



ARCHITECTURAL FORUM / MARCH 1966

FORUM



Beveled edge of new Kentile® Featured Travertine creates a feature strip effect. Tile is 12" x 12" x .080" solid vinyl in 4 colors. Deeply textured like natural travertine. Quiet and comfortable underfoot. Long wearing. Easy to maintain in commercial or residential use. Greaseproof.

KENTILE
VINYL FLOORS

New! Featured Travertine with the beveled edge built in.

Note the custom look! Kentile's new Featured Travertine is solid vinyl tile with the beauty of hand-cut marble! Use it in any decor. Samples? Call your Kentile Representative.

URBAN AMERICA, INC.

THE ACTION COUNCIL FOR BETTER CITIES

PRESIDENT

Stephen R. Currier

VICE PRESIDENT

C. McKim Norton, AIP

EXECUTIVE VICE PRESIDENT

James E. Lash

TREASURER

Alfred S. Mills

ASSISTANT TREASURER

Clyde V. Bergen

SECRETARY

Walter F. Leinhardt

BOARD OF TRUSTEES

HONORARY CHAIRMAN

Harland Bartholomew, AIP

CHAIRMAN

Andrew Heiskell

VICE CHAIRMAN

August Heckscher

Jerome M. Alper

Edmund N. Bacon, AIP, AIA

Mrs. Katrina McCormick Barnes

Albert M. Cole

Albert R. Connelly

Stephen R. Currier

Roscoe P. DeWitt, FAIA

Ben Fischer

Mrs. George A. Garrett

Lewis E. Kitchen

Philip M. Klutznick

Ferd Kramer

Edward J. Meeman

Martin Meyerson, AIP

Alfred S. Mills

John H. Muller

Wayne Nichols

C. McKim Norton, AIP

J. Stanley Purnell

Laurance S. Rockefeller

Julian H. Whittlesey, FAIA

NATIONAL ACTION COUNCIL

CHAIRMAN

John H. Muller

URBAN AMERICA INC., including its National Action Council, is a nationwide non-profit educational organization combining the programs and resources of two national organizations with the common goal of improving cities—Urban America (formerly American Planning and Civic Association) and the ACTION Council for Better Cities.

THE ARCHITECTURAL FORUM / MARCH 1966

FORUM

25

A monthly review of events and ideas.

CUT-RATE REVOLUTION

29

President Johnson's Demonstration Cities Program is long on innovation, but threatens to be short on cash.

I.B.M. THINKS TWICE

32

One of architecture's most prestigious corporate clients undergoes a crisis in its building policies.

REPETITIVE FORMS

40

A gallery of ancient Mediterranean villages, by Architect Myron Goldfinger.

HARVARD'S LARSEN HALL

46

Its form and fenestration have made it one of the most controversial new additions to the Cambridge scene.

FOCUS

54

A monthly review of notable buildings.

CLASS AMID CLUTTER

58

Paul Schweikher designs a Pittsburgh library that is tough enough to survive its harsh surroundings.

VARIETY IN SEATTLE

62

Two dormitories, on the same ridge and by the same architects, turn out to be quite unlike. By Donlyn Lyndon.

BETTER FARMHOUSES

68

A University of California research project produces three handsome prototypes for agricultural workers.

BOOKS

72

On urban planning, Mies, and Nervi.

"ONE, TWO, THREE"

76

An appraisal of the ensemble of buildings which Egon Eiermann has placed around the ruins of a Berlin church.



Cover: Photo by Myron Goldfinger, see pages 40-45

FORUM

THE ARCHITECTURAL FORUM

Vol. 124 No. 2, March issue

Published 10 times a year, combining

Jan./Feb. and July/Aug. issues, by Urban America, Inc., 111 W. 57 St. New York, N.Y. 10019

Sent without charge to architects registered within the U.S.A. Qualified persons are invited to write the Circulation Manager on company letterhead. Please give your principal state of architectural registration, your title, and the kind of work you do. Correspondence regarding service, change of address, etc., should be sent to the Circulation Manager.

Subscription rate is \$10 within the U.S.A. and possessions. Elsewhere, \$15. College Rate for students and faculty members of accredited schools of architecture, \$5. Single copies, \$1.25. Member of Business Publications Audit of Circulation, Inc. Controlled circulation postage paid at New York, N.Y.

© 1966 by Urban America, Inc. All rights reserved.

PUBLISHER'S NOTE

Though our editors will never think of it quite that way, each of you is a short pencil stroke in what we call a "subscriber profile." We have just received the first official sketch of you in the form of a report from the Business Publications Audit of Circulation Inc., of which the FORUM is a member.

To begin with, 25,766 of you—constituting 82.8 per cent of our readership—are architects, and, what's more, architects who have taken the trouble to send back cards saying that you wanted the magazine. Another 5,342 of you are in planning, engineering, and other fields closely related to building design, construction and urban development.

Of these 25,766 architects—an imposing number, we think—a total of 10,972 of you are principals or partners in architectural firms, 5,387 are staff members in architectural firms, 3,664 have your own individual practices, 293 are staff members of engineering firms, and 5,450 are in a variety of other occupations.

The odds are about one in five that you live in the Middle Atlantic region: nearly 20 per cent of our circulation is to the states of New York, New Jersey, and Pennsylvania. California, however, has more FORUM subscribers within its borders than any other single state (3,718). Alaska has the fewest (36) and, we presume, the coldest.

* * *

The editors begin this issue by viewing President Johnson's 1966 urban program with impatience, viewing the state of IBM's heralded building program with alarm, and viewing a new building at a major university with something less than enthusiasm, thus fulfilling the FORUM's pledge to be a critic of the environmental scene. I found in all three articles a confrontation of issues that needed to be faced, and the saying of things that needed to be said. L.W.M.



Imagine all you'd like to do on an urban redevelopment project, with no holds barred.

And most likely you'll find that thin, efficient Barrett Urethane Insulation is what you need to blend your roofline with your design.

