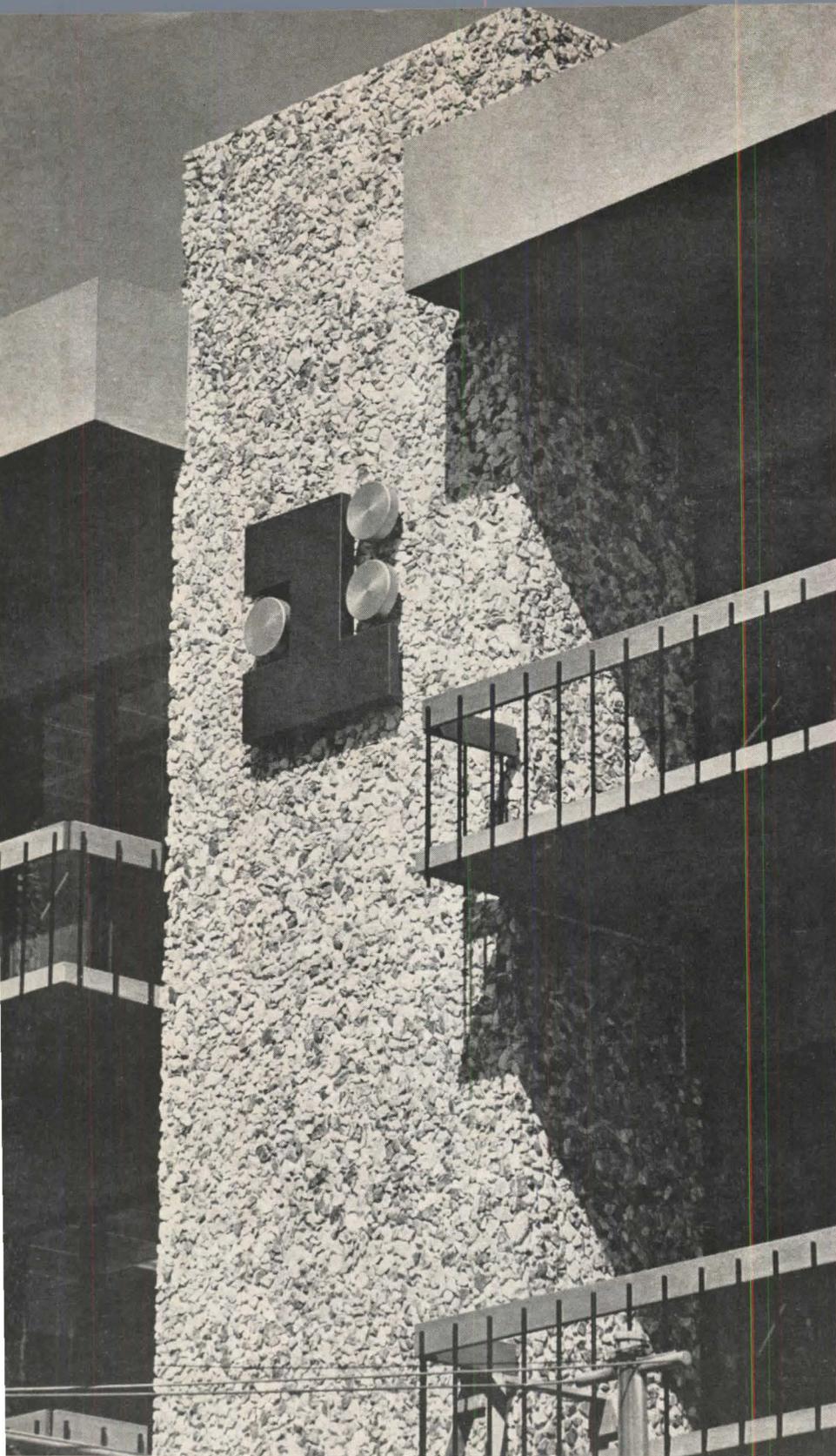
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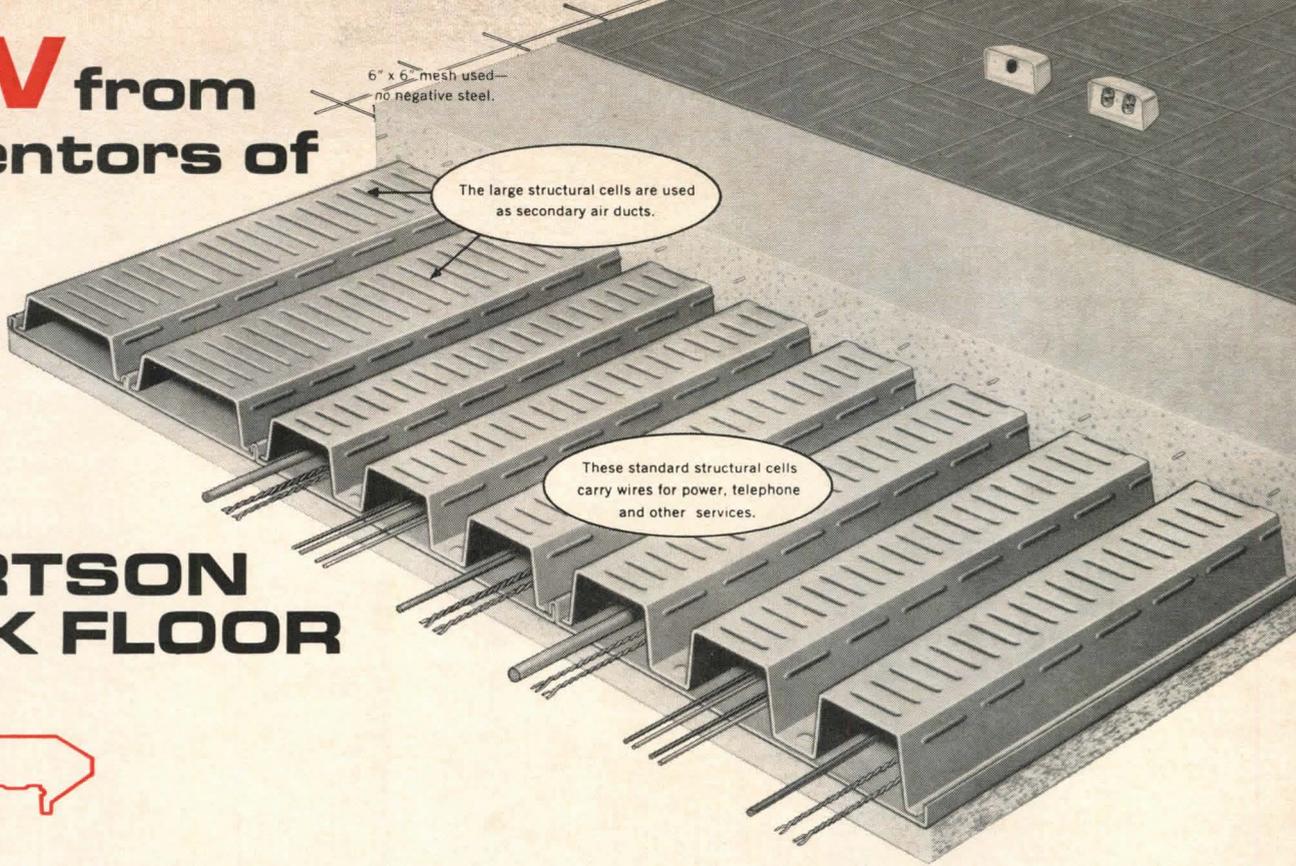
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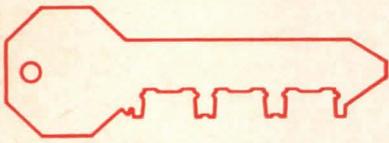
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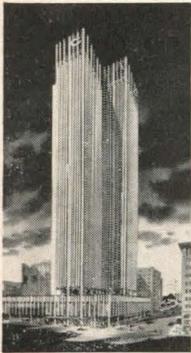


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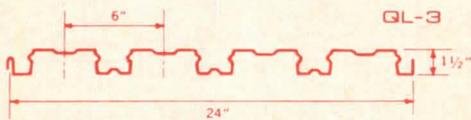
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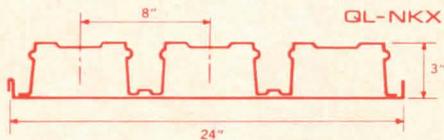
Vocational School, Springfield, Ohio. John L. Kline, architect and structural engineer; Fry, Inc., general contractor.

Crocker-Citizens National Bank, Los Angeles, Calif. William L. Pereira, Architect; Brandon & Johnson Assoc., structural engineers; William Simpson Construction Co. and Dinwiddie Construction Co., general contractors.

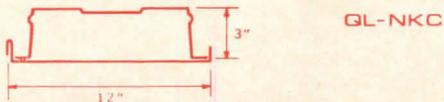
Atlanta Gas Light Tower, Atlanta, Ga. Edwards & Portman, Architects; J. A. Jones, Construction Co., general contractor.



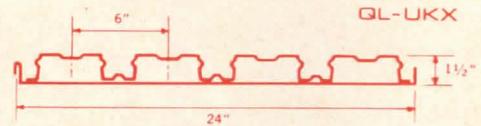
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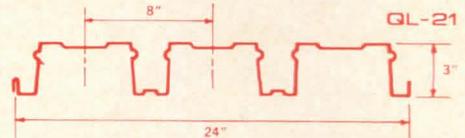
With the welded bottom plate this style provides electrical raceways.



This wide structural unit (used in pairs) also functions as a secondary duct for air conditioning.



This type is similar to QL-3 except that the flat bottom section gives it greater span capacity. It can be used electrically.



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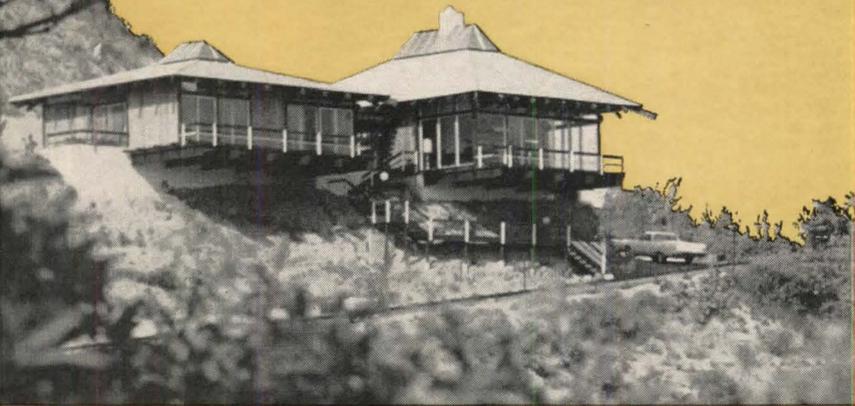
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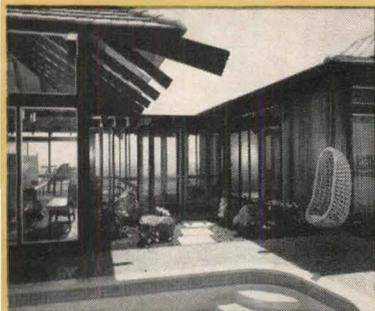
# Rugged hillside— tamed with the warmth of wood and Olympic Stain



A panoramic sweep of the Los Angeles Basin and the Pacific, from a slope high in the Hollywood Hills. That's what architect Bodrell Joer'dan Smith began with. His clients wanted a home completely open to the view—yet one that could provide a sense of privacy and comfort as well.

"In order to make the best use of the steep site and gain as much openness as possible," Smith says, "we were striving for a series of pavilions, linked with a strong 'spine' of circulation."

The floor level, cantilevered with steel beams, extends beyond the narrow shelf on which the house is set. With all but one of the walls completely windowed, and skylights at the peaks of the pavilions, the whole splendid outdoor scene sweeps through the house.



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"One of the advantages of Olympic Semi-Transparent Stains," continues Smith, "is that they allow one to intensify a wood with color without obscuring its natural character. The firm selected warm rust-orange carpeting and earth tones in interior fur-



nishings to complement the theme set by the Olympic tones and provide a fully coordinated architectural statement."

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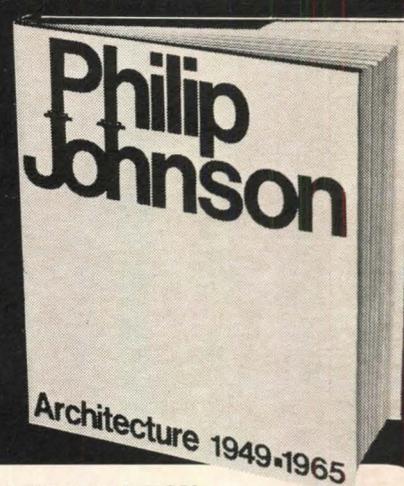
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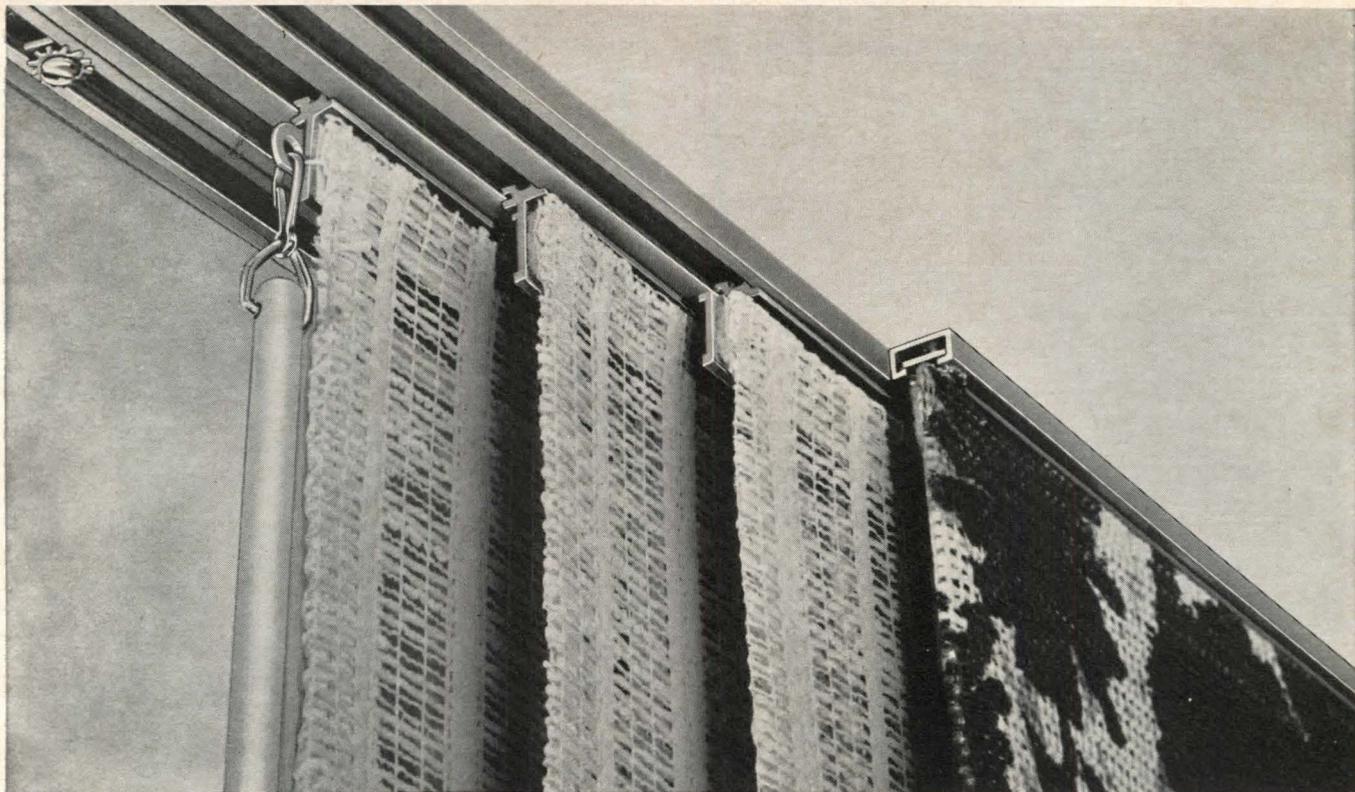
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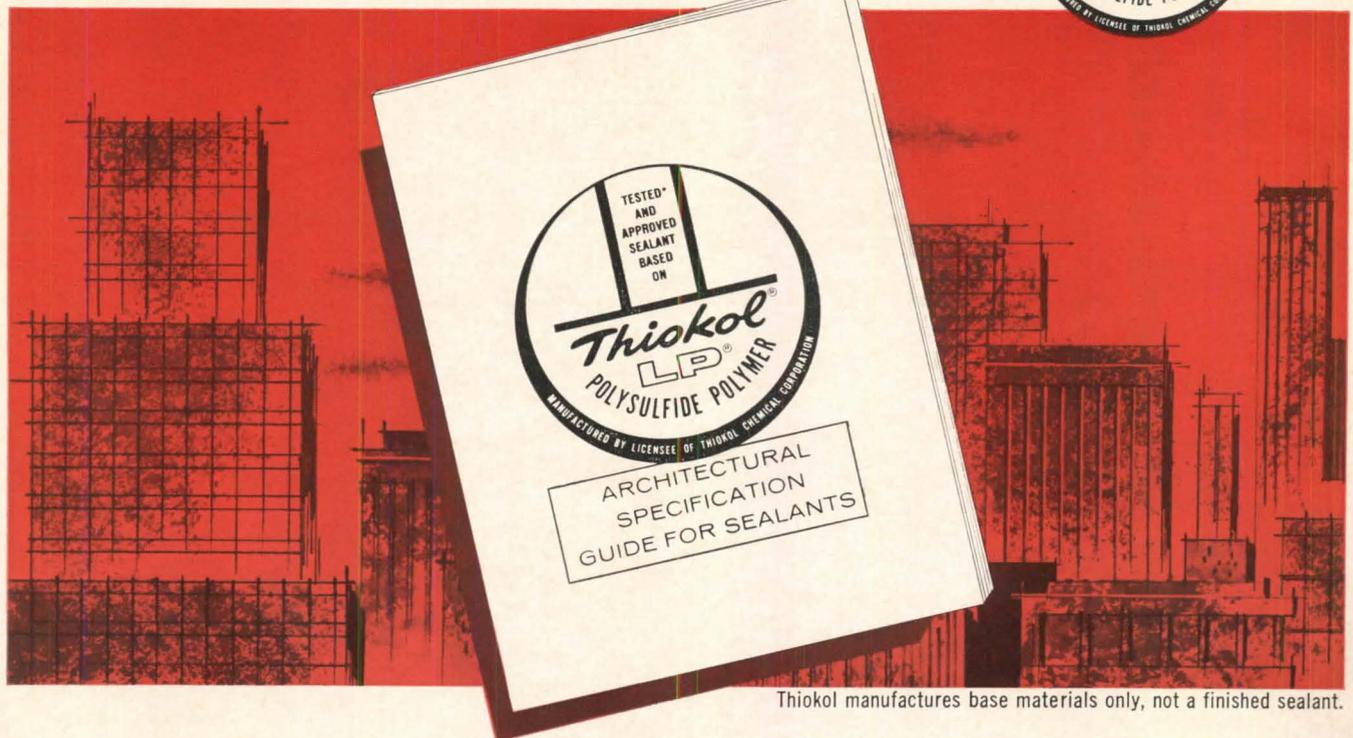
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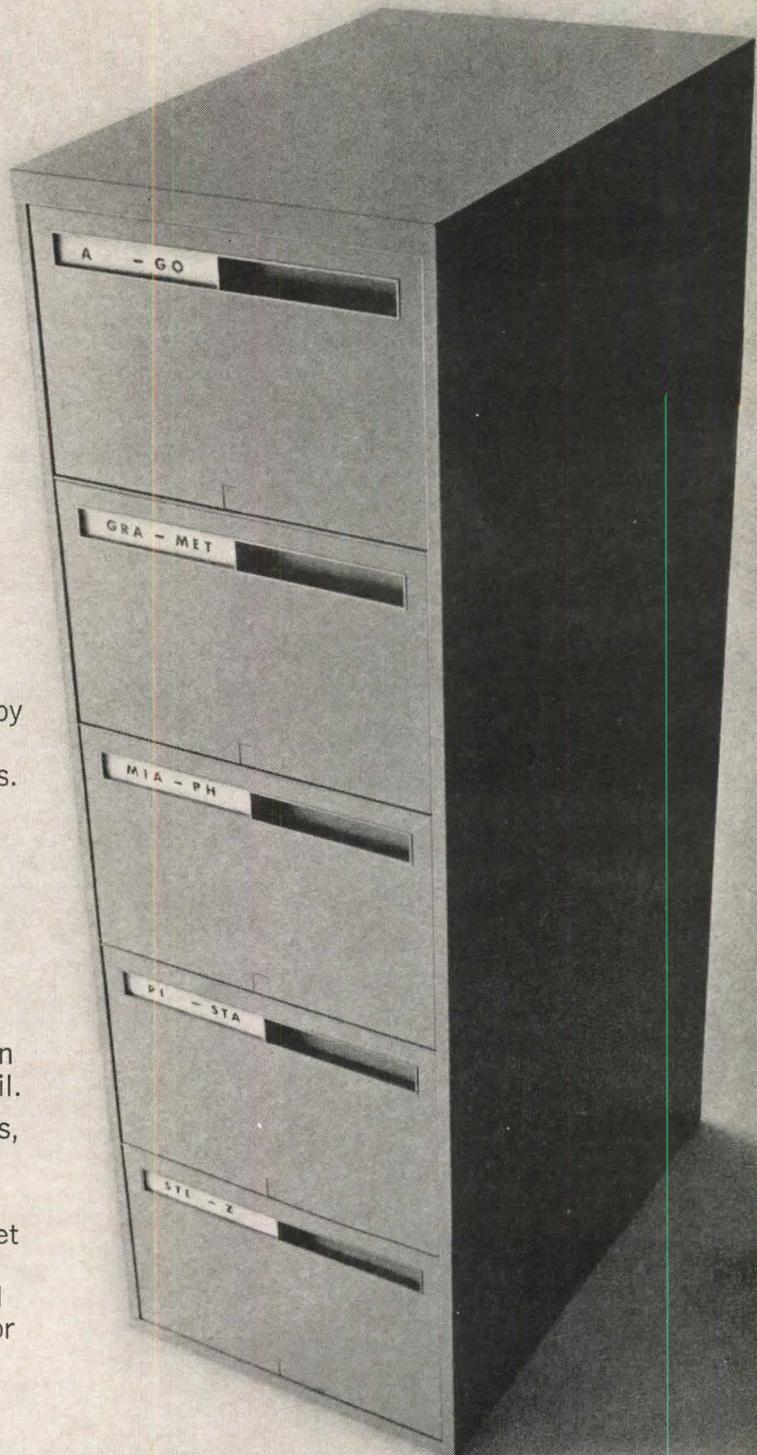
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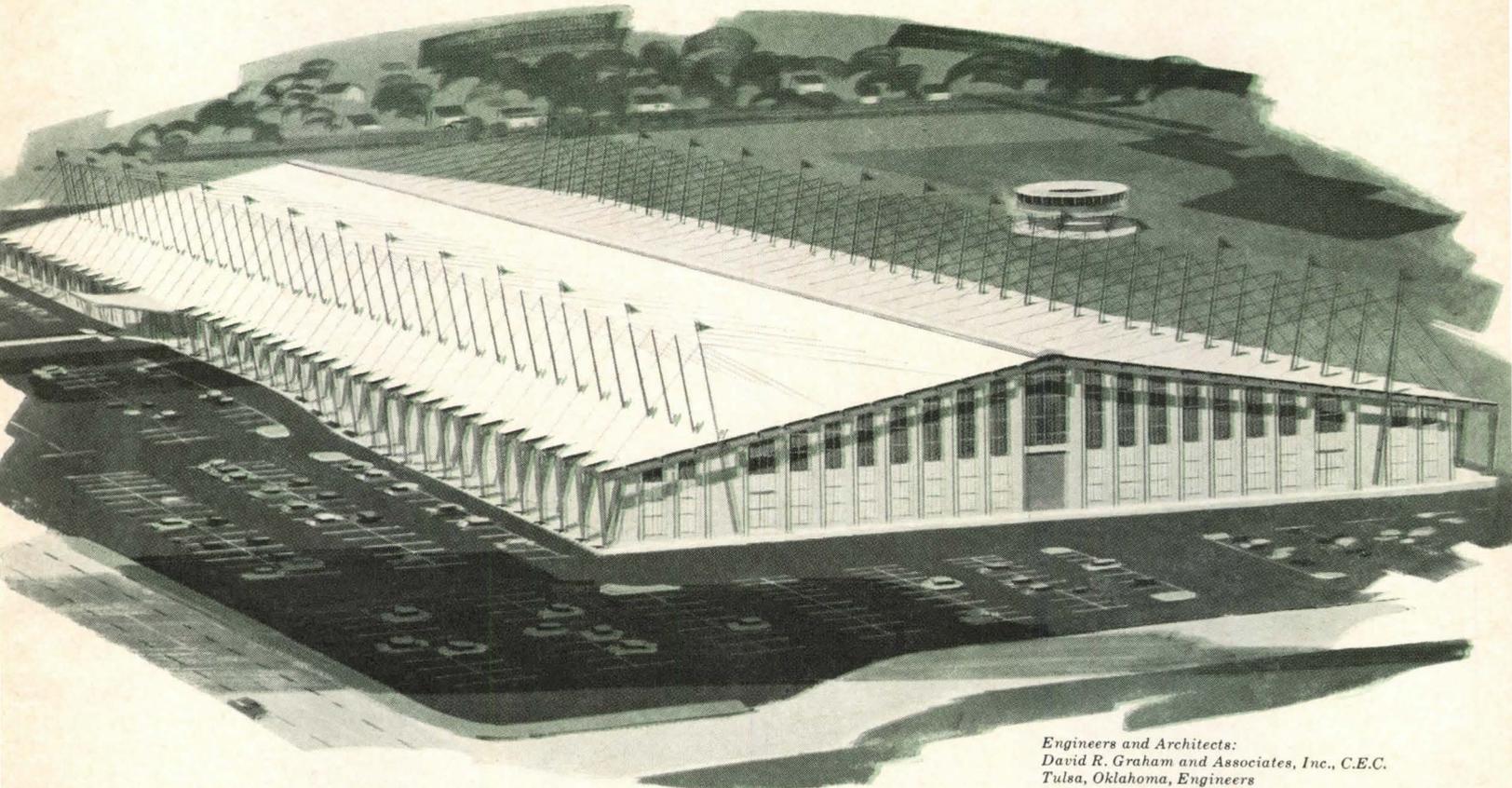
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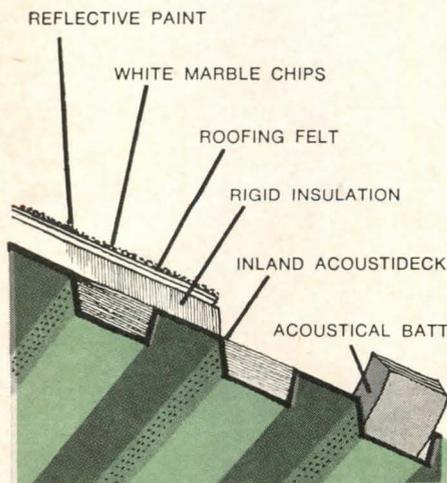
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Inland type N Acoustideck spans the 13'-10" between these beams. The inherent diaphragm action of the deck provides lateral bracing for wind loads, thus eliminating the need for extraneous X-bracing.

Acoustideck was a logical choice for this suspended roof system, because it weighs less than half of equivalent poured-in-place or precast construction—and carries normal loads over greater spans. The roof on the Tulsa Exposition Center is designed for a snow load of 20 psf. Because Acoustideck absorbs sound, it dampens the high noise level rampant in exhibit areas.

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## Inland Steel Products

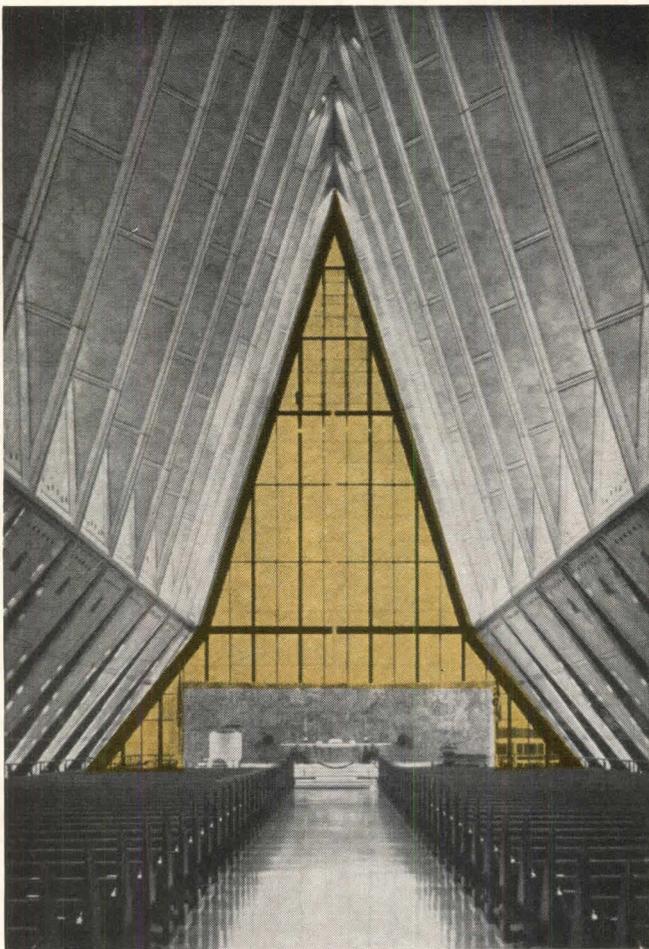


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## LETTERS

### BREAK WITH BART

Forum: I haven't written you before about your superb article on BART in the June Forum, because I had hoped to report what results if any it had on the development of the system.

For a while it looked as though it would make a real impact, and it was widely read and much discussed. However, things rapidly fell back into their old pattern, and it has now degenerated to the point where I find it undesirable any longer to fight the system.

I have prepared a letter of resignation which is being given to the press.

DONN EMMONS  
Architect

San Francisco

For a full report of the incident, see page 29.—ED

### DISGRACEFUL SUBWAYS

Forum: Walter McQuade's article about subway stations [September issue] points clearly towards the urgent need for improved design in these areas.

I would like to let Mr. McQuade know, however, that as interior designers and educators we have been aware of this disgraceful environment for quite some time, and have in fact dealt with the redesign of subway stations in our department on a number of design problems. I cannot say that our students have solved the problem completely; but they have certainly pointed the way to some spirited solutions.

I personally hope that with the help of your magazine and others, and through the outraged voices of design critics, City Hall's attention could be focused on the crying need to improve subway environment. Maybe we could persuade Park Commissioner Hoving to take over as temporary chairman of the Transit Authority to get that solid group to be "with it."

ARNOLD FRIEDMAN  
Professor of  
Interior Design

Pratt Institute

### SNAIL PHOBIA

Forum: I believe Forum is distinguished as a publication directed to the important aspects of architecture. By illuminating the buildings, ideas, and projects which are significant to the development of the architect's con-

tribution to human environment, Forum has become an important magazine.

The coverage of "The Snail House" [July/Aug. issue] is an exception. This building has nothing whatever to do with the important aspects of architecture. This bit of chaff mingled with the grain of relevant ideas hopefully will cause some of us to reflect on the attitude of Mies van der Rohe: "I don't want to be interesting. I want to be good."

NORMAN STOECKER  
Architect

Chesterfield, Mo.

### COMING ATTRACTION

Forum: Charles Moore's penetrating but delightfully un pompous commentary on New York's Baths of Caracalla, which are very *pompier* indeed, omits any mention of its *dernier cri* mid-century paraphernalia "so much of our time."

I respectfully submit a footnote to correct any impression Mr. Moore may have left that Lincoln Center is a 19th-century enterprise entirely.

I learn from most reliable sources that the electronic controls of the great fountain will eventually be wired for sound, to take care of treacherous drafts in a suitably polyglot, gracious manner, including:

*Whoops, sorry!*

*Ai-yiai*

*Entschuldigung*

*Zut alors!*

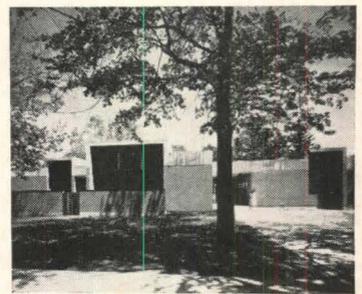
*Ciao ragazzi!*

*Noo nichevo!*

SERGE CHERMAYEFF  
Professor of

Yale University

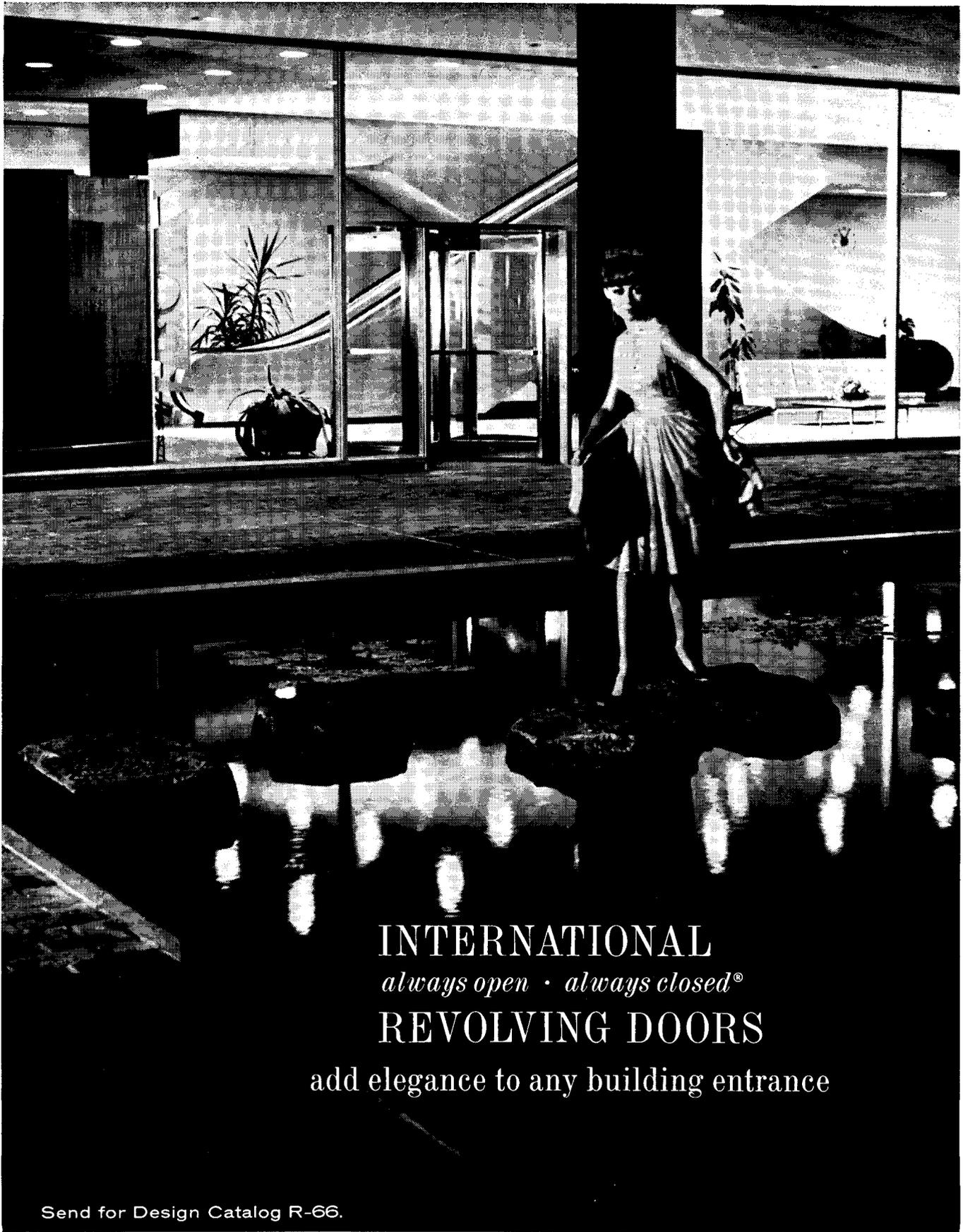
Architectural Design



### THE MAN WHO . . .

For Architect Gilbert Switzer, September was just one of those months. First, the Forum published his Donald G. Mitchell Memorial Library (above) in New Haven, but neglected to mention that he was the architect. Then The New York Times, in a Sept. 18 article, stated that the architect of the library was "Gilbert Witzer."

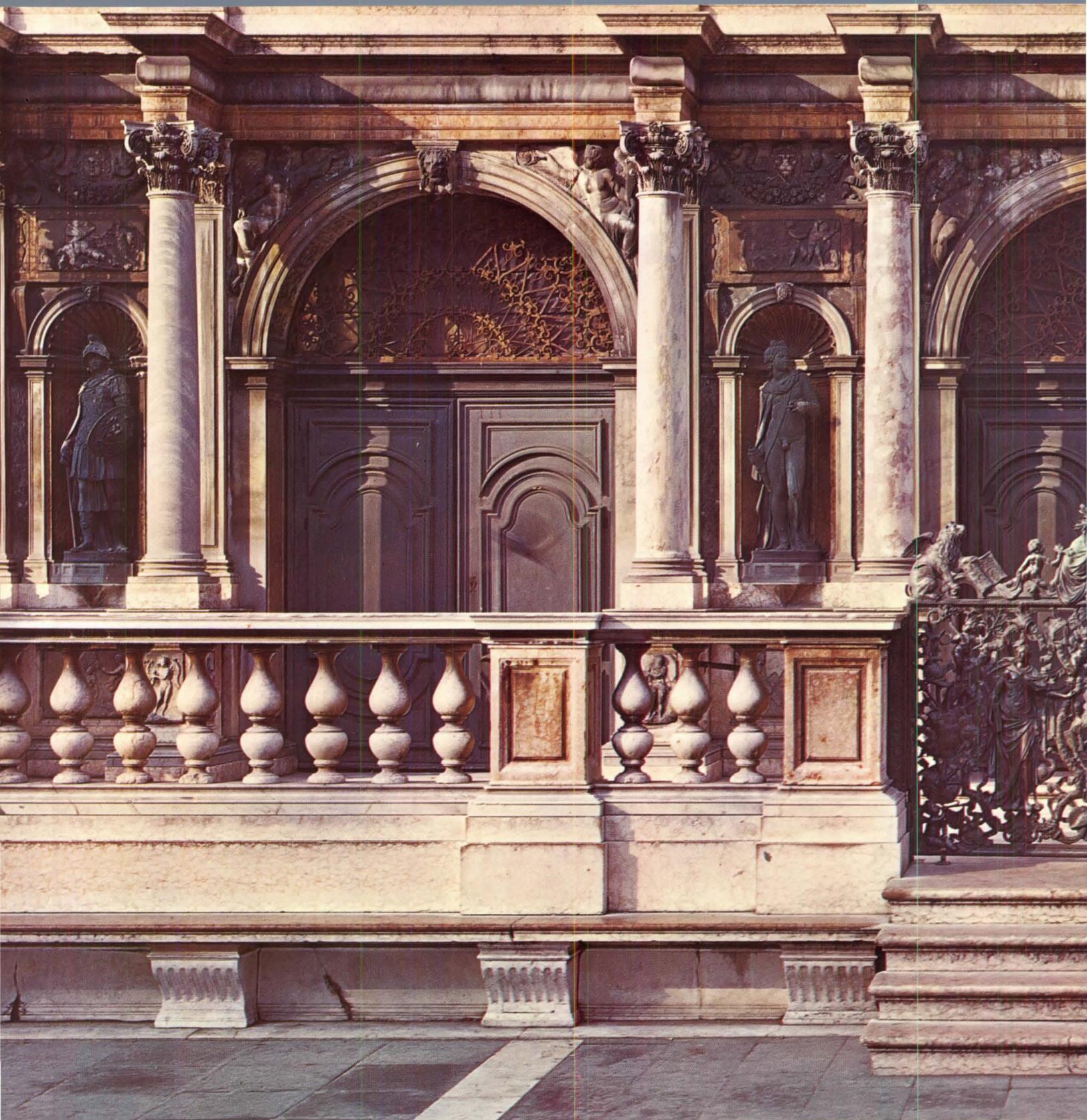
Our apologies—and sympathy—to Mr. Switzer.—ED



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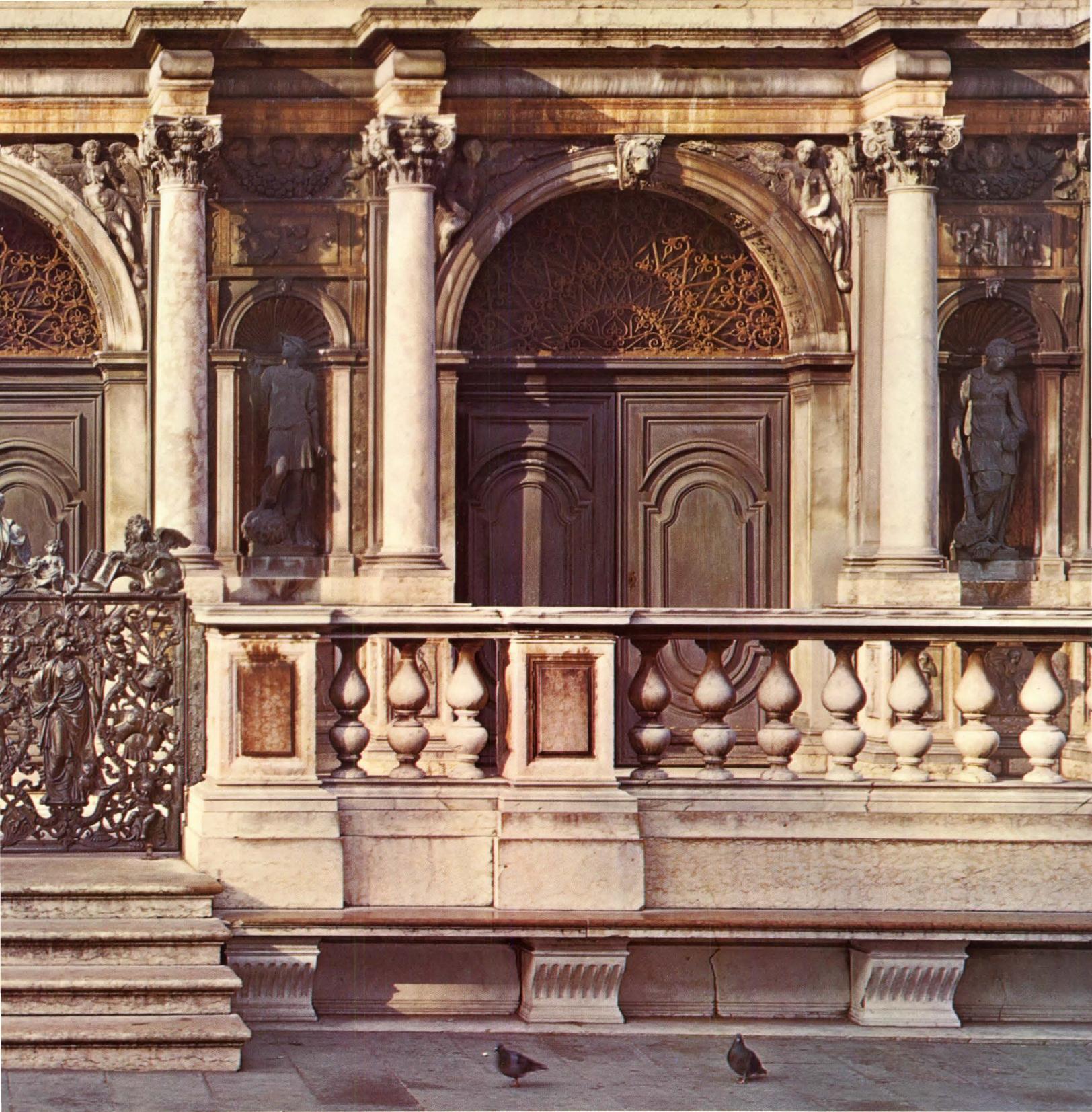
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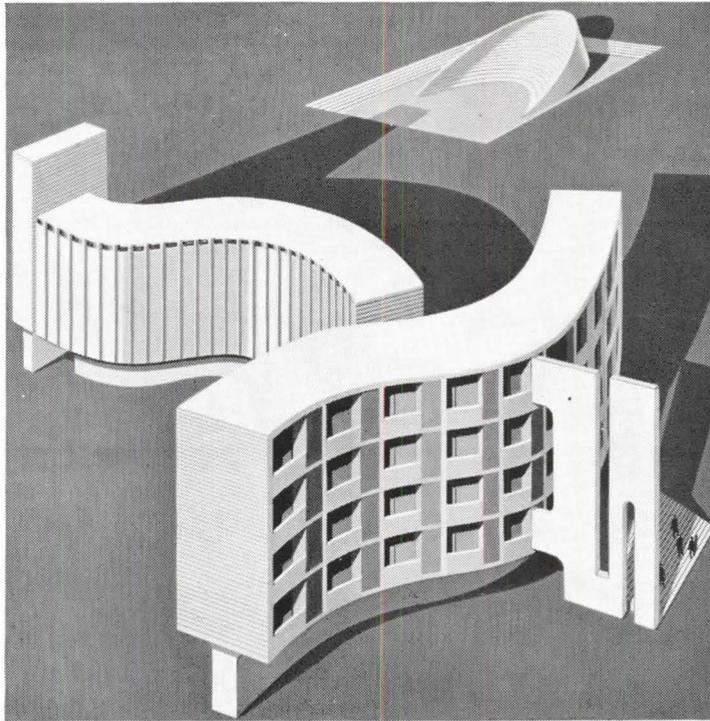
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a modern, easy-to-erect package, and you enjoy quicker occupancy. ■ All of these benefits are yours in a custom-built structure that can cost you less than a pre-fab of comparable size. ■ Macomber doesn't restrict you to any size, shape or style of architecture—as you can see by the photos on this page.