Ideal, too, for today's modern buildings with year-round temperature control. Because Barrett Urethane Roof Insulation, with its low K factor of 0.13, gives maximum year-round thermal efficiency. Does it better than any other type of insulation.

BARRETT®
BUILDING MATERIALS



Dept. AF-3, 40 Rector Street, New York, New York 10006

Apollo Savings & Loan Building, Chicago
 United Engineering Building, New York
 International Monetary Fund, Washington
 Bethlehem Steel Corporation, Bethlehem, Pa.
San Francisco Hilton Hotel, San Francisco
 Church of the Nazarene, Kansas City, Mo.
 Hardin-Simmons University Dormitory, Abilene
 Wilmcote Office Building, Arlington, Va.
Illinois State University, Normal, Ill.
 Nationwide Insurance Company, Columbus, Ohio
First Federal Savings & Loan Building, Detroit
 Emory University Hospital, Atlanta
 Midtown Plaza, Rochester, N. Y.
 Western Reserve Science Building, Cleveland
Fairland Data Center, Montgomery County, Md.
 Wells Fargo Building, San Francisco
 Colorado General Hospital, Denver
Northern Illinois University, DeKalb
 Masonite Building, Chicago
 Riverside Medical Building, Columbus, Ohio
 N. J. Department of Labor & Industry, Trenton
Merck, Sharp & Dohme, West Point, Pa.
 Illinois Bell Telephone Company, Chicago
 Bank of America, Los Angeles
New England Life Insurance Company, Boston
 Embassy of Yugoslavia, Washington
 Siteman Building, Houston
 Madison House Apartments, Cincinnati
New York Telephone Company, Brooklyn, N. Y.
 United Founders Life Tower, Oklahoma City
 Western Electric Company, Chicago
Harper Hospital, Detroit
 5th Avenue Financial Center, San Diego
 Volunteer State Life Building, Chattanooga
 Rochester General Hospital, Rochester, N. Y.
Universal North Building, Washington

Why are we name dropping? **They all use our Bypass Room Terminals** **with self-contained controls!**

Just five years ago Carrier engineers perfected a means of using the reliable and extremely simple bypass principle to achieve automatic control of high-velocity units.

To date this improved method of controlling room temperature in exterior zones has been specified for more than 150 buildings all over the country.

Some 65,000 of these Carrier Bypass Weathermaster® Room Terminals are in use today.

We believe they earned such fast and widespread acceptance because they

offer major installation, performance and maintenance advantages.

For example: Factory-installed and factory-calibrated controls... fully self-contained, no external pneumatic or electric system required... instantaneous response to room temperature change... smooth and silent action, no water throttling noises... water control valves completely eliminated.

How is this basic control approach achieved?

Very simply. In the units, the rate of water flow through the coil remains

constant. Total air quantity discharged into the room also remains constant. A bypass damper controlled by a thermostat proportions the amount of induced air that is permitted to flow through the coils.

Details, diagrams and ratings are all covered in a brochure: "Carrier Bypass Weathermaster Units."

Have you a copy in your files? Or may we send you one? Call your Carrier representative—or write us at Syracuse, New York 13201. In Canada: Carrier Air Conditioning (Canada) Ltd.

 **Air Conditioning Company**

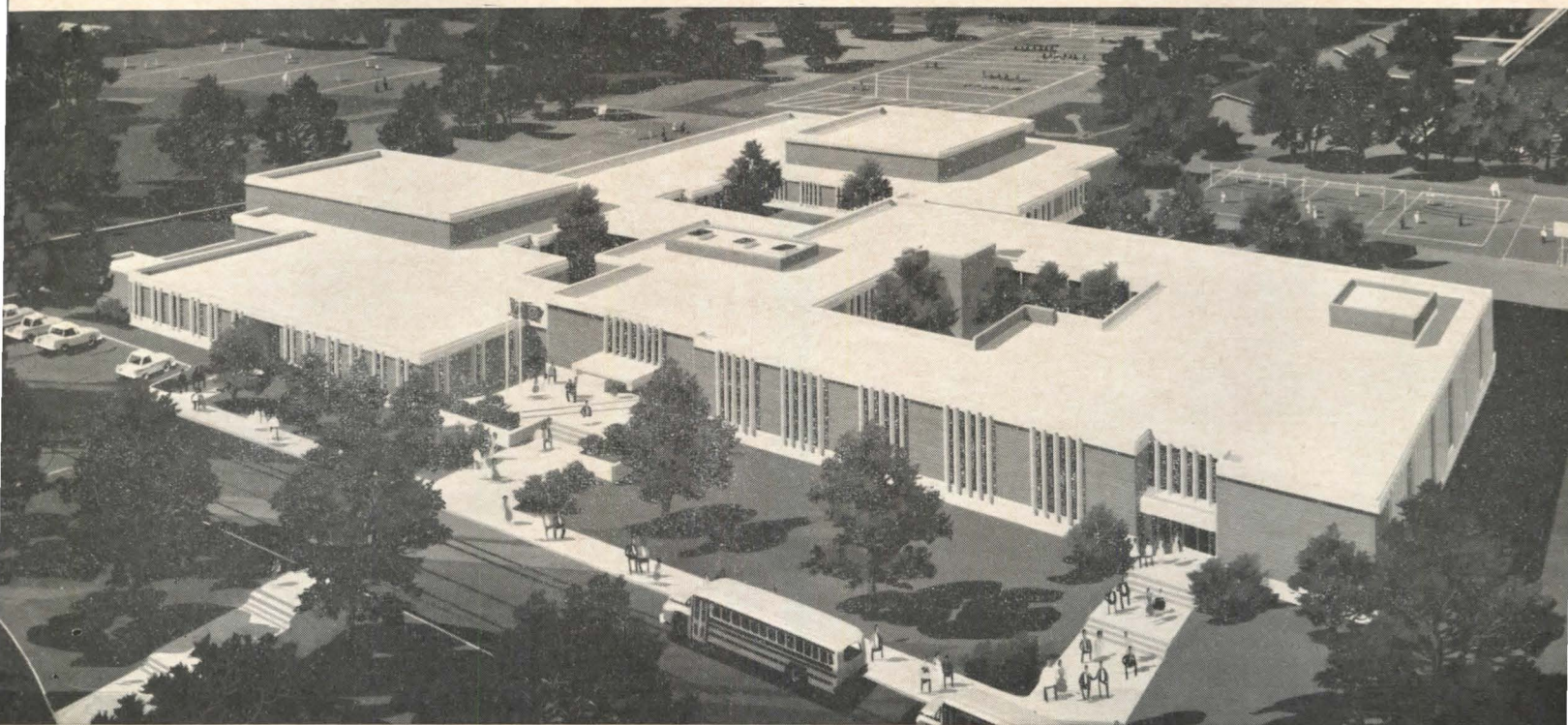
More people put their confidence in Carrier air conditioning than in any other make