**SCHOOLS**, dormitories, libraries are being built at lower costs with Macomber framing systems.



**INDUSTRIAL STRUCTURES**, military buildings, etc., are built to meet requirements . . . easily extended as conditions demand.



**SHOPPING CENTERS**, bowling alleys, commercial buildings of all types made to meet architects specifications.



**SHOW ROOMS** for automobiles, boats, appliances, etc., can be erected at less than the cost of a pre-fab.



**APARTMENTS**, office buildings—high rise units for any purpose—go up quicker when builders use Macomber framing systems.

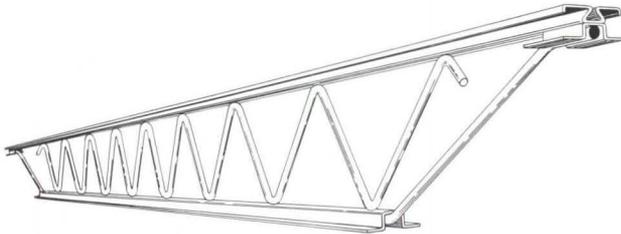


**WAREHOUSES**, aircraft hangars are two more building types where Macomber systems have provided substantial savings.

# MACOMBER

## STANDARDIZED STEEL BUILDING PRODUCTS

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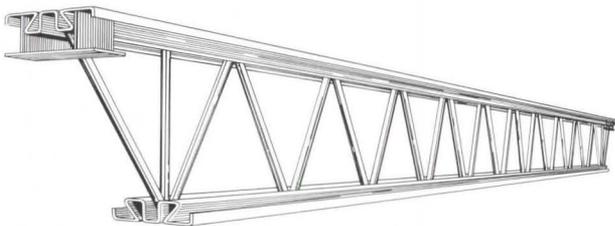


The Macomber V-BEAM is available in depths from 8" to 28" and in spans to 56'. The V-BEAM is made with cold rollformed chords. The Macomber V-Section is utilized as the top chord and a Macomber B-Section serves as the bottom chord, providing the joist with unusual lateral stability. The chords are proportioned in accordance with the latest A.I.S.I. specifications.

The performance and design of this member is verified by the results of more than a thousand load tests on full size joists, conducted since 1950 in the V-BEAM development sequence. In addition, the success of hundreds of thousands of V-BEAMS on the job lends proof to our claims for this product.

**Load tables and other technical information are contained in Catalog VB.**

### LH SERIES JOISTS

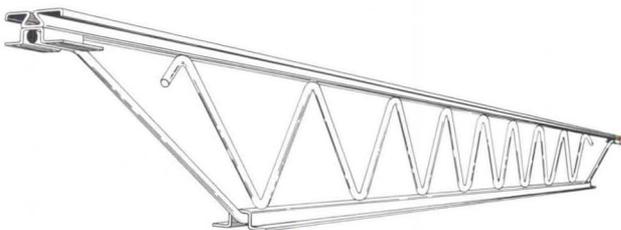


Macomber LH Series Joists are manufactured in the span range 25' to 152'. This joist is fabricated with cold rollformed chords, the light weight members in the smaller depths utilizing the Macomber V-Section and B-Section, the heavier members utilizing the Macomber Double V-Section. The design of the member is A.I.S.C. approved within the range of sizes and spans included in the standards. Sizes and spans outside of the range of standards are designed in accordance with A.I.S.C. specifications.

Standard end depth is 5" for members through 48" deep. For members over 48" deep, end depth is 7½".

**Load tables and specifications are contained in Catalog MLH.**

### J & H SERIES JOISTS

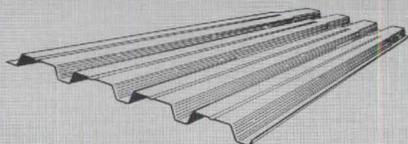


Macomber J & H Series Joists are available in spans from 8' to 48'. These joists utilize cold rollformed chords for maximum lateral rigidity and reserve strength. On both joists, the Macomber V-Section serves as top chord, while the bottom chord consists of a Macomber B-Section.

Design of the Macomber H-Joist is S.J.I. approved.

**Load tables, specifications, and dimensions are published in Catalog MJH.**

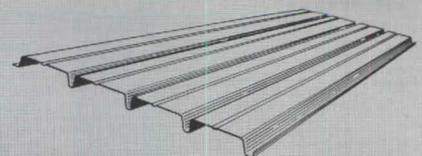
### WIDE-RIB STEEL ROOF DECK



Macomber wide-rib steel deck provides maximum strength and stiffness with purlin spaces up to eight feet. It is cold rollformed from 22, 20 and 18 gauge high tensile steel strip. It has a net lay of 24", rib width is 1½" and depth is 1½". This deck can be furnished in any length practical to handle, either painted or galvanized.

**Loadings, properties and other information is detailed in Catalog SDC.**

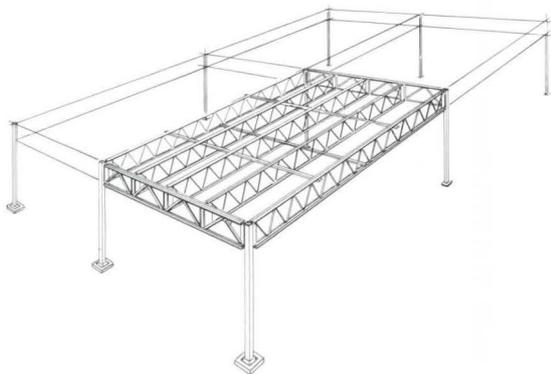
### NARROW-RIB STEEL ROOF DECK



Macomber narrow-rib steel deck is primarily intended for use where specifications require the use of thin insulation material without sacrificing a bonded roof. It is cold rollformed from high tensile 22, 20 and 18 gauge strip. It is available either painted or galvanized in any lengths practical to handle. Macomber narrow-rib deck has a ¾" rib width, a depth of 1½" and a net lay of 24"

**Loadings and properties are covered in Catalog SDC.**

## V-LOK®

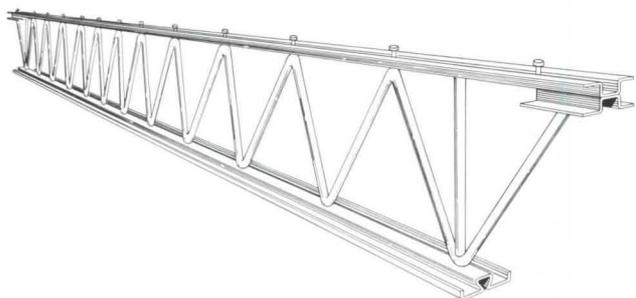


This unique interlocking framing system is unlimited in range of application. It has been used by leading architects and engineers for a wide variety of structures — shopping centers, schools, office buildings, and warehouses. V-LOK permits wide design latitude, requires a minimum of equipment and labor to erect, interlocks into an extremely stable structure, and when provided for, may be readily expanded in any direction.

V-LOK is practical, a building is up, roofed-in, and ready for finishing operations in a matter of days after steel delivery.

**Design Manual MV contains typical framing plans, structural analyses, load tables and other useful information.**

## COMPOSITE STRUCTURAL SYSTEM



A specially designed open-web steel joist is the basis of the Macomber Composite Structural System.

The system consists of this unique joist, Macoform ribbed steel centering, and a wire mesh reinforced concrete slab. The system functions as a unit, utilizing the strength of steel joists and the capacity of the concrete slab. The result is a unit more rigid than steel and concrete acting independently.

The Macomber Composite Structural System is suitable for use in single-story, as well as multiple-story construction. The Composite joist is available in lengths to 36' and depths to 20".

**Installation instructions, load tables and suggested specifications are contained in Catalog MCJ.**

## BOWSTRING TRUSSES

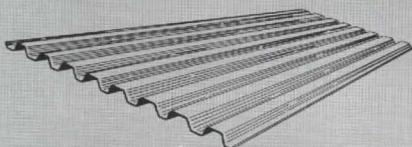


Macomber Bowstring Trusses are the practical, economical way to span wide, column-free areas in industrial, commercial and recreational structures. Bowstring Trusses are manufactured with the Macomber Double V-Section as chord members and rectangular tubing in the web system. The V-Section chords are designed in accordance with the "Specification for the Design of Light Gage Cold-Formed Steel Structural Members" of the American Iron & Steel Institute — 1960.

Bowstring Trusses are available in lengths from 50' to 120'. They are made in one-piece unspliced lengths for spans to 60'. Trusses over this length, up to 120', are made with one field splice at the center, they are readily assembled in the field.

**Technical information is available in Catalog MB.**

## MACOFORM STEEL CENTERING



Macoform high strength ribbed steel centering is cold rollformed from high tensile 28, 26 and 24 gauge strip. It is available in standard lengths of 8'-2", 9'-2", 10'-2" and 12'-2" which are stock items. Special lengths are available, subject to minimum quantities and other conditions as they may apply at time of ordering.

Macoform is  $\frac{1}{32}$ " deep, ribs center to center measure  $2\frac{1}{3}$ " and it has a net lay of 24".

**Technical information is published in Catalog SDC.**

## MACOMBER QUALITY CONTROL

Quality control of Macomber open-web steel framing products is supervised by Pittsburgh Testing Laboratory inspectors.

In addition to inspection by the Pittsburgh Testing Laboratory, a continuous inspection service is provided by the Engineering Department of Macomber.

All production welding is performed by personnel certified by the Pittsburgh Testing Laboratory.

Macomber insures the customer of high quality open-web steel framing products through this program.

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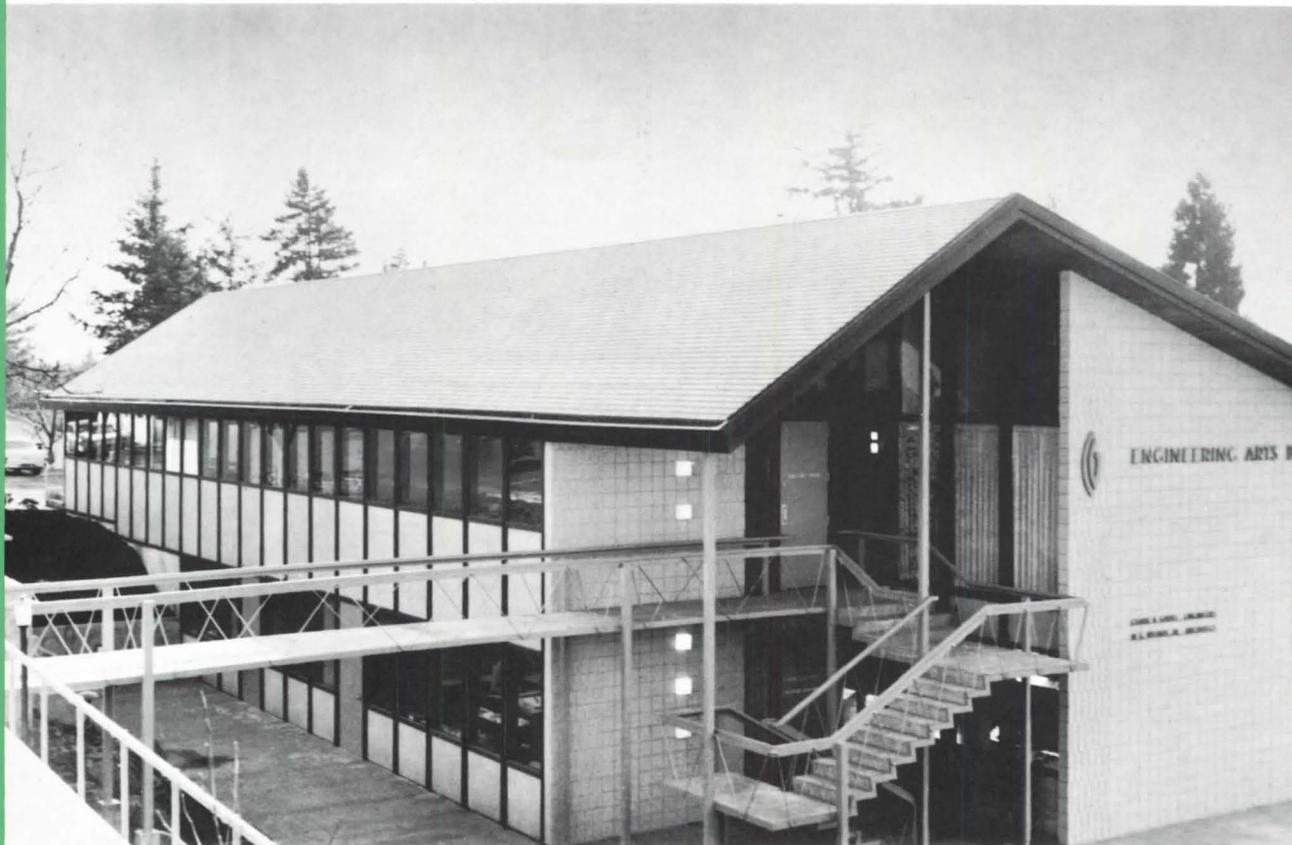
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SUBSIDIARY OF SHARON STEEL CORPORATION

# Architect Says Easily Concealed Electric Heat Pump System Provides Design Freedom, Precise Zone Control



**SALEM, OREGON**—The Engineering Arts Building here is headquarters for Clark & Groff Engineers, specialists in the design of municipal projects and one of the largest engineering firms in the northwest. As might be expected, the building is an “engineer’s dream” and a showcase for the firm’s drafting, designing, surveying, testing, and other engineering activities. The design of the building, its electric space conditioning system, and its landscaped grounds, are the result of close collaboration between architect Wilbur G. Wilmot, Jr., consulting engineers J. R. Downing & Associates, landscape architect Floyd Witteman, and, of course, engineer-owners Warren W. Clark, Lloyd K. Clark and Gilbert Groff.

The two-story building is located on a wooded hillside slope. The upper floor has a ground level entrance from an elevated parking area on one side of the building. The lower floor has entrances on three sides. Interior space on both floors can be easily rearranged as the need arises and architect Wilmot’s design allows for expansion of the building by the addition of a series of smaller buildings

to be connected to the main structure by enclosed passageways.

Year-round, zone-controlled space conditioning is provided by four air-to-air electric heat pumps and supplementary resistance heaters. The heat pumps and the central air handling units are installed in the attic space, “out of sight, and out of mind”, yet readily accessible for routine maintenance.

In planning the Engineering Arts Building, architect Wilmot says he had two major design considerations: flexibility in the use of space and incorporation of the space conditioning system as an integral part of the building. The electric heat pump system fits this concept beautifully, he says, and is so much a part of the building that its occupants are not conscious of its existence. Temperature, humidity, and air movement are precisely controlled; sound and vibration are virtually nonexistent in the occupied spaces. And, he adds, the electric system gave him complete freedom to design the building to his client’s special needs.

**1 CATEGORY OF STRUCTURE:**  
Commercial—Office Building

**2 GENERAL DESCRIPTION:**  
Area: 7,200 sq ft  
Volume: 86,580 cu ft  
Number of floors: two  
Number of occupants: 40  
Number of rooms: moveable partitions  
Types of rooms: offices and engineering facilities

**3 CONSTRUCTION DETAILS:**  
Glass: single  
Exterior walls: 8" block masonry, insulating board faced 2 sides (R/14). U-factor: .21  
Roof or ceilings: wood frame, 3" mineral wool (R/11). U-factor: .07  
Floors: concrete  
Gross exposed wall area: 3,184 sq ft  
Glass area: 1,717 sq ft

**4 ENVIRONMENTAL DESIGN CONDITIONS:**  
**Heating:**  
Heat loss Btuh: 230,000  
Normal degree days: 4,754  
Ventilation requirements: 1,800 cfm  
Design conditions: 10F outdoors; 72F indoors  
**Cooling:**  
Heat gain Btuh: 264,000  
Ventilation requirements: 1,800 cfm  
Design conditions: 95F dbt, 68F wbt outdoors; 75F indoors, 50% rh indoors

**5 LIGHTING:**  
Levels in footcandles: 120-200  
Levels in watts/sq ft: 6  
Type: fluorescent

**6 HEATING AND COOLING SYSTEM:**  
Three 5-ton and one 7.5-ton air-to-air electric heat pumps, supplemented by 60 kw of resistance heat. Each heat pump serves one of four zones.

**7 ELECTRICAL SERVICE:**  
Type: underground  
Voltage: 120/208v, 4-wire, wye  
Metering: secondary

**8 CONNECTED LOADS:**

Heating & Cooling (22.5 tons)	90 kw
Lighting	50 kw
Water Heating	5 kw
Cooking	4 kw
Other	5 kw
TOTAL	154 kw

**9 INSTALLED COST:\***

General Work	\$111,050	\$15.42/sq ft
Plumbing	5,361	.74/sq ft
Electrical	20,231	2.80/sq ft
Mechanical	14,450	2.00/sq ft
TOTAL	\$151,092	\$20.96/sq ft

\*Building completed August 1963

**10 HOURS AND METHODS OF OPERATION:**  
8 a.m. to 5 p.m. five days a week and some evenings

**11 OPERATING COST:**  
Period: 3/3/65 to 3/3/66  
Actual degree days: 4,908  
Actual kwh: 145,460\*  
Actual cost: \$2,033.71\*  
Ave. cost per kwh: 1.40 cents\*  
\*For total electrical usage

Billing Date	Demand	kwh	Amount
4/1/65	50	10,120	\$ 148.88
5/1/65	50	10,280	150.32
6/1/65	48	10,220	147.48
7/1/65	50	8,970	138.53
8/1/65	54	10,110	153.65
9/1/65	54	11,560	166.61
10/1/65	48	10,140	146.76
11/1/65	46	9,340	137.26
12/1/65	56	12,080	173.42
1/3/66	64	19,840	246.14
2/1/66	56	16,780	213.88
3/3/66	58	16,020	210.78
TOTAL		145,460	\$2,033.71

**12 UNUSUAL FEATURES:**  
Heat pumps and central air handling units are located in the attic space. Temperature, humidity and air movement controls are completely automatic. A time clock regulates summer-winter, day-night, and week-end change-over with manual over-ride for late work.

**13 REASONS FOR INSTALLING ELECTRIC HEAT:**  
An electric heat pump system was selected because it offered these important advantages: it could be installed out of sight in the attic space of the building to isolate sound and vibration from occupied spaces; it provides year-round control; and rearrangement of interior space and expansion of the building can be accomplished easily and economically.

**14 PERSONNEL:**  
Owner: Clark & Groff Engineers  
Architect: Wilbur G. Wilmot, Jr., AIA  
Consulting Engineers: J. R. Downing & Associates  
Landscape Architect: Floyd B. Witteman, OSLA  
General Contractor: Stevenson & Wickman, Inc.  
Electrical Contractor: Electric Corp.  
Utility: Portland General Electric Company

**15 PREPARED BY:**  
Kenneth R. White, Air Conditioning Sales Engineer, Portland General Electric Company.

**16 VERIFIED BY:**  
*W. G. Wilmot Jr.*  
Wilbur G. Wilmot, Jr., AIA

The Consulting Engineers Council USA, has confirmed the above categories of information as being adequate to provide a comprehensive evaluation of the building project reviewed.

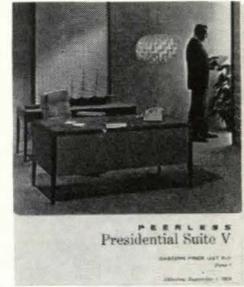
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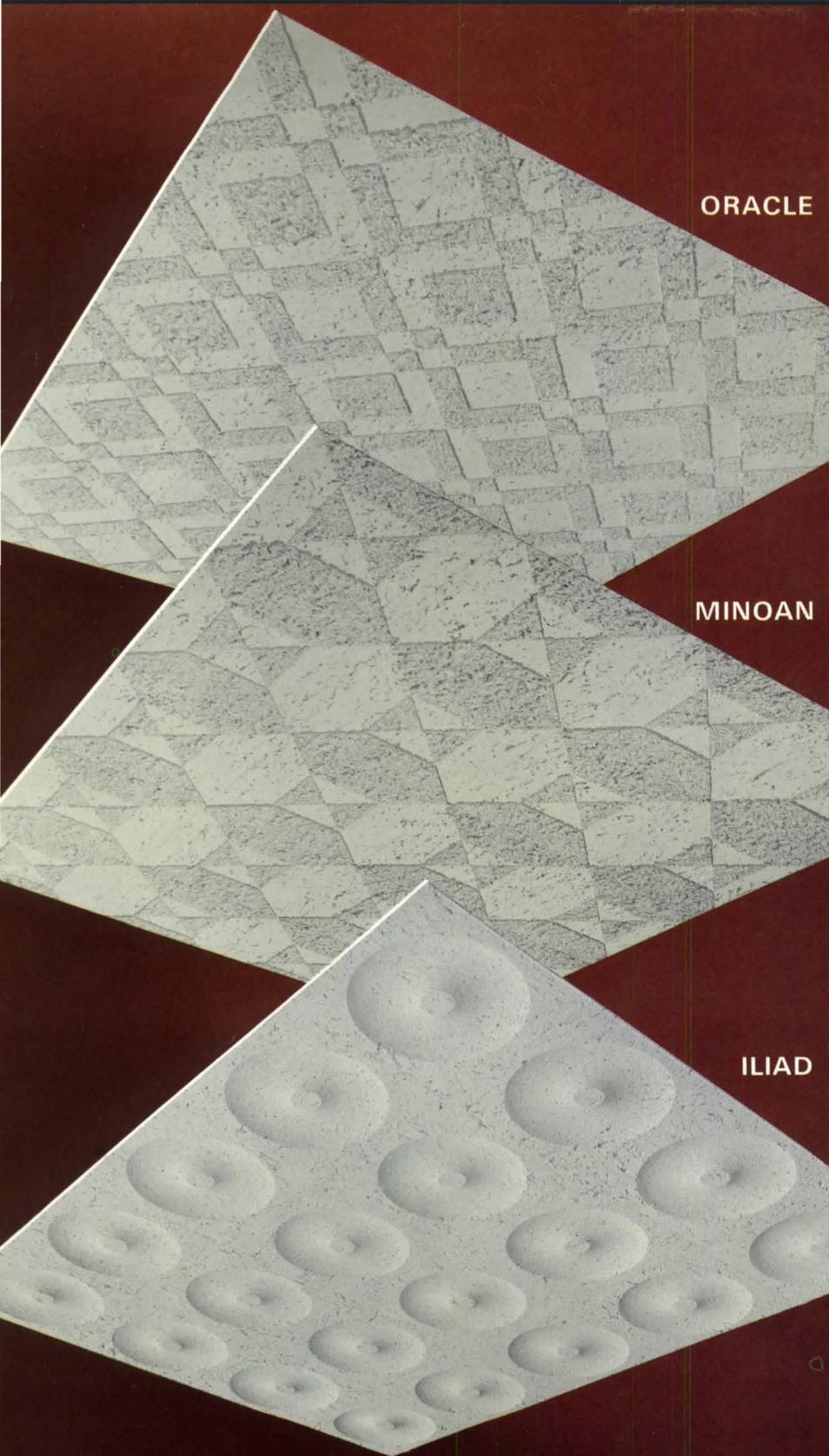
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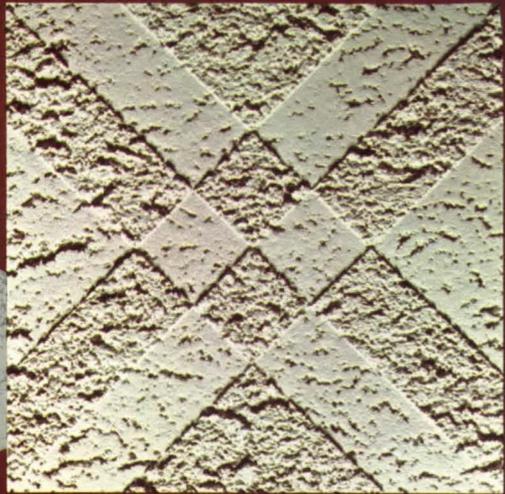
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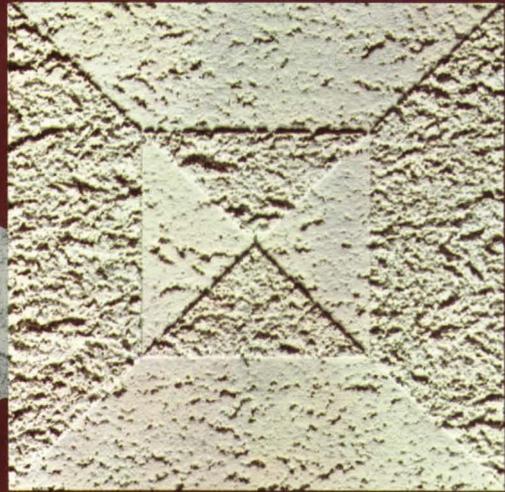




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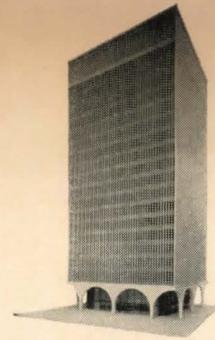
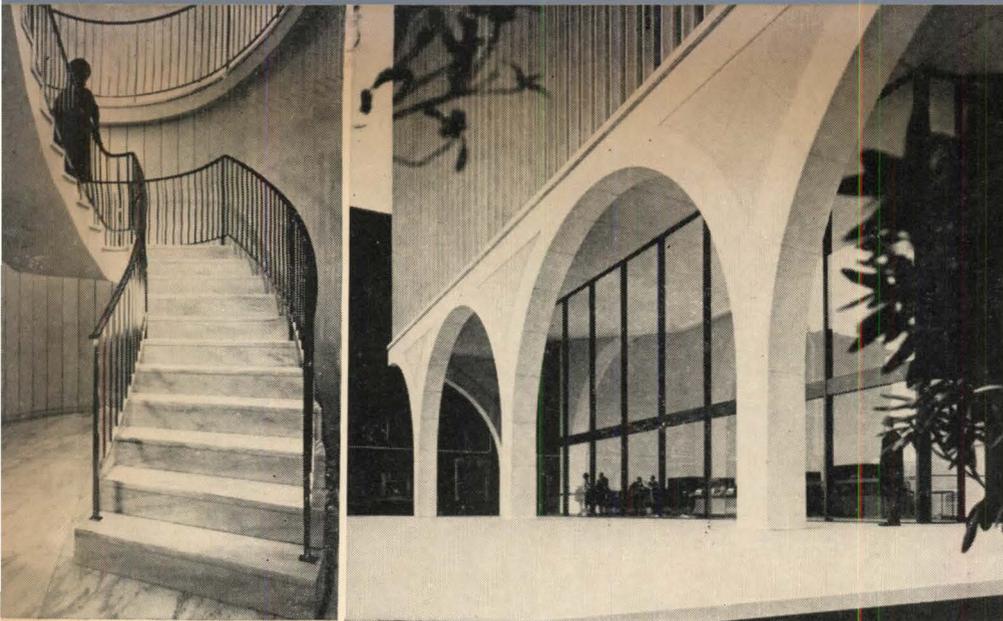
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Architects: Naramore, Bain, Brady & Johanson; Minoru Yamasaki & Associates.

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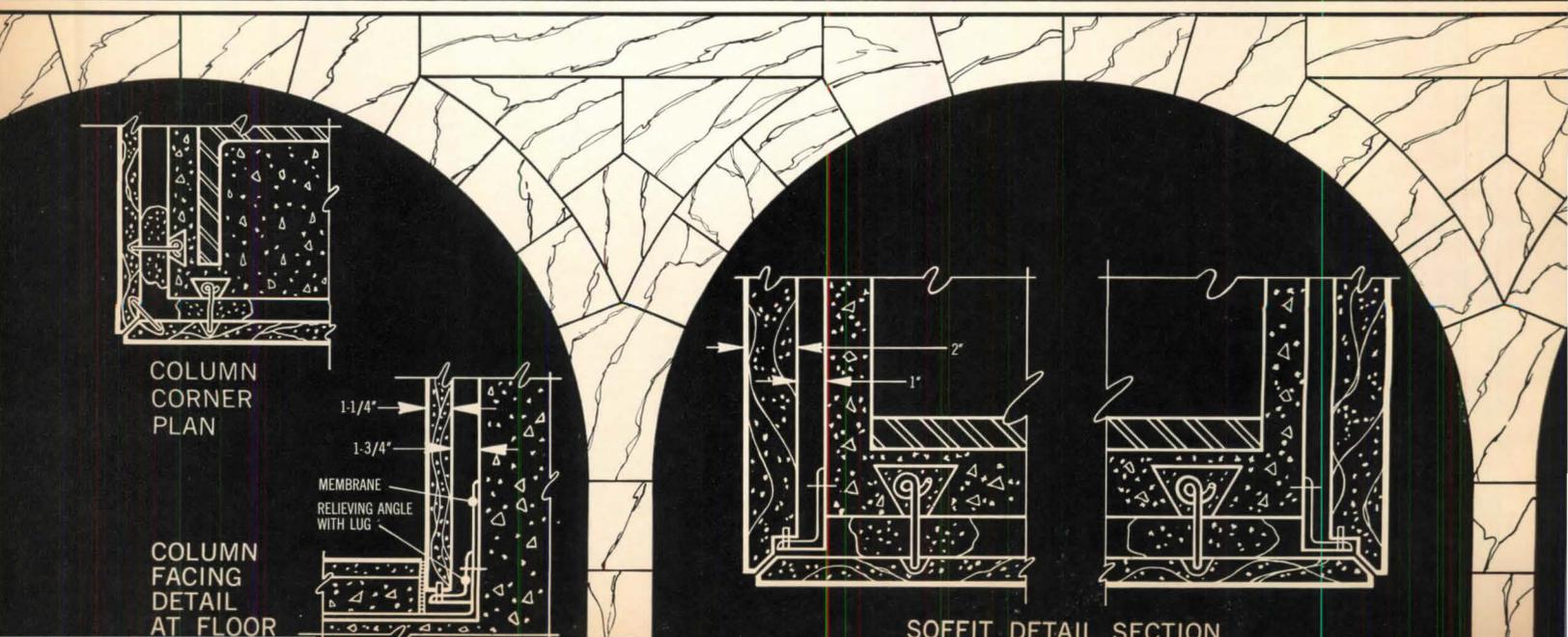
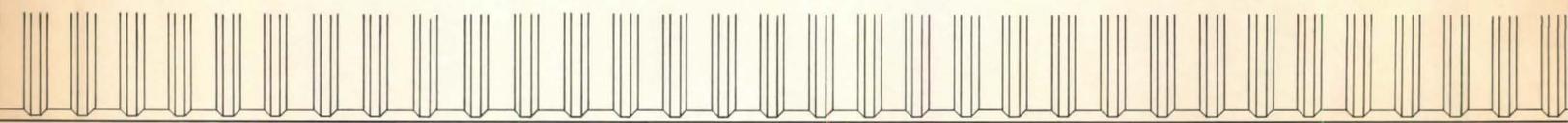
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# FORUM

"To me it looks something like a bird," said a man being interviewed on Walter Cronkite's CBS Evening News. "I'd say it was more on a flying horse—in that type of family," observed another. "Well, it resembles a baboon . . . or maybe a bird," said a third.

Whatever it is, Pablo Picasso's 42-inch model of a 50-foot sculpture that will occupy the broad plaza of Chicago's new Civic Center (below) caused a sensation when unveiled last month. Getting The Master to execute the sculpture for Chicago, where he has never been, was looked upon as one of the biggest artistic coups of recent times.

The man mainly responsible for it is Architect William Hartmann, a senior partner in SOM, one of the three firms that designed the Civic Center (see page 33). Three years ago, after its architects decided that the plaza would require "an important piece of sculpture," he decided to start at the top.

Taking along a model of the building and photographs of Chicago, Hartmann, Architects Charles F. Murphy and Norman Schlossman, and Sir Roland Penrose, Picasso's biographer, called upon the artist at his villa in Mougins on the French Riviera. Picasso was taken by the design—and by the reminder that Chicago was once the home of "*Mon ami* Hemingway."

Hartmann later paid several more visits to Picasso. "The won-



derful thing to me," he said, "is the affection Picasso has for the vision, the vitality and the beauty of Chicago. Picasso knows that Chicago is a center of present-day architecture, and so the sculpture was a natural. It all just seemed to fall into place."

The design will be executed in controlled-corrosion steel, the same material as the building. It will cost \$300,000 to construct, but the design itself didn't cost a cent: Picasso did it without charge.

One lady interviewed on the Cronkite show had the last word: "Well, I think it's something very new, and I think it's something very interesting, and I think it's something you shouldn't try to understand. I think it's something that you should just enjoy."

## TRANSIT

### EXPLOSION

In an atmosphere of bitter, publicly aired charges and countercharges, the Bay Area Rapid Transit system and its principal design consultants parted company last month.

Donn Emmons, BART's consulting architect, and Lawrence W. Halprin, consulting landscape architect, issued bluntly critical resignations that caught BART, its engineers, and all but a few of the consultants' closest associates completely by surprise.

It was common knowledge that Emmons, Halprin, and many of BART's station architects had been dissatisfied and frustrated with BART's procedures and attitudes toward architecture, planning and urban design (see June issue). But few could have predicted that the split would be made so abruptly and so angrily.

The first move came September 20, when Emmons simultaneously dispatched his letter of resignation to BART's engineers and called a press conference. "Instead of being guided by planning and architectural considerations which should be foremost in formulation of this program," Emmons charged, "both the management and the design team are almost entirely guided by limited engineering considerations. . . . I can no longer continue to endorse the program."

At Emmons' side during the press conference was Edward C. Bassett, general partner and chief of design in the San Francisco office of Skidmore, Owings & Merrill, which had been battling with

BART for months over its design of two stations under Market Street. "I am here," said Bassett, "on two counts—to attest to Mr. Emmons' patience in spite of overwhelming odds and to say that the concern expressed in Mr. Emmons' letter of resignation is shared by other architects."

During the press conference, Halprin let it be known that he concurred with Emmons' statements and that he too intended to resign. Three days later, he did, issuing a new blast at BART. "I resign on a matter of principle," Halprin said. "The principle is that the citizens of the Bay Area are being given a less than well-designed transit system."

#### AFTERMATH

BART reacted swiftly with blasts of its own at Emmons and Bassett, but was oddly conciliatory toward Halprin. "He [Emmons] has had a complete misunderstanding about his role as a consulting architect for some time," said General Manager B. R. Stokes. When asked about the difference Emmons' resignation would make, Stokes snapped, "Not much."

"Mr. Bassett," said David G. Hammond, director of development, "has been more unhappy with us than SOM has as a corporate body. The feeling is mutual."

But Stokes told the BART directors that he would try to persuade Halprin to withdraw his resignation. He also recommended, rather belatedly, it would seem, that BART examine "every single aspect" of its architectural design procedures.

There were voices raised elsewhere in support of Emmons, however. The local AIA chapter issued a statement urging BART to give "serious thought" before accepting Emmons' resignation, and the local newspapers praised his action in editorials.

#### PROSPECTS

Will the resignations, and the public airing of BART's architectural and planning shortcomings, improve the situation? Both Emmons and Halprin expressed the hope that they would, and there were indications last month that city and state investigations of BART might be launched as a result. But Architect Ernest Born, another BART consultant, who is in sympathy with most of his colleagues' grievances, feels their actions will make matters worse.

"It isn't a perfect world we are

living in," Born noted. "I don't think quitting was the way to resolve the differences. BART's engineers have grown in their thinking. Education and persuasion have been effective. I don't intend to quit until they throw me out."

As far as their influence and effectiveness were concerned, Emmons and Halprin feel they were "thrown out" before they quit.

## CULTURE

#### SOUND AND SIGHT

The Metropolitan Opera House has given Lincoln Center its first (almost) unqualified success in conveying the sound of music.

The hall was tested during a student preview in April, but the press was barred and results were kept a carefully guarded secret. Meanwhile, reports filtered out that sound during rehearsals for the September 16 opening had delighted the musicians.

Reaction at the opening itself was generally favorable, although the fact that Samuel Barber's new opera "Antony and Cleopatra" frequently required full stage, without backdrops, meant that the hall did not perform at its potential best: during these passages, too much of the sound went backward instead of outward.

The management was sufficiently reassured, overall, to release the results of the April test, with backdrop, which showed the Met to be exceptional in terms of throw, presence, reverberation time, and all the other arcane measures of the acoustician's art. Those responsible were Dr. Cyril M. Harris of Columbia University, Dr. Vilhelm Jordan of Copenhagen, and, of course, the architect, Wallace



Harrison, who paid them full deference in his design.

The Met also has given Lincoln Center some distinguished works of art, including two lyrical 30-by-36-foot murals by Marc Chagall (above, at the unveiling) and Wilhelm Lehbruck's historic 1911 sculpture *Die Knieende*. The Lehbruck (below, left), commemorating the German government's \$250-million contribution to the building of the new Met, stands at the head of the lobby's grand staircase.

## SYSTEMS

#### MAN THE INTERFACES!

Spin-off craft bearing analytical networks are hovering over the cities in anticipation of market aggregations in civil systems with sufficient critical mass to justify invasion.

This represented the conclusion, and the tone, of a conference held last month on "Technology and the City Matrix" by the Engineering Foundation at University of California's seaside Santa Barbara campus. Translated, it means that High Technology, the space-age peer of the Fine Arts, is being briefed for re-entry into the polluted atmosphere of the urbanizing earth.

Conferees were chosen from government, universities, the design professions, and organizations concerned with or involved in advanced technologies. The program was based on the metaphor of biology: the city was examined in turn as a metabolic system (the input of energy, the output of wastes through digestive tracts); a cardiovascular system (transportation of people and goods); and a nervous system ("a place where people sit together and change themselves").

A peculiarity of the conference was that quotation was not permitted, in order to facilitate free discussion, and a summary was distributed in advance in the form of a preprinted article by Chairman John P. Eberhard from the magazine *International Science and Technology*. Eberhard, an architect who heads the Commerce Department's Institute of Applied Technology, began his pre-summary by disclaiming the intention of suggesting how available technologies might be applied to cities. Instead, his subject was "how an organization based in science or technology can contribute" to cities. The important thing, he said, was not the hardware but the approach.

#### FORGET THE BUILDINGS

The approach which Eberhard advocated, not surprisingly, was the systems approach. He acknowledged that the term had become overworked, but defended its usefulness in "shifting the emphasis from city components—such as a house, an automobile, or a garbage dump—to the larger context in which these components are placed."

Thus, instead of talking about buildings, Eberhard (below) sug-



gested talking in terms of "enclosure systems . . . constructed as organic wholes." And instead of thinking about cities as collections of buildings, they would be conceived as "total systems" including such subsystems as enclosure, transportations, and communications.

"Each subsystem will need to be integrated with the others rather than generated at random as in the past," Eberhard said, a task "beyond the capacity of most companies we consider traditionally as members of the building industry." This is where High Technology would come in.

The High Technology companies

could enter urban development by building new cities, by assembling their own large-scale urban markets or by using government "to provide the focus and financial support," Eberhard said. The demonstration cities program, he pointed out, "has inherent in its conception the ability to create markets for new city systems"—and thus for High Technology.

## POLICY

SMILE WHEN YOU SAY THAT, ABE

President Johnson just doesn't cotton to criticism. His response to the city crisis hearings of the Senate Subcommittee on Executive Reorganization (page 38) was both swift and stinging.

His Administration, he said after Senators Abraham Ribicoff and Robert Kennedy had given his cabinet members less than gentle treatment, "has done more than any Administration in the history of the country"—specifically, twice as much as Dwight D. Eisenhower's and a third again as much as John F. Kennedy's. When the demonstration cities appropriation was being whittled down, moreover, "no amendments were offered to increase it" in the Senate, the President noted, relishing the irony.

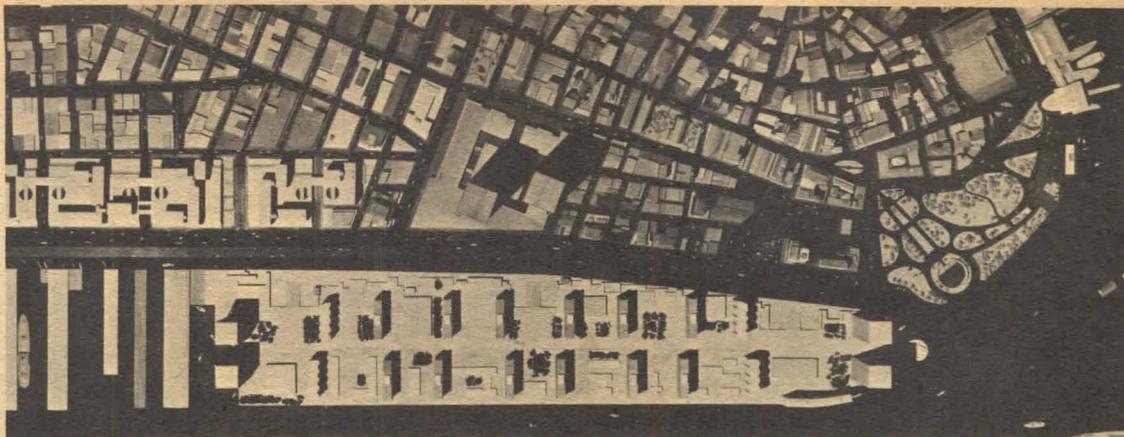
He was mellow but no less emphatic at the signing of the appropriations bill containing \$22 million for rent supplements in fiscal 1967. He called it "the single most important breakthrough in the history of public housing."

The Administration already is talking about big urban plans in next year's legislative program. Meanwhile, the President revealed, the cabinet will devote at least one meeting a week to cities.

### RIGHT HAND, LEFT HAND

Meanwhile, Mr. Johnson was busily pushing buttons on that willful and complex machine called the national economy—a speedup here, a slowdown there.

With one hand, the President was trying to give a boost to the depressed home building industry. The Census Bureau said the adjusted annual rate of private home construction dropped again in August to a six-year low of 1,057,000 units, a decline of 370,000 in a year. The President signed a bill increasing the buying power of the Federal National Mortgage Association by \$4.67 billion, and a second allowing three Federal agencies to put ceilings on interest



rates for savings deposits.

With the other hand, the President launched an anti-inflation drive that put new curbs on Federal spending and borrowing from the private money market. No specific directives had gone to such urban spenders as HUD, but the slowdown seemed certain to catch up with its housing and renewal programs. Already, it was reported, HUD Secretary Weaver had picked up the phone to ask big-city mayors to cut back on all non-residential renewal projects.

## CITYSCAPE

### STRATEGIC SITING

The State of New York will build a \$20-million, 23-story office tower in central Harlem. Governor Nelson Rockefeller said the tower, designed by Percy C. Ifill and Conrad A. Johnson Jr., would be "a symbol of the future of Negro communities."

Placement of a major state building in Harlem had been advocated in September 1965 by Federal Judge Constance Baker Motley, then Manhattan borough president. In July, Comptroller Arthur Levitt added his support, saying he would rather see the state build uptown than go through with its plans to lease

2 million square feet of the controversial World Trade Center.

The governor's office said that the Harlem tower would contain only 250,000 square feet of space, and would not affect the state's commitment to the Trade Center.

### POLITICAL PLANNING

Governor Rockefeller also was involved last month in an embryonic conflict over who is to fill the waterfront in the Trade Center's lap. If allowed to grow, the conflict could kill aborning the most dramatic features of the city's Lower Manhattan Plan.

Last spring, the governor unveiled a static series of residential and commercial towers called Battery Park City, to be built on 98 acres of fill in the Hudson River just in front of the center (top). Then came the Lower Manhattan Plan, with its far more comprehensive proposal for multilevel residential and recreational development on fill around the island's entire southern tip (above and July/Aug. issue).

Did the Lower Manhattan Plan supersede Battery Park City? Not at all, said an aide to the governor. In fact, an announcement was being prepared of large-scale private financing for it.

City-state negotiations were hurriedly called to blend the two schemes. "The city's demonstrably

superior, long-range plans should have priority over the [governor's] proposal," said *The New York Times*. "The governor would be far better advised to assist the city's program. . . . Plans are no longer to be pulled out of hats as political ploys."

## LANDSCAPE

### THE BEST OF BOTH WORLDS

New York's Mayor John V. Lindsay and his parks commissioner, Thomas P. F. Hoving, struck blows for good design and historic continuity in one fell swoop last month. They announced that five firms had been invited to enter a \$100,000 competition to design a new park facility incorporating Calvert Vaux's charming structure (below) originally designed as a stable.

Under the administration of





Lindsay's predecessor, Robert F. Wagner, Architects Eggers & Higgins had designed the new complex (above), but their scheme made no use of the Vaux building, which now serves as a police precinct station. When Lindsay took office this year, he and Hoving decided to abandon the early scheme and start over. The new design will make the Vaux structure part of a combined police station house, stable and riding ring.

The five participating firms are Edward L. Barnes, Marcel Breuer & Associates, Kelly & Gruzen, Philip Johnson, and Whittlesey, Conklin & Rossant. Each will receive \$15,000, plus the services of a cost estimating firm to be sure the designs are within the established \$5.7-million budget. Costs of the competition are being underwritten by Urban America Inc.

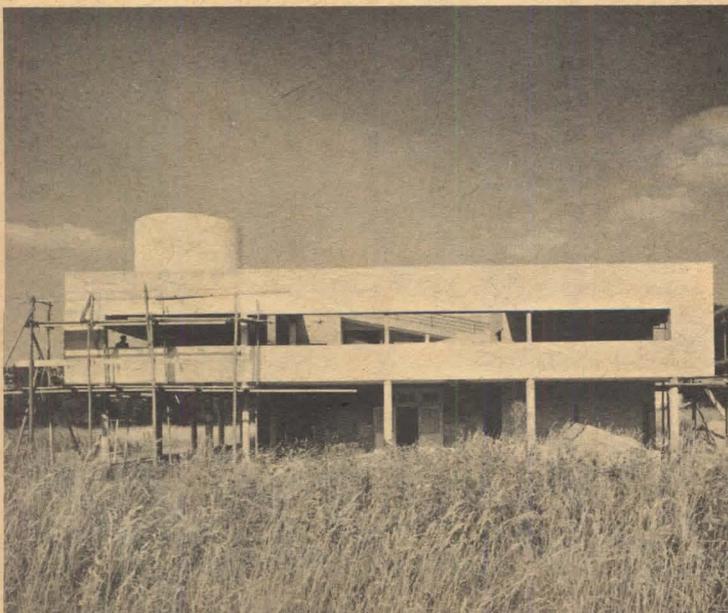
"We think this is an important and interesting development in the city's architecture," said a happy John Lindsay.

## LANDMARKS

### REINCARNATION

Le Corbusier's 1930 Villa Savoye, whose tragic state of disrepair was the subject of an indignant exhibit at the Museum of Modern Art last summer (July/Aug. issue), is finally being restored.

Photographer Cervin Robinson



visited the Villa recently and sent back the progress photo below, showing the Villa coming back to life. *Vive la France!*

## PROGRESS

### CONFRONTATION

For two days in late August, the Octagon House reverberated to the sounds of debate between architects, landscape architects, and planners (on the one hand), and officials of HUD (on the other). Big things are expected to come from it.

According to a two-page, vaguely worded press release issued by HUD and the AIA, the objective of the meeting was "to induce new and dynamic working relationships in environmental design between HUD and the design professions, to receive suggestions on aspects of HUD programs and operations, and to emphasize importance of the design component in America's programs for upgrading its urban environment."

The meeting was closed to the press, and no one would say just what transpired. But Architect George T. Rockrise, Weaver's adviser on design, did say that there were no final agreements reached—only a "clearing of the air" and a mutual determination to pursue further some of the complaints and ideas put forth.

Rockrise said it would now be

up to him to take the 500-page transcript of the meeting and "boil it down into memos" recommending new action and procedures in the months ahead.

### SELECTION

Underscoring its greater concern for the "design component," HUD last month presented First Honor Awards to seven projects developed under its aid programs.

The recipients (announced at the Urban America conference) were Riis Houses Plaza, New York, by Architects Pomerance & Breines and Landscape Architect M. Paul Friedberg; East Barnard Street Homes, West Chester, Pa., by Geddes, Brecher, Qualls & Cunningham; Crawford Manor, New Haven, by Paul Rudolph; Society Hill Towers, Philadelphia, by I. M. Pei & Associates; The Common, Chicago, by Ezra Gordon-Jack M. Levin Associates; Arena Stage Theater, Washington, D. C., by Harry Weese & Associates; and Ridgeway Dorms, Bellingham, Wash., by Fred Bassetti.

"The winning entries," said Weaver at the conference, "symbolize our aspirations for an environment that will uplift the spirit, broaden the vision, and help to enrich the lives of the people who live in the cities."

## MEDIA

### COME BACK, WILBUR

An architect is a nice guy—not too bright, but nice. His work gives him a certain aura of glamour, and it helps explain why he does such crazy, unconventional things.

That, apparently, is how the people who produce television shows have him sized up. Until this season, television's only regularly scheduled architect was Wilbur, a nice, bumbling young fellow who was always being rescued from the jaws of disaster by his talking horse, Mister Ed.

But Mister Ed finally lost the rating race last season, leaving what many feared would be an architectural vacuum in the American home. Fortunately, the ABC network has filled the void. His name is David, a nice, bumbling young fellow who—and here's the twist—is always rescuing his talking wife from the jaws of disaster.

The show, entitled "Love on a Rooftop" for reasons best left unexplained, even delves into David's professional life. In the first episode he is shown sitting on

(continued on page 89)

# BIG STEEL.

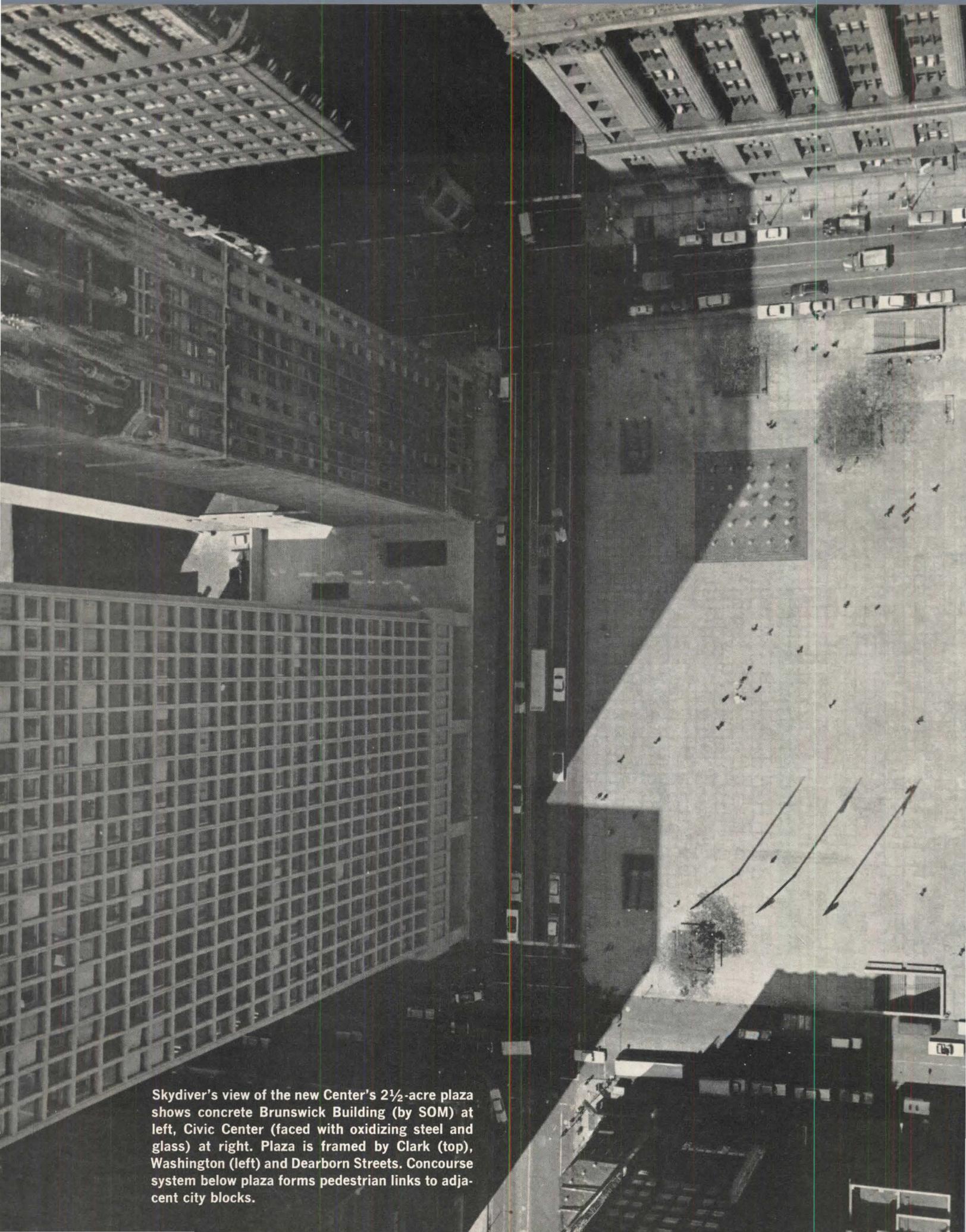
CHICAGO'S  
CIVIC CENTER  
COMPLETE

Chicago's new Civic Center speaks for itself—clearly, nobly and monumentally. It also speaks for its godfather (who happens not to have been involved in its actual design at all): Mies van der Rohe.

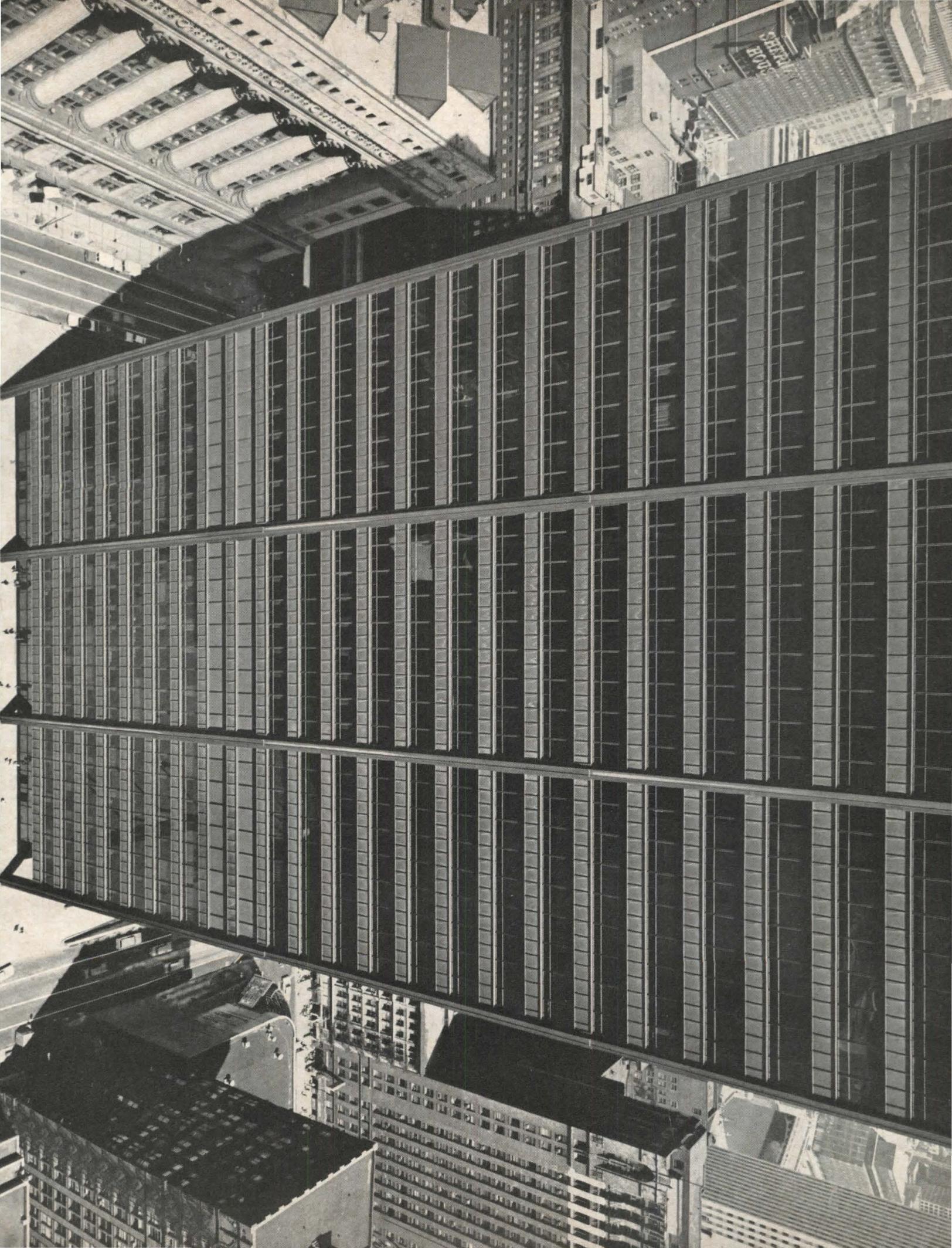
For this 648-foot-high monolith is, quite possibly, Mies's greatest tower to date. The outstanding team of Chicago architects who did, in fact, design this big monolith would probably be the first to insist that his name should head the list of credits.

What makes the Civic Center a Mies building is, first, the clarity and precision of its detail and its form; and, second, the universality and flexibility of its spaces.





Skydiver's view of the new Center's 2½-acre plaza shows concrete Brunswick Building (by SOM) at left, Civic Center (faced with oxidizing steel and glass) at right. Plaza is framed by Clark (top), Washington (left) and Dearborn Streets. Concourse system below plaza forms pedestrian links to adjacent blocks.





## BIGGER-THAN-LIFE

The most impressive aspect of the Civic Center tower is the huge span of its steel framing: 87-foot trusses in one direction, and 48-foot spans in the other.

But this astounding sight is no tour de force, but a reflection of certain demands of the building program. These demands included:

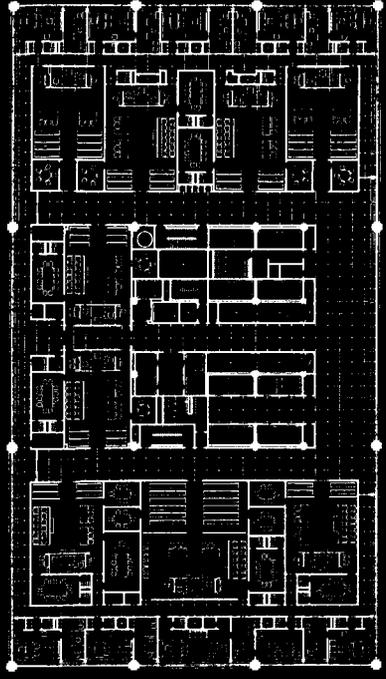
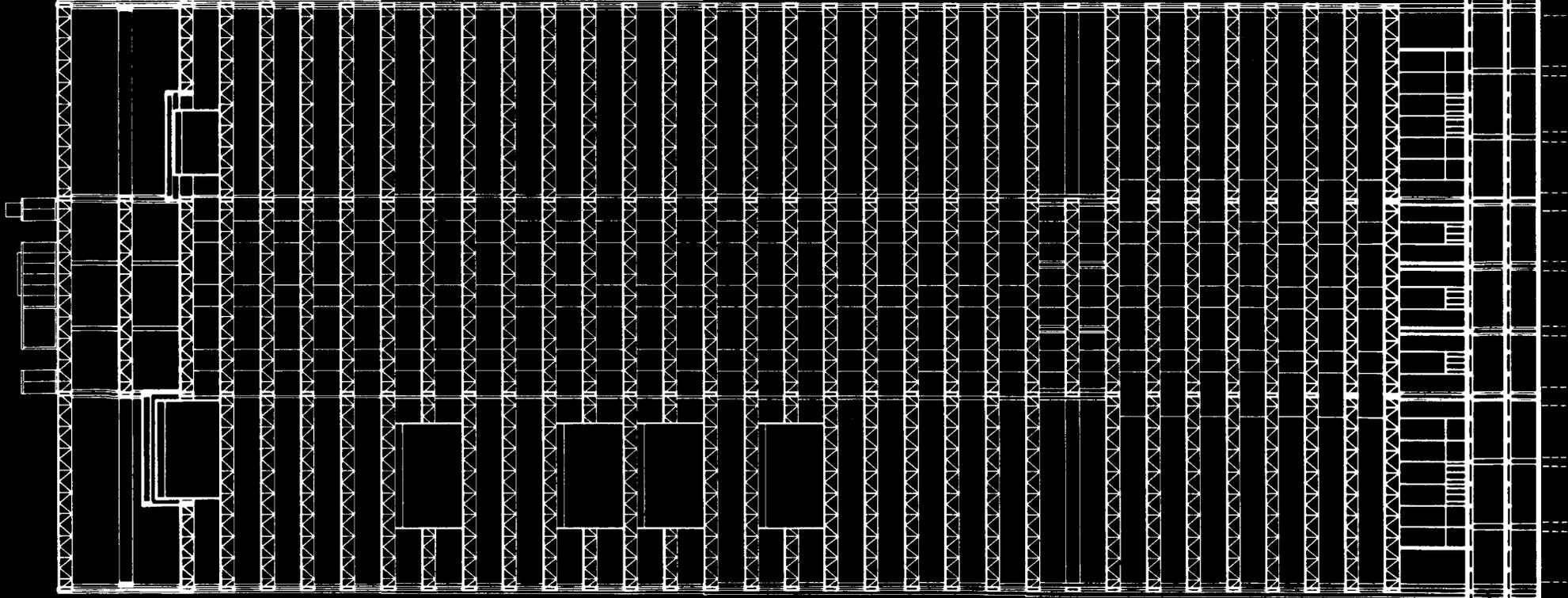
- a great variety of spaces, ranging from small offices to two-story-high courtrooms;
- optimum flexibility in the future use of some interior spaces, so that certain floors initially allocated to small offices might, some day, be converted to house large courtrooms;
- a circulation system on some floors that would separate judges from the general public;
- and facilities for large groups of spectators, with the resulting need for substantial air conditioning systems.

The huge structural bay, with a floor height of 18 feet, forms a framework that can accommodate all these requirements: The large spans (and deep trusses) resulted in an actual ceiling height of less than 12 feet per floor—fine for the office spaces; larger courtrooms were extended up through two stories, for a ceiling height of 26 feet; the deep trusses left plenty of space for ducts; and the absence of interior columns made for complete flexibility of floor layout.

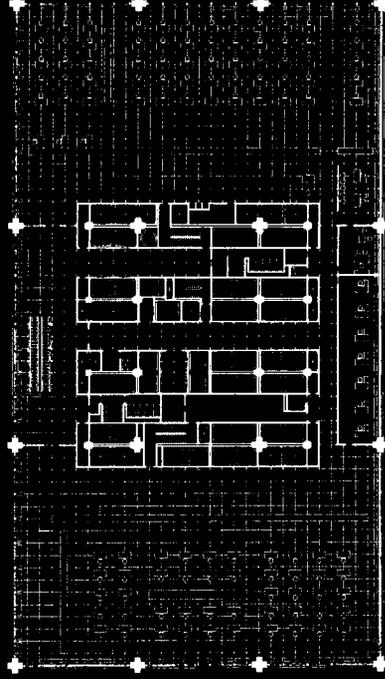
In short, this is as “pure” a structure as has been built in or out of Chicago in a long time; and it is as “universal” a space-container as has been devised anywhere in recent years to cope with an unpredictable future.

### FACTS AND FIGURES

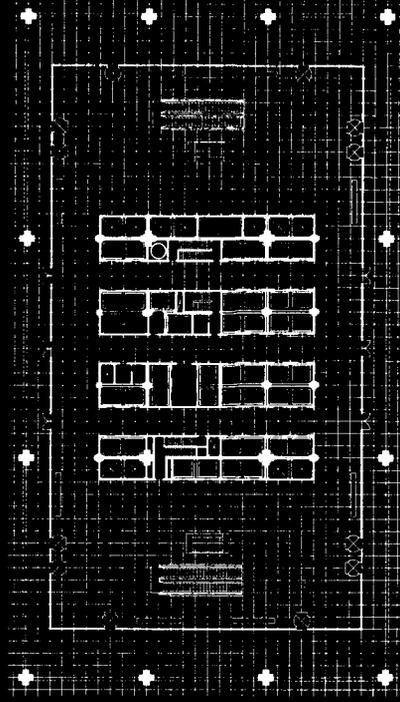
Owner: Public Building Commission of Chicago. Architects: C. F. Murphy Associates, Supervising Architects; Skidmore, Owings & Merrill, Associate Architects; Loeb, Schlossman, Bennett & Dart, Associate Architects. Consulting Engineers: Severud-Elstad-Kreuger Associates (Structural); Bolt, Beranek & Newman (Acoustical); Edison Price (Lighting). General Contractor: Gust K. Newberg Construction Co. Gross building area: 1,465,000 sq. ft. Cost: \$87,000,000 bond issue includes land acquisition, demolition, and building complete with furnishings. PHOTOGRAPHS: Richard Nickel except preceding page, Balthazar Korab.



TWENTY-FOURTH FLOOR



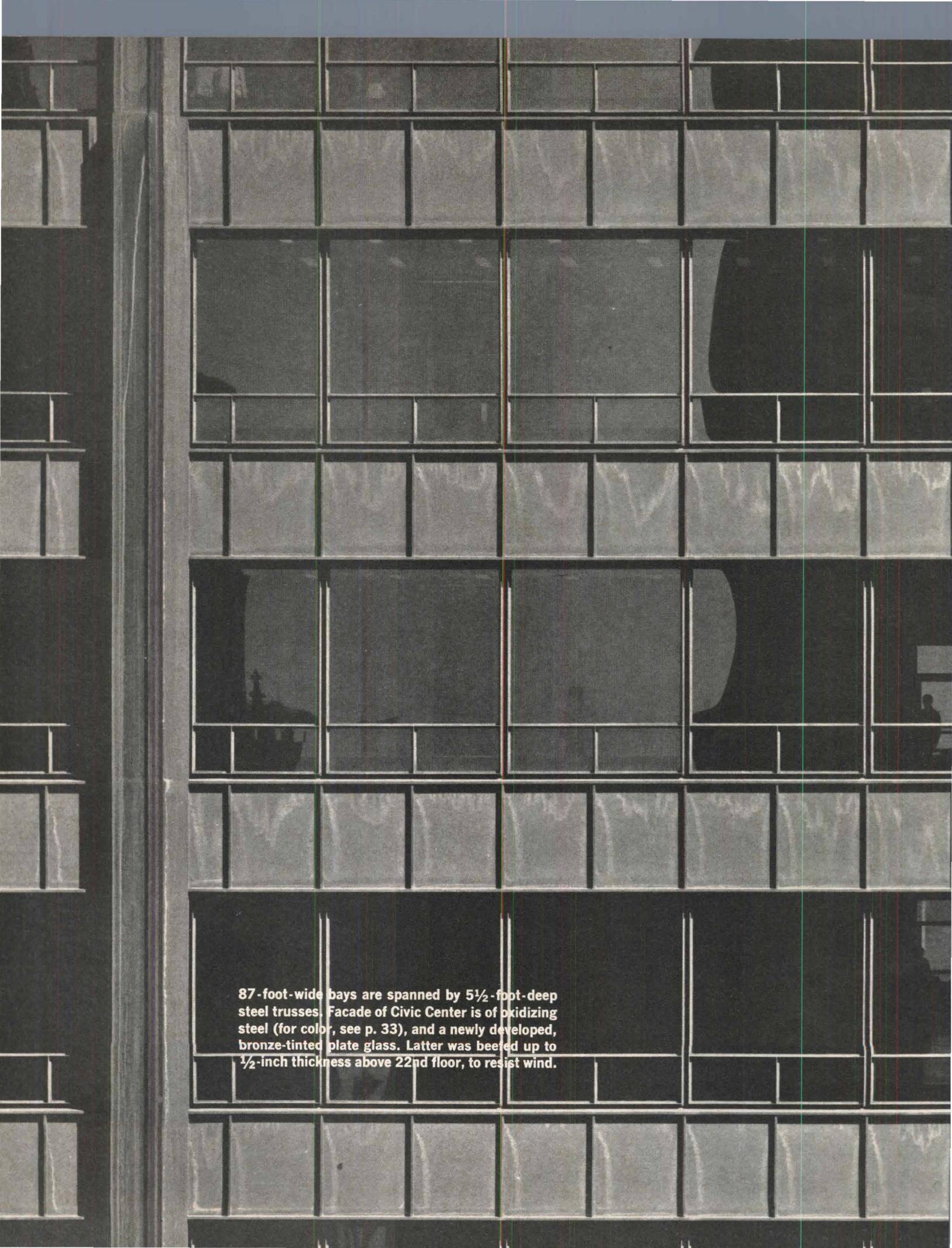
SIXTH FLOOR



GROUND FLOOR

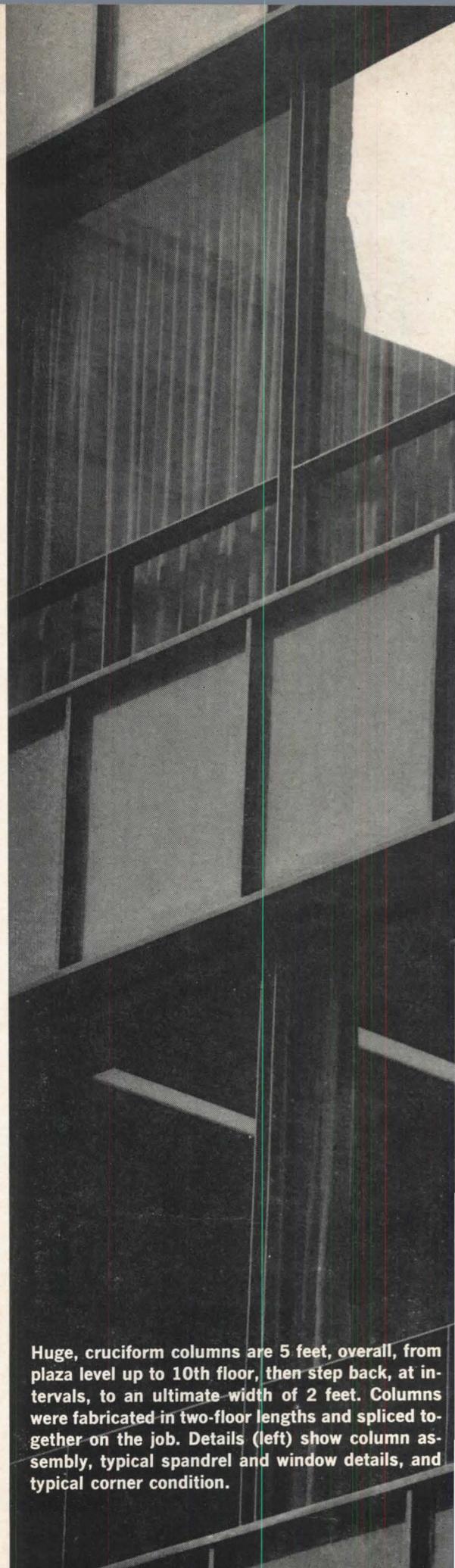
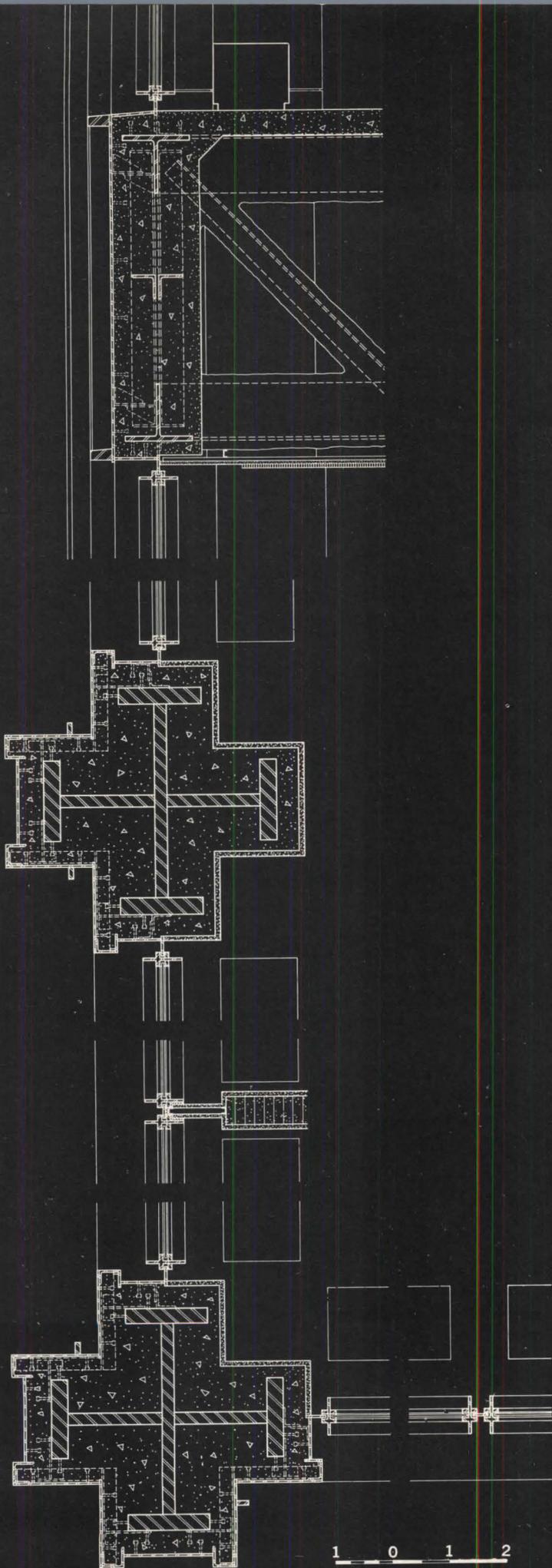
1/8" = 1'-0"

10 0 10 20 40 60



**87-foot-wide bays are spanned by 5½-foot-deep steel trusses. Facade of Civic Center is of oxidizing steel (for color, see p. 33), and a newly developed, bronze-tinted plate glass. Latter was beveled up to ½-inch thickness above 22nd floor, to resist wind.**





Huge, cruciform columns are 5 feet, overall, from plaza level up to 10th floor, then step back, at intervals, to an ultimate width of 2 feet. Columns were fabricated in two-floor lengths and spliced together on the job. Details (left) show column assembly, typical spandrel and window details, and typical corner condition.



# Dialogue in Washington

In the past few weeks, a significant change has taken place in the growing public discussion of the nation's principal domestic crisis. The crisis is, of course, that of our cities—housing, work places, transportation, open space—but always, and above all, the crisis of the human condition in the urban environment.

The change is that the discussion has moved from oratory to dialogue; from what the mayor of Detroit calls “the rhetoric of despair” to a direct engagement of the issues involved in the crisis and its solution. It was especially apparent at two recent events in Washington: the August hearings of the Senate Subcommittee on Executive Reorganization on the Federal role in urban problems; and the September conference sponsored by Urban America Inc. on “Our People and Their Cities.”

The two events were not connected: the Urban America conference was held in response to last year's White House Conference on Natural Beauty; and the Senate hearings, in part, in response to the travail of the latest long hot summer. The hearings turned into a series of sometimes explosive confrontations, between the executive and legislative branches of government, between local officials and Federal potentates, between urban citizens and their representatives. The Urban America affair was a convocation of nearly 1,000 urban specialists, those who think about cities and those who must act, those to whom we must turn if the crisis is to be solved.

The existence of a dialogue does not emerge, necessarily, from the actual format of such events. It emerges only upon later reflection, upon the rearranging of impressions and recollections. On the following seven pages is such a reconstruction of both the hearings and the conference, not in the exact order in which discussion took place, but rather in the manner in which they fall into place as part of the dialogue.

**"I see only danger and dreariness ahead if we don't do very much more"**

Dr. Robert C. Weaver, secretary of the Department of Housing and Urban Development, had the misfortune of being the first cabinet witness. Dr. Weaver listed 14 "breakthrough programs" passed or pending in Congress, ranging from demonstration cities, through rent supplements and mass transit assistance, to truth in lending and packaging bills designed to protect the slim pocketbooks of the urban poor. "This Administration," said the secretary, reportedly at the direct urging of the White House, "has moved farther, faster, with more understanding, and with a stronger sense of purpose, to respond to the needs of our cities than any before it."

Dr. Weaver's statement was accurate, but it was not sufficient for Senators Abraham Ribicoff and Robert Kennedy, whose urgent impatience set the tone of the hearings. "I don't know whether we delude ourselves, Mr. Secretary, just by spending so much time going over what we have done," Kennedy broke in. "It sounds on paper as if the problem is disappearing." Ribicoff agreed. "We have had all these programs and yet we keep slipping further and further behind," he said. "We have reaped and are reaping a whirlwind of violence." And Kennedy again: "We are not going to have any kind of an effective program unless we do something quite different than we have done in the past, unless we have the same kind of imagination and effort that we put together in the United States to develop the Marshall Plan or win the Second World War."

The major achievement of the hearings was the communication of this sense of crisis. They were uniquely free of the voices of special interests that normally dominate Congressional consideration of the city's problems. Instead, after an unavoidable

opening week of testimony from senators and cabinet members, the stand belonged to the city: first mayors, then voices from the streets. "I see only danger and dreariness ahead, if we don't do very much more than we are doing now," said Senator Jacob Javits at one point. The hearings served primarily to share such forebodings with the public, through press and television.

The third week witnesses included, again uniquely, one real, live citizen of the slums. He was Arthur Dunmeyer, 30, of Harlem, among whose qualifications were the facts that he was an illegitimate child, grandfather of another, and had spent approximately half his life in jail. "I might go back to jail," he told the subcommittee. "Right today, I have no intentions of breaking the law. But to exist where I live and how I live, you might break the law at any time without intention."

Dunmeyer was brought to the hearings by Claude Brown, author of the book about Harlem life, *Manchild in the Promised Land*. Brown spoke of the waves of migrants from the south: "Once they get here and become disillusioned—they can see the streets aren't paved with gold, and there exist no great economic opportunities—they become pressured." The result, said Brown from direct experience, can be that the father eventually leaves home, and the mother takes up with the butcher or numbers runner to bring in food and money.

**"It is like a war between us and them, between the oppressed and society"**

"This is the way you get your drug dealers and prostitutes and numbers men," said Dunmeyer. "They see that these things are the only way that they can compete in the society, to get some sort of status. They realize that there aren't any real doors open to them, and they can't go back. . . . In their mind it is not a criminal thing. It is a way to live, a way to have enough to keep your wife from going to bed with the butcher. It is a way

(continued on page 40)

Some of the participants in the Urban America dialogue:

PRESIDENT LYNDON B. JOHNSON  
VICE PRESIDENT HUBERT H. HUMPHREY

PHILIP H. HOFF  
Governor of Vermont

MRS. LYNDON B. JOHNSON

DR. JOHN K. GALBRAITH  
Professor of Economics,  
Harvard University

EDWIN C. BERRY  
Executive Director,  
The Chicago Urban League

STEPHEN R. CURRIER  
President, Urban America, Inc.

JOHN V. LINDSAY  
Mayor of New York City

WILLIAM L. RAFSKY  
Executive Vice President,  
Old Philadelphia Development Corp.

ROBERT H. RYAN  
President, Regional Industrial  
Development Corp.  
of Southwestern Pennsylvania

ROBERT F. SCHMITT  
President, Bob Schmitt Homes Inc.

EDGARDO CONTINI  
Partner,  
Victor Gruen Associates

COLIN BUCHANAN  
Professor of Transport,  
Imperial College of  
Science and Technology

ALLAN TEMKO  
Center for Planning and  
Development Research,  
University of California, Berkeley

B. W. SHIPPEE  
Executive Director,  
Housing and Redevelopment  
Authority, St. Paul

ROBERT C. WEAVER  
Secretary of Housing and Urban  
Development

M. JUSTIN HERMAN  
Executive Director,  
Redevelopment Agency,  
San Francisco

CHARLES BLESSING  
Planning Director,  
City of Detroit

CLARENCE FUNNYE  
City Planner, Brooklyn

IAN L. McHARG  
Wallace, McHarg, Roberts & Todd

MRS. KENNETH KASSLER  
Author and Architectural Critic

RICHARD L. STEINER  
Director, Baltimore Urban Renewal  
and Housing Agency

LOUIS J. BAKANOWSKY  
Partner,  
Cambridge Seven Associates Inc.

THOMAS P. F. HOVING  
Commissioner of Parks,  
New York City

SISTER MARY CORITA  
Chairman, Department of Art,  
Immaculate Heart College

THE CRISIS

PRESIDENT JOHNSON

"Many of our citizens are restive and dispirited. The air they breathe is polluted. The roads they drive on are strangled with traffic. The mass transportation they ride is slow and out of date. The natural beauty they seek is scarred or replaced by ugliness. For tens of thousands of families, housing is shabby and unsanitary.

"The quality of life in urban America does not match the affluence of our society."

VICE PRESIDENT HUMPHREY

"In the Middle Ages, citizens surrounded their cities with high, fortified walls, to keep out marauders. Today we are in danger of creating new walled cities . . . in which the remaining inhabitants will be surrounded not by walls of stone, but by unbreachable social, economic and political barriers.

"It is important for the autonomous suburban units which



cluster about our great cities to realize that they are in the same boat, and if the center city goes down, all its suburbs will be pulled down with it."

GOVERNOR PHILIP H. HOFF

"We cannot set up a rural-urban dichotomy. The problems of urban America are the problems of all America. . . . We look to a city to offer a vast variety of human experience within relatively well defined boundaries of time and distance."

MRS. LYNDON B. JOHNSON

"The clamor of city victims is a spur to progress. . . . A decade ago, Lewis Mumford may have

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## SENATE HEARINGS

to keep from killing the butcher."

"It is like a war between us and them, the society which oppresses us, and we the oppressed," Brown said. "A successful hustler drives a big Cadillac, because he is winning the war. If he gets busted, well, he is just a prisoner of war."

So far, Brown said, "all the white community has tried to do is placate; you know, just keep the niggers cool. . . . Perhaps no one has taken time to notice it, but the only thing that has really brought any meaningful concessions from the white society into the Negro communities has been the riots."

The warriors against society, of course, make up only a small minority of the ghetto's population. The plight of the rest was described by Joseph P. Lyford, a former newspaperman who has also written a slum book, *The Airtight Cage*, and who lives on New York's West Side. "Of the people who live where I do, while 99 per cent of them are decent, law-abiding people, they are all terrorized by this disorganized minority who simply turn the place into a sort of battleground," Lyford said. The 99 percent get little protection. The major problem on the West Side, said Lyford, "never was the question of the police being brutal. It was a question of the police being afraid to involve themselves in situations, or being demoralized."

Still another author, Ralph Ellison, who grew up in the Harlem of the 1930's, cautioned against the assumption that most Negroes want to "break out" of the ghetto entirely. Instead, said Ellison, "they want to transform the Harlems of their country. These places are precious to them. These places are where they have dreamed, where they have lived, where they have loved, where they have worked out life as they could. . . . They would just like to have a more human life there."

Ellison also warned against "the impression that what is

wrong with the American city is the Negro. The reverse is true: what is wrong with the Negro is what we Americans have done to the city. . . . I think one of the things that we can do about the city is to look at it, not merely as an instrumentality for making money, but as a place for allowing the individual to achieve his highest promise. And with that in mind, try to construct a city, or reconstruct a city, in ways that would encourage a more gracious sense of human possibility."

Ellison found "a crisis of optimism" in the slums. "Now that so much money has been thrown into the neighborhood, supposedly—the papers tell us so—the slum child feels very cynically that it is being drained off somehow in graft," Ellison said. "He doesn't know. He doesn't have the information. I don't even have it. All he knows is that this promised alleviation of his condition isn't taking place." The statement drew a response from Senator Javits that was only partially reassuring. "It isn't being drained off in graft, the millions that are being appropriated and are going into these areas," said the senator. "It just takes so many millions more than are being appropriated to really make a measurable dent."

### **"The point is to quit making promises if you can't fulfill them"**

The matter of Federal promises broken or deferred was a major theme of the mayors' testimony. Basically, the mayors came from three kinds of cities: those with significant achievements (Lee of New Haven, Cavanagh of Detroit); those with significant problems (Yorty of Los Angeles, Loucher of Cleveland), and those with both (Lindsay of New York). All said much the same things, but they said them in revealingly different ways.