Since

HOPE'S

1818

WEATHERSTRIPPED STEEL WINDOWS



JOHN ADAMS MIDDLE SCHOOL • ALEXANDRIA, VIRGINIA

Vosbeck-Vosbeck & Associates, Architects

M. L. Whitlow, Inc., General Contractors

This attractive school structure will be well guarded against the cold draughts of winter. It is one of the first to incorporate Hope's revolutionary new Weatherstripped Steel Windows. Through specially designed continuous Neoprene weatherstripping, Hope's engineers have reduced air infiltration by more than 60% (confirmed by independent laboratory tests). These windows combine the strength and rigidity found only in steel, with an air infiltration rate well within the maximum established for weatherstripped aluminum windows. Here are some of the advantages:

- All windows constructed from hot rolled solid steel sections.
- $\frac{3}{8}$ " high glazing rebates comply with glazing requirements for $\frac{1}{2}$ " insulating glass.
- Heavy ventilator section permits use of larger ventilators.
- All frame and ventilator corners mitered and solidly welded for greater strength and rigidity.
- To reduce maintenance and simplify initial glazing, windows can be inside glazed with continuous metal beads.
- Factory-finishing with Hope's Ultra-Coat available to eliminate field painting.

Hope's engineers are prepared to help you incorporate Weatherstripped Steel Windows in your building design; contact your local Hope's representative in the yellow pages, or write for Weatherstripped Steel Window publication No. 181-65.

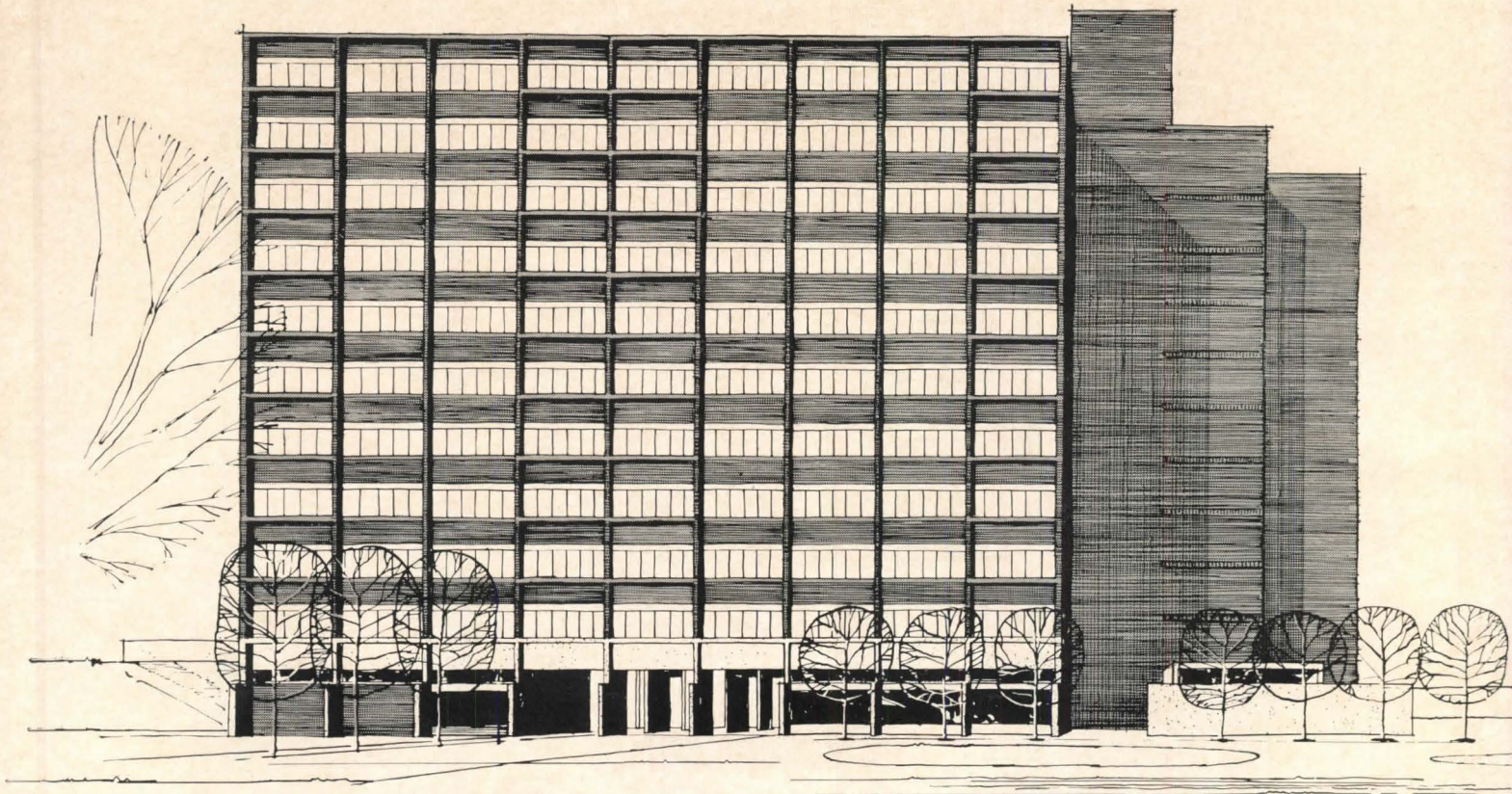
HOPE'S WINDOWS, INC. Jamestown, N.Y.