Samuel Yorty, for example, was resentful. "You don't know who comes into your city," he said. "You can't identify them, and sometimes they come pretty

bitter and unskilled. They immediately need schooling, they need jobs, they need housing, and all of these things. It is very unfair to expect that you can have people move into the city from any place they want to, and then demand from the local people many services, some extremely expensive, when the taxes are already very high."

At this point Senator Kennedy was unkind enough to point out that 85 per cent of the residents of the riot area of Watts had lived in Los Angeles for more than five years; and Senator Ribicoff that Los Angeles had a low tax rate in relation to other major cities. Yorty was undaunted.

"When the politicians run around and make a lot of promises that are not kept and some that cannot be kept," he said, "and get people agitated, expecting more than is going to be made available to them, and then they reach out illegally to get it, it is the policeman who has to stop them. . . . And along with that, the police department has been subjected to attack for several decades by subversive groups that have preached police brutality." Yorty concluded with the assertion that Los Angeles had no slums, and the suggestion that some form of racial quota be applied to urban immigrants. "By and large, where you have tried to get integration," he pronounced, "you get inundation."

Senator Kennedy pressed Yorty for specific figures on housing, on employment, and on education in the ghettos of Los Angeles, but in each case the mayor claimed that under the city's peculiar charter, he had no responsibility for such things. "You might not have the responsibility in each one of these fields," said Kennedy, "but you certainly are mayor of the city and therefore we can expect some leadership." Replied Yorty, "I do not need a lecture from you on how to run my city." This was too much for Chairman Ribicoff. "I would say that the city of Los Angeles right now, from your testimony, does not stand for a damned thing," he said. It

(continued on page 42)

**WILLIAM L. RAFSKY**

"In the renewal of older cities a piecemeal approach has been used so that physical improvement is rarely related to social, educational, or economic goals. . . . We must learn how to get away from the narrow professional interests and recognize the need for a program which deals with the entire problem."

**GALBRAITH**

"We must explicitly assert the claims of the community against those of economics. . . . If a structure, facility or design is cheaper, more convenient, or more efficient, this is no longer decisively in its favor. If it is ugly or otherwise offensive, it is probable that it should be rejected."

**LINDSAY**

"The poor need more than an education. They need clean housing that they can afford. They need jobs. They need more enlightened welfare policies. They need readily available medical services. They need a voice in the administration of governmental programs created for them. They need protection from junkies, extortionists and crooked merchants, and they need to know hope—hope that they can progress in our society as fast and as far as their abilities and ambitions will carry them."

**ROBERT H. RYAN**

"People say that we don't want to be specific—that we don't want definite goals and values. Well, I say that we're not going to get far until we formulate them."

**HUMPHREY**

"Federal assistance, both monetary and technical, is necessary to help metropolitan areas solve their problems; but the particular solutions should be local in character."

**CURRIER**

"It is time we gave up the hopeless attempt to press the cities for solutions to problems that range across their borders into the broader jurisdiction of tens of counties, and often of several states."

(continued on page 43)

that directs funds to the points of greatest need.

"These are the large cities."

**HUMPHREY**

"In the past several weeks there have been a number of statements made to the effect that the Federal Government has failed in its responsibility to America's cities.

"I will not attempt to respond to this criticism."

**LINDSAY**

"It is almost astonishing that of 48 standing Congressional committees, none is charged with overseeing urban affairs. We have an influential, well-staffed Committee on Agriculture to represent the farms, but committee-level representation of the total



needs of the cities . . . is nonexistent.

"Congress should establish, as a matter of the highest priority, a Committee on Urban Affairs in both the Senate and the House. "The Federal Government . . . can compel cities, counties and states to hammer out regional agreements remedying regional problems. The Federal Government should be more active. . . ."

**THE RESPONSIBILITY**

**HUMPHREY**

"Ours is a nation with 80,000 separate, local governmental units. In the New York metropolitan area alone, there are over 1,400 units of government. Today's problems do not respect yesterday's governmental structures.

"Those who traditionally would be in control have the titles but not the authority; or where they have the authority, they cannot get the funds to do the job."

**LINDSAY**

"In a host of matters critically important to the cities, the legislative and executive branches often have moved either belatedly or parsimoniously. A current illustration is the Demonstration Cities Act. . . .

"The cities' appeals for Federal aid sometimes have been viewed as singlemindedly selfish. . . . New York City has been accused of wanting much more than its fair share of Federal revenues.

"The facts are that the New York City metropolitan area contributes almost \$15 billion a year to the Federal Government in personal and corporate income taxes. . . . Yet, in any one year, New York City has never received as much as \$1 billion in direct or indirect Federal assistance. . . .

"Thus New York City has been financing innumerable Federal spending programs . . . throughout the country."

**GALBRAITH**

"With economic growth and rising incomes, the Federal Government, through the income and corporation tax, gets the money. The cities, on everything from traffic to air pollution, get the problems. . . .

"The best way for the Federal Government to help would be to assume the cost of providing a minimum income and thus free the cities from the present burden of welfare costs. In the years of the farm crisis it did this for agriculture. In these years of the urban crisis we want a system

been the only person calling upon cities to become the citadels of human fulfillment. Now citizens in every walk of life, from every point of origin, are yearning for an environment of sanity and hope, of beauty and fresh air, of honest work and refreshing pleasure."

**JOHN K. GALBRAITH**

"There is no reason to believe that an unplanned metropolis will have any better chance of beauty than an unmade bed."

**EDWIN C. BERRY**

"There will be no City Beautiful until we can wipe from the face of American cities racial bigotry. . . . We live in a series of ghettos, white ones and black ones."

**STEPHEN R. CURRIER**

"Two years ago, we pledged ourselves to launch a war against poverty . . . yet this year we are spending less than \$2 billion to fight it. We would never fight a foreign war with such meager resources. It would be unpatriotic. The dictionary defines patriotism as love and devotion to one's country. Does this definition exclude the fate of tens of millions of our countrymen who live amidst decay, locked in ghettos and in permanent penury? Does our patriotism begin at the water's edge?"

**MAYOR JOHN V. LINDSAY**

"I would not want the United States during the coming years to be described by future generations as a society that stood amidst the filth, the oppression and the violence of the slums . . . and shot rockets at the Moon."

## SENATE HEARINGS

was the most widely quoted single statement of the hearings.

Each of the mayors had a story about the difficulty of finding one's way through the maze of Federal urban programs—and officials. New Haven's Richard Lee told of trying to set up a "coordinated (social) service program" to teach those displaced by renewal and rehoused "how to live under decent normal circumstances in a decent normal environment." There were 11 separate Federal agencies involved, Lee said, and it took 20 months to get the program through them. Detroit's Jerome P. Cavanagh had to deal with only four agencies in setting up a "multipurpose center to serve as an anchor for a slipping neighborhood," but his reaction was similar: he found "no apparent logic in the variations" among agency requirements. Oakland's John H. Reading, who counted 140 separate Federal programs at work in his city, told of a case in which "Federal spokesmen built up hopes of residents of run-down neighborhoods on the availability of rehabilitation and modernization grants and loans. A great deal of work was done at the neighborhood level . . . only to discover that there were no funds available. The point is, quit making promises if you can't fulfill them."

Each of the mayors suggested remedies, most of which amounted to the same two things: better coordination, and more money. "Cities must be able to combine separate Federal programs into effective services at the street level," said John Lindsay of New York. "Much can be done in Washington to make this possible." Cavanagh had the most compelling proposal: "a national commitment to achieve the rebirth of the American city to coincide with the 200th anniversary of the founding of this nation in 1976." Said Cavanagh, "We made a commitment to get a man on the moon by 1970. We reordered our national priorities and set aside \$70 billion to see that it

was done. That objective is now in sight. We made a commitment to have a national interstate highway system by 1971. We set aside \$43 billion. That objective is now in sight. We must make a similar commitment and set aside at least as much money as that to see that the rebirth of our cities is accomplished."

"Do you mean \$113 billion over a decade?" Ribicoff asked in awe. "At least," Cavanagh replied. On second thought, he said, Congressional studies indicated the amount might be something more like \$250 billion.

Cavanagh was equally emphatic about the way this money should be distributed. The Government, he said, should set up an "urban development fund. . . . In lieu of categorical programs, cities could draw on this fund for a myriad of purposes on the basis of approved comprehensive social and physical renewal plans." He saw the shadow of such an arrangement in the demonstration cities program, which would provide unearmarked money to the chosen few recipients. "I think almost as important as the money involved—and I say almost—is this block grant approach."

### **"The demonstration cities we are talking about are a drop in the bucket"**

Virtually every cabinet member who testified pointed to the demonstration cities program as the Administration's response to the need for a coordinated attack on the physical and social problems of the city. The program obviously is being looked to as an overall framework for the Federal urban aids now spread among HUD, HEW, the Labor Department, and the Office of Economic Opportunity. Meanwhile, HUD's Weaver and OEO's Sargent Shriver each have been given responsibility for interdepartmental coordination, although neither could tell the subcommittee precisely where his responsibility ended and the other's began.

Senator Kennedy, once again, was dissatisfied. "The demonstration cities we are talking

about are really a drop in the bucket compared to what is needed in these cities across the United States," he said in questioning Attorney General Nicholas de B. Katzenbach. "It is hardly going to be adequate for a city to deal with the kinds of problems which you have described here. . . . There is going to be more and more dissension, disagreements between races and between different classes of people and parts of our society. . . . Until somebody comes in and says, 'This is what we have to do, this is what is required of us,' it seems to me these remedies are not going to accomplish our objectives."

Replied Katzenbach, "demonstration cities gives you a concept and a philosophy that is important, very important—the same concept and philosophy, Senator, that you have. Maybe there is not enough money. Maybe more money, maybe much more money has to be spent on this. . . . We do have a problem of getting acceptance here in Congress."

Senator Ribicoff steered the testimony away from criticism of Congress whenever it veered that way, preferring to keep the bright lights on the Administration, but some of his colleagues were less single-minded. "I think we have been gravely at fault in the Congress and I think the country should know it," said Senator Javits, with particular reference to cuts in appropriations for demonstration cities and rent supplements.

Senator Thomas E. Kuchel took the matter of responsibility one step further, to the people themselves. "Only last June," said Kuchel, "bond issues to provide new schools and a new hospital for the Watts area failed to win the approval of the voters. These disappointments emphasize the need to awaken a civic consciousness and a civic conscience in the people of our cities. . . . We need to try to improve human nature at the same time we seek to improve human environment."

Even Senator Kennedy seemed satisfied that this was a sufficiently comprehensive goal.

**GALBRAITH**

"We will need to resort increasingly to public ownership of the strategic land areas. It does not take a political genius to see the prospect here for some blood-letting."

**ROBERT SCHMITT**

"Industry will continue to leave center cities, driven . . . by land costs of \$30,000 to \$40,000 an acre."

**RAFSKY**

"Less than a handful of new towns are being developed in the United States. Serious questions arise as to whether such development will destroy the central city."

**EDGARDO CONTINI**

"And finally [there is] a new concept, barely beginning to emerge . . . the 'New Cities'. These 'New Cities', by contrast to the 'New Towns', are to grow in entirely new locations, distant and distinct from existing metropolitan areas. They are to be a bold experimental venture as a matter of national purpose. . . . I am not suggesting that we embark upon this adventure at the expense of concern and commitment to the rehabilitation of existing ones. . . ."

**COLIN BUCHANAN**

"The United States, in its space exploration program, is showing what can be achieved by dedicated teams cooperating in the achievement of agreed objectives; some of us in other countries are anxiously watching to see whether the same spirit can be demonstrated in the infinitely more difficult task of redeveloping cities."

**THE SPECIFICS**

The Urban America conference concerned itself with four specific city problems: housing, employment, transportation, and leisure. Here are some of the comments and a few of the recommendations offered by the participants:

**Housing**

**RAFSKY**

"A comprehensive and coordinated program to bring about the new town in the city requires [among other things] more direct subsidy to low-income families to enable them to afford decent shelter. . . ."

**GALBRAITH**

"Economic growth does not solve the problems of our urban environment. On the contrary, it makes these problems infinitely more urgent. . . . It would cost about \$20 billion to bring everyone up to what the Department of Health, Education and Welfare considers a reasonable minimum. This is a third less than the amount by which personal income rose last year. . . . There is no antidote for poverty that is quite so certain in its effects as the provision of income."

**CURRIER**

"Our cities are vast concourses of human beings. . . . In the next 34 years, we must build more new homes than exist in our nation today—and most of them will have to be built in the cities. . . . In 1960, close to half the homes of urban Negroes were substandard. The figure for whites was one-sixth. . . . The dreary statistics documenting life in the ghetto are well known. What is less well understood is that the ghetto is not only a Negro problem. The fortunate residents of other parts of the city, or suburb, cannot ignore it."

**ALLAN TEMKO**

"A really effective housing effort must go far beyond the mere

replacement of deteriorated stock and the accommodation of millions of newly formed households. It would have to be a **city-building process** which would simultaneously create a new urban infrastructure and a logical, regional order in which housing would be only one of many carefully integrated components."

**CONTINI**

"The commitment is to create an entirely new urban structure, to give a fresh and exuberant image of our capability, our imagination, and our pride."

**BERRY**

"The black ghettos in large American cities must currently be viewed as 'latter day domestic colonies' which are powerless. Most of the decisions about what goes on within the 'colonies' are made from outside the 'colonies'; the 'colonies' are characterized by absentee ownership; the inhabitants of the 'colonies' are subjected to every kind of eco-



nomie and political exploitation known to man; Negroes in the 'colonies' are compressed and suppressed in areas which are designated for their occupancy . . . and there exists small work opportunity within the 'colony' so that the 'inmates' must travel long distances to seek jobs in areas where they are not permitted to live."

**B.W. SHIPPEE**

"I think we're being overly optimistic when we talk about joining housing and industry. A 15-to-20-minute ride to work is nothing. Housing and industry don't have to be closely related."

**BERRY**

"The inhabitants of the 'colonies' must be free to move with precisely the same ease as their white brothers."

**GALBRAITH**

"Public services . . . render their greatest assistance to the urban poor. . . . Those who are now calling, so righteously, for shelving the Great Society because of the Vietnam war are asking that the well-to-do taxpayer, whose income is at an all-time high, be protected at the expense of aid to . . . low-income housing, etc. . . .  
"This is outrageous."

**SECRETARY ROBERT C. WEAVER**

"The Demonstration Cities Program . . . is the one, single proposal now in hand which can bring about the kind of constructive, revolutionary change that we must bring about."

**CURRIER**

"This year we are spending \$58 billion for defense—with little or no argument in Congress or among the public. We spend \$5 billion for space—with nary a nay on the floor of either house. But a bill to spend about \$2.3 billion (over 5 years) to attack the physical and social ills of 60 slum areas across the country—a modest enough proposal at that—is mired in parliamentary disputes!" (Since then, the Demonstration Cities Program referred to above by Secretary Weaver and Mr. Currier has been trimmed by the Senate to a mere \$900 million, approximately, over a mere three-year period.—Ed.)

**TEMKO**

"We must build for life, as audaciously, as expensively, as skillfully as we now build for death. . . . In the end, the problem may be reduced to a simple question of whether the American people have the political and the social maturity to make the most of their technological accomplishments, and whether they are wise and kind enough to use that technology to build humanely for all people, everywhere they are in need."

## URBAN AMERICA CONFERENCE

### Employment

**M. JUSTIN HERMAN**

"We are paying so much attention to residential problems in ghettos, and so little, comparatively, to the need for jobs within these same areas. They should go together.

"We need more liberal financing, more flexibility in our legislation. We must write down the price of land and create land banks for industry."

**RAFSKY**

"The new town in the city requires a sound economic base with full opportunities for employment for its population. This must include job training and development of new industries."

**CHARLES BLESSING**

"In Detroit we are making an effort to join schools with industry on our riverfront industrial project. I think it can be done."

**SCHMITT**

"Smaller communities are going after industry and getting it. They achieve a good tax base to support their schools, and they attract more industry. Meanwhile, suburban communities, on the fringe of big cities, are loath to zone for industry. They want to remain residential."

**CLARENCE FUNNYE**

"Urban industrial parks can be combined with schools, housing, training facilities for workers and other amenities. Industrial buildings can be attractive—we can live with them. The Federal Government should provide special inducements for this kind of program. . . ."

**IAN L. McHARG**

"It seems incongruous to assume that the central activity

of man—work—can occur in settings as grim as necessary; but that leisure requires blue sky, trees, and grass."

**MRS. KENNETH KASSLER**

"Work and play should be brought as closely together as possible to give a feeling of vitality to the working people."

**RICHARD L. STEINER**

"Since people spend a great part of their lives at work, they should be working in places they enjoy."

### Transportation

**CONTINI**

"Transportation systems seldom are developed as an integral part of the city; they either precede urban growth, only to be, eventually and greedily, embraced by it; or, more often, they follow growth and are crudely superimposed on the urban texture."

**BUCHANAN**

"The motor vehicle has outdated the street as a form of urban layout, and this is a serious matter. . . . Multipurpose streets are just about as difficult for motor traffic as they could be. . . . Considerable changes are required involving both buildings and streets together."

**LINDSAY**

"Since passage of the Interstate Highway Act, a full decade ago, thousands of miles of freeway were constructed, but the cities' mass transit systems fell deeper into debt and obsolescence without a dime of Federal assistance until a meaningful Mass Transportation Act was passed in 1964—and even then the allocations were meager. Moreover, the 12½ per cent limitation placed on individual states was indefensible."

**BUCHANAN**

"The insistent urge to use automobiles for personal transport has resulted in a rundown of oth-

er perfectly useful methods of transport for certain purposes—railroads for commuter travel, for example. . . ."

**LOUIS J. BAKANOWSKY**

"There are many transportation systems in use in industry, for example, that are much more sophisticated than the ones we use in cities. These systems don't use the sort of fuel that pollutes our air—and we are fast running out of such fuels anyway. If some of these new systems were applied to urban transport, they might make many of our present facilities completely obsolete."

**CONTINI**

"I would like to suggest the development of alternate systems of transportation within the New Town, filling a middle ground between travel by high-speed, high-power conventional private car and travel on foot. . . perhaps a battery-powered, limited-radius, limited-speed, sensibly dimensioned electric vehicle. . . ."

**BUCHANAN**

"If someone were to arrive from outer space and the characteristics of urban movement were explained to him, and he was then to design a suitable method of transport, my guess is that he would produce something very like a motor vehicle. It would be soundless and fumeless, of course, but it would provide the same service that the individual motor vehicle does today."

**CONTINI**

"The overriding design task . . . in developing new urban transportation systems is the establishment of an optimum balance between the values that accrue to 'man as a passenger' and those affecting 'man as a resident'."

### Leisure

**HOFF**

"We may restore the hearts of our cities, or lift the horizon of satisfaction in the work place—and yet fall far short of our goals, unless we recognize the basic unity of human experience."

**COMM. THOMAS P. F. HOVING**

"A park is a stage. It is a stage not only for the enactment of communal play and drama, but a stage for which the city is the producer, booking agent, and manager. As a producer, the city must have a grand concept of what it is trying to do and must get the funds to do it. As the



booking agent, it must provide entertainment from rock-and-roll to philharmonic concerts. It must program ahead, like a TV station. And as the stage manager, the city must make sure that everything runs smoothly, is clean, is safe, is cared for."

**McHARG**

"Rich and poor alike have certain environmental requirements for survival and health—good air, potable water, protection from flood, drought, hurricane, and earthquakes.

"Survival becomes the key when we turn to problems of the existing industrial city. Here the problem is more revolutionary than voluntary leisure. There is little freedom or opportunity—work is more often toil than fulfillment. . . . For the urban poor, leisure is not even the panacea it can be of surcease from toil."

**GALBRAITH**

"Idleness we do know to be demoralizing. But why is leisure so uniformly bad for the poor, and so uniformly beneficent for the moderately well-to-do?"

## McHARG

"In the absence of any other solution for the underprivileged in the existing city, play, if possible, is better than idle despair; and facilities provided for recreation, parks, and playgrounds, at least provide some leavening in the grim slums . . . though a spanking new, expensive playground in a gritty slum is a wry sight."

## HOVING

"Parks should be the scene of celebration of communal life. . . . People should look upon a park not only as their backyard—but also as their frontyard and the criterion of their pride and care. . . . In New York, children have playgrounds usually equipped with that triad of monotony—the swing, the slide and the see-saw. This is wholly unacceptable today. . . . The Federal Government is too far behind in its recreational philosophies. It must realize that people count most, and by 'people' I also mean money to hire people. Not a single Federal program today in recreation per se grants money to hire recreation directors, playground assistants, maintenance men."

## GALBRAITH

"The last resort of all who argue for economic priority over esthetics is that the public is intransigently vulgar. So it is wrong to inflict upon the public the value system of those who pretend to taste. This is pure nonsense, and the worst kind of special pleading for private gain."

## HOVING

"We who have power in the cities must have the courage of our taste. . . . As a park commissioner, I feel that I am a steward of the future, and that I must protect land over concrete, trees over roads, shoes over tires, and people over cars."

## McHARG

"The division of leisure and toil is antiquated and can only perpetuate the inadequacies of the industrial city. Better let us aspire towards the City of the Good Life, wherein personal and social fulfillment are facilitated by the structure of the city. Home-work-play should become integral."



## OUR PEOPLE . . .

### SISTER MARY CORITA

"There are different sizes of man. "There is the small man which is the single man, and a large man which is the community—of two or of everyone.

"Something changes when the size changes. . . .

"Someone needs to direct the traffic and invent the larger size ceremonies. . . .

"For a single man to laugh, the equipment is all built in. . . .

"For a larger man to celebrate, more muscles are needed. . . .

"For a still larger man to celebrate, it becomes more complex still. He needs more space—a whole city, and more equipment. . . . So we need city planners and they need to be in touch with the complex needs. . . .

"But if he only knows physical facts and knows no poetry or irony . . . he will be out of touch. . . . And the people . . . will be-

come weak and unable to act, unable to express and explain themselves to each other. They will disintegrate. They will not be able to remember together who they are. . . .

"And so this larger man will begin to do the opposite of remembering—he will dismember. "Witness Watts or Chicago or Harlem, where humans have been denied the right to express need or anger or love. They respond in chaotic, destructive ways. We can only be grateful that they respond at all—that we have not fully killed them. . . .

"Always there remains this need to explain to each other that we are good. We all have a constant need to be reaffirmed. The single man needs this. The whole human race needs a 'Yea'—needs the large ceremonial pat on the back that says 'Come on, come on! We can make it!'"

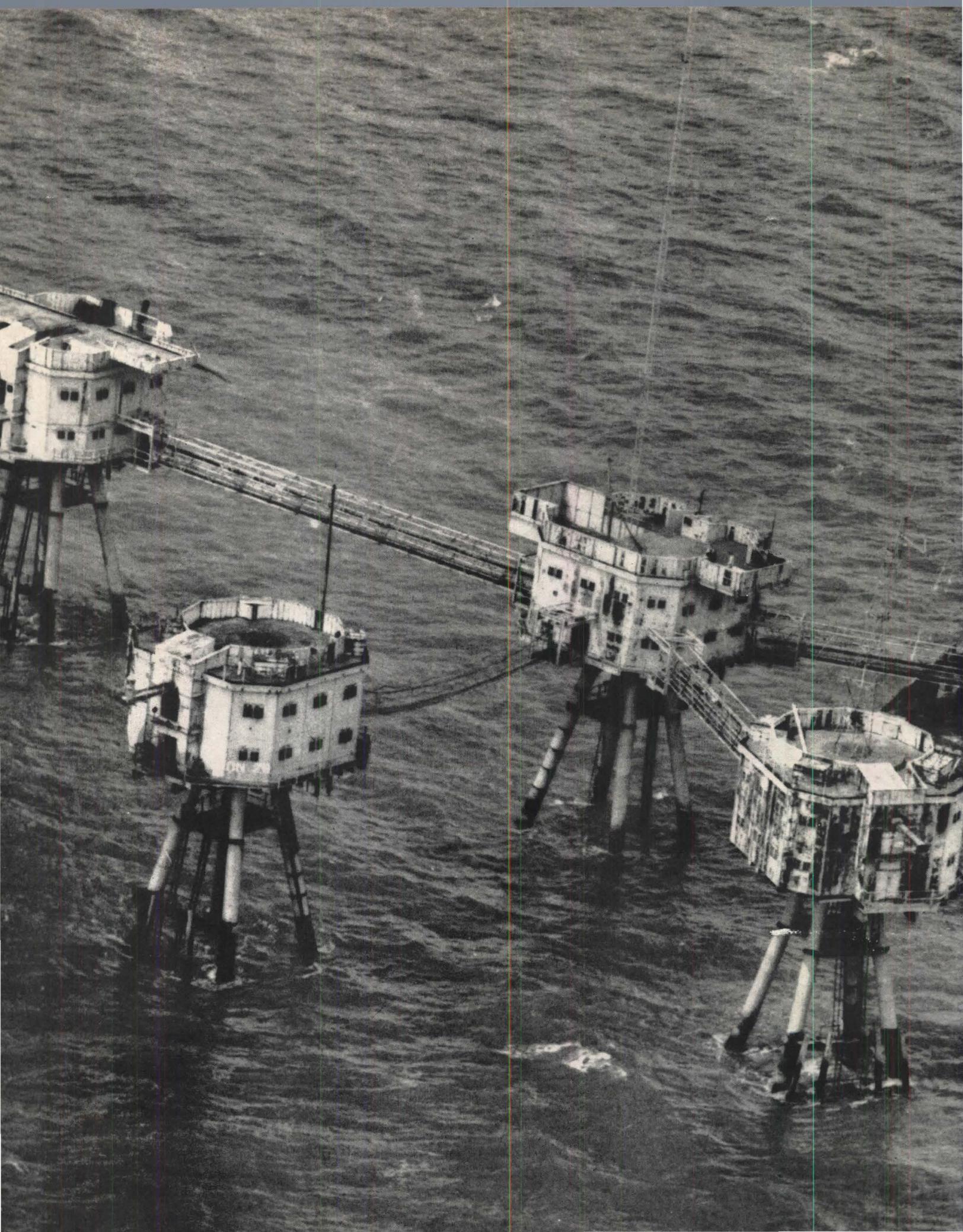
## . . . AND THEIR CITIES

### GALBRAITH

"The city or metropolis is the key unit in the management of environment. This means that city government must be stronger, by far, than in the past. It means that cities must be run by stronger, more imaginative, and, needless to say, intelligent and strictly honest men. . . .

"We must explicitly assert the claims of the community against those of economics. . . . It should not be claimed that the eventual cost of greater esthetic quality will be less—that it will pay in the long run. That is no longer the test.

"The test is what, in the end, people will enjoy most."



# HARDWARE OF A NEW WORLD

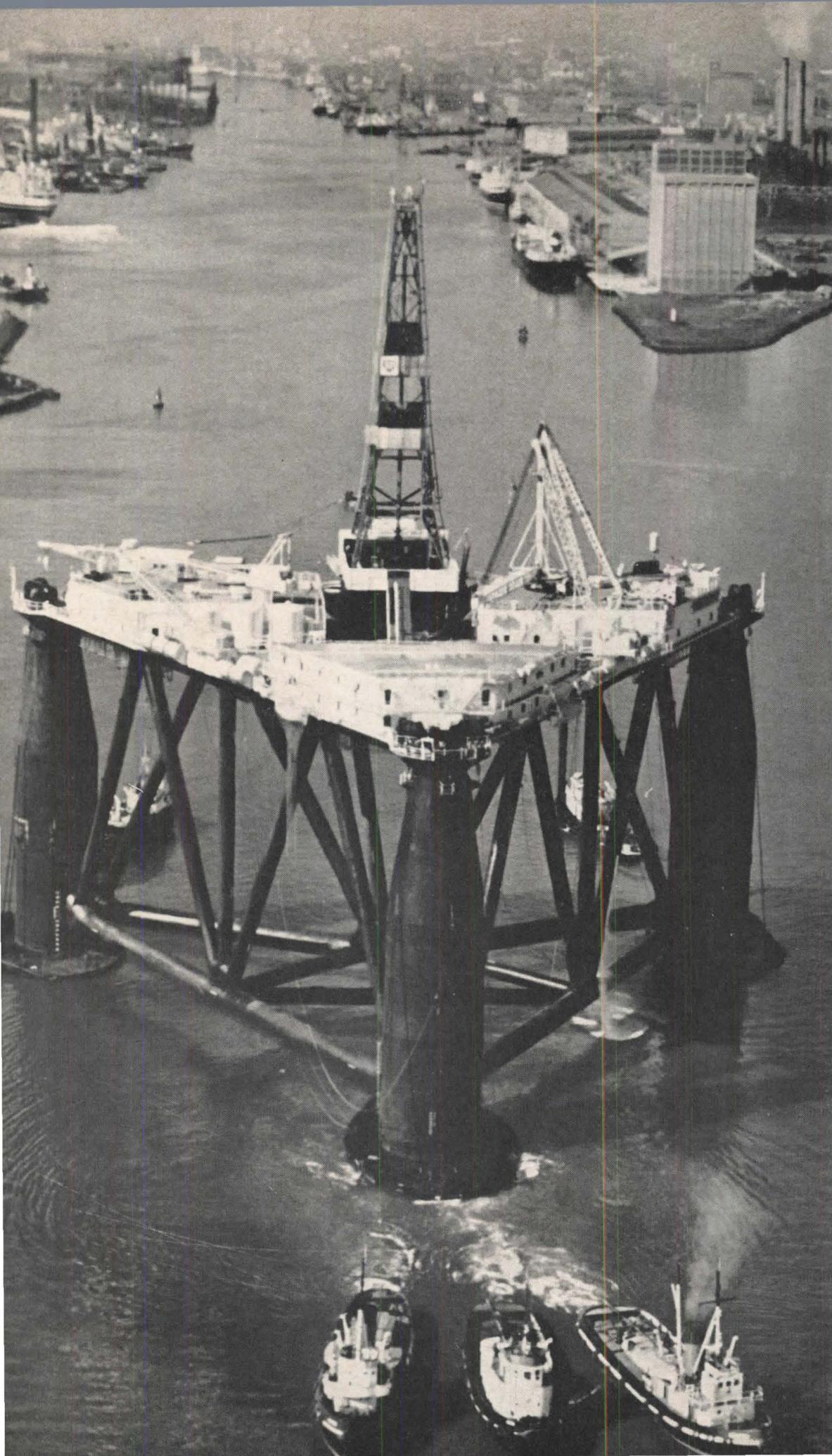
BY WARREN CHALK

Two apparently unconnected news items hit the headlines in Great Britain this summer: the first concerned a strong-arm bid to take over *Radio City*, a "pirate station" broadcasting non-stop pop music from a wartime antiaircraft fort, outside territorial waters in the Thames Estuary; the second item concerned some oil rigs out in the North Sea, which had made natural gas strikes large enough to change the face of Britain. Although of no apparent connection, together these news items contributed a fresh flush of enthusiasm to a small band of young British architectural hopefuls concerned with predicting patterns of the future.

The ack-ack forts in the Thames Estuary (left) are relics of World War II; they bristled with antiaircraft guns and radar equipment, as early-warning stations against hostile aircraft or invasion fleets. One of the stations, the "Shivering Sands Fort" off Whitstable, Kent, is now occupied by pirate *Radio City*, a commercial station that pipes round-the-clock pop music and commercials to an estimated 25 million regular listeners. This June saw an attempted commando-style raid, the fort invaded and its transmitters silenced for several days. Then followed news that the pirate pop-radio chief had been shot, and that a full-scale inquiry had been launched by Scotland Yard. Questions in Parliament led to a new Government anti-pirate bill being published which may silence the transmitters for good.

THE natural gas finds in the North Sea, which could help substantially to make the British economy more stable, might at the same time produce a visual disaster area similar to the U. S. coastline along the Gulf of Mexico. The oil rigs used in these gas strikes, however, such as the I. C. I.'s and Burma Oil's "Ocean Prince," or the monster "Sea Quest," British Petroleum's semisubmersible drilling barge (next page), have a close hybrid structural and visual affinity with the Thames forts and with certain

Mr. Chalk, a young British architect, is a member of the *Archigram* group, whose experimental designs appear, much to infrequently, in a magazine of the same name. The aerial photograph at left shows the "pirate" *Radio City* in the Thames Estuary.



architectural projects for cities of the future.

**S**YMBOLISM and reality are in a sense interconnected, the bridge between them serves to support a new visionary understanding of what architecture might become. A view from this bridge provides a glimpse of a physical world of architecture subservient to the media it supports, and refocuses the work and doctrines of the modern movement in terms of the transient nature of life in this century.

As in the instance of the Thames forts, where one medium gave place to another, where apparatus of war at one moment in time was later thrown out and replaced by pop-music transmitters—so, in the fabric of future cities, the “architecture” can be conceived as an adaptable megasystem cradling a continually changing range of media. And suddenly the medium is seen to be more important. Architecture will no longer be concerned with individual buildings or groups of buildings, but with forming a permissive environment that is capable of any configuration according to circumstances.

**J**UST as important is the realization that with the culture explosion brought about by mass production advertising, throwaway packaging, etc., as well as the widening of horizons due to space and underwater explorations, architects and designers themselves will change. They will eventually have to reorient themselves, ease out from under their traditional role, and accept the new phenomena in order to survive.

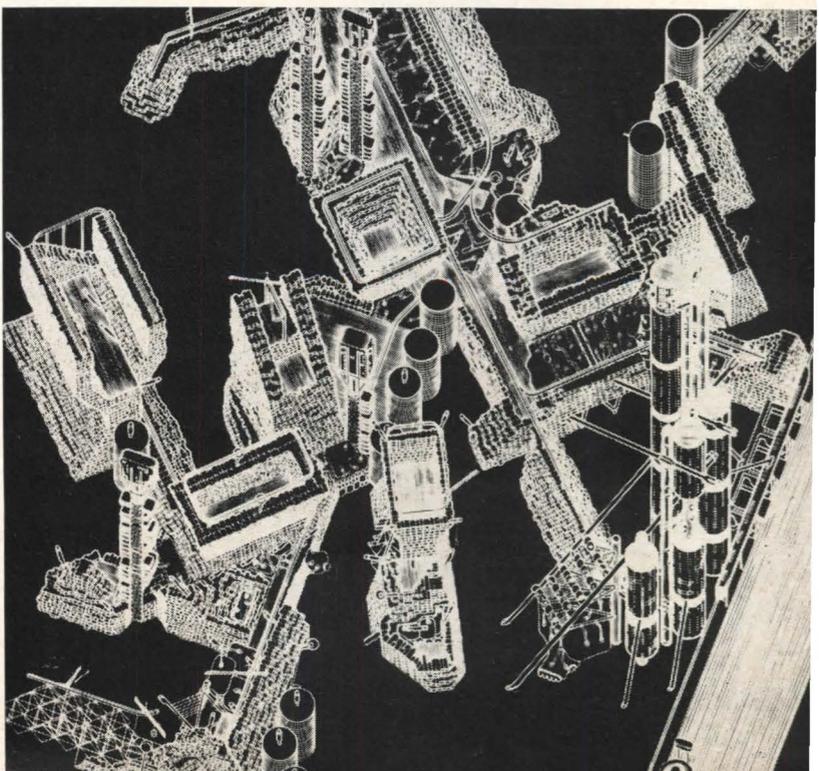
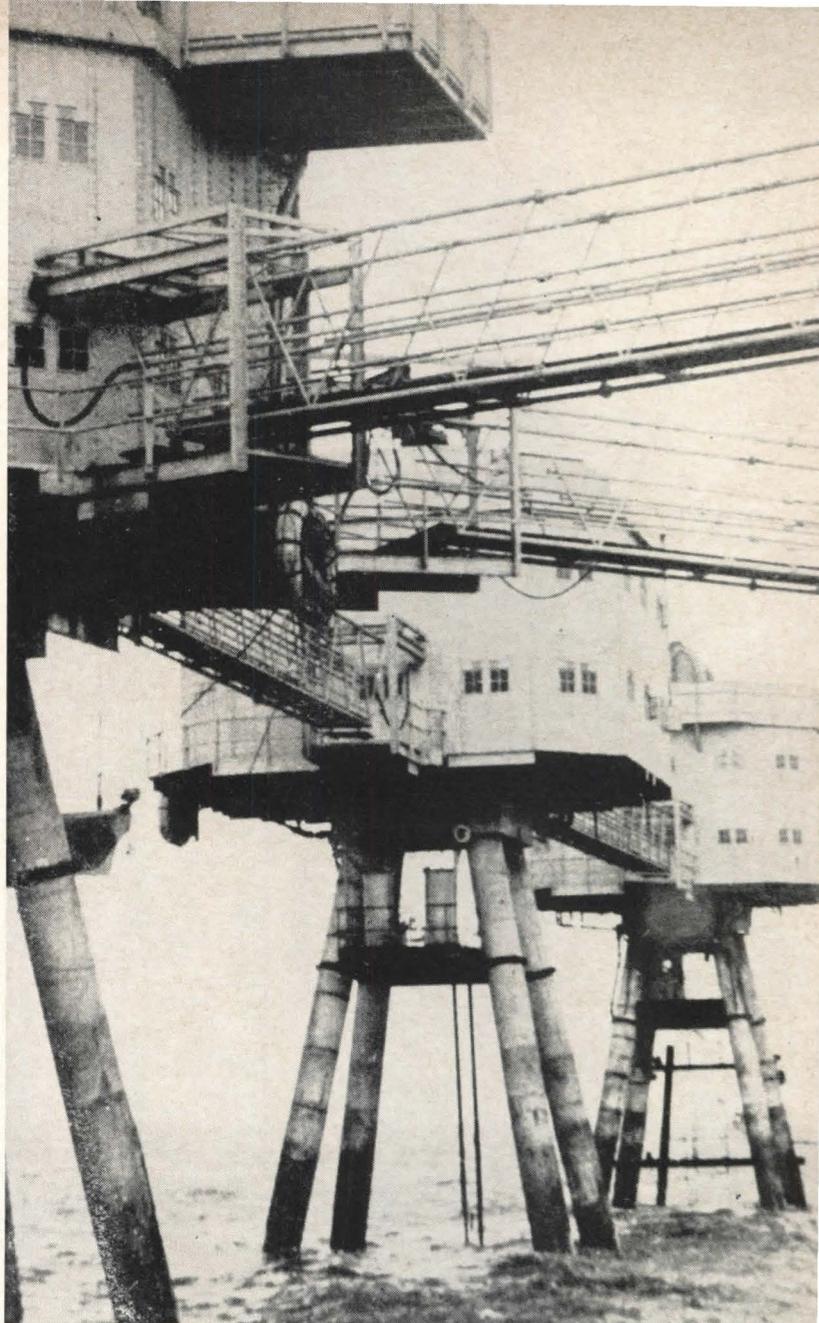
Unforeseen by the founders of modern architecture, ignored or feared by the large mainstream of contemporary architectural thought, but recognized by those *outside that mainstream*—these space-age commodities will be

Left: “Sea Quest,” British Petroleum’s semisubmersible drilling barge, is a structure 320 feet tall. The triangular platform measures 300 feet by 300 feet by 300 feet.

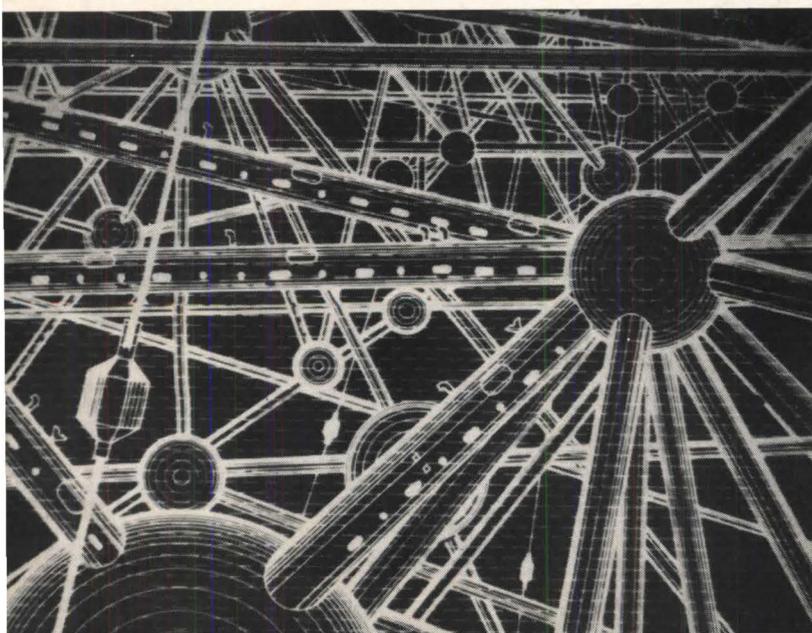
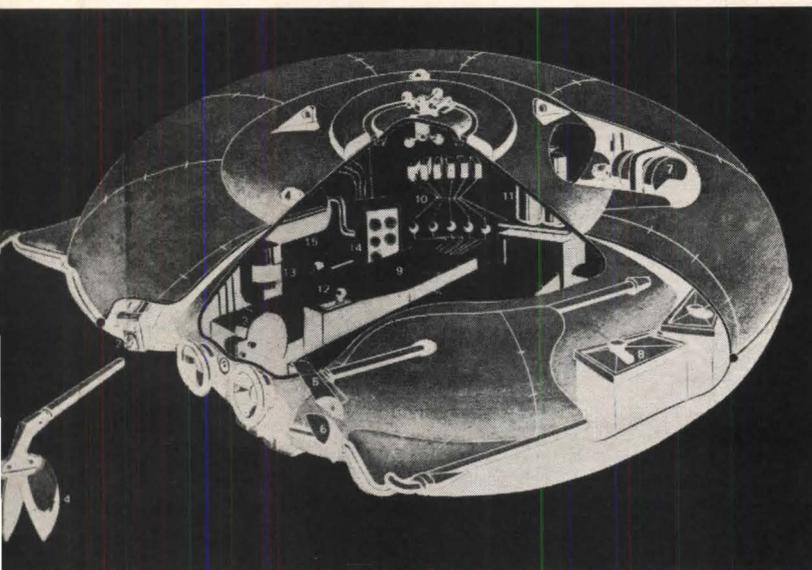
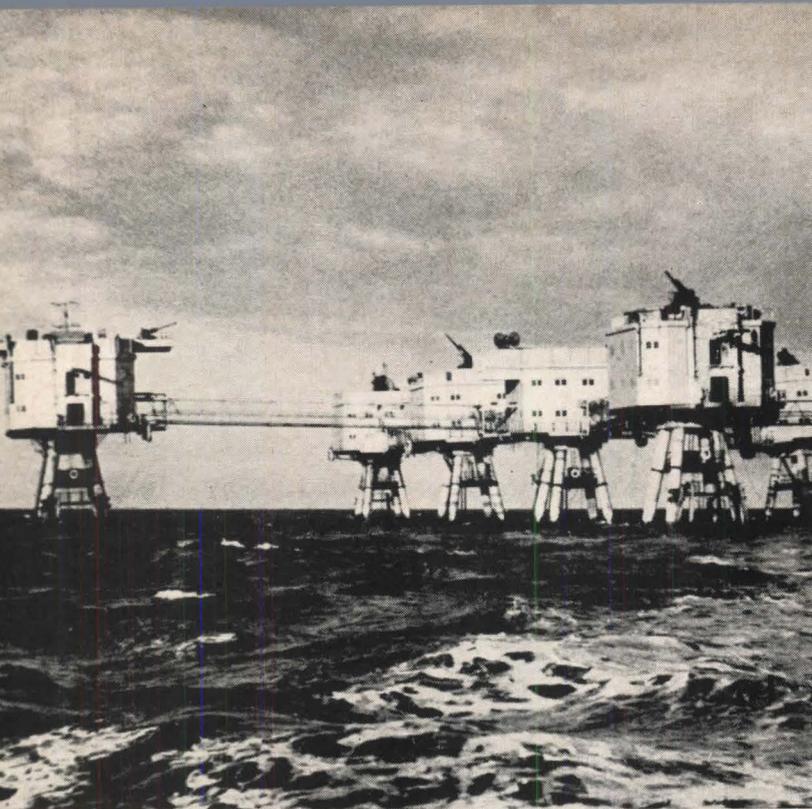
instantly absorbed and understood, taken for granted even, by younger generations. The world of architecture will eventually move away from the idea of buildings as something fixed, monumental, great and edifying, into a situation where buildings take their rightful place among the hardware of the world. Then architects as presently known will cease to exist, and a very different kind of animal will emerge, embracing science, art and technology in a complex overview. Established disciplinary boundaries will be removed and we will come closer to the all-at-once world of Marshall McLuhan.