HOPE'S WINDOWS ARE MADE IN AMERICA BY AMERICAN WORKMEN

THE CONTEMPORARY BRICK BEARING WALL

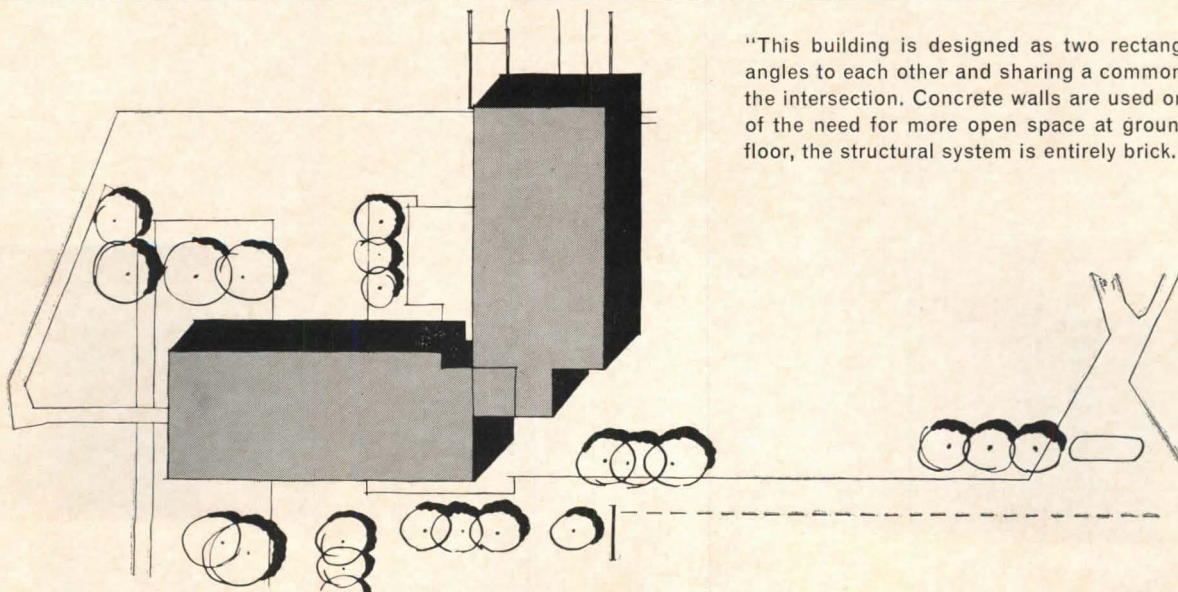
as designed by E. W. Angerer, AIA, and I. J. Milani, AIA

Eight-Inch Bearing Walls Provide Beauty, Economy, Efficiency



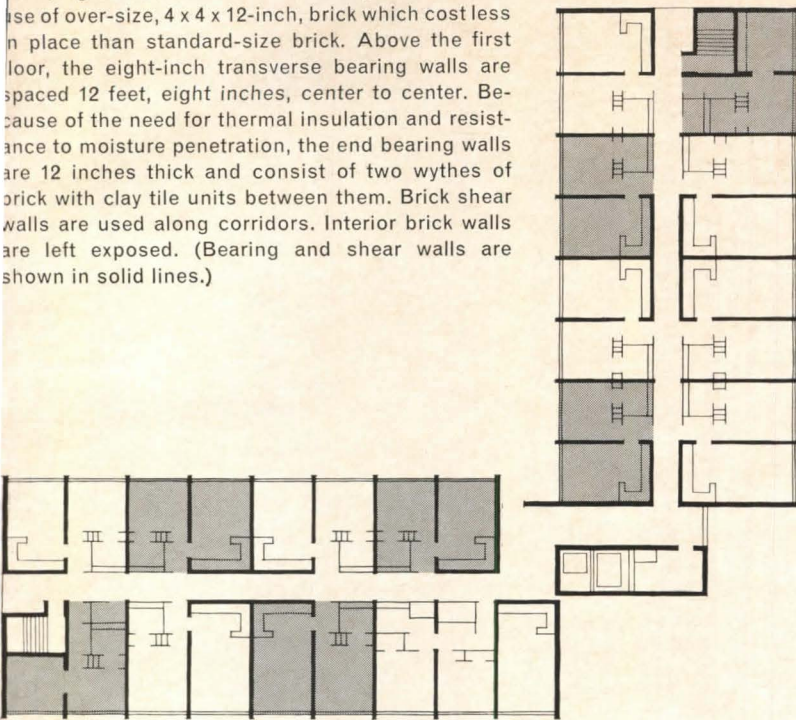
"In designing this Housing for the Elderly apartment project in Rock Island, Illinois, we faced the problem of providing a durable, easily-maintained and attractive building with a high degree of fire resistance and sound control, within the limits of a modest budget. We chose the modern brick bearing wall structural system because it provided all these qualities. This building is 11 stories high and

provides 128,000 square feet of floor space divided into 160 dwelling units. Through the use of brick bearing and shear walls, we were able to separate each apartment by solid, unpenetrated brick walls, and we were able to do this within the \$14.06 per square foot of floor area cost for construction and site development.

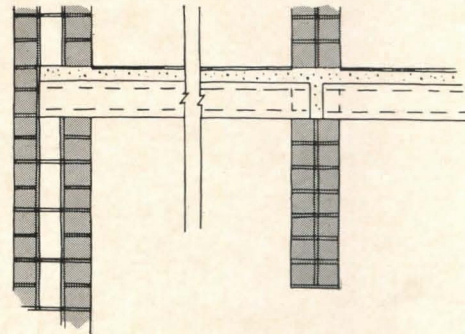


"This building is designed as two rectangular wings set at right angles to each other and sharing a common service core located at the intersection. Concrete walls are used on the first floor because of the need for more open space at ground level. Above the first floor, the structural system is entirely brick.