**T**HIS far-out research is happening *now* and must be studied and understood if we are, eventually, to produce an architecture that recognizes the technological implications of our time. Young architects in Britain, who have no firsthand experience of space or underwater programs, look to whatever hardware is available to them for indications of a future. If the Thames Forts and oil-rigs are seen, not as isolated facts, but as a confirmation of our attitudes, then our analogies become less suspect. These sea structures have a deep significance to us, as pointers to the shifting nature of architecture and environment: at a purely visual level, this marine hardware parallels the Archigram Group's work on projects such as "Plug-In City" (bottom right), "Walking City" and "Underwater City". The same tube connectors, the use of the diagonal, the linking of nodal points, an understanding of the language of mobility, making sense of technological know-how without destroying the characteristics of sea and sky, land and space—all these are evident here. The unselfconscious process of marine engineering and its attendant economy of conception are similar in spirit to the plug-in concept.

**W**HEN you trace the implications further afield, a comparison can also be drawn with the work of the Metabolists



Top right: Close-up of one of the ack-ack forts anchored off Britain more than 25 years ago. They did not possess all the comforts of home, but they clearly were, and are, an architecture of a new kind and age. Below: Part of the Archigram group's design for a "Plug-in City," done quite independently a couple of years ago.



of Japan, Kenzo Tange's Tokyo Plan, Kiyonori, Kikutake's Marine Civilization and the spatial constructions of Arata Isozaki.

A number of the Metabolist projects are concerned with ocean cities as extension of land or as floating offshore islands. Possibly, Tange's Tokyo Bay proposal is the most familiar: it is one of the finest essays in offshore marine settlements.

This said, Tange's project (opposite) nonetheless fails to exploit to the full the potential of a marine settlement, and is still very much a land-based organization with movement systems. Oceanographers have long realized the untapped sources of wealth to be found in the sea and under the sea bed. Underwater resources appear fantastic, a storehouse for harvesting petroleum, natural gas, minerals and sulphates; even gold and diamonds are to be found, and commercial fish-farming is a theoretical possibility.

These activities will give rise, eventually, to on-surface and undersea marine settlements as unexceptional communities.

The notion of manned undersea communities arises directly from research carried out by Professor John Scott Haldane in 1906, and the continuing experiments by such men as Auguste Piccard, Sir Robert H. Davis, Edwin A. Link (the inventor of the Link Trainer for simulated flight conditions), George F. Bond and Commander Jacques-Yves Cousteau.

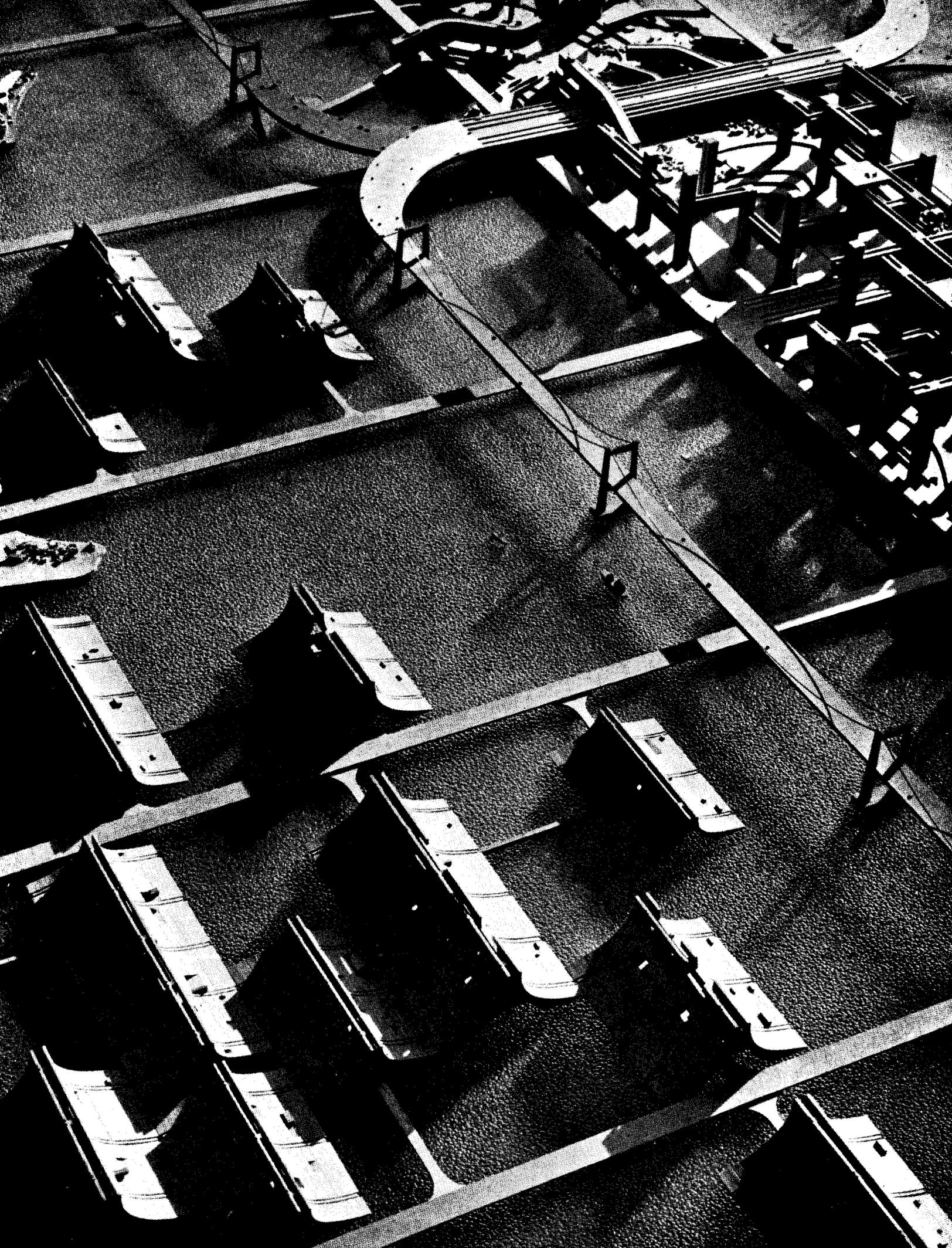
These men and others have been responsible for the development of numerous underwater inventions and hardware including the aqualung, the SPID (submerged portable inflatable dwelling) various deep-submergence research craft, underwater houses and laboratories.

BUCKMINSTER Fuller's observation that the space capsule is the first completely designed human environment may finally apply also to undersea conditioned environments. Environmental control in a sea settlement could be designed to the ultimate, with televisual commu-

nications links and "artificial gill" air supply. Recent developments in undersea and surface craft, such as the Westinghouse Deepstar deep-submergence craft and the SR. N1. Hovercraft shown at left (or similar Ground Effect Machine), could form transportation links with land.

A RECENT issue of *Esquire* magazine showed an aquarium for people, designed as an underwater house by Corning Glass Works: a glass bubble capable of traveling 6 miles down into the sea attached to a surface saucer-home with solar batteries embedded in its roof to provide electricity. This suggests that besides the great commercial implications of marine cities there also may be an equal leisure potential—a potential that may make the line, "We all live in a yellow submarine," more prophetic than even the Beatles might have imagined.

Left (top to bottom): One of the offshore ack-ack forts in its prime, replete with artillery; cutaway drawing of the British "Hovercraft," which will do 60 m.p.h. hovering a few inches above the water; and a detail of an Archigram design for a "Walking [or, anyway, atypical] City." Right: Kenzo Tange's plan for extending Tokyo across its bay. This part-view of Tange's scheme begins to look rather conservative by comparison with the 25-year-old reality of the ack-ack forts.



# BOOKS

**PHILIP JOHNSON: Architecture 1949-1965.** By Philip Johnson. Published by Holt, Rinehart and Winston, Inc., New York, N. Y. 115 pp. Illustrated. 10¼ by 11¼ in. \$15.00.

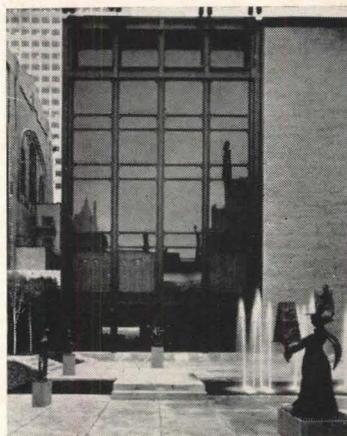
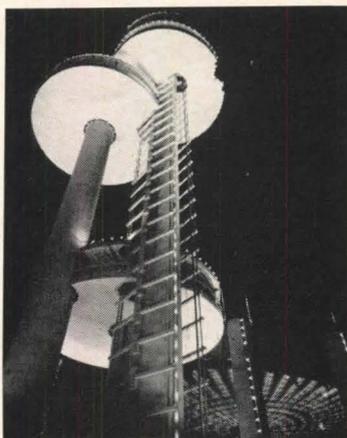
REVIEWED BY PHILIP JOHNSON

It is always good in our decadent world to see a well designed, sumptuous book come on the market. This is one. Paper heavy, lots of color, generous type, excellent cover design. Elaine Lustig at her best. Cocktail tables look handsome with it.

The importance of the book, however, is other. It is the latest in a line of architects' books on their own work. The genre deserves propagation. Perhaps because Johnson was an architectural historian before he became an architect at the age of 36, he thought it important for some of his public (the few who buy books) and especially for the future to have a record made by the architect's hand. How right he was.

All of which has nothing to do with the quality of Johnson's architecture. Plenty of second rate architectural works are also grist for the architectural historian's mill, as anyone going through Avery Library can judge. The value of this book, for example, is the new way of showing architecture. Color photography beats heliotype any day. And think of the impossibility today of the beautiful line drawings of Schinkel's works or Frank Lloyd Wright's 1910 *Ausgeführte Arbeiten*. No one would ever do it. Mareel Breuer's half-tone photos and Saarinen's fuzzy gravure seem pale next to Technicolor.

Mr. Johnson, a former director of the department of architecture and design at the Museum of Modern Art, is also the author of several important books and essays on architecture. He co-authored, with Henry-Russell Hitchcock, the now-classic *The International Style: Architecture 1922-1932*; and he is the author of the first definitive monograph on Mies van der Rohe, published in 1947. The fact that he happens to be both the subject and the critic of the present book is not entirely coincidental: Philip Johnson, it turned out, was the only critic and scholar fully qualified to review a book on Philip Johnson's work.



1. Robert Wiley house, New Canaan, Connecticut, 1953. 2. World's Fair 1964, New York State Pavilion. 3. Museum of Modern Art, New York, 1964. 4. New York State Theater, Lincoln Center, New York, 1964.

Whether color catches on or not is less important than that here is a book which by its very existence shows that someone (publisher?, architect?) cares about the position of architecture. Architecture becomes as important a branch of knowledge and life as, say, Beautiful Meissen, or Wild Life in Africa. And anything that will raise the level of public estimate of our hitherto lowly art is very, very welcome.

The text is faultless. Henry-Russell Hitchcock, the dean of architectural historians of the 19th and 20th centuries, has produced a lucid, critical essay that well might stand as a paradigm for the monographs on living architects. Although commissioned by Johnson, he indulges in no hyperbole. He *says* something in each sentence, and what he disapproves of, what he finds positively ugly, he mentions not at all. He accentuates the positive without flattery or sycophancy. A difficult piece of tightrope walking. The result is packed, objective, interesting.

Concerning the quality of Johnson's oeuvre, I shall have to hide behind what Furneaux Jordan wrote. Personally I feel too close to the trees to see the forest. Contemporary architecture is too near to let us judge. Mr. Jordan wrote in the *London Observer*: "Whether the work of Johnson will eventually be looked upon as a culmination, a climax, in modern architecture, is for the future to decide. It is certainly difficult to see how his kind of architecture can be taken further. There is more than one facet, more than one technique, in modern building."

Whatever Johnson's place in history may be, it is a plus for the historians to have a book on his work. Without any invidious comparisons to the great self-publications, starting with Ledoux and Schinkel down to Otto Wagner and Frank Lloyd Wright and the incomparable *Oeuvres Complètes*, it might be said that Johnson's book may encourage architects to bring out their own books. For a minor reason, it is fun to see what the artist picks out to illustrate, also

how he wants to show it (think of the difference between Le Corbusier and Frank Lloyd Wright in methods of self advertising!). Also interesting: Why did they choose the buildings they chose? Also, why did they change styles when they changed? Also (alas, lacking in Johnson's book), why does what they say differ from what they do?

**WITH HERITAGE SO RICH.** Report of Special Committee on Historic Preservation under the auspices of the United States Conference of Mayors with a grant from the Ford Foundation. Published by Random House, New York, N. Y. 230 pp. Illustrated. 9 1/2 by 10 1/4 in. \$10.00.

**REVIEWED BY**  
WHITNEY NORTH SEYMOUR JR.

"We already have on exhibition more historic houses and museums than we need, or are good for us as a nation. . . . Preservationists should try to keep America beautiful, rather than to create little paradises of nostalgia in an ocean of superhighways and loudspeakers, billboards, neon signs, parking lots, used-car dumps, and hot dog stands."

These hard-headed observations by the director of the Boston Athenaeum, Walter Muir Whitehill, provide a key to the best elements in the handsome, hard-cover volume on the state of historic preservation recently published as a team effort by a group of professionals in this unsettled field.

*With Heritage So Rich* is the first comprehensive, basic textbook on historic preservation. It is an essential reference work for anyone interested in the field, whether architect, government official, civic worker, or layman. The book provides a wide

Senator Seymour, a member of the New York State Legislature, has long been associated with historic preservation in civic and professional groups, and has sponsored a number of significant bills in the preservation field. Immediately prior to his election to the State Senate, he was president of the Municipal Art Society of New York.



1.



2.



3./4.



1. Cliff Palace ca 1200, Mesa Verde National Park, Colorado. 2. Barn, near Lebanon, New Hampshire. 3. Cast Iron Front Building, Fulton Street, New York. 4. Jayne Building, Philadelphia (destroyed 1957).

range of background information and learning on most aspects of historic preservation: a good general history of U. S. architecture, running from the earliest colonial times down to the modern era; a history of landmark preservation in the United States; a checklist of the available working tools for preservation activists; and a brief summary of the laws and practices in a number of European countries engaged in preserving their architectural heritage.

Like all committee undertakings, this work is spotty. In an attempt to please all classes of readers, it includes much material of dubious value, including a substantial quantity of handsome photographs, many in color, which seem more geared to generating a sense of misty sentimentality than to encouraging hard-headed programs. In part, this is undoubtedly due to one obvious purpose of the volume: to provide back-up material for legislation, since introduced in Congress, to implement many of the committee's recommendations. The photographs presumably are included on the not altogether unsound premise that although legislators frequently behave as if they cannot read, at least they can look at pictures.

But the good stuff in this imposing volume far outweighs the unevenness of its approach. It also is sprinkled with fascinating tidbits. The preface starts out with a brief account of the accidental blowing up of the Parthenon on September 15, 1687, during the bombardment of the Turkish army by the Venetians. There are anecdotes such as the role played by Emerson, Holmes, Longfellow, Lowell, and Whittier in helping to preserve the Old South Meeting House in Boston, in one of America's first successful preservation efforts. There is a good account of "Alexander Hamilton's folly," when that gentleman attempted in the late 18th century to establish at Paterson, New Jersey, the first major industrial community in our country.

By far the most interesting historic item in the book, in

terms of its practical utility as a guide to modern generations, is the reference to a letter written in 1791 by Thomas Jefferson, then Secretary of State, to President George Washington and Major Pierre Charles L'Enfant, suggesting techniques for encouraging architectural good taste in the design of the new capital of Washington:

"While in Europe I selected about a dozen or two of the handsomest fronts of private buildings, of which I have the plates. Perhaps it might decide the taste of the new town were these to be engraved here and distributed gratis among the inhabitants of Georgetown. The expense would be trifling."

The simplicity of this device, proposed by one who laid down the basic framework of independence which our nation has followed for almost two centuries, is important to remember. If people interested in historic preservation would only spend more time making fellow citizens aware of the beauties and benefits which architectural landmarks can supply, the task would be infinitely easier. Instead, preservationists tend to spend their time talking to one another, a vice which this book should help to cure.

In terms of action programs, *With Heritage So Rich* has many good ideas but, even so, barely skims the surface. Its principal recommendations relate to the legislation now before Congress, which obviously deserves support. Beyond those proposals, however, the book comes up fairly short. There are a handful of suggestions for state and local action, most of them technical and of limited effectiveness. Clearly this volume is merely the jumping-off point.

Where do we go from here?

The architectural profession has a great opportunity to further the goals suggested by this book. Architects who take on the difficult work of preserving old buildings, or of intelligently integrating them into the fabric of new designs, deserve recognition and praise from their colleagues. Historic preservation

(continued on page 107)

Looming up among the picturesque gables and chimneys of the University of Colorado campus at Boulder (right) is a new building by Harry Weese, a concrete-framed laboratory tower higher than anything else on campus. New towers breaking the university skyline are a familiar story these days, but the relation between this one and the older buildings around it is part of a special story. Special because the expansion of this university is the most earnest—and the most successful—effort in the U.S. today to integrate new buildings with an existing campus.

If continuity between old and new is to be worth pursuing, there has to be an existing environment worth respecting. And Colorado had one: a physical plant outstanding in most of its

## Colorado U: respect for a robust environment

spaces, forms, and details, despite its ostensible historicism. Architect Charles Z. Klauder had established a manner of building particularly suited to the location, a point where the wind-swept plains collide with the foothills of the Rockies. Buildings tightly enclosed in massive walls of native Lyons sandstone and sheltered under hail-proof tile roofs were designed to grow in crablike wings, enclosing courts where trees could flourish with the aid of mountain water.

What is more, Colorado has had administrators who knew a good environment when they were in it. They were able to set up an internal planning mechanism and a system for employing design consultants that virtually assured sympathetic extension of the campus' architectural values.

Inside the administration is a

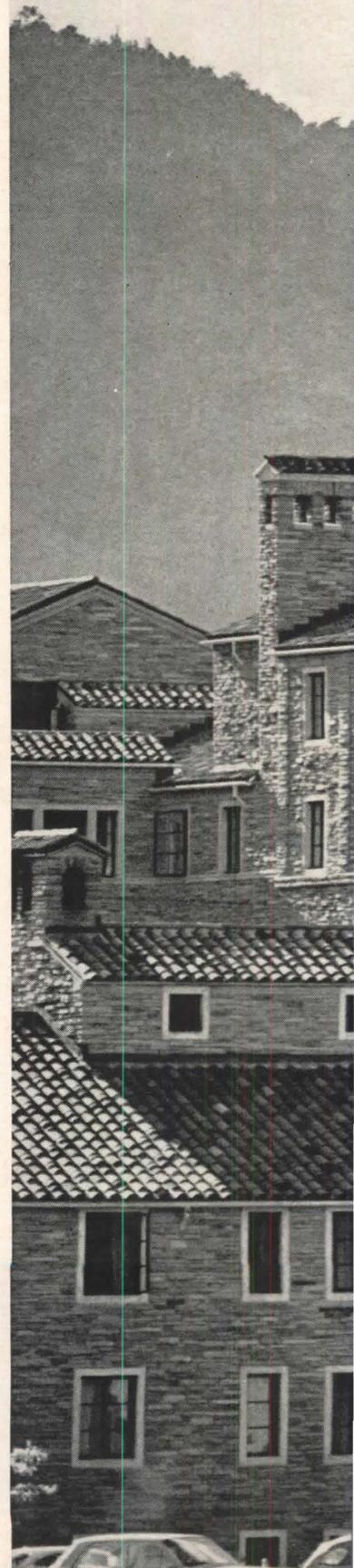
planning office whose interests extend beyond mere siting and budgeting to considerations of educational and environmental goals. Its work is guided and reviewed by a 12-man Joint Planning Committee (administration-faculty), which oversees the programming of both new and existing space.

In 1960 the university abandoned its 43-year reliance on a single firm for architecture and planning (Day & Klauder of Philadelphia and their successors, Trautwein & Howard) and decided to entrust each new project to an architect individually selected for it. This gave Colorado architects a chance to design buildings on the state university campus for the first time in decades, but it did not discriminate against out-of-state firms either.

That much of the process is not too remarkable, and could have produced the kind of competition between prima donna buildings that is taking place on so many other campuses. What makes Colorado so different is the crucial role of the continuing design consultants.

The "consultants for planning and design," Sasaki, Dawson, DeMay Associates, not only provide a master plan, advise the planning staff and committees, and assist in the selection of architects, but they critically review all proposed buildings—actually collaborating on design revisions, if necessary, to get an acceptable solution. Backing up their advice and review (and refereeing, on occasion) is a further authority, the "consultant on architecture," Pietro Belluschi.

This running of the gauntlet is far more difficult than the usual formal review, and may occasionally cost a bit extra in fees. In the six years since the system was established (with the present consultants), many designs have gone back to the drafting boards for revision and re-revision, until everyone, *including the building architect*, was satisfied. All of this entails many long meetings, serious disagreements, wounded feelings, and a drain on the drafting paper supply. But the unified campus emerging from it seems well worth the trouble.





In 1876, the university's first home, Old Main (right), rose on the bluffs above the village of Boulder, apparently without the aid of an architect. In the next 40 years it collected about 20 buildings around it, some were merely sheds and some solid masonry piles loosely based on Romanesque, Classical, or Collegiate Gothic models. One of the few things they had in common was the use, here and there, of rough-cut native stone.

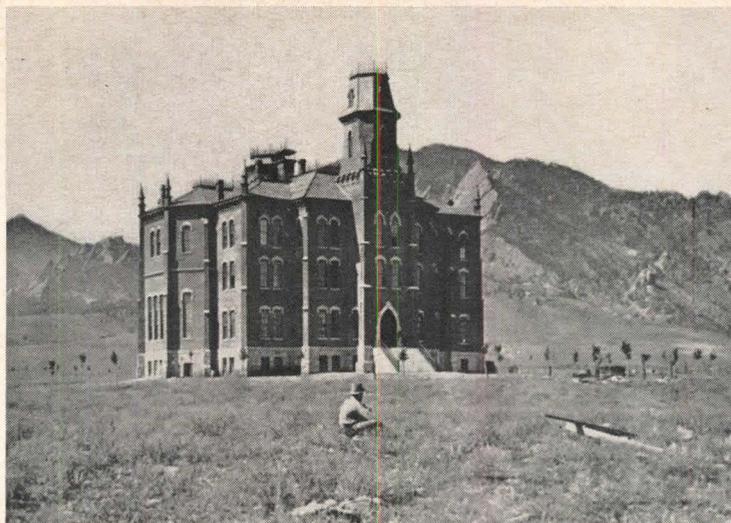
In 1917, when the state was ready to support a major expansion (allowing enrollment to rise from 1,200 to 3,000), the regents decided it was time to bring order to the campus. They turned to the most respected campus architects of the time, Day & Klauder of Philadelphia. It was this firm, in particular Charles Z. Klauder, who set the architectural guidelines that have never since been abandoned.

Klauder had made his reputation with Collegiate Gothic buildings at Wellesley and Princeton, and the Coloradans wanted nothing less. A preliminary Gothic scheme was worked up, but Klauder could not seem to reconcile it with the untamed terrain.

In true eclectic fashion, he set about finding a source of more appropriate forms and details, and found it in the hill towns of Tuscany. So enthusiastic was Klauder about this "Rural Italian Style"—never before admitted to an American campus—that he gained unanimous approval from the regents.

Klauder's Rural Italian Style was no authentic reconstruction. He merely relied on Tuscan towns as precedents for the characteristics he was seeking: basically symmetrical organization; clusters of more or less Classical cut-stone detail at focal points, with sparser details on the sprawling wings; and numerous arcades and loggias.

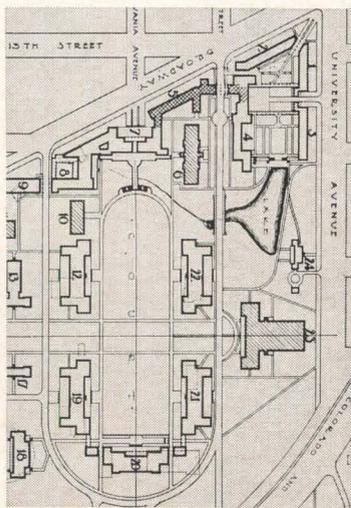
Most obviously reminiscent of the hill towns were his red tile roofs, popping up and down and taking gabled or hipped forms; half-gables appeared often, symmetrically opposed in a book-ends effect. His walls offered few openings for the piercing Colorado sun and were of split Lyons sandstone (from the uni-



versity's own quarries), pale ochre to reddish brown in color, laid up in horizontal slabs with wide mortar joints.

In his plan (portion below), Klauder reinforced the main quadrangle—already loosely enclosed—by brackets of linked buildings at both ends. A continuous wall of buildings (with colonnaded portals through them) was to enclose the campus on the west, curling around at the north end to form a dense women's residential group with intimate interior courts. A men's group, (not included on plan below), was to be built around similar small-scaled courts.

Klauder's plan made a hit with at least one architectural critic. In a ten-page ARCHITECTURAL FORUM story, Aymar Embury II hailed it as a model of campus design (making the ageless observation along the way that "the average American university is an architectural mess"). What Embury especially admired was

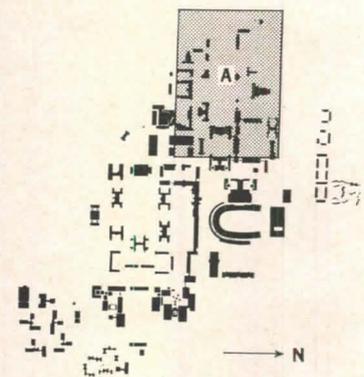


that there was no artificially monumental focal structure: "Where all buildings are of nearly equal importance . . . no building can justifiably dominate the group." George Norlin, then president of the university, said more simply that it was not the usual "hen and chickens" solution of the time.

But the adventurous architectural style that Embury welcomed so heartily (calling it "as novel as the Aztec," when the Dodge House, page 68, was already three years old) was not so well received by the public. When the first product of Klauder's office, the central block of the Hellem's Building, was completed in 1921, it did not look at all picturesque. With neither wings nor vines to soften it, it was suspected by some of being modern. A group of legislators sent to investigate on the spot was placated only by the reassuring sight of Klauder's toylike campus model (still on view at the university).

Not much of Klauder's work was executed as originally planned. What the regents wanted for their money were useful interior spaces in neat packages to fit appropriations. Arcades and terraces that would have linked building to building were dropped (along with the campaniles). And nobody has yet been willing to tear down the sound existing buildings (including Old Main) that Klauder brashly indicated as mere dotted lines on his plan. The chain of buildings along the west end of the campus was never built.

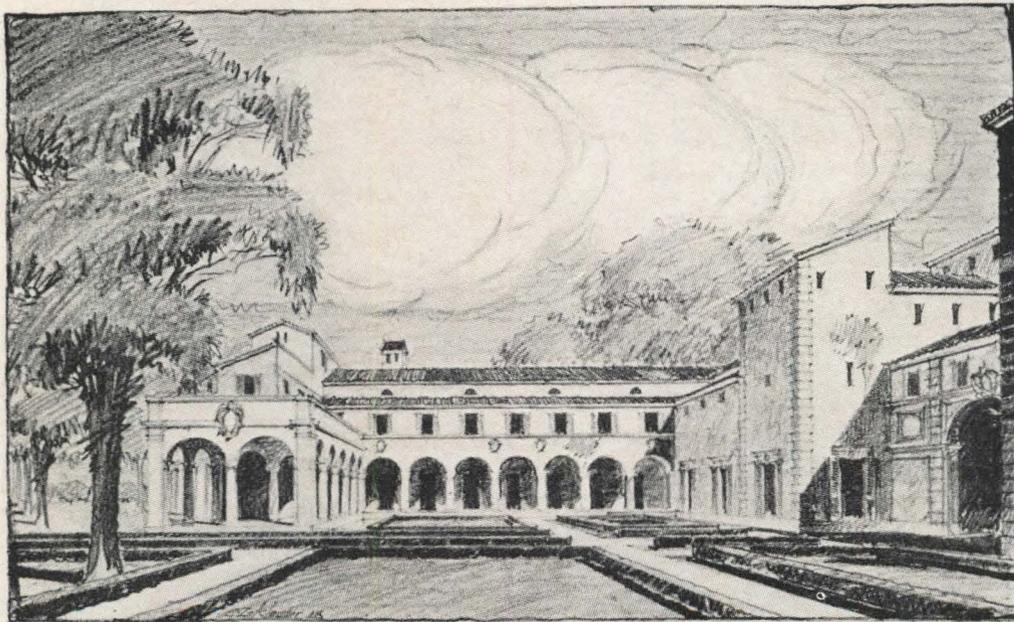
In 1919, Klauder gave the scraggly campus a pattern for growth that is still valid today



The saplings seen around Old Main in an 1877 photo (above left) had already grown into a hardy grove when Charles Klauder came west to draw up a development plan for the campus. The core of his plan (left, shaded on key plan of present campus above) enclosed the existing mall around Old Main (A on key plan) with new buildings in a style based on Tuscan hill town vernacular. A page from Forum's September 1919 story on the scheme is reproduced at right.



*West Entrance, Women's Dormitory Group*



*South Front, Social Center Building*

*Colorado University Buildings, Boulder, Colorado  
Day & Klauder, Architects*

Before his death in 1939, Klauder completed 13 projects on the campus, including additions that muffled immovable old buildings in wings of his own style. When construction was resumed after World War II, under pressures of enrollments that soared from a prewar high of 3,845 to more than 9,000 in 1948, the university naturally turned to his successors, Trautwein & Howard. But without Klauder, nothing was quite the same.

Even though most of Klauder's buildings turned out to be isolated objects, he never missed an opportunity to develop courts and terraces between their wings (as at Sewall Hall, right). And he never ran out of unexpected forms and details.

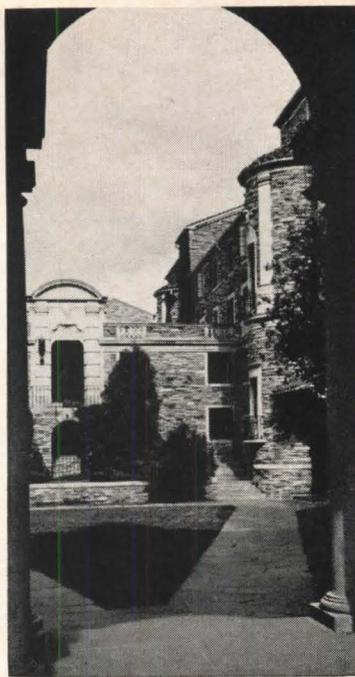
The successor firm retained some conspicuous elements of Klauder's buildings, such as the tile roofs and dove-cote chimneys. But stone trim became skimpy and uniform, patches of stucco or brick appeared on the walls, facades became flatter and landscaping perfunctory. In late examples such as the Wardenburg



Health Center (above), completed in 1960, large glass areas in metal frames mixed incongruously with stone-trimmed windows and frills of roof tile.

As expansion reached beyond Klauder's campus, new master plans were drawn up, but each bore little relation to the last. One bright aspect of the period was that the university bought up hundreds of surrounding acres while they were still undeveloped. But as campus distances increased, more space was allotted to roads and parking.

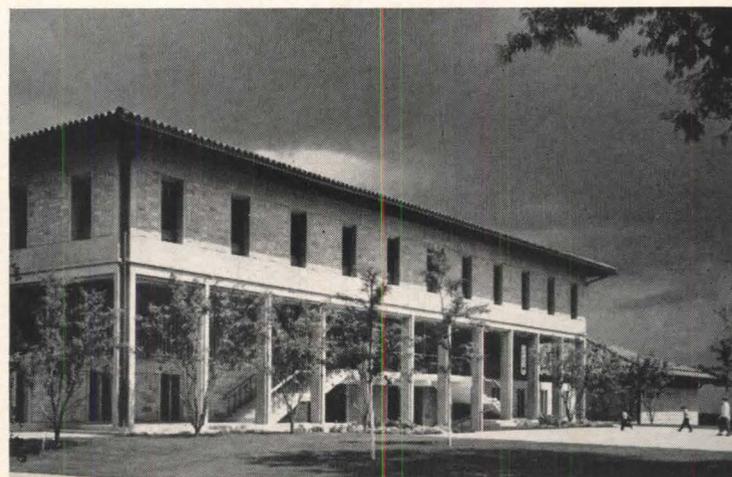
A 1957 survey showed that enrollment, then about 10,000, would double by the 1970's; and



that the trend toward specialized graduate studies would require more physical plant per student. Faced with these predictions, President Quigg Newton and his staff decided that new design guidance was needed.

It was in 1960 that the Sasaki firm (then Sasaki, Walker & Associates) and Belluschi took up their roles as consultants. The university chose them partly for the weight of their international reputations, but the local press accused them of being recklessly avant-garde, displaying recent MIT projects as evidence. The state senate, forgetting its cool reception of Klauder's work in 1921, unanimously resolved "to condemn any change in the present Italian Renaissance style [sic] on the Boulder campus."

The regents were not fright-



ened by the specter of MIT, nor did Sasaki and Belluschi have any intention of giving the campus a space-age look. The respectfulness of their design policies became evident in the first building to be completed under the new review system, the administration building designed by Warren Peterson, then with Meyer & Ayers of Baltimore. It was, if anything, too inhibited in form for this robust campus, especially in such a pivotal location (E on plan at right).

In dealing with individual architects, Sasaki and Belluschi encouraged use of Lyons stone walls where appropriate, of concrete in ways reminiscent of Klauder's cut-stone trim and columns, and of red tile roofs in shapes found in Klauder's work (a generous choice, actually). Large areas of unshielded glass were discouraged, but dove-cote chimneys, too, were banished.

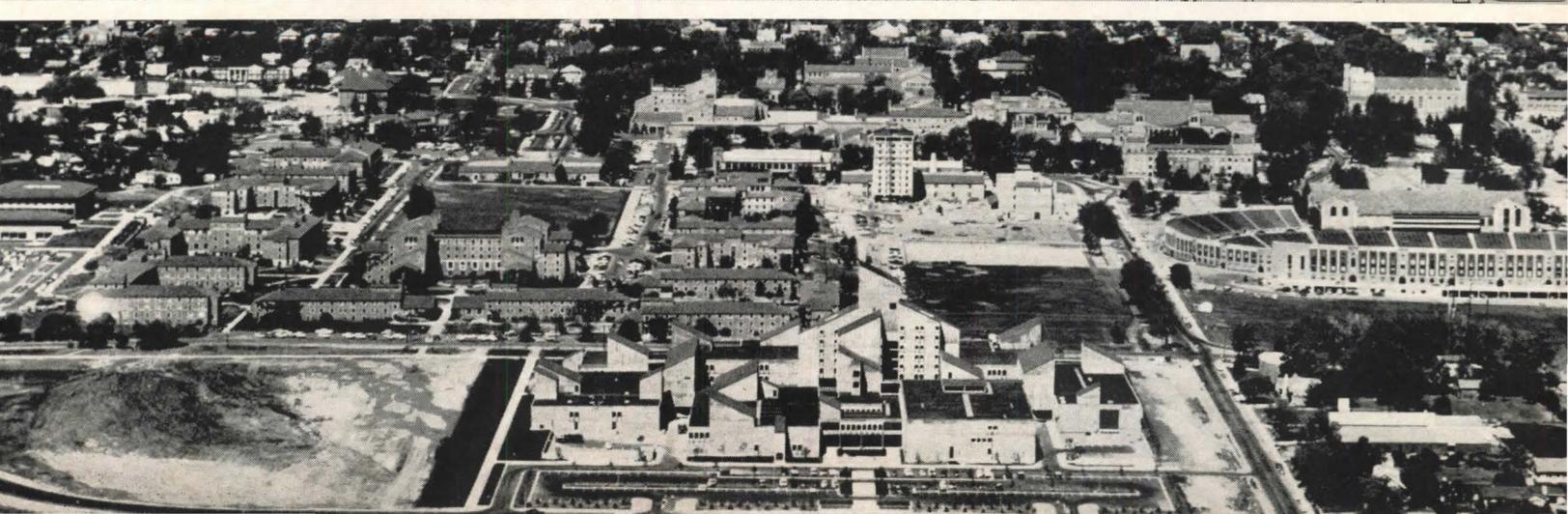
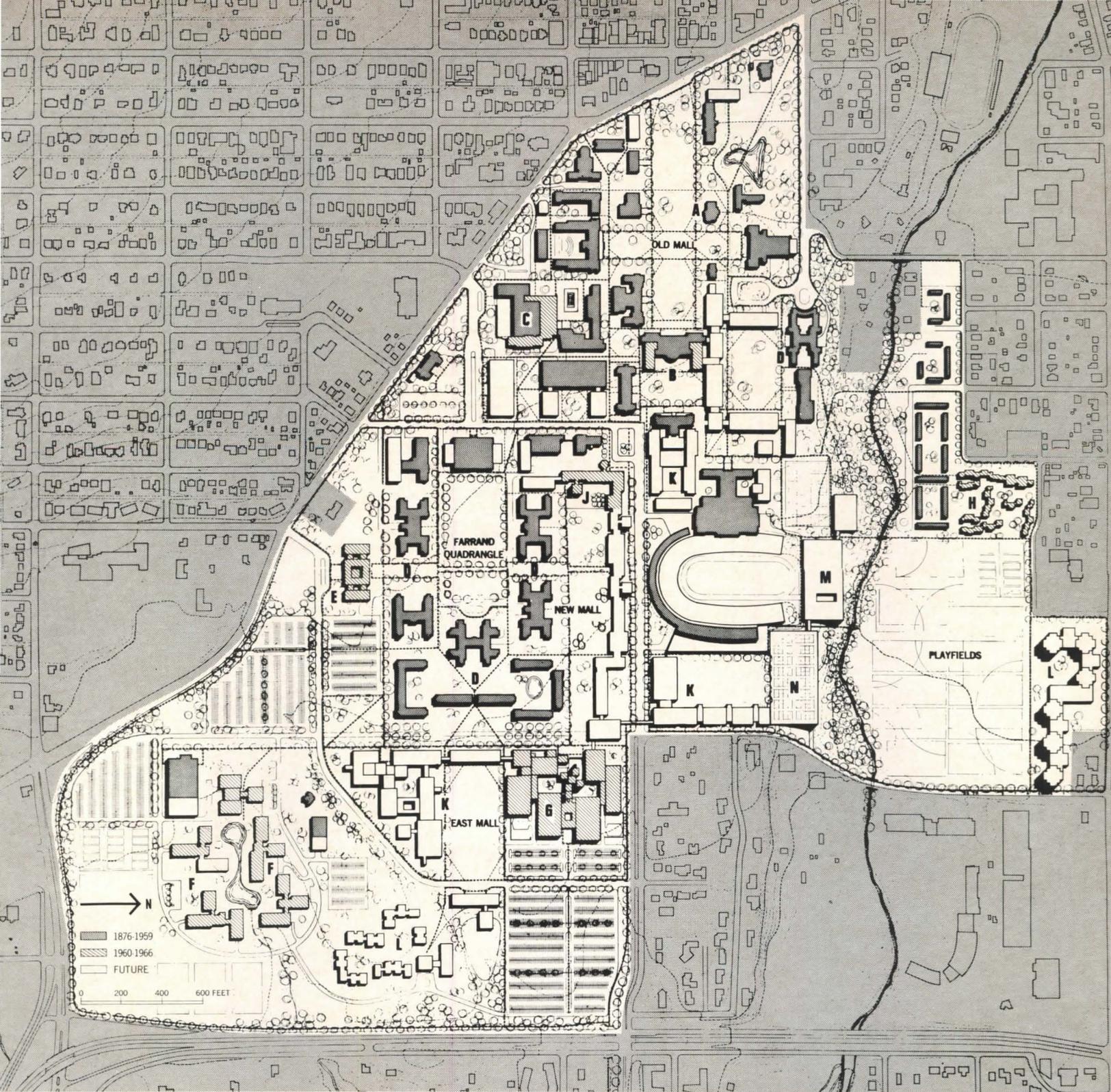
Sasaki's main task was to establish a plan for expansion to 20,000-student capacity (facing page). The plan extends Klauder's pedestrian quadrangle scheme, creating two new major malls linked by smaller courts and passages. New construction in the academic core will raise its density, as Klauder had planned to do, and help to keep distances down to pedestrian scale.

New academic buildings, clustered by areas of study (science, business, etc.) have had to be placed outside the ring of residential halls that surrounds the original academic core. The resulting mix of functions is considered an asset by both planners and administrators.

## After Klauder, campus design faltered for two decades before strong new guidance was found

The imaginative massing and detail of Klauder's work (top left) was lacking in buildings by his successors (middle left). In 1960, Sasaki and Belluschi introduced their interpretation of Klauder's design principles (bottom left).

Sasaki's master plan (above right) retains the academic core around Old Main (A). Proposed expansion of core buildings has been completed at the library (B) and student union (C). Outside the zone of earlier dormitories (D) are buildings completed under Sasaki-Belluschi guidance: the Administration Building (E, photo bottom left); Kittredge dorms (F); Engineering Sciences Center (G, foreground, bottom right); and Marine Family Housing (H). The partially completed physics complex (J) will be followed by other academic groups (K). More dormitories (L) are planned for this campus and two satellite areas not included on this plan. Additions to athletic facilities (M) will adjoin tennis courts atop a multilevel hillside parking structure (N).



Colorado University's new design objectives got a full-scale workout in the Kittredge dormitories (right), completed in 1964, a village-like complex for 1,000 students. Kittredge was built at the southeast corner of the campus near the new turnpike entrance to town and remote from existing campus buildings.

It was thus critically important that Kittredge look like a part of the university. Hence the picturesque massing of its rather squatty forms, the tile roofs, and the rugged stone walls (a random pattern with much exposed mortar that was a departure from the campus standard).

Surrounded by empty fields, Kittredge needed a strongly enclosed central space. The Sasaki staff saw an opportunity here for a focal body of water, the first new pond introduced since Varsity Lake was dammed up at the opposite corner of the campus in 1888. Adapting to terrain, they gave Kittredge two ponds, the upper draining into the lower over a man-made falls.

The latest effort to carry the university's architectural image to the frontiers of the campus is the just-completed Marine Family Housing (facing page), a development of 130 units for married students. It is in the area north of Boulder Creek, where the campus meets the older part of town, and where previous construction (also for families) had no visual kinship to the campus.