The efficiency and economy of our structural system derives from two major factors: The use of solid, eight-inch-thick interior bearing walls, and the use of over-size, 4 x 4 x 12-inch, brick which cost less in place than standard-size brick. Above the first floor, the eight-inch transverse bearing walls are spaced 12 feet, eight inches, center to center. Because of the need for thermal insulation and resistance to moisture penetration, the end bearing walls are 12 inches thick and consist of two wythes of brick with clay tile units between them. Brick shear walls are used along corridors. Interior brick walls are left exposed. (Bearing and shear walls are shown in solid lines.)



"The floor system consists of precast concrete hollow-core planks. These planks bear eight inches onto the end bearing walls and are joined over the center of the interior bearing walls. The planks are topped with two inches of concrete containing wire mesh, insuring diaphragm action. Sills and lintels are of precast concrete laid up with the masonry to be consistent with the layer-upon-layer technique of masonry construction. Corridor floors are supported by small precast beams spanning from one bearing wall to another.



"Total construction and site development cost for the project is estimated at \$1.8 million. Approximately 550,000 dark brown, smooth-face, 4 x 4 x 12-inch brick are required. Mortar used is ASTM Type M. Fire rating for all brick walls is four hours.

"In order to minimize construction co-ordination problems, the building is designed so that all mechanical trades install their work after the spaces are enclosed. No conduit or mechanical elements are embedded in the basic wall-floor systems. Plumbing and utilities rise vertically through spaces provided behind the bathrooms and kitchens of each unit. Electrical devices in apartments are placed in gypsum board partitions, with the exception of a surface raceway incorporated in a chair rail running along the brick partitions. This method of handling plumbing and other utilities greatly simplifies construction. In addition, because the entire structure and shell of the building consists of only brick and precast concrete, the problems involved in joining materials with dissimilar expansion and flexural characteristics have been minimized. We feel that the resulting simplicity of construction widened our field of qualified bidders."

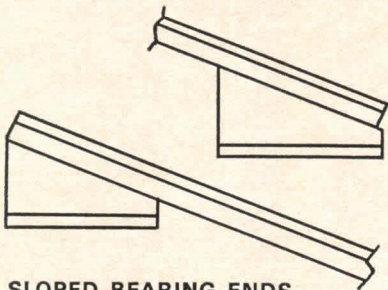
Project: **Housing for the Elderly, Rock Island, Illinois**
Architects: **E. W. Angerer, AIA, and I.J. Milani, AIA, associated architects**

Structural Engineers: **Petersen & Appel**

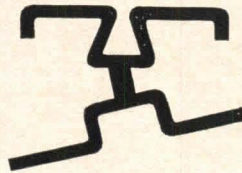
Owner: **Housing Authority of the City of Rock Island, Illinois**

BRICK:
For
Bearing
And
Beauty

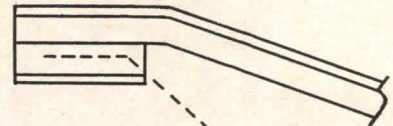
Macomber does a lot of little things to help architects and builders do a better job...for example:



SLOPED BEARING ENDS

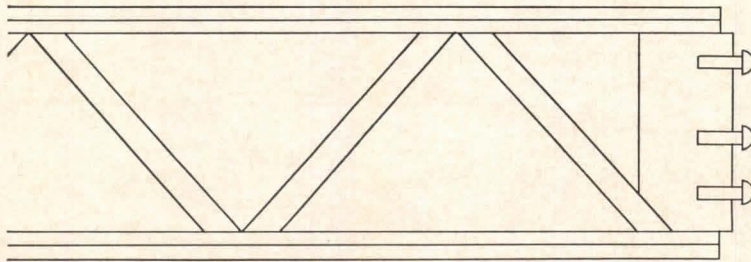


LATERALLY TILTED
BEARING PLATES

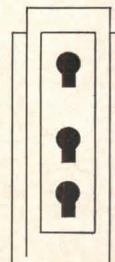


BENT BEARING END

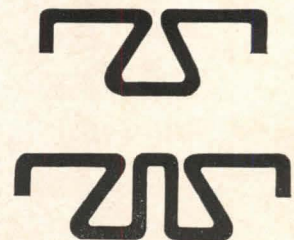
Macomber representatives can provide architects and builders with more building for their dollar. This is no idle boast, but fact based on thousands of construction jobs. Macomber representatives are experienced building people who work closely with architects and builders in providing their clients with a custom-steel-framed building that exactly suits the need, as well as getting the most usable area from the site. Macomber V-LOK® open-web framing systems have become extremely popular because they combine maximum strength and flexibility with ease of erection. V-LOK can be modified to meet almost any requirement, including the systems approach.