The architects, Moore & Bush, first came up with a straightforward glass-in-concrete-frame scheme, but the consultants insisted that this be another outpost of campus identity. The result is a village more reminiscent of a new Scandinavian town than an old Italian one. Densely massed to contrast with adjacent playfields, it has an exciting variety of town-like spaces within. The Scandinavian suggestion arises largely from the substitution of brick for the ubiquitous stone. Partly because the project is so far from the campus core, the consultants were allowed to test their theory that a carefully selected local brick could look as much a part of the campus fabric as the stone itself. It does.

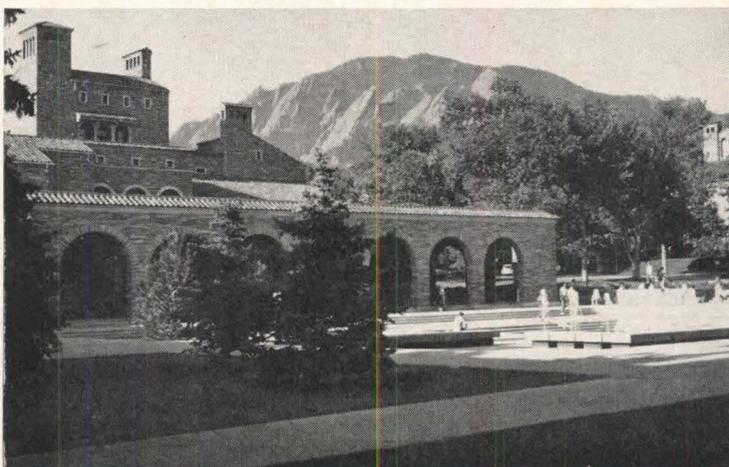
Expansion inside the campus



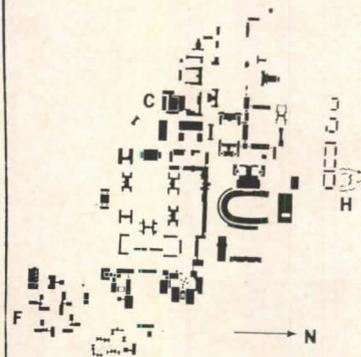
core has so far taken the form of additions to existing buildings. The first of these, an expansion of the main library, proved resistant to Klauder's add-a-wing concept. Two small wings were in fact added, but the bulk of the need was for stack space, which was more conveniently housed underneath the grassy court between them.

In a second expansion—that of the (post-Klauder) student union—the designers saw an opportunity to turn a shapeless open space into an intimate

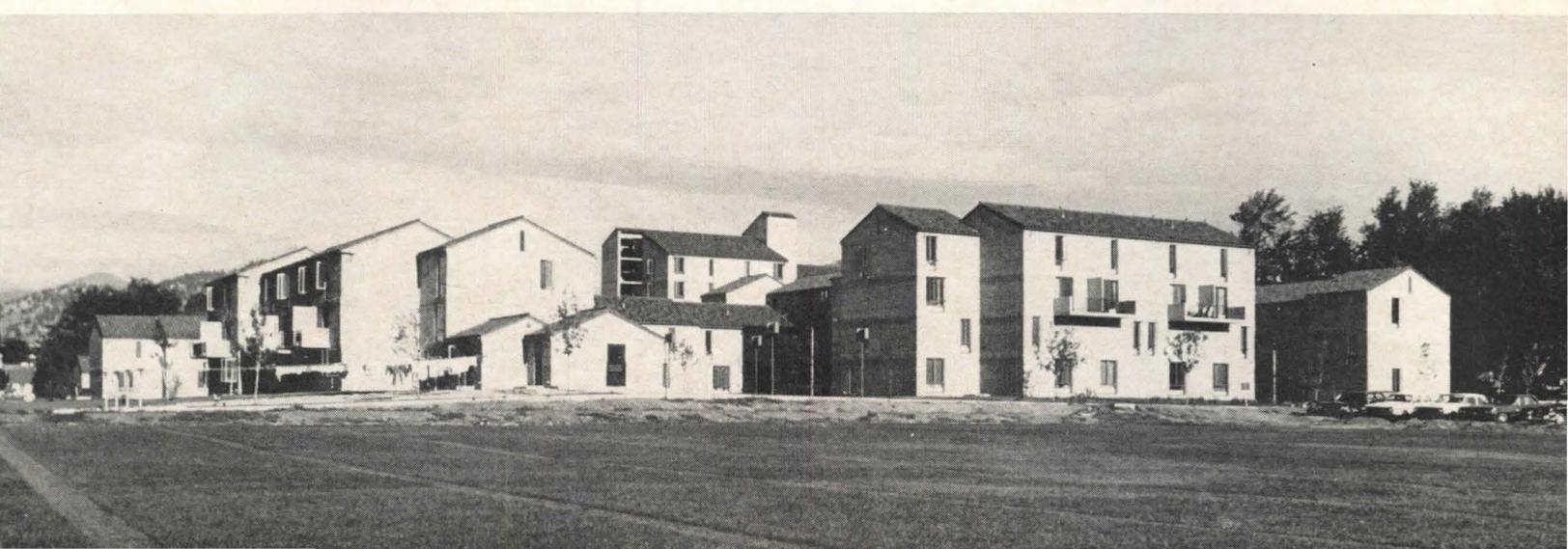
plaza of the type that Klauder had envisioned but never quite accomplished (before and after photos below). A massive stone arcade along the face of their addition encloses the new court on one side (and serves as a useful covered walk). Despite the uneven silhouettes (and quality) of other surrounding buildings, the court is strongly unified by a series of terraces descending toward a central fountain pool. The sense of enclosed space has been attained without excluding the dramatic mountain backdrop.



## Expansion at the edges and in the core yields new spaces for student life, indoors and out



Kittredge Dormitories (above left, F on key plan) were completed in 1964, the first residential cluster designed under the new consultant system. Marine Family Housing (right, H on plan), the latest product, applies the same design guidelines in a denser community. An addition to the student union (before and after at left, C on plan) allowed the planners to define a plaza and frame a rugged landscape in the best Tuscan tradition.



The science buildings going up around what will eventually be the New Mall further explore the range of possibilities within the university's design policies. The vast Engineering Sciences Center (right), a collaborative product of Architectural Associates Colorado and the Sasaki office, will anchor the east end of the group. Carrying Klaunder's wing system into the third dimension, the center is a cluster of elements largely free to expand independently either out or up. Its broad laboratory blocks are surmounted by mechanical penthouses and classroom wings punctuated by lecture halls, the whole topped by interlocking office towers.

The spare concrete framework of the upper portions is left largely open at the ground level, forming colonnades around internal courts with planting and fountains by the Sasaki office. Filled in at mid-height with stone walls and concrete window units, these superstructures are capped with a profusion of sharp, half-gabled forms, roofed with the accepted red tile but walled with rough, board-formed concrete.

It is these jagged, coarse-textured forms that make indig-

nant alumni compare the center with deserted mine shafts in the surrounding hills, while architectural writers are commending its sensitive relation to the campus (for instance in "Compatibility in Colorado," Nov. '65 issue, page 26).

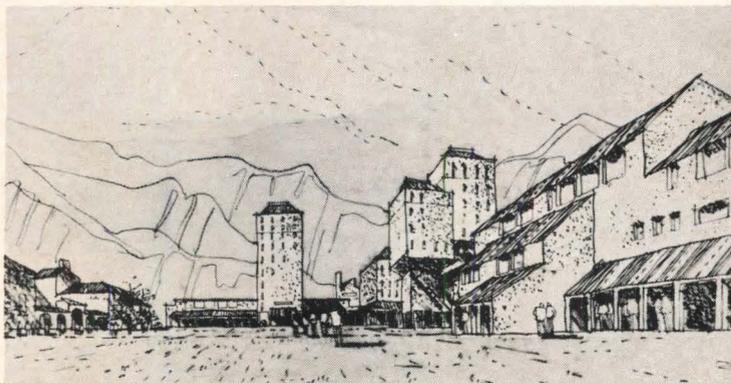
Harry Weese's almost-completed astrophysics tower (below left), although higher, is less likely to arouse protest. Weese was enthusiastic about adapting Klaunder's forms and materials, filling most of the bays of his ten-story tower with Lyons stone and crowning it with a broad-brimmed roof of red tile.

The tower and the low wing behind it are only fragments of a much larger physics complex being designed by Weese (preliminary sketch below). With a series of projecting towers and pitched-roofed links, it will close the north side of the New Mall, eventually meeting the Engineering Sciences Center at the east end.

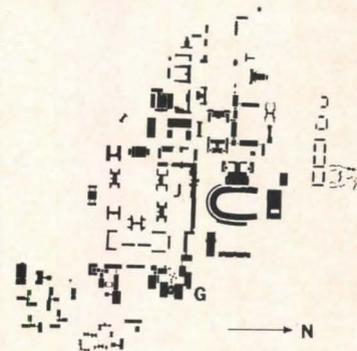
When all of the development plotted in the present master plan (page 59) is completed—about 1972—the university will have more than doubled the plant it had in 1960, when Sasaki and Belluschi were called in to guide expansion.

It might have been possible in 1960 to initiate a visionary departure from the existing pattern—a single-structure campus or a plug-in system that might have accommodated 20,000 students more efficiently. Instead, the design consultants saw and grasped a greater opportunity, to create a harmonious environment, and a visible continuity with the past. How many other universities can offer as much?

—JOHN MORRIS DIXON



## A cluster of buildings for science will round out the eastern end of campus development

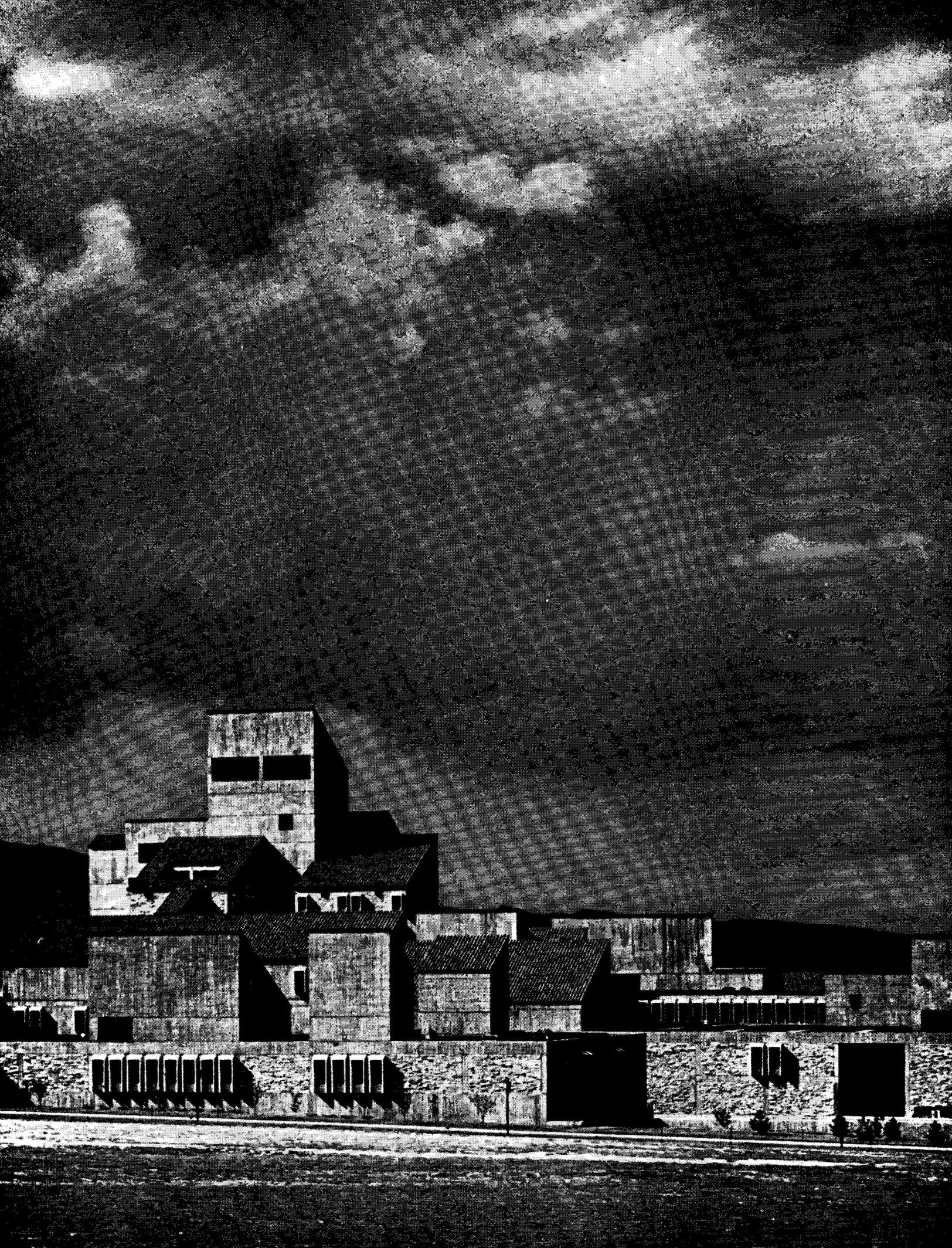


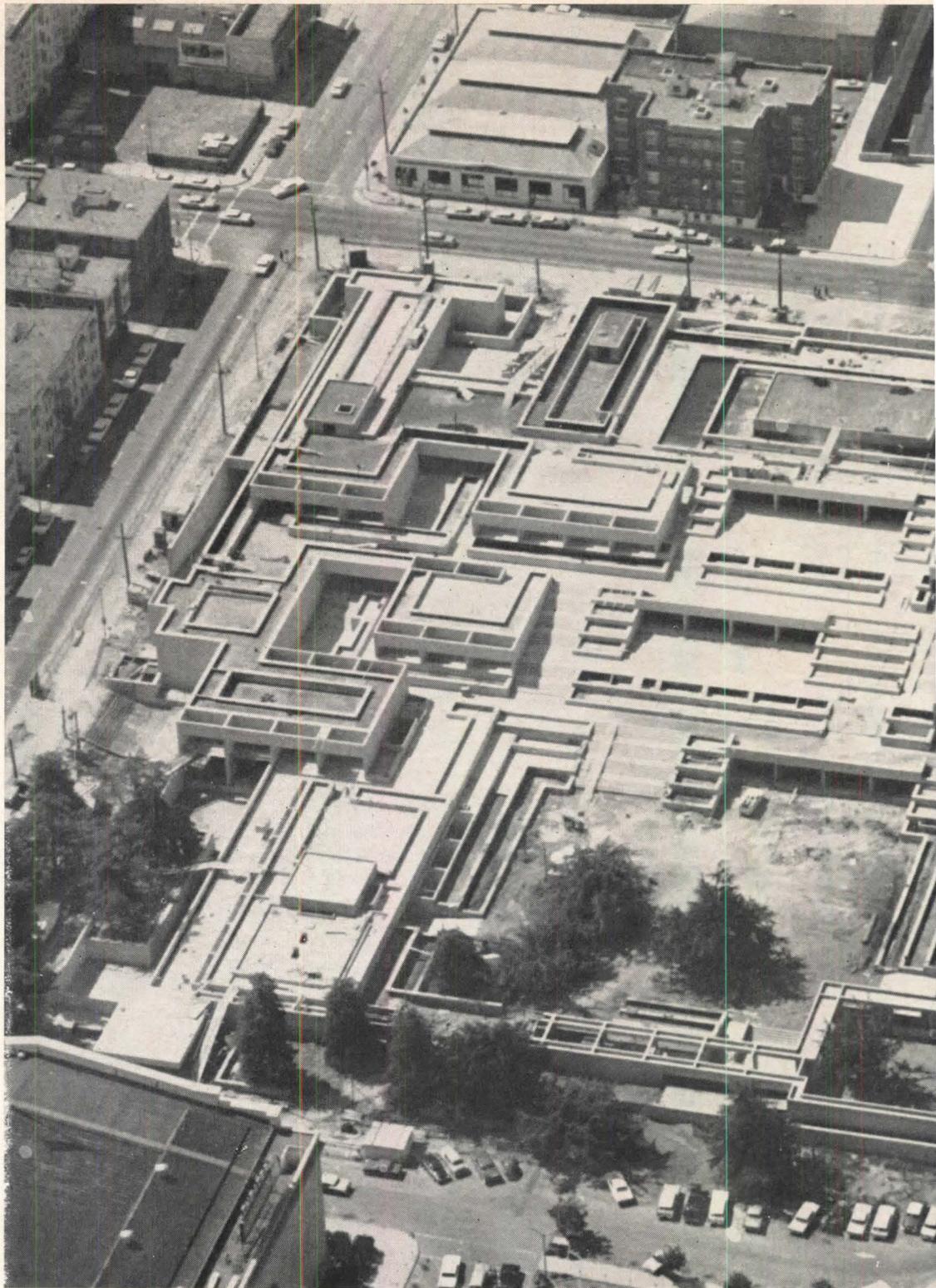
The nearly completed astrophysics building (above left) will eventually stand at the end of a mall enclosed by more physics buildings (sketch at left, J on key plan). At the east end of this mall-to-be stands the bristling mass of the Engineering Sciences Center, looking as rugged as the mountains behind it.

PHOTOGRAPHS: Orlando Cabanban, pages 55, 58 (bottom), 61, 62, 63. John Morris Dixon, pages 58 (top and middle), 60 (top). Floyd G. Walters, Univ. of Colorado, pages 59 and 60 (lower photos).

For Facts and Figures see page 110.







## TERRACES IN OAKLAND

The new Oakland Museum, designed by Kevin Roche John Dinkeloo & Associates, will be less a building than a tiered public plaza, a series of steps and paths leading indoors and out through an artful maze of visual experiences. Combined within it will be the collections

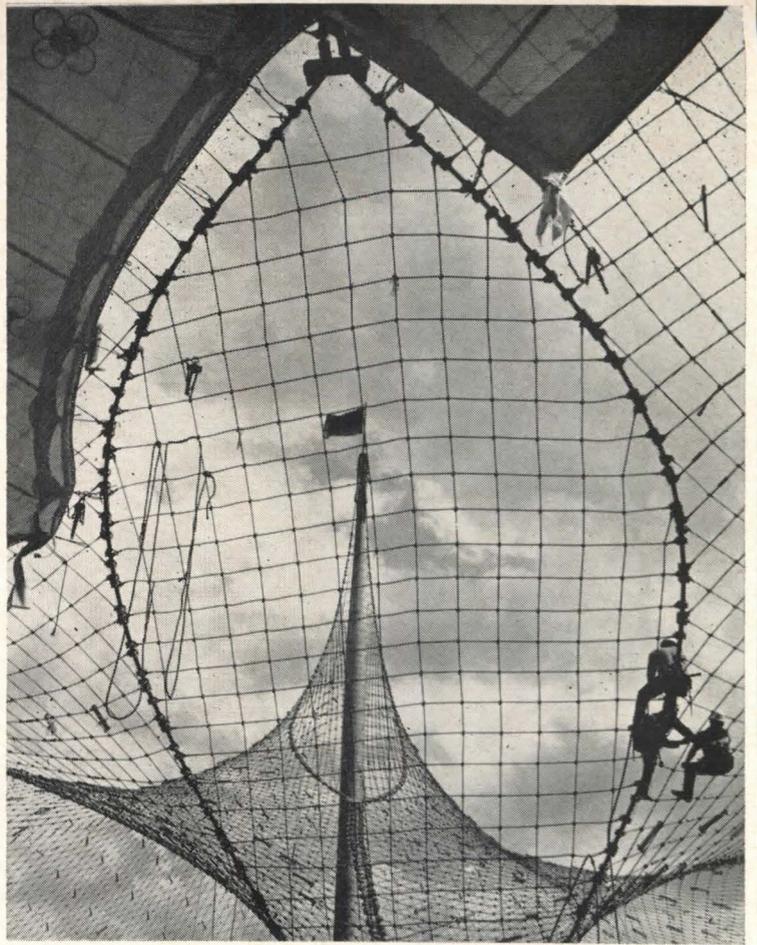
and activities of Oakland's three presently separate museums, for art, cultural history, and natural sciences, each on its own level, stepping downward in that order. Every gallery will open to terraces overlooking nearby Lake Merritt and the surrounding hills, some serving to roof enclosed spaces below. At the

end of the descent will be a large garden court used for exhibitions, concerts and receptions. Ranged along the south side of the structure (left in photo) are, again from top to bottom, a divisible, communal exhibit hall 200 by 70 ft.; a restaurant; offices; a 100-seat lecture room; classrooms; and



a 300-seat theater. Parking for 200 cars is buried beneath, and a three-lane roadway is tucked under one corner of the 5½-acre site. Costing some \$7 million, the museum is scheduled to open in April 1968.

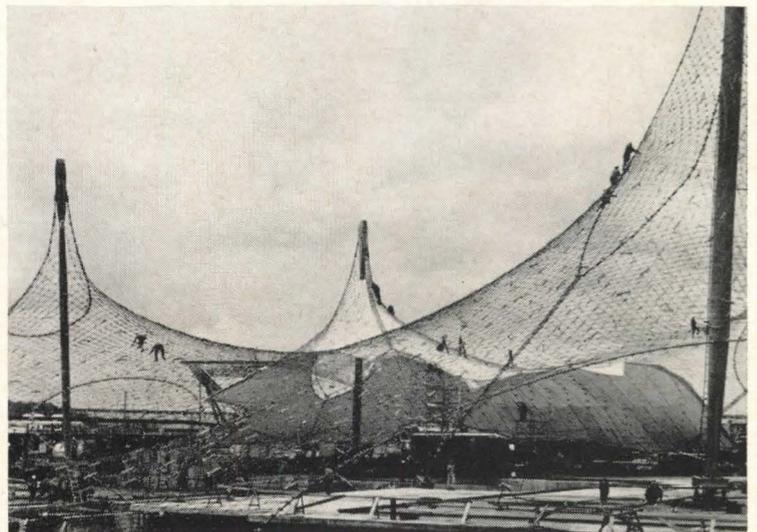
PHOTOGRAPHS: Page 64, Barney Peterson. Page 65, German Information Center. Page 66 (top), UNESCO/R. Lesage. Page 67 (top), Morley Baer.

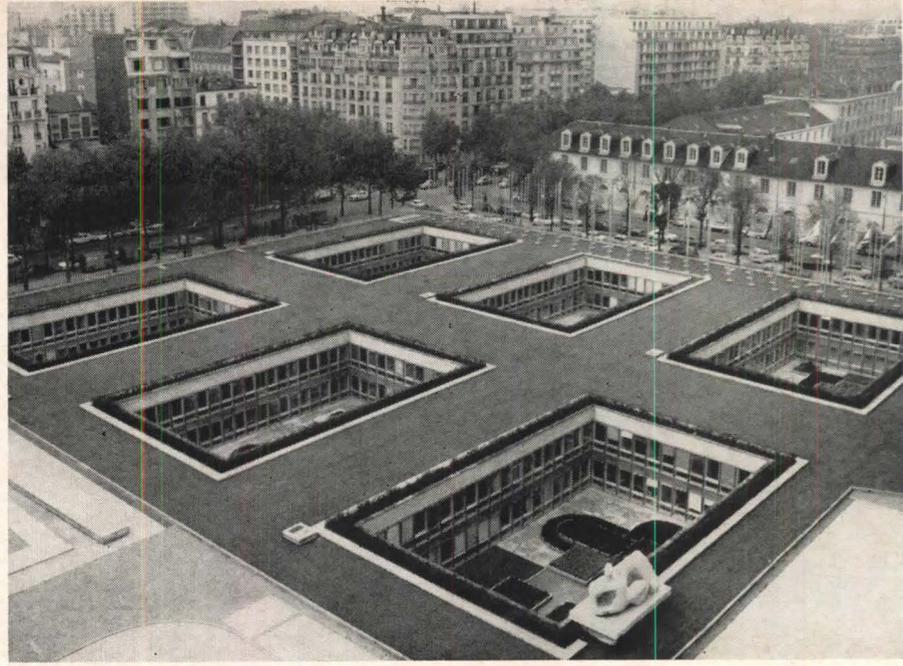


#### STEEL TENT IN MONTREAL

Perhaps the largest space yet shaped by one of Frei Otto's sweeping tensile structures is the 100,000-sq.-ft. West German pavilion at Expo 67 in Montreal, shown here in construction but now complete. The graceful roof, supported on eight steel masts up to 120 feet in height, is a fishnet of steel cables which stretch a total of 27 miles.

A translucent plastic skin is hung from the net, and vertical glass walls create the illusion of a "roofed landscape" (below). Total German participation at Expo, including exhibits inside the pavilion, will be approximately \$10 million. Frei Otto is design architect; Fritz Leonhardt, consulting engineer; and Rolf Gutbrod, chief architect of the demountable pavilion.



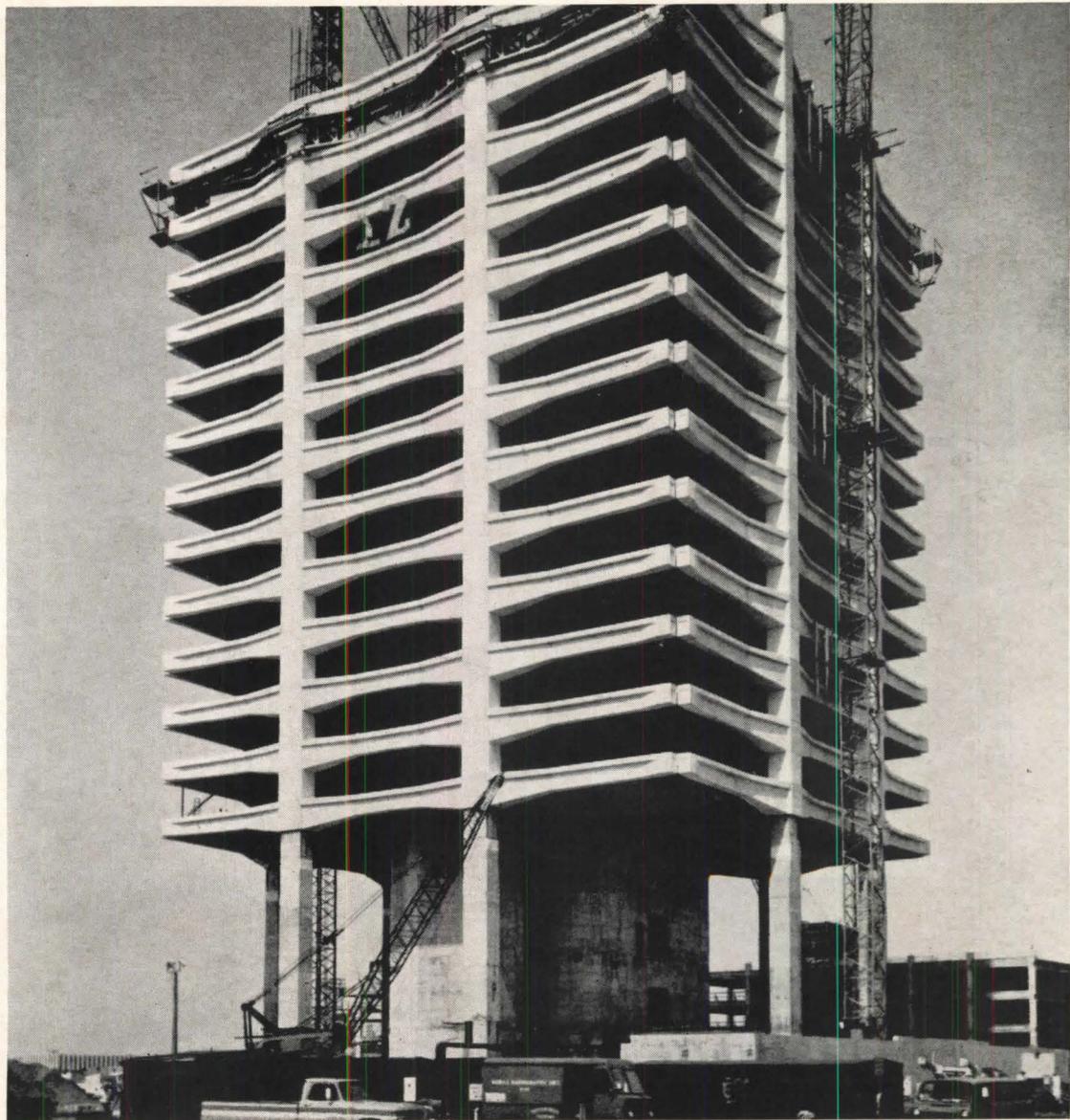


#### SUNKEN PATIOS IN PARIS

UNESCO has gone underground in Paris to add space to its Zehr-fuss-Breuer-Nervi headquarters without obscuring its visibility. The submerged annex, designed by Bernard Zehr-fuss, contains 350 offices and two conference rooms arranged around six patios. Pools, fountains, marble paving, and planting embellish the patios in a sometimes desperate effort to brighten the experience of working 20 feet below grade, and perched on the edge of one is a precariously reclining figure by Henry Moore. Landscape Architect Burle Marx also redesigned the original plaza as part of the headquarters expansion.

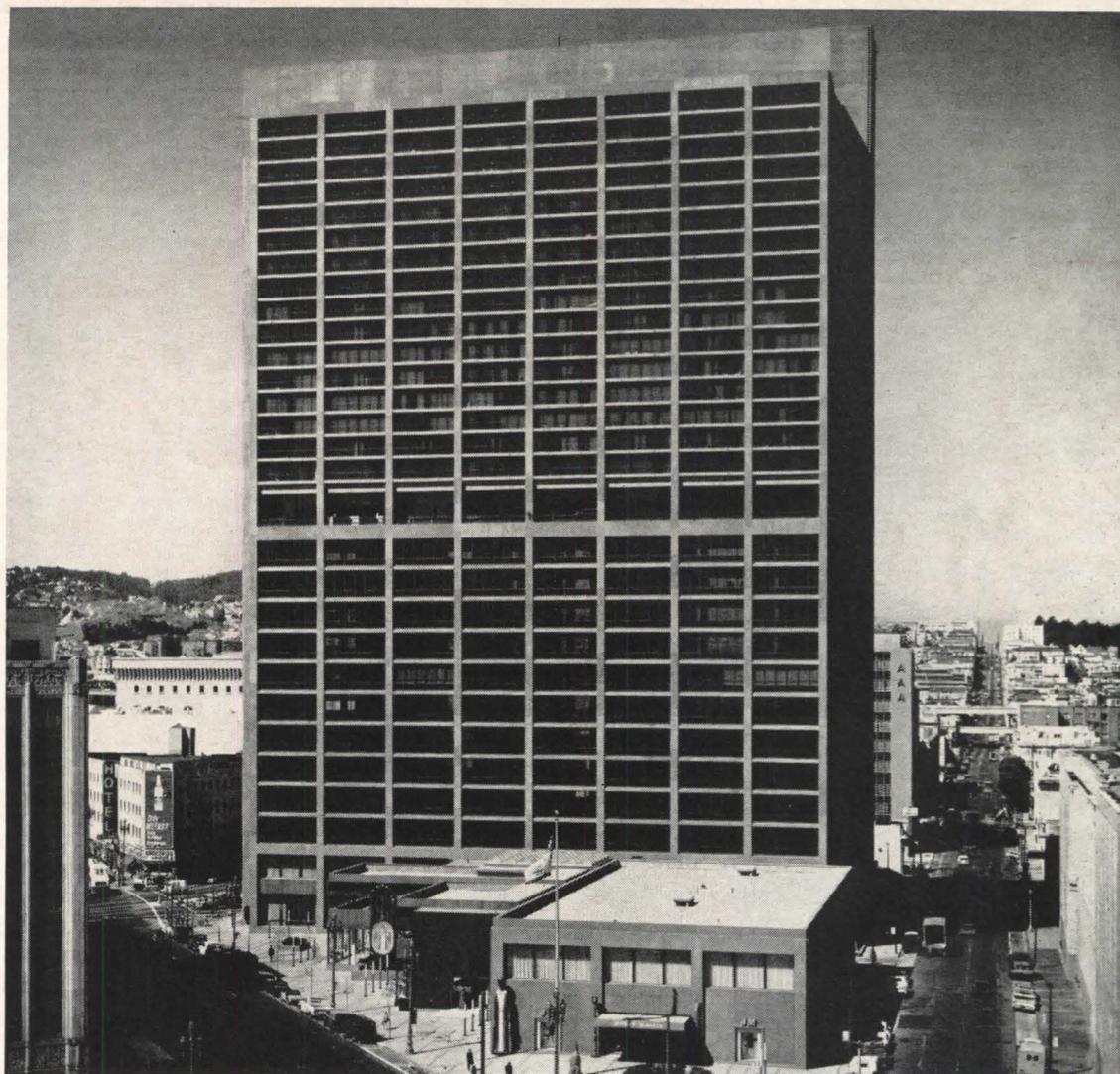
#### FRAMEWORK IN FLORIDA

The Gulf Life Insurance Co. office tower in Jacksonville, Fla., is billed as the nation's tallest precast post-tensioned concrete structure. It will rise 420 feet in 27 stories, with its wavy white skeleton (right) standing out 15 inches in relief from contrasting windows of gray aluminum and gray glass. Welton Becket Associates designed the home office as part of the \$25-million Gulf Center which also will include a luxury motor hotel and a 1,100-car garage.



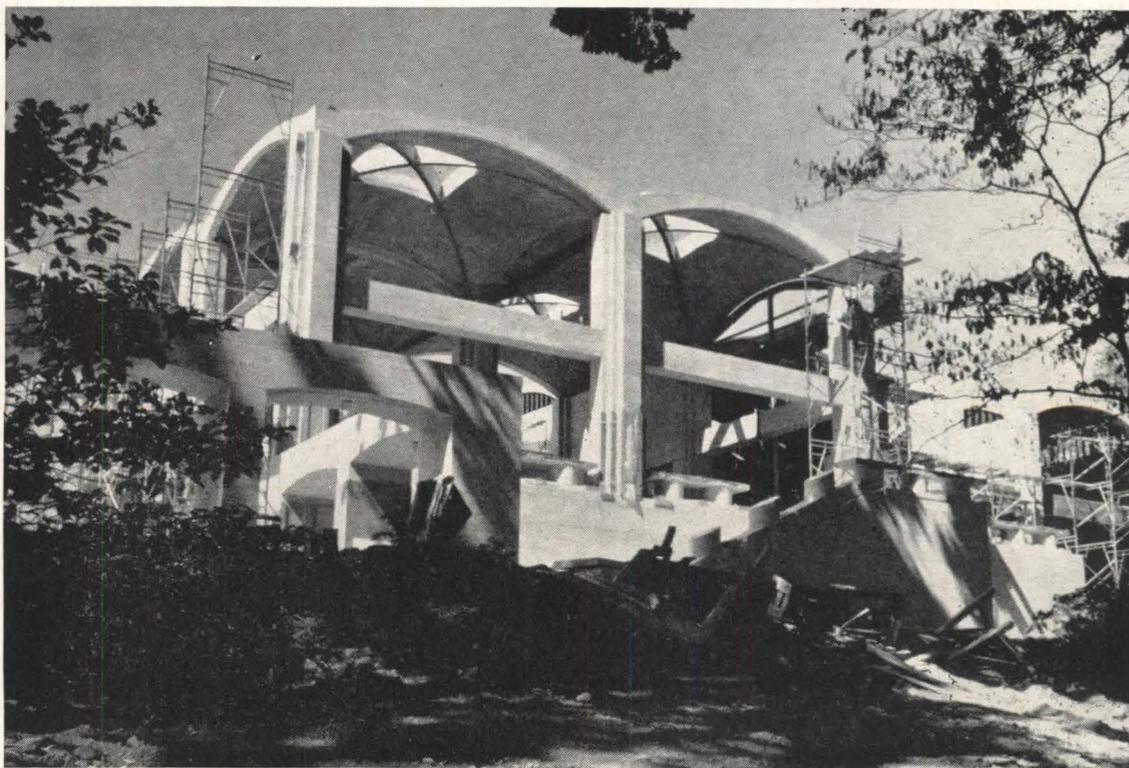
#### SPLIT IN SAN FRANCISCO

Located on the triangular site of the old Fox Theater on San Francisco's Market Street, the Fox Plaza Building is "a place to shop, a place to work, a place to live," in the words of Architect Victor Gruen. The separate functions are clearly marked on the exterior of the 29-story steel-framed structure (photo right). On the first two floors, shops for some 30 businesses and a restaurant surround an enclosed plaza with a central fountain and sculpture. Floors 3 to 12 are devoted to offices, and the top 16 floors are divided into 448 studio, one- and two-bedroom apartments. Separate lobbies and elevators serve the office and apartment levels of the building, and floor 13 houses unsuperstitious utilities.



#### DOMES IN WASHINGTON

The David Lloyd Kreeger residence is rising dome by dome along Washington's elegant Foxhall Road (right). Presenting 435 ft. of marble to the street and glass to the back and sides, the Philip Johnson-designed house includes a Great Hall where Impressionist works will be hung against carpeted walls; a dining room for Monets, with sliding doors opening onto a sculpture terrace for a Maillot and some Henry Moores; a "basement" gallery for Picassos and other contemporaries; and an indoor tropical garden with a built-in sprinkler system.



# WILL SALVATION SPOIL THE DODGE HOUSE?

BY DENISE SCOTT BROWN

The apparent rescue of Irving Gill's Dodge house, one of the major early monuments of modern architecture in California, was accomplished with appropriate drama. "I come not to praise the Dodge house but to save it," said Bart Lytton, a savings and loan executive, at a Feb. 28 hearing of the Los Angeles school board. As Lytton strode to the speaker's dais, he removed a check for \$800,000 from his mouth. He had put it there in answer to a board member's comment that few of the Dodge

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house supporters were willing to put their money where their mouths were.

The Committee for the Dodge House, which had interested Lytton in its salvation, was nevertheless left non-plussed by the suddenness of his action. The house had been acquired, not by government, but by private enterprise, and in the name of profitable real estate as well as public good. At the meeting, Lytton said he intended to build one and perhaps two high-rise apartment buildings on the northeast portion of the site. He promised to "do everything possible" to save the house—but specifically excluded the garage and pool wing.

The house had been assured a

future, but for how long, and for what use? The questions, at this writing still unanswered, have implications beyond the saving of a single great work of architecture. The entire history of the house, and the manner of its rescue, suggest the need to develop a new strategy, not just for historic preservation but for urban design.

The Walter Luther Dodge House was completed in 1916 in then-fashionable West Hollywood. For the eastern or European architect versed in CIAM and the International Style, it is difficult to realize that this is not a mature work of some American disciple of LeCorbusier or perhaps Brinkmann and van der Vlugt, built in the middle thirties, a kind of high International Style. But there is something different about the plan; and details such as the arches in the concrete patio walls are reminiscent of someone else; perhaps Richardson, perhaps Kahn.

The building, in fact, owes its shape to Gill's apprenticeship

under Louis Sullivan, to his enthusiasm for the California missions and adobes, and to his desire to use new materials and techniques, in this case reinforced concrete. Building and grounds are united in the design in a way eloquent with meaning for us today. "The whole effect," says Hitchcock in his *Architecture: 19th and 20th Centuries*, "in its clarity of form and simplicity of means is more premonitory of the next stage of modern architecture than any other American work of its period."

## Forces of change

The history of the house from its completion to today is the story of changing city forces and their impingement upon existing structures. In 1924, the house changed hands for \$125,000. Fifteen years later the Los Angeles High School District condemned the property, and paid its protesting owners \$69,000. Then the high school district discovered that it had no need for a school at that site after all, and



transferred title to the junior college district. The latter sold a portion of the property for a reported \$140,000 and found makeshift uses for the house and the remaining 2¾ acres of ground until 1963, when it was declared surplus property by the board of education.

Since then it has been virtually unused, except by the estimated thousand visitors who see it annually. In late 1963, the area in which the house stands was rezoned from single-family to multiple-unit residential. This enabled the board of education in mid-1965 to offer the house and remaining property for public auction at a \$778,000 minimum acceptable bid.

#### Forces of preservation

Meanwhile, the forces for preservation had been gathering, gaining cohesion with each new threat to the house. In July 1965 the Citizens' Committee for the Dodge House was formed. Most members were architects or writers on architecture (including Raymond Girvagian, Esther

McCoy, John Reed, Miv Schaaf, Harvey Steinberg, and Bernard Zimmerman), with the exception of Jack Levine, attorney to the committee and a participant in an earlier battle to save the Watts Towers. Most came to the committee through other groups such as the Historic Buildings Committee of the local AIA chapter and the Architectural Panel of Los Angeles. Their activities took three main forms: delaying action; involving the community and building public opinion; and making suggestions for use of the building within the public domain.

As a result of the committee's work, a six-month postponement on the sale was approved, setting the new date at Feb. 28 of this year. Through the committee, a host of public and private associations and individuals was rallied, among them the California Arts Commission, the Cultural Heritage Board, the AIA, the Association of Women in Architecture, Los Angeles Beautiful, the Women's Architectural League, and the various

architectural journals. Dean Samuel Hurst of USC and Chancellor Edward Murphy of UCLA wrote in support, as did William Jordy, Mumford, Neutra, Lloyd Wright, Zevi and many others. A film was made by Esther McCoy. Notices appeared in the New York and Los Angeles *Times*, and an editorial on the local CBS radio station.

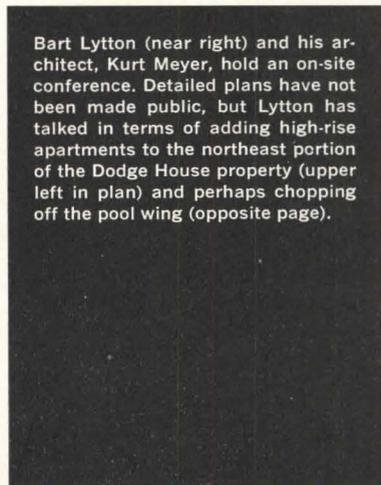
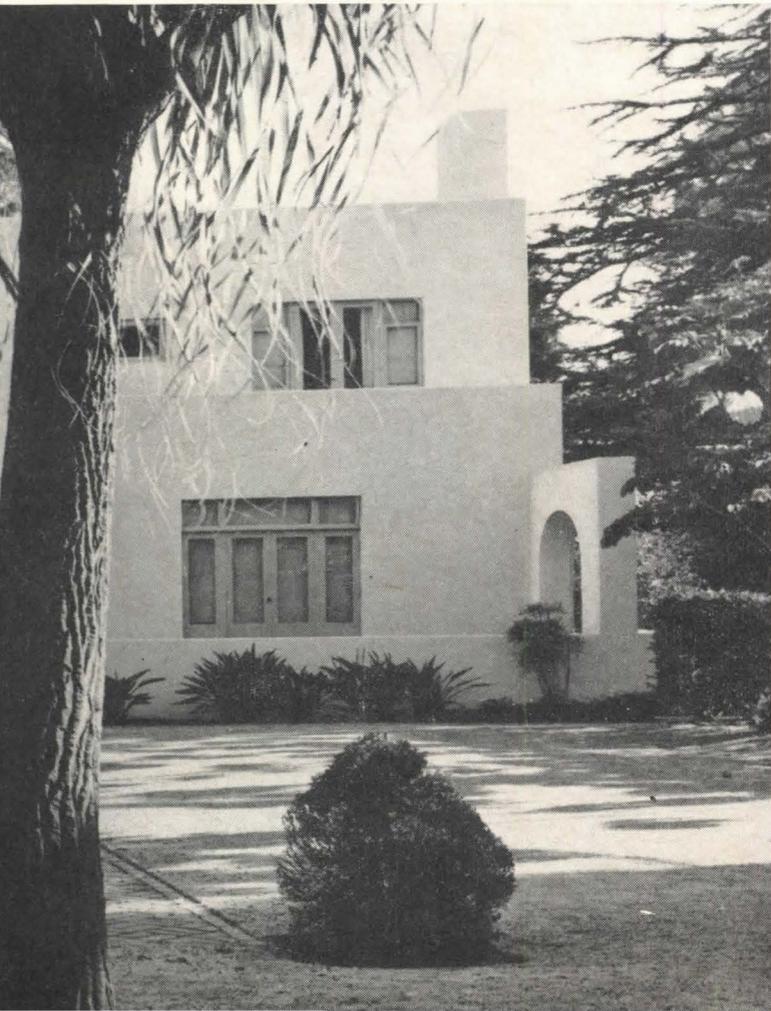
Imaginations were taxed to find an important use for the house. Efforts to transfer the property, through exchange, to other agencies failed. Proposals to use house and grounds as a cultural center, a senior citizens' recreation center, or an architectural library and museum were coolly received by the school board, which could not see these activities as central to its educational function.