OPEN-WEB V-LOK GIRDER



SQUARE V-LOK COLUMN



V-SECTION CHORDS

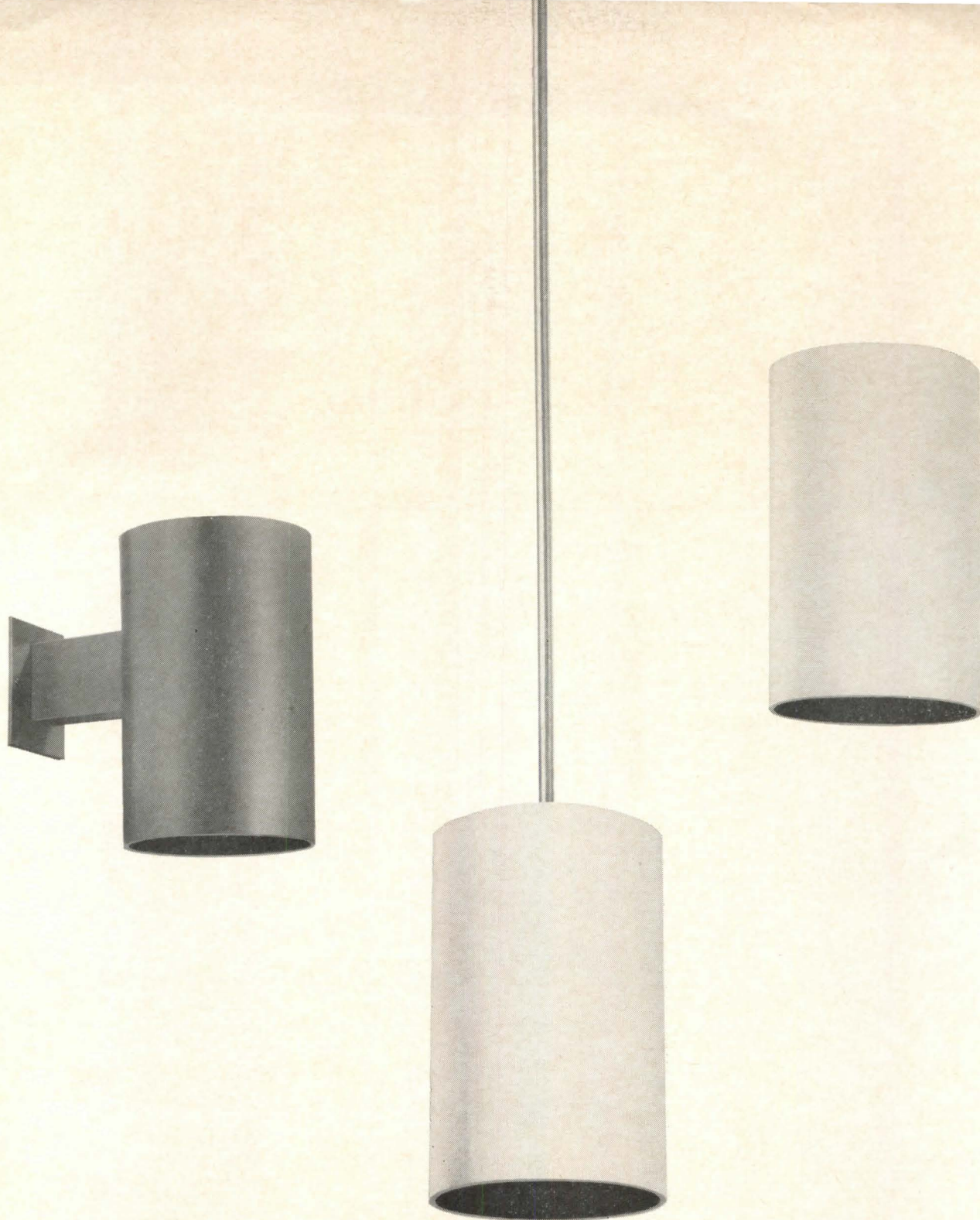
Prove it to yourself. Talk to the Macomber man in your area and discover how a sturdier custom-steel-framed building can be built to meet any specific style and set of requirements at costs equal to or even below other types, including prefabs. Literature and name of nearest representative upon request.



MACOMBER INCORPORATED

CANTON, OHIO 44701

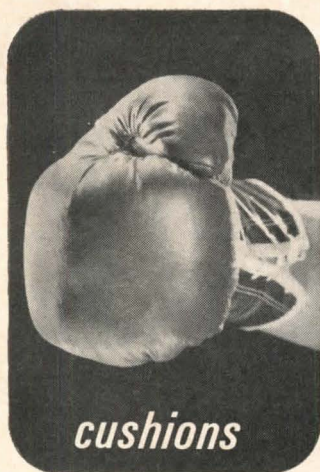
SUBSIDIARY OF SHARON STEEL CORPORATION



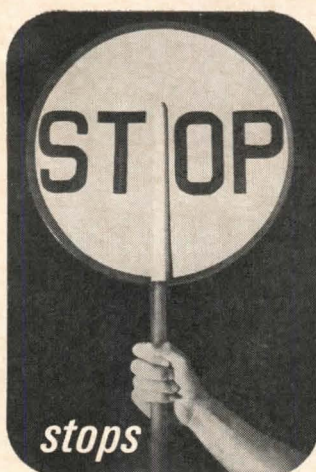
Gotham Cylinderlites are a new, visually unified group of fixtures for interior and exterior use. They are offered in two basic types: the first uses a precisely contoured black Alzak specular reflector which re-directs all spill light into the useful zone and holds surface brightness to a level so low as to be practically non-existent; the second type is finished inside with a new, baked matte black coating which eliminates all surface glare and reduces surface brightness at the aperture to a pleasingly low value. Cylinderlites are made in a wide range of sizes to utilize reflector lamps from 30 to 500 watts. Three mountings and four finishes are available.

Gotham Lighting Corporation, 37-01 thirty-first street, long island city, new york 11101

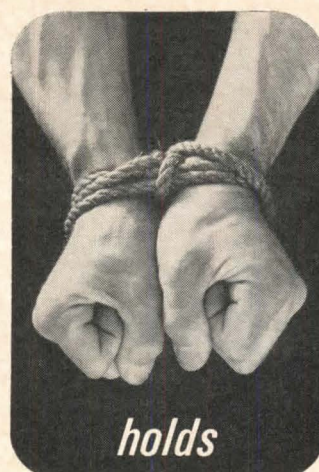
in Canada: Gotham Lighting of Canada, Ltd., Toronto, Ont.



cushions



stops

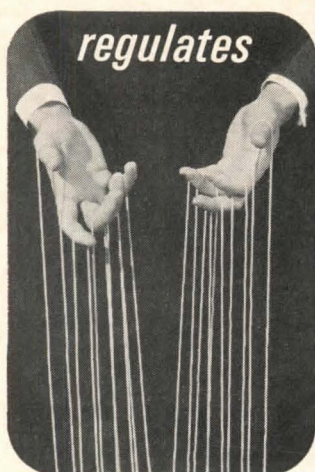


holds



closes

ALL FIVE DOOR CONTROL FUNCTIONS IN A SINGLE UNIT



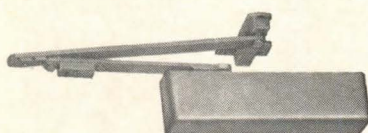
regulates



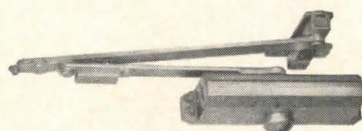
Norton Series 6100 Uni-Trol Door Control

A DOOR CLOSER AND A DOOR HOLDER—
A SINGLE UNIT ENGINEERED AND COORDINATED
TO PERFORM COMPLETE DOOR CONTROL

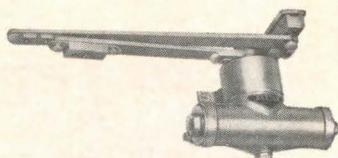
CUSHIONS the opening of the door; **STOPS** the door;
HOLDS the door open; **CLOSES** the door;
REGULATES the door closing and latch speed.