At the Feb. 28 hearing, Los Angeles City Councilman Edmund Edelman, good friend to the committee in its attempts to delay sale, presented a painstakingly documented case for the application for Federal matching funds under the Open

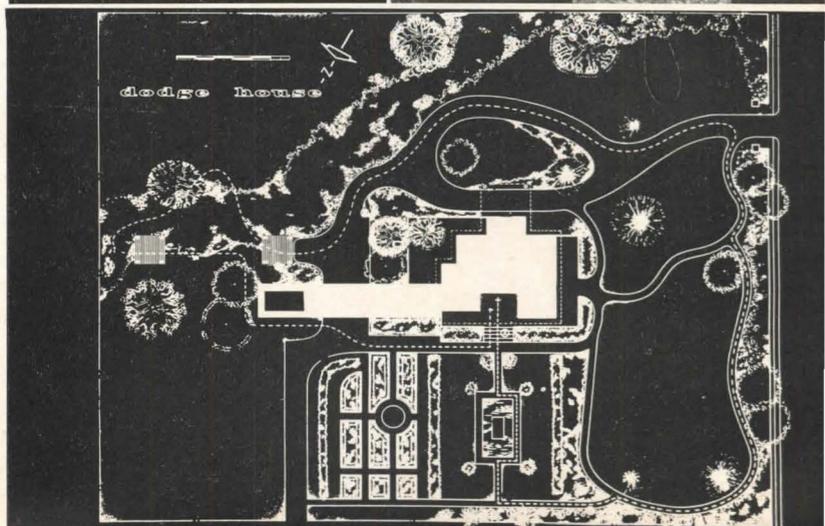
Space Program. This, unfortunately, showed that, allowing for half the cost of land to be paid by the Federal government, and with all the support he had so far managed to find, he would still have about \$350,000 to go to meet the board's price. This was the point at which Lytton stepped in.

After the meeting, members of the committee, although Lytton's involvement had been part of a strategy planned with them, appeared not to know whether to mourn or rejoice.

The committee's aim had been to maintain building and grounds in the public domain. Should a city save its cultural heritage through Lytton Savings & Loan? In a committee discussion after the meeting, this same question came up in several forms: Will a commercial sponsor spell more or less risk for the house than a government one? Will the developer and his architect, Kurt Meyer, work with us? If so, how? How will they work with the city? And, gradually, these questions came to have a more



Bart Lytton (near right) and his architect, Kurt Meyer, hold an on-site conference. Detailed plans have not been made public, but Lytton has talked in terms of adding high-rise apartments to the northeast portion of the Dodge House property (upper left in plan) and perhaps chopping off the pool wing (opposite page).



general meaning than we had first given them.

As a city grows, there are bound to be individual buildings and spaces (and even whole areas) of great architectural and sentimental value, which cannot be maintained as they are. Sentiment and symbolism *can* triumph over economic pressures in city building, but not everywhere nor all the time.

The urban strategist must choose his battlegrounds. In most city areas, the pressure for change must be accommodated. The aim should be to accommodate gracefully, so new augments old. In a mixed economy, systems must be evolved for cooperation of public and private.

#### Dual motives

Economists tell us there are other motives than money in economic action — prestige, power, self-respect. From what he said, Lytton appears to have had two motives in buying the Dodge house—doing good and doing well. His acquisition of the house, then, is an opportu-

nity to set a precedent for good but realistic cooperation between public and private interests.

Here two questions arise, one organizational and the other architectural. The organizational one is how to ensure this cooperation, i.e., what should be the structural and personal framework of relations between the developer and his architect, the city, and the valiant, weary committee? As we have seen, this group functioned most effectively in its role as public agitator and watchdog. Moving now into a new phase, can it continue to agitate and watch, not only for the continued welfare of the Dodge house as means for its use are devised by Lytton and the city, but also for a new architecture which will grace the old and achieve with it an urban continuity? What should be the philosophy of architecture and urban form from which this task is approached?

The danger is that, having fought for the platform, we find once there that we have nothing to say. So far, only half the

battle has been won. A negative good, the “non-destruction” of part of the building and part of the grounds, has been tentatively promised. At this stage, the battle could still be lost even if the building is left untouched, through what is built beside it. To attain now a positive good, a greater whole must be made through the addition of the new. And to do this, we need a philosophy for the setting of large new buildings and complexes in existing urban areas; and for the juxtaposition of old and new, where sentiment implores retention of the old, but economics requires an intense use of the site on which it stands.

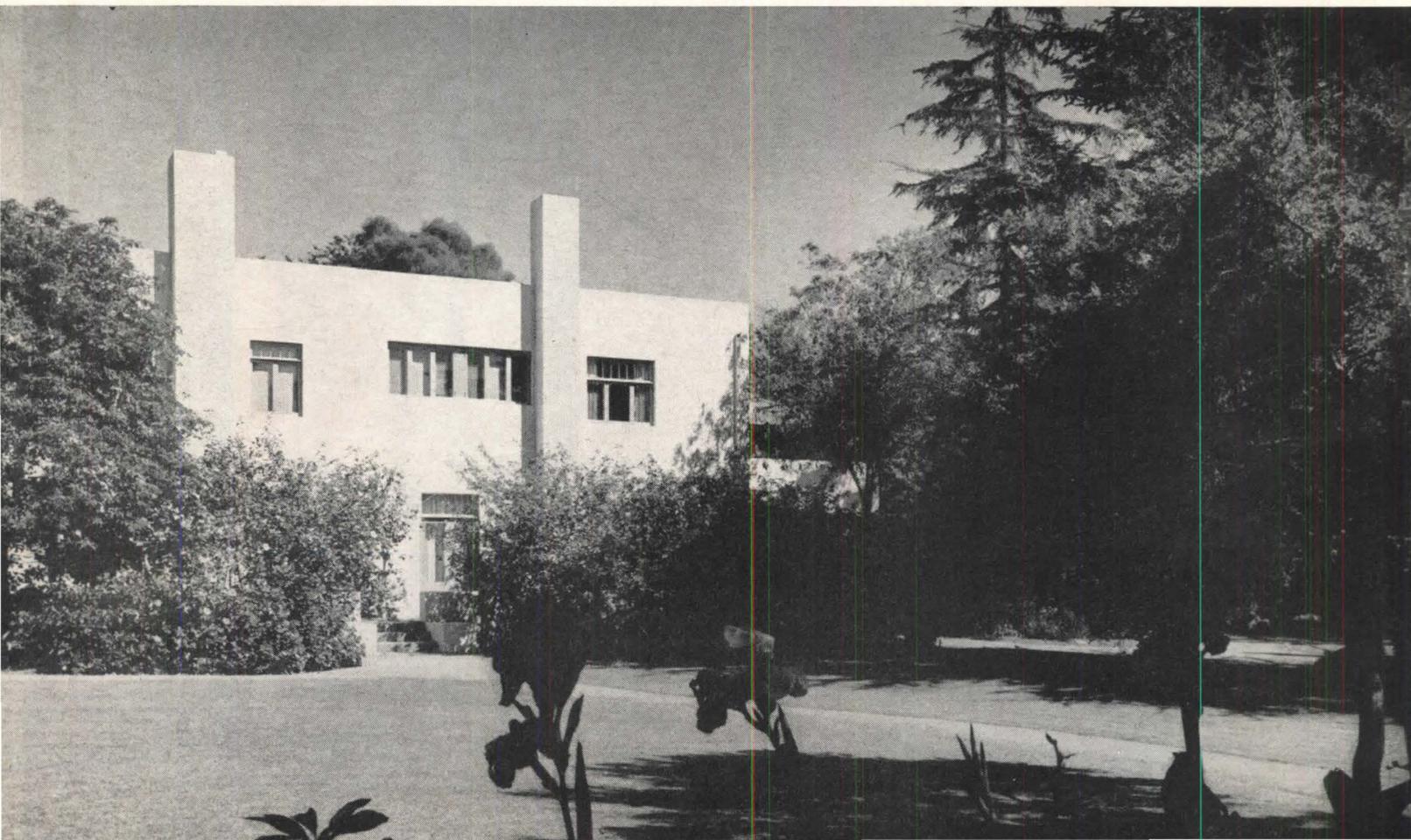
#### Private and public

Furthermore, we should ponder the nature of a private architecture which, through its link with a public asset, becomes a part of the public interest. Lytton, in requesting the support of the committee, differentiated himself from the “other commercial interests.” How does his enterprise differ from theirs, and

how should its architecture reflect the difference? What should be the architecture of the “public-private” realm?

All architecture is both private and public, but the Dodge house will be a special case. The new buildings will resemble “grace and favor” housing in English royal palaces, made available to retired national heroes and their families. For here a group of citizens will live in particular grace and favor thanks to the public sector; in a beautiful, half-public garden. And the developer too will receive particular advantage (including possibly the lifting of height restrictions) through his ability to incorporate in his calculations the large, half-public site. At the same time, both will be much in the public eye.

The problem of the privacy of the occupants is an intriguing one: How does one give privacy or the illusion of privacy to private spaces in public places? But it is not as pertinent to our consideration of city strategy as is the problem of the public spaces.



To many architects, the space between buildings and the space of the road is a residual, a "negative" space. Such an attitude, I feel, would be wrong in the design of a public-private architecture.

### Building and grounds

The Dodge house is itself an eloquent expression of an attitude toward this problem. On the west and south sides, Gill strongly contrasted the man-made with the natural, poising the building, in the 18th-century manner, against the soft sweep of garden and the seemingly random placing of trees. But on the other sides, a different philosophy prevails. The house sends arms (including the threatened garage wing) out into the landscape. Major rooms give onto walled courts and patios; and through or over them one glimpses the trees beyond. Paved and pooled gardens stretch on one side toward the boundary, open but formal, more formal in their spaces than the house itself. And at the far end sits a

columned loggia, a final man-made outpost on the boundary.

In a dense urban area, the setting of buildings against vast swaths of garden is a luxury we cannot usually afford—in the Dodge house we are lucky we already have so much of it. For the additions, we would do well to learn from Gill's other, more formal approach (this is for the public spaces; the private courts and patios, by contrast, can be informal).

According to Lytton, the new buildings are to be placed on the northeastern portion of the site, where they will disturb the house and grounds as little as possible. Since there will be no room here for a grand sweep of landscape—we are too near the house on one side and the street on the other—the space should be made urban, public and formal, like the street. The automobile and the exigencies of its parking will tend to force a formality on the plan. This should not be resisted but rather embraced as an opportunity to produce a truly urban solution.

How will the building relate to the street? Can the basement parking structures become a firm and monumental base for the complex? Can the driveways be treated as part of this formal architecture of the street, not introduced timidly and circumstantially as if we wished they weren't there? Can buildings, planting and driveways together make the street space something more than a residue, and thereby set a pattern which adjoining developers will want to follow? On the house side, can we use the rich and ample elegance of what is already there to augment our necessarily more prosaic new structures?

### Conservative surgery

Can Lytton and his architect learn from the Dodge house the difference between the complex and the complicated, the simplistic and the truly simple, so that they will make sure the new building is a good one? And, if it is good, can it bravely come right up close to the old one, leaving it intact, but interweav-

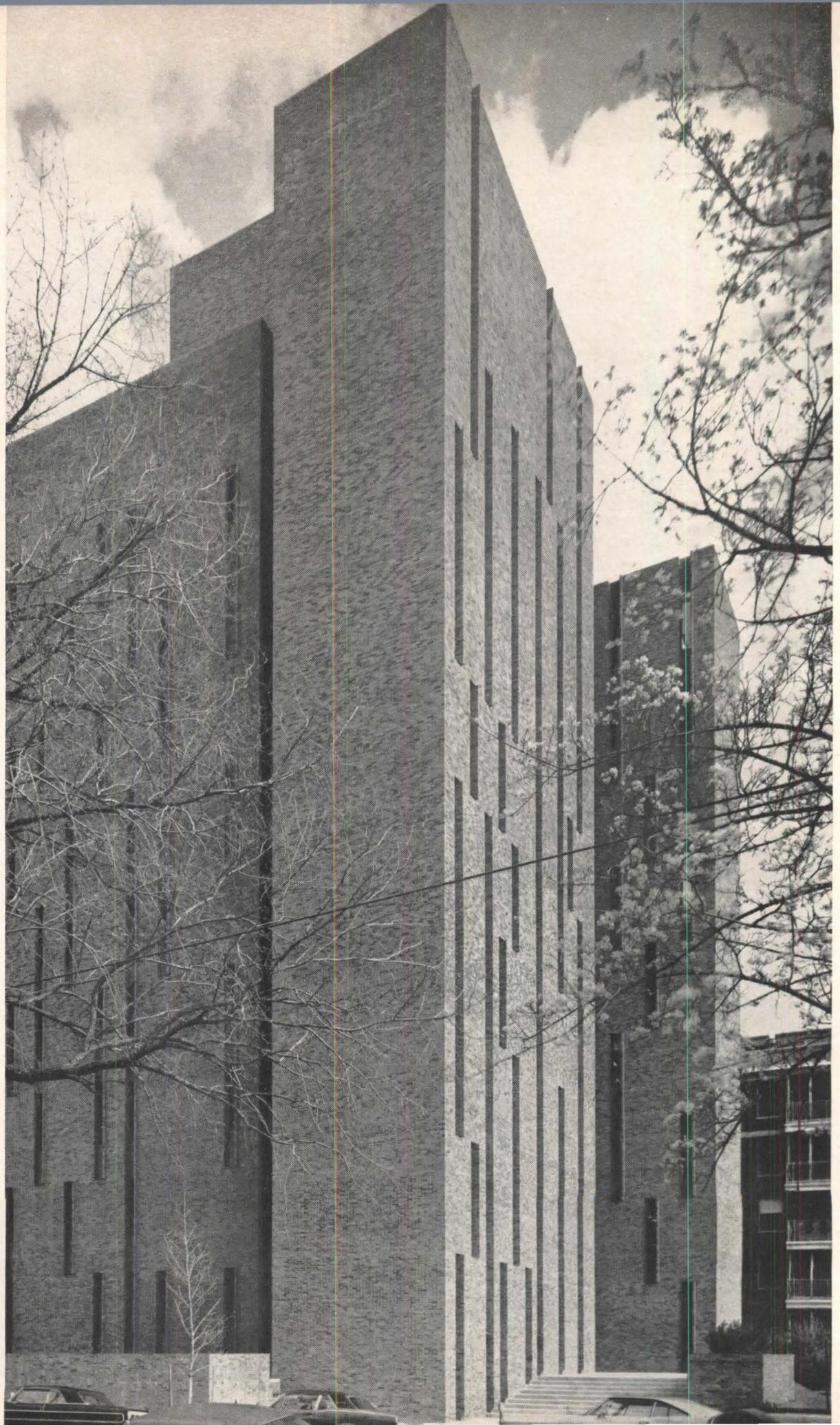
ing with it, using its walls for positive definition of new outdoor spaces?

Patrick Geddes used the term "conservative surgery" to describe his plans for Indian villages—plans where no house was removed which wasn't already falling down, where the temple courtyards were merely enlarged a little, temples and wells cleaned, trees planted, and the village pool drained and cleaned rather than filled in as a health menace. His plans were not used. Clearance is so much easier and more immediately profitable for planners and developers. But in many areas, his strategy of love is the more suitable and, in the long run, the more conducive to maintenance of stable values, economic and otherwise.

It is to be hoped that the additions to the Dodge house will prove this point; and that, as pressure is exerted upon the area, this example of a kindlier and less destructive urban strategy than the one we now practice will appear more and more cogent.

PHOTOGRAPHS: MARVIN RAND





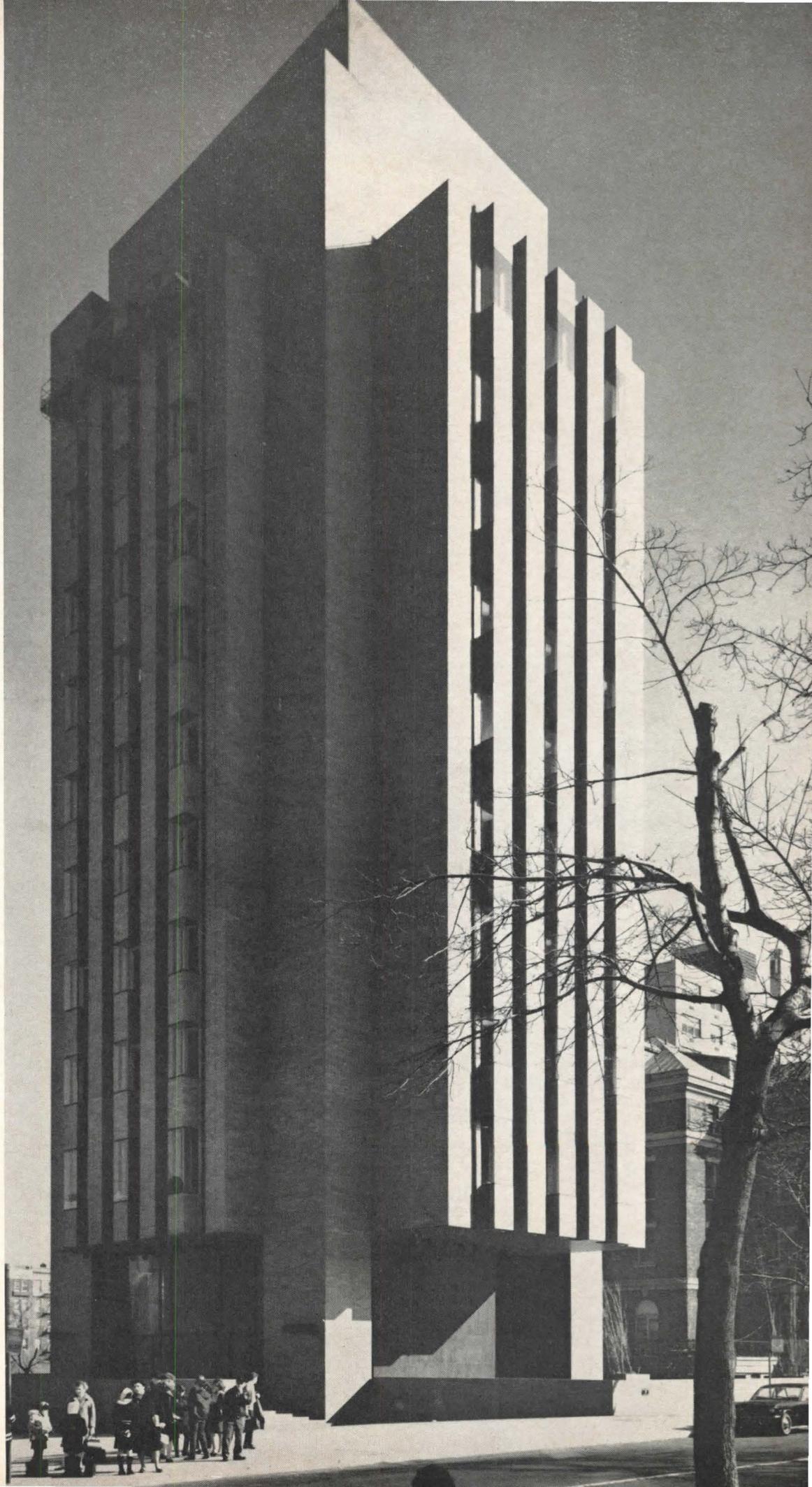
# RESEARCH RAISED ON HIGH

The two medical research laboratories shown here are both tall because they have been squeezed onto leftover scraps of land in vast hospital complexes. And both have lots of little windows so that each lab worker can peer outside without giving up too much of his precious wall space.

Beyond that they have little in common. Architects Douglas Orr, deCossy & Winder, who designed the tower on the left, and Philip Johnson, who designed the one on the right, once collaborated on another medical research laboratory (May 1965 issue). But separately they have taken quite different directions.

Orr, deCossy & Winder have broken down the mass of their Laboratory of Clinical Investigation into irregular blocks that are grafted onto the dense cluster of Yale-New Haven Hospital buildings. Their tower has a stern, impenetrable look and is asymmetrical in both form and detail.

Philip Johnson's Henry Moses Research Institute provides a free-standing focal point for the sprawling Montefiore Hospital in the Bronx, New York. It is symmetrical on all faces and meticulous in detail. And its projecting bays make it look less solidly walled in than it really is.



## Research tower 1: It fits in

The Yale Medical School's Laboratory of Clinical Investigation rises like a cluster of towers guarding one corner of the pile of cubic forms that houses Yale-New Haven Hospital. The square tower at the core and the slab-like blocks pin-wheeling around it are separated by deep recesses and cut off at different heights to emphasize their independence.

Inside, the five blocks are separated by corridors that are treated as if they were part of the outdoors. The rough brick walls are wrapped completely around each block and the ends of the corridors are entirely of glass. Utility lines that rise through two large chases are distributed horizontally above the dropped corridor ceilings, entering the labs themselves through panels above the doors.

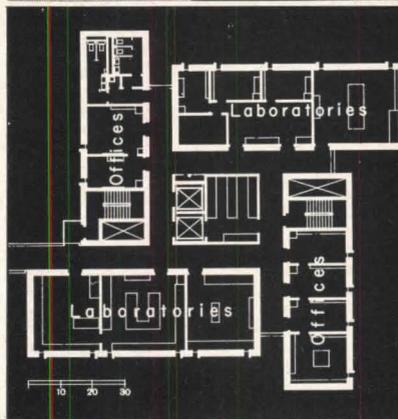
To carry out the visual theme of irregularly grouped verticals, the architects devised a window pattern that is at once logical and capricious. It is based on the desirable location of the view slot in the individual laboratory room—one cabinet's depth away from its end partitions (which are considered virtually permanent in this building). The resulting near-random distribution of openings has been turned into a conscious pattern by recessing panels below the windows and outlining the slots thus formed with ribs of brick.

The pattern changes in interesting ways with light conditions and is well subordinated to the building forms. Yet it remains obviously an arbitrary device.

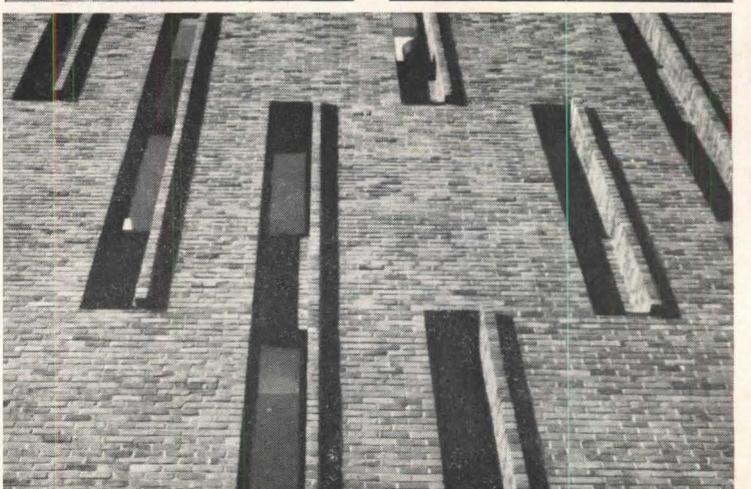
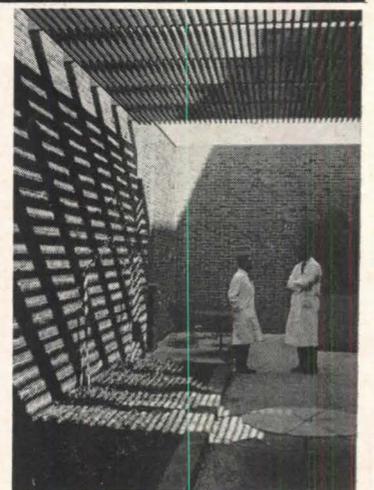
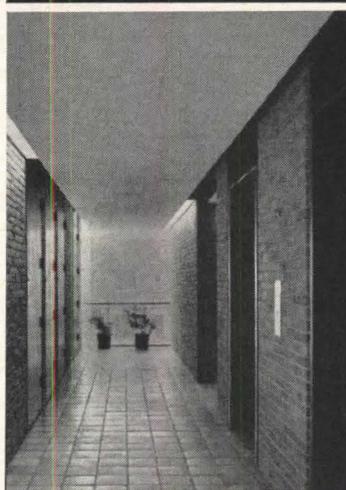
### FACTS AND FIGURES

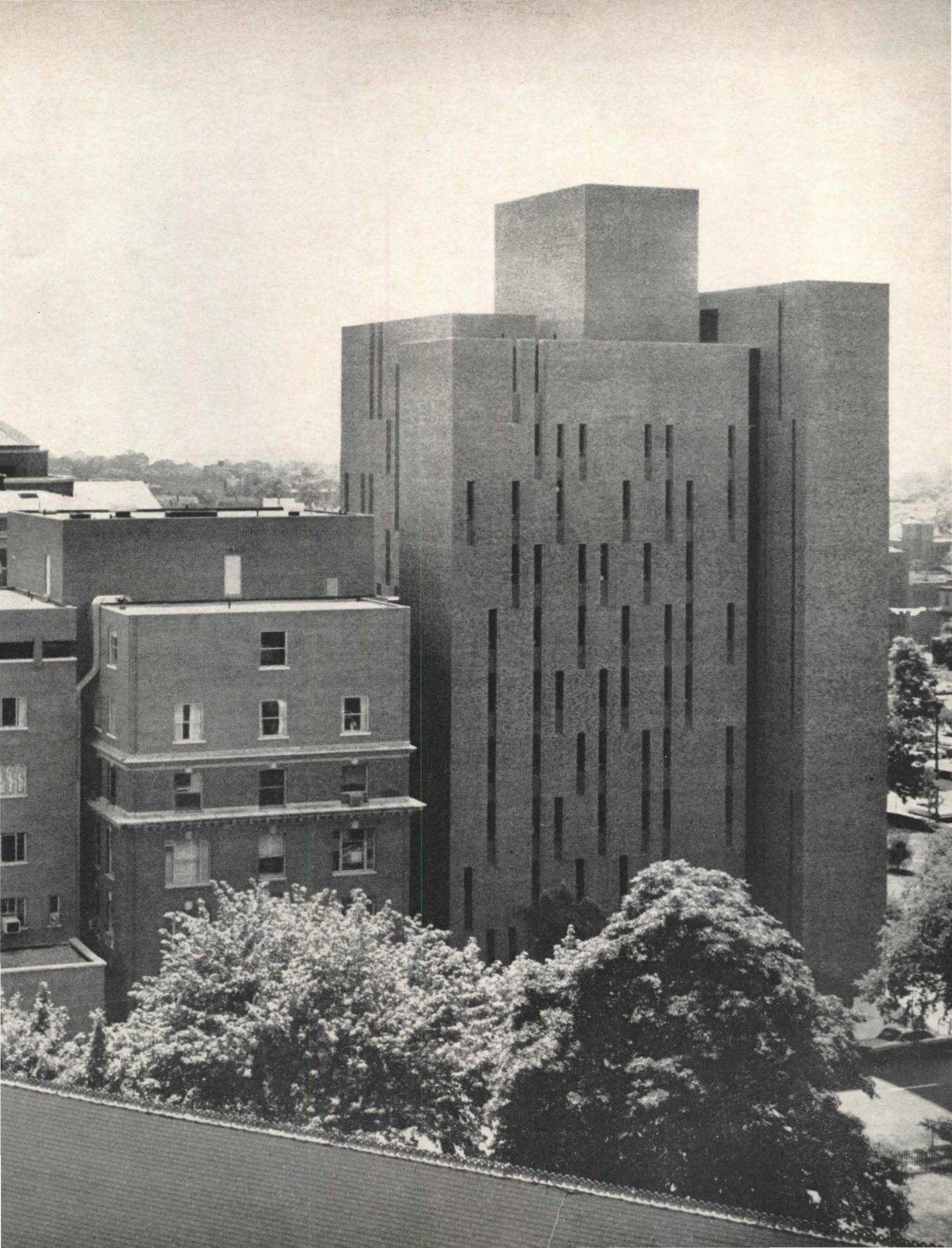
Laboratory of Clinical Investigation, New Haven, Conn. Owner: Yale University School of Medicine. Architects: Office of Douglas Orr, deCossy, Winder & Associates. Associated Architects: E. Todd Wheeler, Perkins & Will. Engineers: Henry A. Pfisterer (structural); Meyer, Strong & Jones (mechanical). Landscape architects: Sasaki, Dawson, DeMay Associates. General contractor: W. J. Megin, Inc.

Building area: 79,000 sq. ft. (gross). Construction cost: \$2,750,000 (including built-in lab equipment).



Typical laboratories (above) are in 24-foot-deep blocks arranged alternately with 18-foot-deep office areas around a central service core (plan left). Brick walls around clusters of rooms pass uninterrupted through the all-glass ends of the corridors (below left). The walled garden (below), adjacent to top-floor conference rooms, has view slots that continue the opening pattern of the walls (bottom photo).





## Research tower 2: It stands out

Rising on a hilltop from a site once considered too small to build on, Philip Johnson's monumental Henry Moses Research Institute dominates the Bronx cityscape for blocks around. Johnson quotes Henry-Russell Hitchcock as saying, "It makes the Bronx." Some might quibble about that, but there is no doubt that it "makes" Montefiore Hospital.

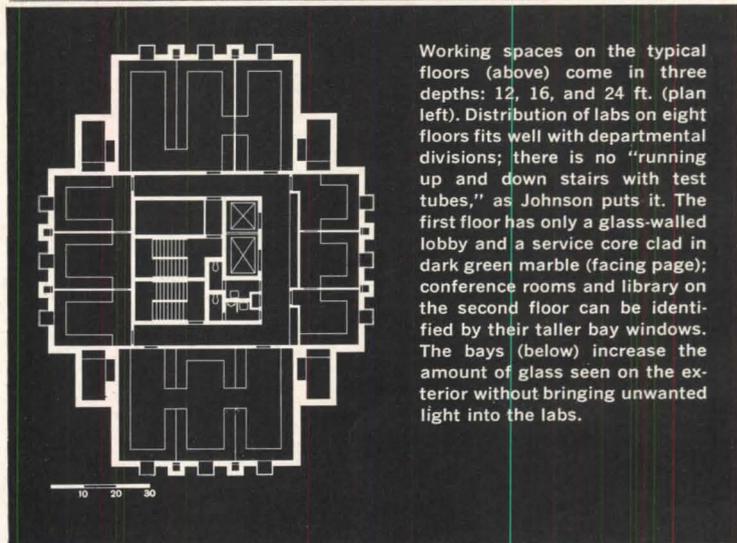
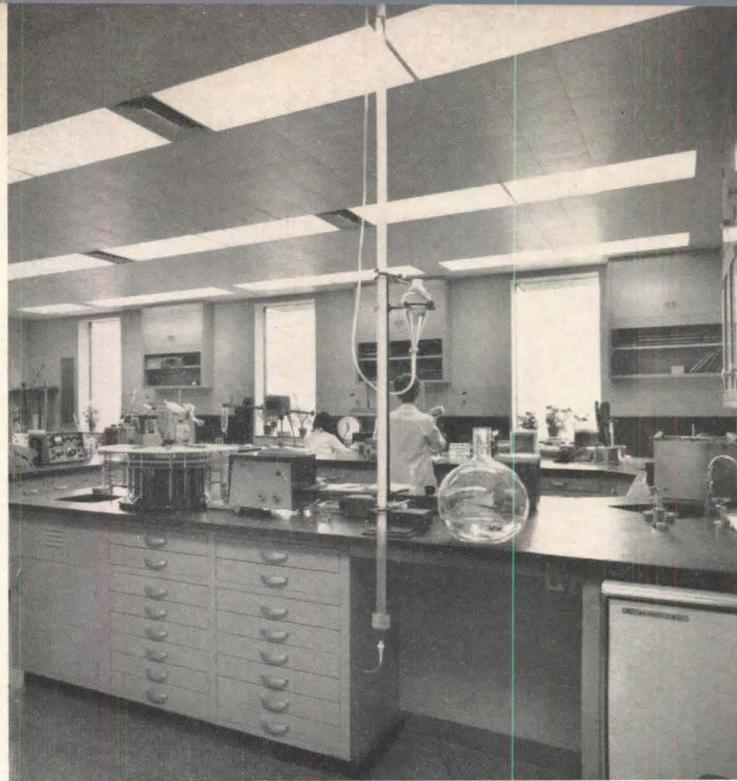
The tower stands on a podium formed by two basements full of services and utilities. The four massive hollow piers at its corners, which carry much of the structural load, also carry supply ducts up from the basement and exhaust ducts up to the penthouse. The solid vertical projections between the banks of windows carry piped utilities up the tower, and the window bays themselves house air conditioning units below the sills. All of these projections—even the rails for the window washing rig—add to the vertical thrust of the design.

The window details are typical of the refinements that fascinate Johnson. Each one is made up of three sheets of  $\frac{3}{8}$ -inch plate glass, with the outside corners mitered and joined by a colorless epoxy adhesive. The same kind of precision went into the specification of brick in a special size ( $11\frac{3}{4} \times 3\frac{3}{4} \times 1\frac{3}{4}$  inches) and color (buff with gold and purple overtones). This kind of brick was often used in the 1890's, Johnson notes, with  $\frac{1}{8}$ -inch mortar joints; Johnson had to settle for  $\frac{1}{4}$ -inch ones.

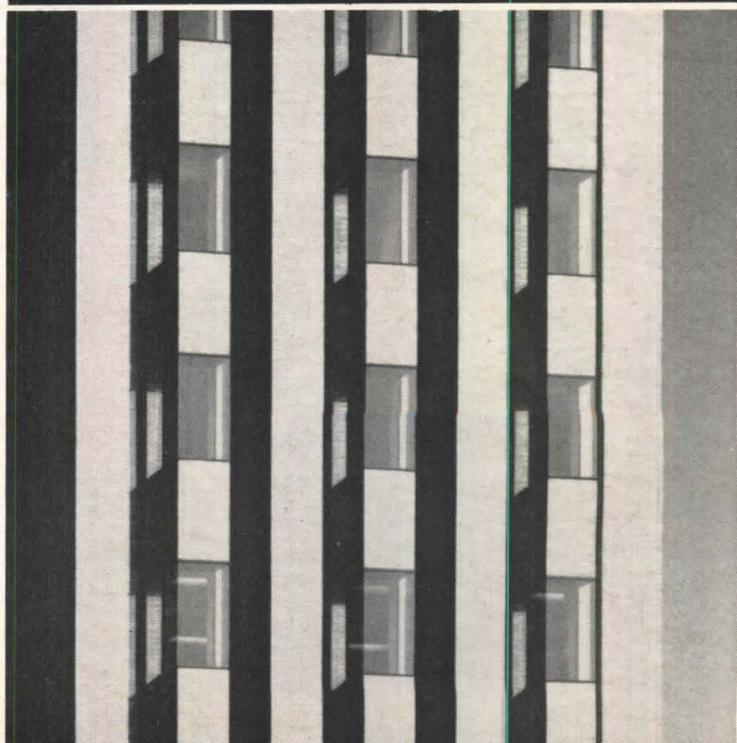
### FACTS AND FIGURES

Henry L. Moses Research Institute, Bronx, New York. Owner: Montefiore Hospital and Medical Center. Architect: Philip Johnson. Engineers: Lev Zetlin & Associates (structural); Caretsky & Associates (mechanical). General Contractor: Turner Construction Company. Landscape consultants: Zion & Breen.

Building area: 66,796 sq. ft. (gross).  
PHOTOGRAPHS: Ezra Stoller (ESTO), pages 72, 73, 74 (top), 76 (bottom) and 77. George Cserna, pages 74 (middle left), 75 and 76 (top). Robert Perron, page 74 (middle right and bottom).



Working spaces on the typical floors (above) come in three depths: 12, 16, and 24 ft. (plan left). Distribution of labs on eight floors fits well with departmental divisions; there is no "running up and down stairs with test tubes," as Johnson puts it. The first floor has only a glass-walled lobby and a service core clad in dark green marble (facing page); conference rooms and library on the second floor can be identified by their taller bay windows. The bays (below) increase the amount of glass seen on the exterior without bringing unwanted light into the labs.





# THE TOWN THAT REFUSED TO GO AWAY

One day, less than two years ago, a housewife in Bethesda, Md., an affluent suburb of Washington, was asked to deliver a load of donated toys to Scotland, a tiny community not far from her home. It was, in retrospect, an event of far-reaching significance.

Scotland is an enclave of about 50 indigent Negro families, and the housewife, Mrs. Joyce Siegel, was so shocked and outraged by her first view of it that she immediately took action, setting off a chain of events which already have brought a number of needed improvements to Scotland, and show every sign of transforming it into a model low-income community.

What first horrified Mrs. Siegel was the discovery that, in one of the highest income counties in the world's richest nation, the people of Scotland were living in a collection of squalid shacks along a wooded hillside—ignored, if not unknown, by their upper-middle-class neighbors. She soon learned there was more to it than that.

Scotland was threatened with extinction. Its land, owned by the residents who had inherited it from their ancestors in a line going back a hundred years or more, was coveted by two outside interests. The Maryland-National Capital Park and Planning Commission wanted about two-thirds of it for inclusion in a new park; and the rest was being eyed by speculators who figured it was only a matter of time before the wave of development in the surrounding areas would wash over Scotland. The people of Scotland were "caught between the buzzard and the hawk," as one of them put it.

These and other facts about Scotland were brought to light by a new organization—Save



Our Scotland (SOS)—which came about through the efforts of Mrs. Siegel, who rallied the people of Scotland and aroused the interest and help of her neighbors and Montgomery County civic and church leaders.

SOS quickly became the voice of the reawakened Scotland. Through public meetings and the press, it gave Scotland's neighbors their first knowledge of the county government's record of neglect and indifference toward the community.

## Misplaced rules

There were no sewer lines to Scotland, and the county refused to issue permits for the construction of septic tanks. Neither would it allow Scotland residents to make needed repairs to their crumbling houses—short of bringing them up to full code standards, which they could not afford. The county was not out to get Scotland; it was merely applying its countywide regulations, designed to serve the interests of its more affluent white majority, which makes up 96.1 per cent of the population.

The county maintains a well in Scotland, the community's only source of water. But last year, after a series of breakdowns, the county refused to repair the pump, charging that it was being sabotaged by Scotland residents. It was only after SOS, with its membership strengthened by influential white citizens, issued a complaint, that the county went back for another look. It discovered that a faulty shaft had been causing the trouble all along.

Public schooling was not provided by the county until the early thirties, after Scotland had agreed to put up its own building. Residents raised \$500 toward the construction cost, and a foundation provided the rest. Scotland's children attended the one-room school until the 1954 Supreme Court decision forced neighboring schools to open their doors to them. Now the old schoolhouse is the community's recreation center (left).

The first concern of SOS was the current living conditions and



social deprivations of Scotland's residents. It began by attacking a relatively minor but psychologically demeaning problem. Scotland was strewn with mounds of garbage, junk and abandoned automobiles. SOS staged a clean-up project, on which more than a hundred volunteers from churches in the area pitched in to help the Scotland residents. The project took two weekends, but when it was completed Scotland looked a lot more respectable.

#### Seeds of change

Many of Scotland's children were unable to cope with the educational pace of the public schools, so SOS began a tutoring program, carried out by volunteer teachers and mothers. To help preschoolers prepare for formal education, SOS started its own version of Operation Head Start. And with the help of Arthur Motley, former director of the U. S. Employment Service and a Bethesda resident, SOS found summer jobs for most of Scotland's teenagers.

SOS also was able to persuade the Washington Suburban Sanitary Commission to extend its sewer service to the AME Zion Church in Scotland. Then a new well was dug, and plumbing was installed in the church, giving Scotland its first access to hot and cold running water and modern toilet facilities. Scotland's houses still do not enjoy these benefits, but the changes are, in the words of the Rev. Frank A. Randall, its pastor, "a symbol to the rest of the community for our future housing project."

#### Key program

The housing project of which the Rev. Randall speaks is another major SOS program, and the one which ultimately may spell the difference between Scotland's survival or extinction.

SOS was aware from the start that its other programs would have little value if Scotland could not stop the acquisitiveness of the park commission, and would not resist the offers

of speculators. Both problems were overcome with relative ease: The park commission agreed to halt the expansion of its park into Scotland until a community plan could be drawn up, and the Scotland residents overwhelmingly supported the idea of staying put and reasserting their roots.

Their decision to remain can be traced to two major causes. First, Scotland is a tightly knit, proud community. Virtually every family has at least one employed breadwinner. No one collects unemployment payments, and no one is on the county welfare rolls. While the median family income is only \$85 a week, Scotland residents are financially better off than other Negroes in the county and in the slums of Washington.

#### No place to go

A second and more compelling factor was the bleak alternatives open to the people of Scotland. There was no low-income housing in the county, and Washington offered them nothing more than a ghetto existence. The park commission was buying their property for about \$5,000 an acre, and speculators were offering from \$2,000 to \$8,000, but the Scotland property had been split up over the years to the point where few individuals owned more than an acre, and many holdings were as small as a quarter-acre. Sale of the land would hardly be a windfall for most of the Scotland residents.

Even those who stood to gain several thousand dollars from the sale of their land would find it virtually impossible to purchase decent housing in Montgomery County. And even if they were able to jump the racial barrier, their incomes would not support the monthly equity payments.

With the blessing of the park commission and the backing of the people, SOS began to develop a housing solution for Scotland. Again, it was Mrs. Siegel who provided the major impetus. In the course of searching for help in the program, she had telephoned Edward Rutledge, executive director of the National

Committee Against Discrimination in Housing. Rutledge had put her in touch with Urban America Inc., which made it possible for SOS to get what it needed most at that time: legal counsel and guidance.

Attorney Herbert S. Colton, a former Federal housing official, steered SOS through the course of incorporation—a necessary first step for what was to follow. Then the new corporation, Scotland Community Development, Inc., worked out the broad outlines of a housing program and applied for a Federal demonstration grant.

On July 9, 1965, then-HHFA Administrator Robert C. Weaver, noting that the Scotland situation is typical of “numerous slum pockets in which land is owned by long-term residents who have not the means to rehabilitate housing that has become dilapidated,” announced that the corporation had been granted \$78,400. “The demonstration in Scotland, within the orbit of the nation’s capital,” said Weaver, “will be of nationwide interest, and help show the way to a solution of similar problems elsewhere.”

### Coming together

The scheme for which the HUD money was granted called for the pooling of sites owned by the residents, totaling about 50 acres, providing a single site for a planned-unit housing development to be privately financed under the Federal 221d3 program at below-market interest rates. Each participating resident would receive credit for his land and would have the opportunity to contribute labor in return for credit toward the purchase price of the new dwelling.

To bring the costs down to within the income range of the residents, the corporation would sell off all but about 12 acres, on which it would develop about 100 housing units—enough to accommodate all current Scotland residents, those who have left but would like to return, and a few other families in the county.

Scotland now had the vehicle

and the planning money, but it still lacked professional planning and architectural help. Through the pages of the *Montgomery County Sentinel*, which had been devoting a great deal of coverage to the Scotland effort, the new corporation appealed for help. Its call was answered by Rurik F. Ekstrom, a young Yale graduate with a highly developed sense of community responsibility who had recently set up his architectural practice in nearby Potomac.

### Filling a void

Ekstrom stepped in and took charge of the mountain of work that remained to be done, performing such a variety of tasks that the AIA’s concept of “comprehensive services” would look narrow by comparison. Ekstrom searched the land records, drew up a list of owners, and got almost all of them to sign a non-binding letter of intent indicating they would go along with a community housing project. He found a land appraiser who conducted the first thorough economic study of the site, valuing the combined parcel at an average of \$14,000 per acre—well above prices offered by the park commission and speculators.

Ekstrom also consulted attorneys who conducted a title search, investigated zoning regulations and drew up an option contract under which owners would agree to sell their property to the corporation. Again, Ekstrom got almost everybody in Scotland to sign.

Last January, Ekstrom read an account of an address in which Benjamin Thompson, chairman of Harvard’s department of architecture, advocated the introduction of “live” situations into student projects. Scotland, thought Ekstrom, was about as “live” as a situation could get, and he decided to ask several architectural schools to take it on. Ekstrom could arouse no interest at Harvard, but the deans at Yale, Howard, Virginia, and Georgia Tech agreed to handle it.

To date, the largest effort in behalf of Scotland has been

carried out at Yale, where Charles W. Moore, chairman of the department of architecture, assigned the project to the master’s class. Working from a program supplied by Ekstrom, and from a personal examination of the site, 13 students developed schemes for Scotland. The results, in Ekstrom’s estimation, were fascinating—but showed an almost total lack of understanding of needs and living patterns of the people of Scotland.

“Most of them designed new Georgetowns,” Ekstrom said. “The kind of places in which people drink martinis in the evening and sit around reading their newspapers. In Scotland, they don’t go for martinis, and they like to sit on the porch and watch the kids playing.”

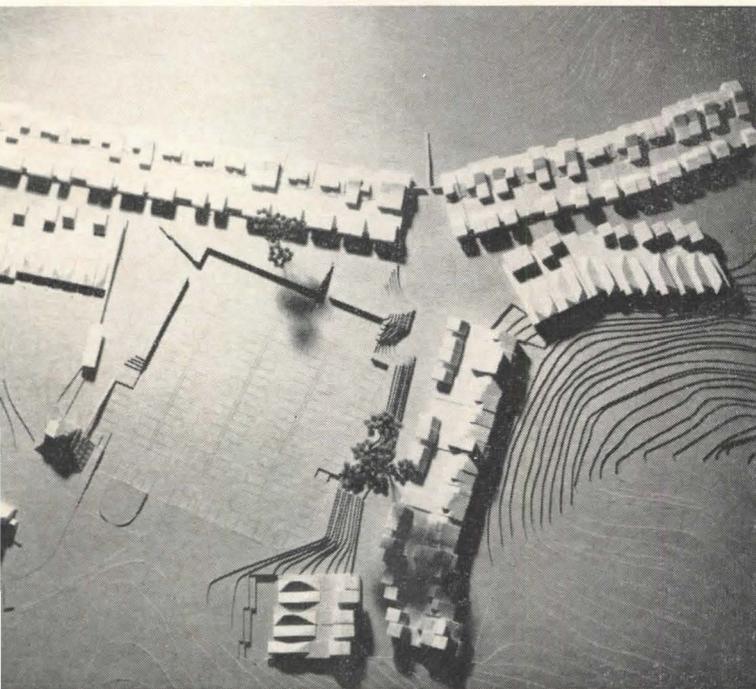
Only one of the 13 solutions seemed to be basically designed around Scotland’s needs, Ekstrom felt. It was the work of Lester Walker, who had previously confronted a similar situation through his work with the Architects Renewal Committee in Harlem (ARCH). Walker’s solution did indeed provide a front porch, as well as a private rear yard, for each unit. It also permitted cars to be directly accessible from the houses—another pattern that Scotland residents are used to and find desirable.

### Not picturesque

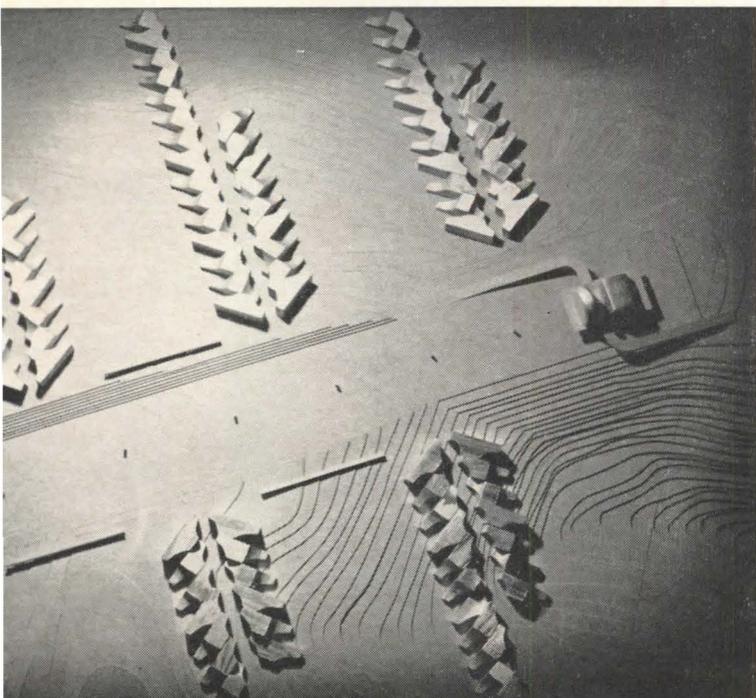
Ekstrom took a delegation of Scotland people to Yale to look over the schemes and, he says, “to introduce them to the kinds of forms and spaces that could be coming out of this thing.” He was delighted to find that they were not at all negative toward the strange shapes presented to them. He got the same reaction when he conducted a tour of Scotland housewives to Reston, where the ladies expressed a dislike for the picturesque row houses designed by Chloethiel Woodard Smith but were enthusiastic about the more severely modern cluster by Charles M. Goodman. Ekstrom has come to the conclusion that the people of Scotland do not



Lester Walker's scheme for Scotland, one of 13 produced by the master's class at Yale, groups the 100 units along four winding, downhill cul-de-sacs, linked to an access road run just below the top of the hill. The community center is at the crest.



Kazunari Ide gave greater glory to the automobile by making a large central parking core the central design element. The housing units, shaped like piano keys, project over arcaded pedestrian ways.



Like Ide, Marvin Buchanan positioned the parking lot in a place of honor. His houses are conceived as individual, manufactured metal units whose interiors are to be divided up and finished by the owners. The ramped community center is also designed to be built in metal.

PHOTOGRAPHS: Pages 78-79, Michael Lenzi/BPI. Page 81, Gerard M. Ives Jr.

share the stylistic prejudices of their middle-class neighbors.

Ekstrom has just begun designing the new Scotland, and he claims that the work of the architectural schools has provided "an invaluable service for me in the development of a basic perspective and evaluation of the needs of the project." He hopes that, if financial problems can be worked out, many of Scotland's houses can be detached. If not, he wants to give them "the character of detached houses" as far as possible. He also hopes that some of the existing houses can be saved through rehabilitation.

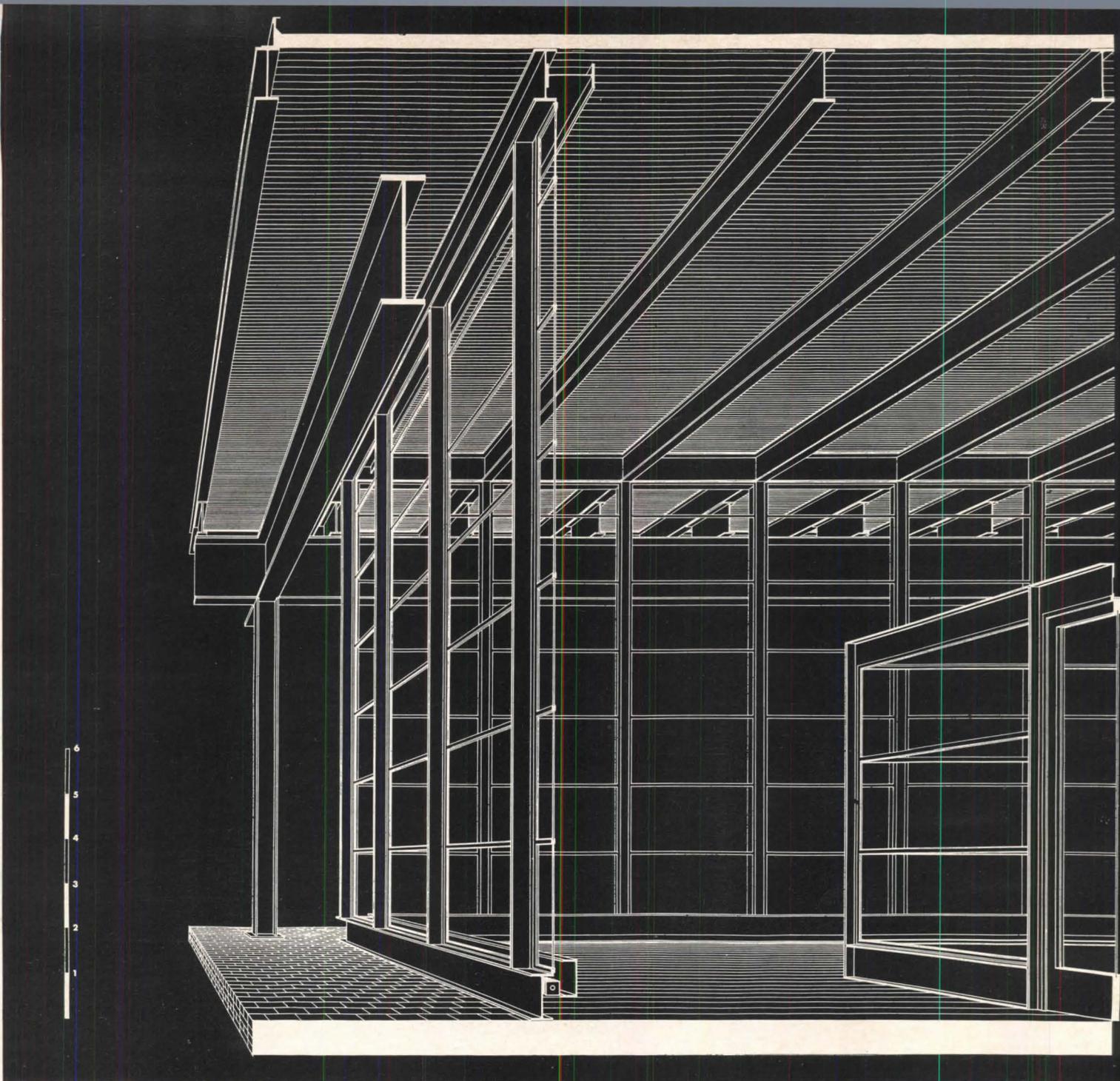
#### Remaining hurdles

Right now, money is Scotland's biggest problem. Ekstrom and others are looking into every possible Federal program in an attempt to work out a combination that will make the Scotland development financially feasible. They also are hopeful that Congress will pass a housing bill amendment, introduced by Senator Joseph Tydings of Maryland, which would extend the low-interest-rate benefits of 221d3 to the purchase as well as development of new houses in low-income projects.

Another source of concern is the current tight money market. Even if all the other problems can be worked out, the shortage of mortgage funds could force at least a postponement of the project.

If the Scotland effort succeeds, Ekstrom sees it as a breakthrough in the housing of low-income minority groups in suburban areas. He personally has discovered some 65 enclaves of impoverished Negroes in the two Maryland counties adjacent to Washington—most of them far worse off than Scotland. If a whole string of Scotlands could be built within the capital's suburban ring, he feels, it would not only improve the lot of the Negroes already living there; it could also relieve the pressure on the crowded Negro slums of Washington.

—JAMES BAILEY



## DARK STEEL PAVILION DESIGNED FOR EXPORT

The Cummins Engine Co. plant in Darlington, England, its architect remarked recently, was consciously designed to export "the best American tradition" of crisp technological know-how. This was neither said nor done in a spirit of chauvinism, however: the architect is Irish-born, London-apprenticed Kevin Roche, the Cummins plant being the first finished building bearing the firm name Kevin Roche John Dinkeloo & Associates.

It is also the first in England

to employ exposed oxidizing steel; the first in England to hold its windows together with structural neoprene gaskets; and the first anywhere to combine the rusty steel and gasket glazing in exterior walls and interior partitions, identical in detail.

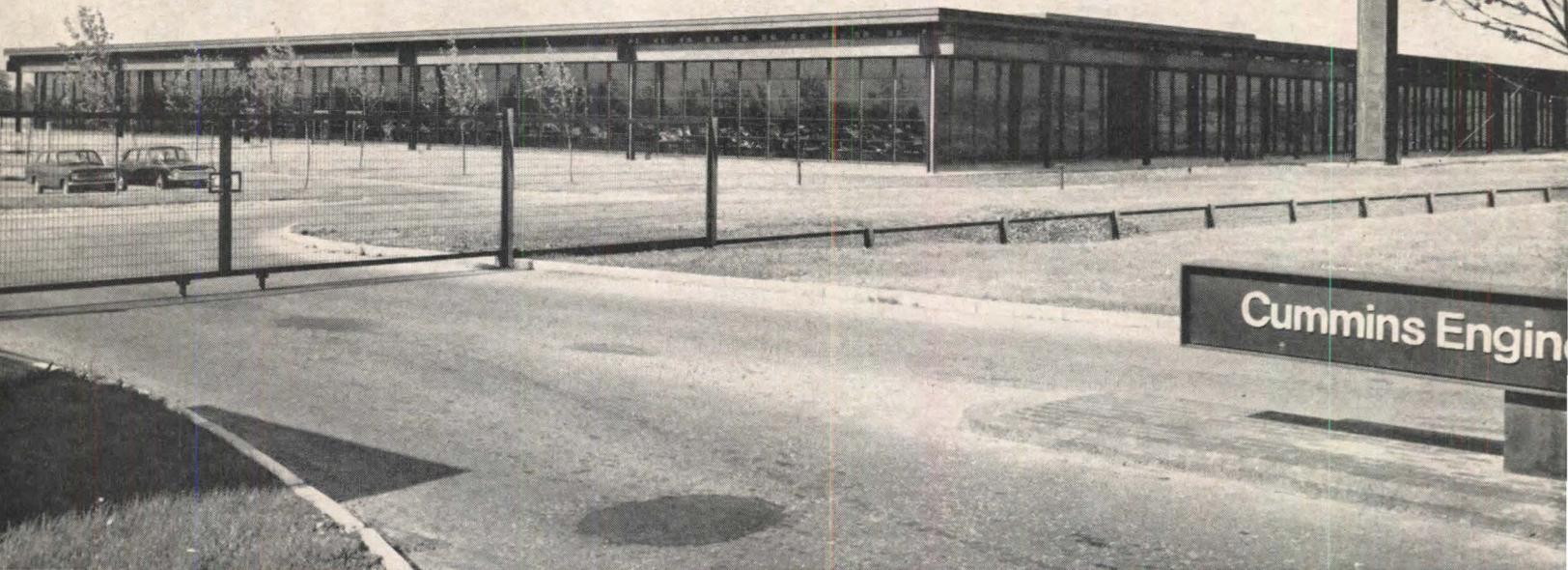
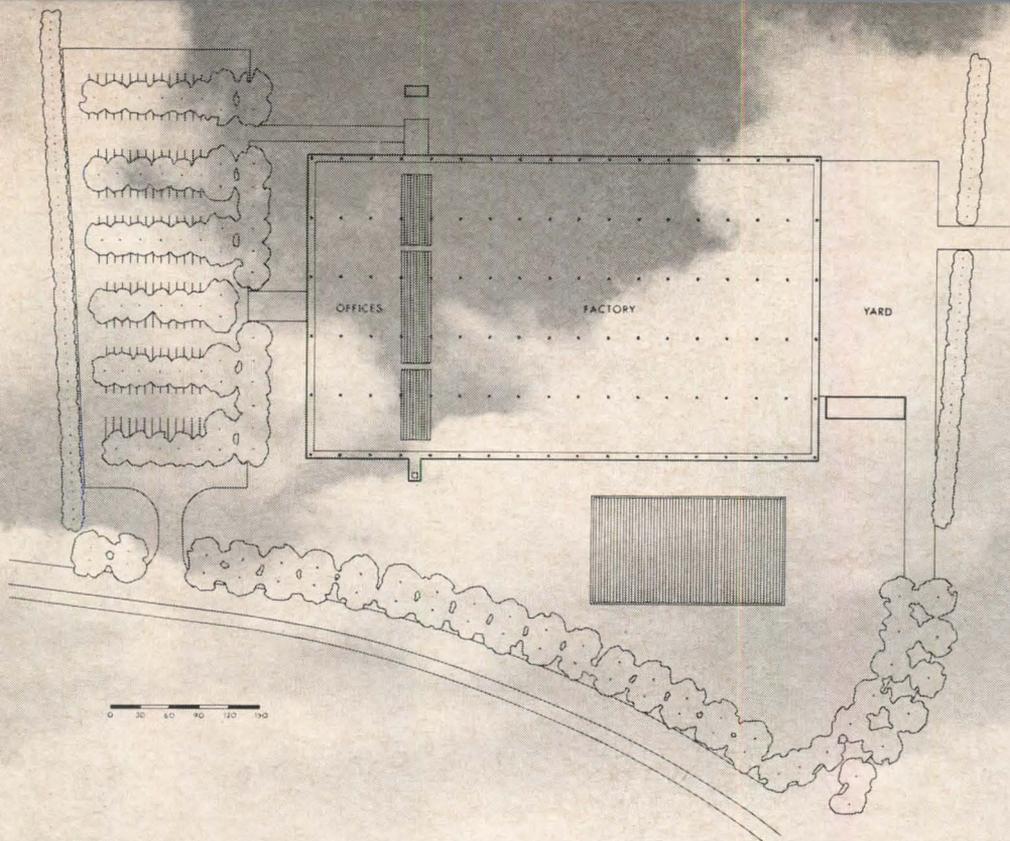
The drawing above shows how it was done, and the photo at right the end result, darkly metallic against the fields and wild flowers of the usually misty English Midlands. Both illustrate still another unique aspect of the

building, one less technological than architectural: The purlins are set on 18-inch plinths resting on the main steel girders. These spacers, looking like little left-over bits of wide-flange beams, provide a 3-foot space between roof deck and girders, through which run major utilities, and an 18-inch space between purlins and girders for branch lines. They also add a touch of individuality that is part of the new firm's own tradition as the former Saarinen office.









**The articulate structure is simply a "big shed," containing interchangeable office and factory space**

Darlington is in an economically depressed area of England, and Cummins came there as a result of a government industrial development program. In such a situation, the architecture-conscious company had no desire to erect a landmark. It simply

wanted a good, straight-forward, economical plant.

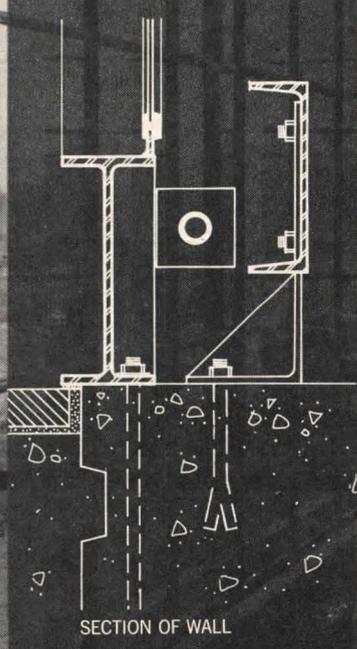
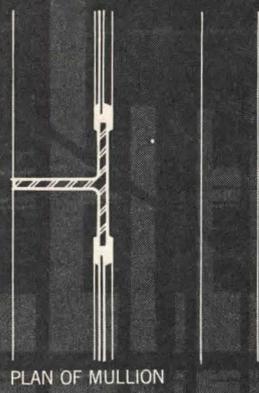
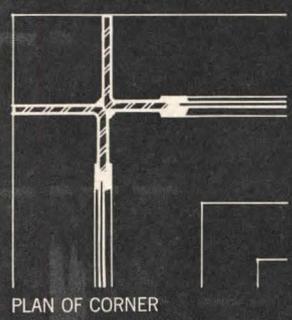
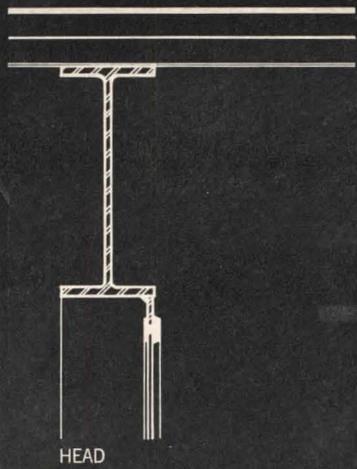
Roche describes the building as a "big shed . . . very, very direct stuff." In one end are offices and in the other the vast manufacturing space, with utility and mechanical rooms in between. The heating and air conditioning units are roof mounted, each handling six 30-by-60-foot bays. The building is planned for three-fold expansion: it can grow bay by bay through the addition of new roof units, with-

out disturbance of the existing air handling system. Since the structural system is uniform throughout, moreover, office and manufacturing space is interchangeable.

The plant went up in 14 months, from start to occupancy. Its cost was \$11.83 per square foot, excluding site and manufacturing utilities but including a cafeteria. The price range is that of prefabricated steel buildings, without the distinction of this articulate pavilion.

**FACTS AND FIGURES**

Cummins Engine Company, Ltd., plant, Darlington, County Durham, England. Owner: Cummins Engine Company, Columbus, Indiana. Architects: Kevin Roche John Dinkeloo & Associates; David Powrie, associate. Landscape architect: Office of Dan Kiley. Engineers: Henry Pfisterer (structural); Cosentini Associates (mechanical and electrical). General contractor: Bernard Sunley & Sons, Ltd. Building area: 158,000 sq. ft. (27,000 sq. ft. offices, 177,000 sq. ft. manufacturing, 5,000 sq. ft. utility storage, and 9,000 sq. ft. mechanical core).  
PHOTOGRAPHS: Balthazar Korab.





# FORUM CONT'D

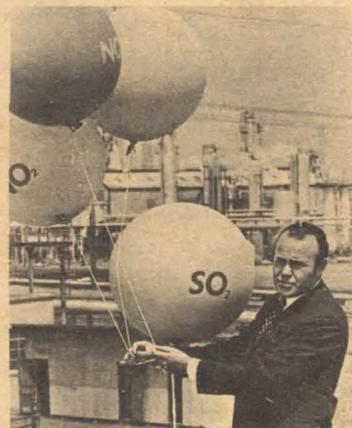


a scaffold, wearing a construction helmet, and eating his lunch (above), looking for all the world like a regular fellow. It is also revealed that he makes \$85 a week and has a mean old tightwad for a boss. Those who worry about the architectural profession's "image" may yearn for the return of Wilbur and Ed.

## POLLUTION SPECIALS

Television discovered pollution last month and suffused the airways with it. Within a span of 48 hours, both NBC and CBS presented hour-long pollution specials which, for sheer horror, outdid the Boris Karloff reruns.

NBC's effort, aptly called "Air of Disaster," featured reporter Sander Vanocur (below, holding aloft balloons identifying some of



the deadly gases being emitted into our atmosphere). It ended with a scene of children playing, their faces covered with gas masks. Acknowledging that the scene was staged but "plausible," Vanocur asked: "There will be those who say it cannot happen here, but how can they be so sure . . .?"

The CBS special, "The Poisoned Air," was less dramatic but no less frightening. Reporter Daniel Schorr, noting that "many of our big cities live today by the grace of friendly winds," also asked a pertinent question: "Will it take the panic following another Black Tuesday [St. Louis, Nov. 28, 1939], when a stilled wind may bring suffocation—will it take that to provoke action?"

## UPS & DOWNS

### PARABLE OF THE POTOMAC

*It came to pass in mid-September that the Potomac River, on which Washington relies for its water, suddenly began to diminish. For the first time since the generation of Abraham Lincoln, the people of the city were asked to restrain their thirsts.*

*For three days, as the river fell, the leaders of the city watched in vain for a replenishing flow. Then, on the fourth day, the rains came in amounts up to eight inches. Roads were flooded and bridges were washed away.*

That's the way things went on the environmental scene in Washington last month: one step forward and several back. In the matter of water supply, the one-two crises of dearth and flood struck Washington—the nation's only major river-dependent city without reservoirs—as a Federal-state task force was working on long-range management plans for the Potomac. Neither the river nor the rains could wait.

There were sunnier spots. The National Capital Planning Commission approved a plan to bring new life and order to the Mall, drawn up by SOM-San Francisco and enthusiastically presented by Nathaniel Owings. Downtown Progress was at work on a demonstration project on F Street to show what the city's shopworn shopping district could become, and David Wallace and William J. Conklin were hired to work on a grand design for the entire downtown area from Massachusetts Avenue to the Mall.

But a key to the improvement



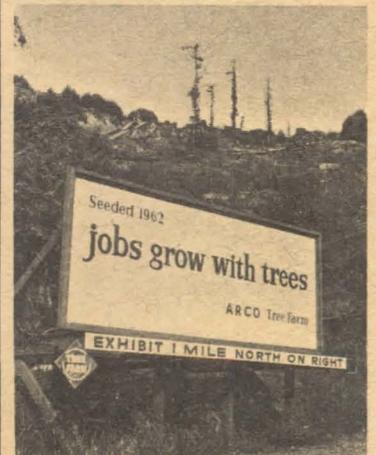
of downtown is the projected new subway, which Congress undertook to delay for a year in a particularly flagrant act of capital punishment. Road agents in the House knocked out a modest \$8.5 million budget item to begin work on the Washington subway in retaliation for the city's delay in acting on expansion of its freeway system.

They had allies in the Planning Commission. Its members representing public agencies again ganged up to pass four key elements of the freeway system over the votes of members representing the public itself. A segment of the public showed up to picket against the freeways (above), but in vain.

## CONSERVATION

### SINCE YOU PUT IT THAT WAY

"The lumbermen are working into the virgin forests and, as we are all aware, they leave in their wake a mass of refuse and wreck-



age." That statement was made 49 years ago by conservationist John McLaren.

Things have changed since then. Lumbermen are destroying the redwood forests of California at an even greater pace, but have been leaving signs like the one above in their wake, in an attempt to

## FOOTNOTE

As long as you're up get me a Beretta—Modesty Blaise is a sort of female James Bond, and the movie describing her exploits is the worst film of the year. The other reason we liked it has to do with the props: the gent at left, a thug named Gabriel, is shown here in his lair—the lair being, of all things, Marcel Breuer's exceedingly beautiful (and revolutionary) tubular steel chair, designed in 1925, and now manufactured again in Italy. Until we saw Gabriel in the Breuer job, the man (Gabriel) had us pretty scared; but as soon as we saw him in his chromium-plated lair, we were much relieved: after all, nobody in a Bauhaus chair could be all bad!

PHOTO: Twentieth Century Fox.

convince the world that their operations are really in the public interest.

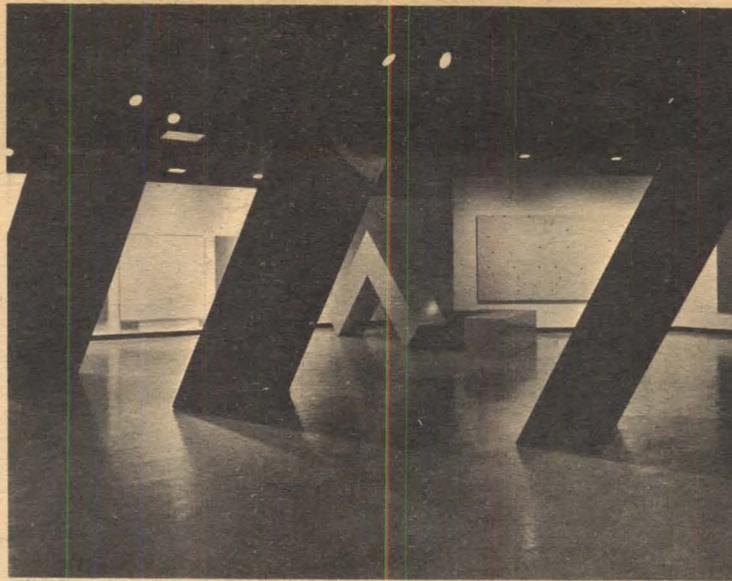
In the past few months, Congress has been considering two possible tracts as sites for a new Redwood National Park. But while Congress debated, the lumbermen destroyed, cutting down virgin trees in the heart of the proposed park areas. The pleas of President Johnson, Interior Secretary Udall and scores of other high officials failed to silence the chain saws.

Last month the President took more drastic action. He requested emergency legislation to force the lumber companies to cease operations until Congress could decide on the location and size of the new park. A week later, the five affected companies announced their "voluntary" suspension of operations.

Reportedly, what moved the lumbermen was not a sudden conversion but an ultimatum issued by Senators Thomas H. Kuchel of California and Henry M. Jackson of Washington: either cooperate now or face the wrath of an outraged Congress when it takes up the park bill next session.

#### FOULED VALLEY

"It is plain enough that the valley is scarred," said the final report of the Hudson River Valley Commission. "Its once clear waters have been fouled with sewage and its air is polluted. Many of the most beautiful bluffs along its shores are being quarried away; its old river fronts have become lined with rotting piers and derelict freight yards [sample below]. The countryside is still lovely, but the view of it is being defaced by billboards and an uncoordinated sprawl of subdivisions."



Last month the Senate gave final Congressional passage to a bill designed to keep the valley from being further scarred while permanent arrangements are being made for its protection. But the bill had been so weakened that to many conservationists it scarcely seemed a victory.

As originally drafted by Representative Richard L. Ottinger, the bill would have given Interior Secretary Stewart L. Udall veto power over any Federally licensed project likely to have an adverse affect on the Hudson and the lands it passes through. Eventually, responsibility for the valley's protection would have been transferred to a Federal-interstate compact with broad authority.

At the Johnson Administration's insistence, the bill was amended to limit Udall to the power of review over Federally licensed projects, although it states the "sense of Congress" that Federal agencies should be restrained in approving any major changes in the valley until the compact is in force.

One such project, the proposed Cornwall electric plant of Consolidated Edison Co. at Storm King Mountain, comes before the Federal Power Commission next month for rehearing. An FPC spokesman said the bill would have no bearing on the final decision, thus providing an accurate measure of its potential effectiveness.

As for the Federal-interstate compact, an aide to New York Governor Nelson Rockefeller restated the governor's opposition to any arrangement in which his state did not have the dominant voice in planning the river's future. He could profit from a re-reading of the report of the commission, which was headed by his brother, Laurance S. Rockefeller.

"There need be no dispute over who is going to save the Hudson," said the report. "There is work enough for everyone."

## EXHIBITIONS

#### ALL TOGETHER NOW

Visitors to the 68th American Exhibition, now on view through Oct. 16 at the Art Institute of Chicago, may come away feeling they have experienced something much more than a collection of individual works of art. If so, A. James Speyer, the institute's curator of contemporary art, would be delighted.

Speyer staged the exhibit, and his intention was to make each of the works on display an element in a single grand design. He gave the ceiling a mat black finish, and he alternated black walls with large open courts holding paintings and sculptures pinpointed by oddly angled spotlights. Floating through

the air are the eerie sounds of electronic music.

The result (left) is an "environment" as exciting as it is unusual. "And," noted Hilton Kramer in *The New York Times*, "let there be no doubt about the fact of [Speyer's] success: the public clearly adores this fun-and-games spectacle."

## PLANNING

#### IMPALED ON A SPUR

On September 18, John E. Hirten, executive director of the San Francisco Planning and Urban Renewal Association, publicly confirmed what had long since become obvious. "There is a real breach," he said, "between SPUR and the [city] planning commission."

The next day, Planning Director James R. McCarthy announced his retirement after eight years on the job. The reason, he said, was a heart condition, but it was no secret that a delegation from SPUR, an influential citizens' organization, had gone to Mayor John F. Shelley, a month before, demanding that he fire McCarthy.

McCarthy had been the target of brickbats throughout most of his term. SPUR, as well as other private and public groups, repeatedly complained that the commission was a do-nothing body which refused to communicate with the people. McCarthy, in his resignation, blamed it all on a shortage of staff, which numbers some 60 employees.

#### ON A CHEERFUL NOTE

Hirten's blast was delivered during SPUR's big "Commitment to Greatness" meeting, which was otherwise a rather cheerful affair. In conjunction with the meeting, as a means of dramatizing the benefits of "an environment of human scale and quality," SPUR had singled out 44 "bright spots" within the city.

SPUR's choices ran the gamut in size, age, and degree of fame. They included the Golden Gate Bridge, the Crown Zellerbach Building and its plaza, Ghirardelli Square, a number of parks, large and small, even Macondray Lane, a little-known "country lane" in the middle of the city. Above each spot, SPUR suspended a big yellow balloon.

In SPUR, San Francisco has one of the country's most influential

and effective private planning organizations. Last summer, in the ground floor of an abandoned downtown department store, SPUR staged an ambitious Workshop, replete with a variety of exhibits, a program of public meetings—even a battery of tape recorders into which citizens were invited to state their gripes.

Following last month's "Greatness" conference, SPUR staged a nine-day festival to dramatize the city's problems and their solutions. The festival culminated in a citizens' rally on the theme "The Neighborhoods Speak Out."

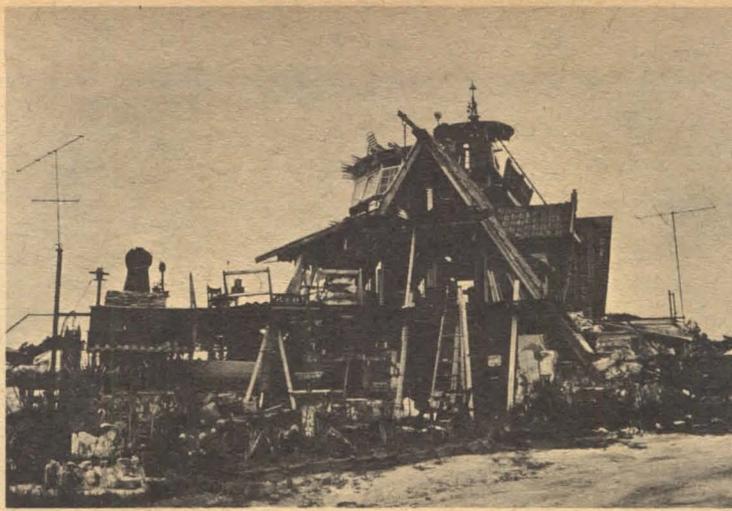
## INCIDENTS

### ROADSIDE RUIN

Ugly roadside billboards usually are slapped up in no time at all. Construction of the one above—a billboard, despite its bizarre domesticity—has taken two years and isn't finished yet.

It is the work of Reid Garrett, a dentist in Rockingham, N. C., and its purpose is to advertise to motorists on Route 1 that he owns a quarry and has a million tons of volcanic shale for sale.

It all began when Dr. Garrett, deciding that advertising was in



order, hitched an A-frame to his car and hoisted it into place next to his office. He has been padding it out with bits of the shale and other objects ever since.

Dr. Garrett's four-level billboard is highly mechanized. Water wheels turn barbecue spits, vacuum cleaner hoses are used as bannisters, and stereo and television sets, with aerials, outnumber windows.

### GIFT TO THE GREEKS

This time, it's the Greeks who have accepted a gift-horse. It measures 29 by 56 ft. and has been installed at Filiatra, a town near

Olympia in southern Greece.

The horse (below) is the gift of Haralambos Fournarakis (now Dr. Harry Fournier), an ulcer spe-



cialist from Chicago who wanted to repay Filiatra for his happy childhood there, and to help its tourist trade at the same time. The horse has three rooms in the rump and plumbing in the tail, and it will eventually house a library and museum of mythology.

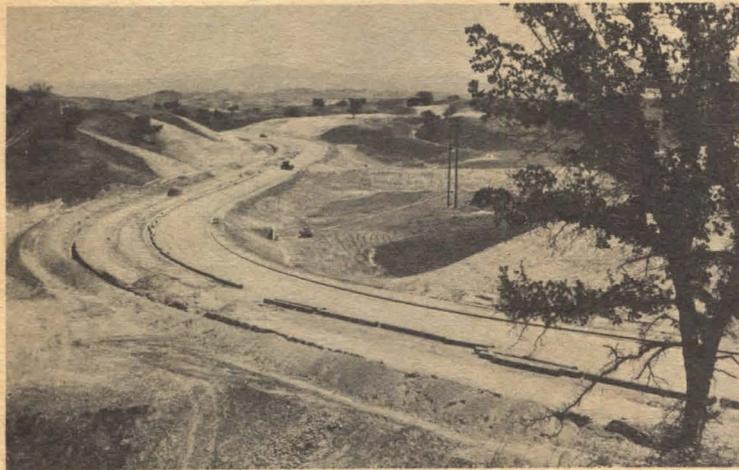
Fournarakis had previously given the town a gigantic unisphere and a 75-foot Eiffel Tower.

### HOW TO DO IT

A California new-town developer has challenged the state to follow its example in building roads that blend with, rather than deface, the landscape.

The California Land Company, builder of the community of Valencia north of the San Fernando Valley, released the two pictures at left. The top one shows Valencia Boulevard, being built by the company: the cuts for it and all other Valencia roads are being contoured, then covered with seeded top soil. The bottom one shows the Golden State Freeway, being built nearby by the State Division of Highways, cutting harshly into the hills.

"We would like to see the Division of Highways follow our lead, or these scars will be with us forever," said Vice President Alfred B. Osterhues of California Land. The extra cost, he said, amounts to less than one-half of one per cent of the grading contract.



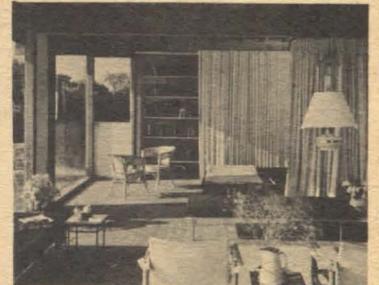
### WHAT'S MY LINE?

Last month, in San Francisco, Robert H. Mersereau, a candidate for city assessor, requested that he be identified on the ballot as "Slumlord." "I regard myself as a slumlord because I'm a landlord in San Francisco," Mersereau explained. "Like most big cities, it's rapidly becoming one big slum. This is the greatest problem in San Francisco, and I hope to focus attention on it."

### DEATHS

► Robert Hays Rosenberg, one of the better known architects to emerge after World War II, died of a heart ailment Sept. 12 at the age of 59. Though he liked the extensive use of glass and the leanness of structure that were part of the International Style, Rosenberg rejected its unrelieved starkness.

Among his most widely publicized buildings was a house, largely of glass, that he built for himself and his family in 1952 (below). He was a schoolmate at



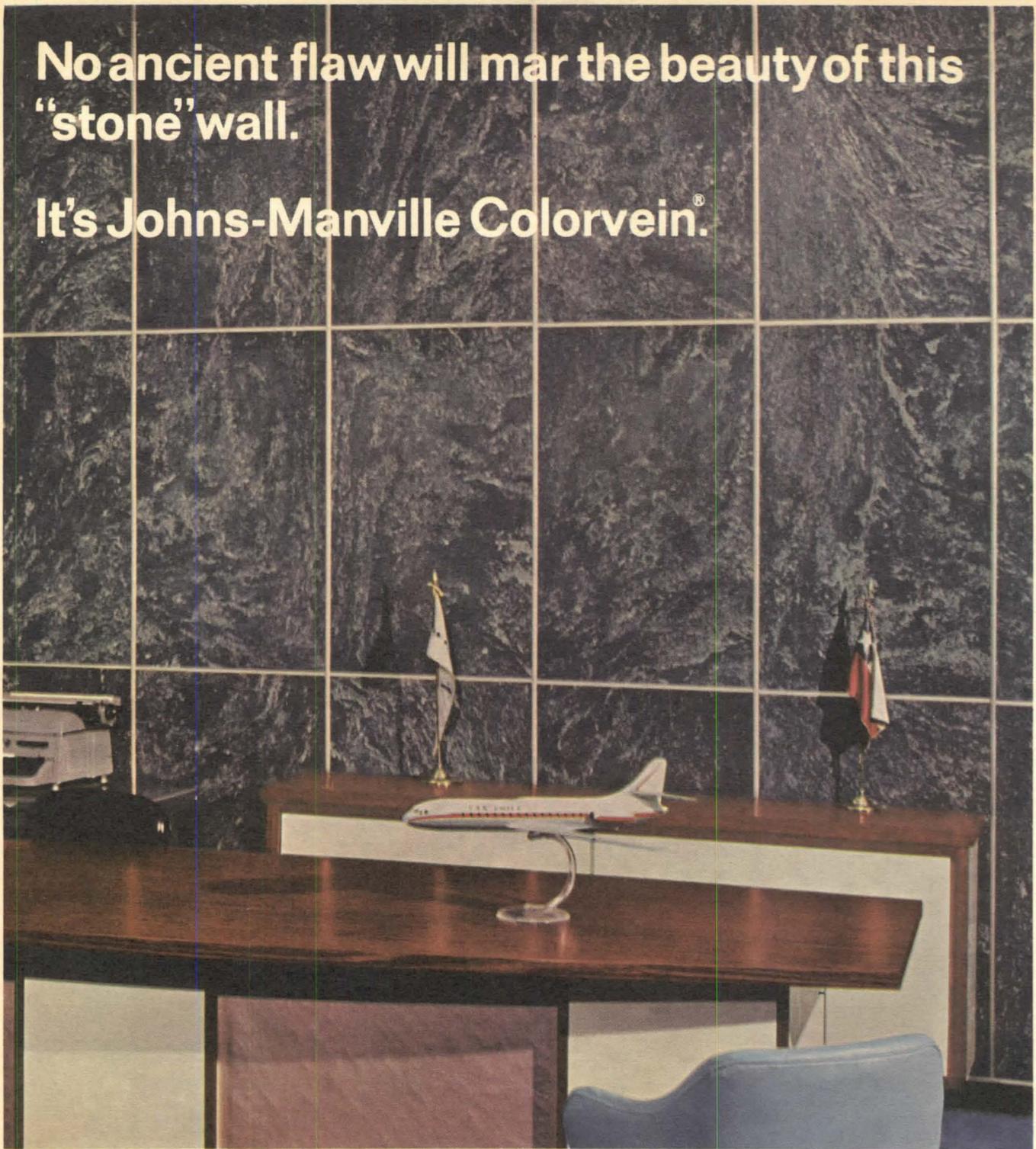
Harvard of such luminaries as Rudolph, Johnson and Johansen, and a stimulating contributor to the now defunct magazine, *TASK*, published by the students of that school in the early forties.

► Carroll L. V. Meeks, a familiar figure on the Yale campus for more than 35 years and a well-known architectural historian, died Aug. 27. He was 59. His entire teaching career was spent at Yale, where he joined the faculty in 1930 as an assistant in architecture. He was a major force in the development of Yale's school of Art and Architecture.

His published books include *Italian Architecture 1750-1914*, and *The Railroad Station*. He was a past president and director of the Society of Architectural Historians and chairman of the AIA's committee on the preservation of historic buildings.

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