Series 6110



Series 6120



Series 6130

ATTRACTIVE DOOR APPEARANCE

You eliminate the necessity of two products at the door. Norton Uni-Trol, unitized door control, is an attractive single unit. There's only one installation at the door for a more esthetic, uncluttered appearance.

SIMPLIFIED SPECIFICATION

You only have to specify one product. You have only one catalog number and only one template to be concerned with. You completely eliminate the possibility of the mix-up of installing the wrong holder with the wrong door closer.

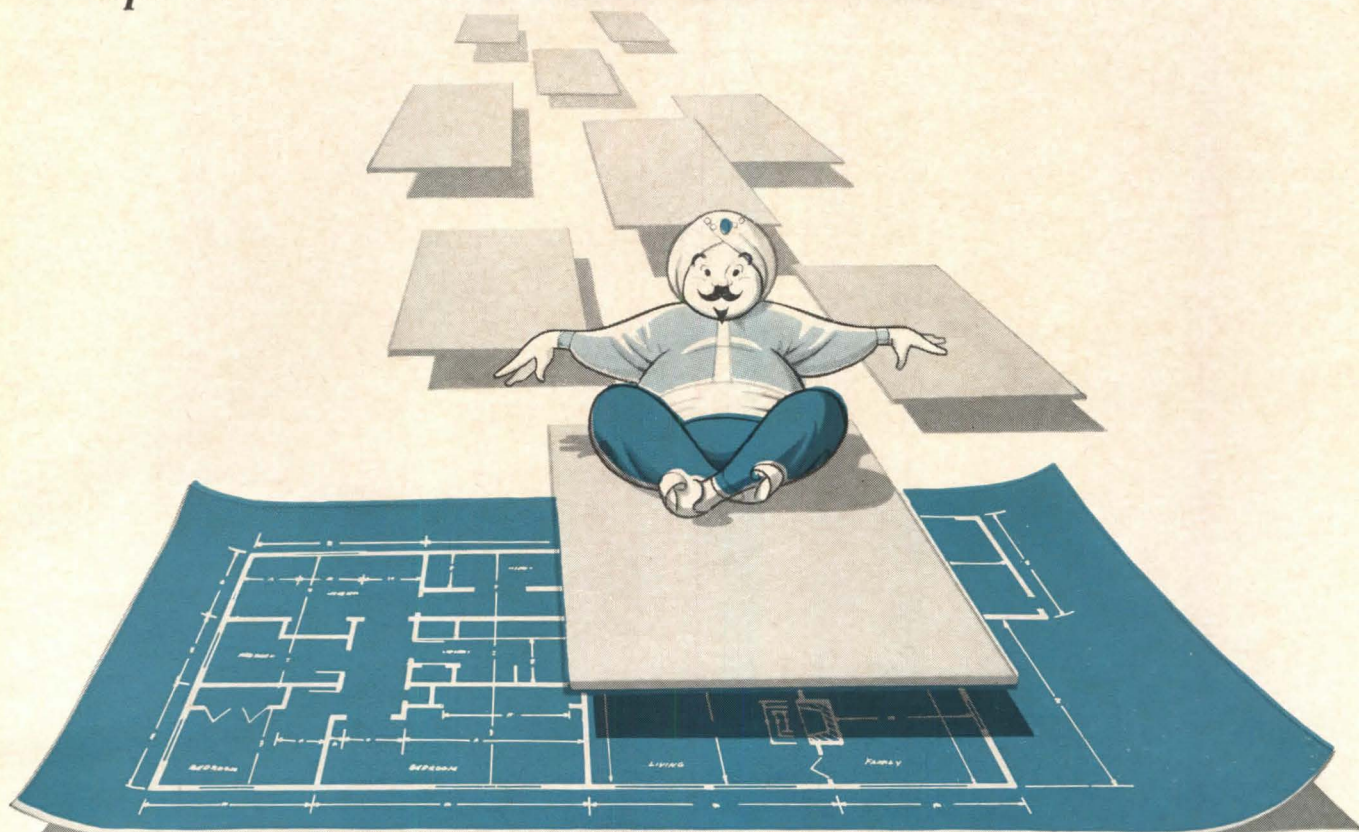
COMPLETE CONTROL

The coordinated control obtainable only with the Norton Uni-Trol assures perfect control under all conditions. Since the combined door holder and door closer are functioning as a unit, there's less strain on each, far less strain on the door and frame.

For complete details, write for Manual "U", or contact your Norton representative.

NORTON® DOOR CONTROLS
372 Meyer Road, Bensenville, Illinois 60106

Specified in MORE and MORE fine construction..



HOMASOTE RESILIENT UNDERLAYMENTS

put a "magic carpet" cushion—
under flooring over concrete

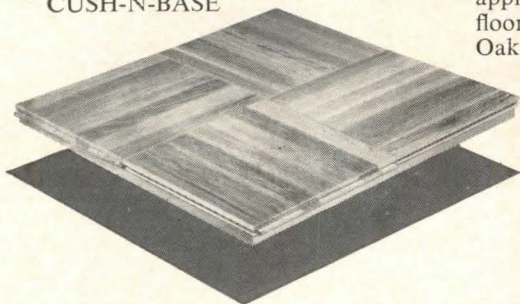
Hard, cold concrete becomes softer-feeling, warmer, insulated — with Homasote wood-fibre insulating panels. Better still, their just-right resiliency brings welcome cushioning and quiet* to wall-to-wall carpeting in high and low-rise apartments, institutions and homes.

All wood-fibre Homasote is available in $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ " thicknesses — in easily handled 4' x 4' or 4' x 8' sizes. Weather-proof, termite protected and non-bituminous. Applied to concrete above-grade with adhesive, for conventional installation of carpet and pad with tackless (or other) methods.

CUSH-N-BASE, the prefinished parquet panel has a Homasote underlayment built-in. Panels are 12"x12"x11/16" for application by adhesive to concrete (above grade) and to old floors. Solid parquet, in Red and White Oak or Dark Brown Oak, is factory prefinished.

For additional details on Homasote Underlayments and "Cush-N-Base" Parquet Panels, write Dept. C-4.

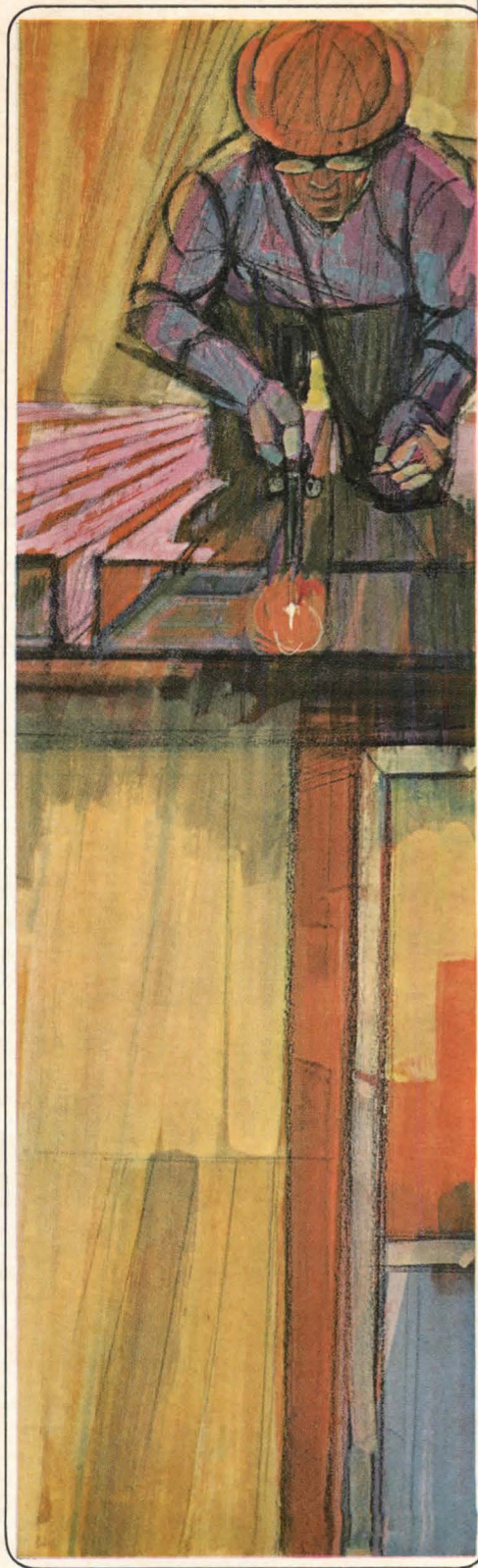
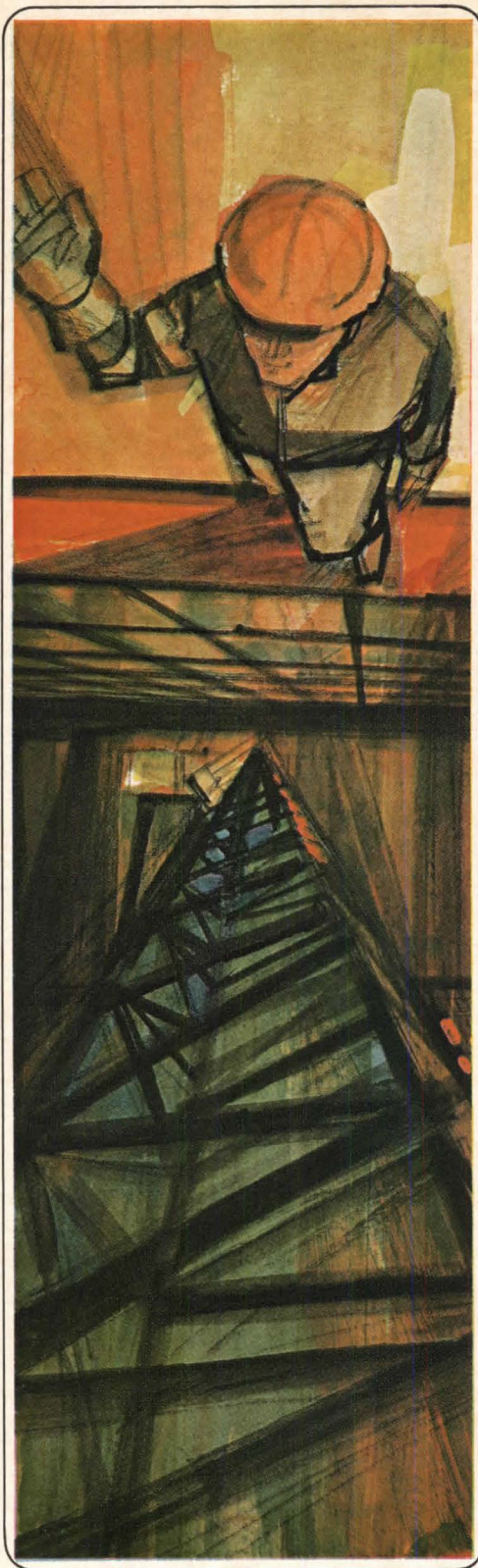
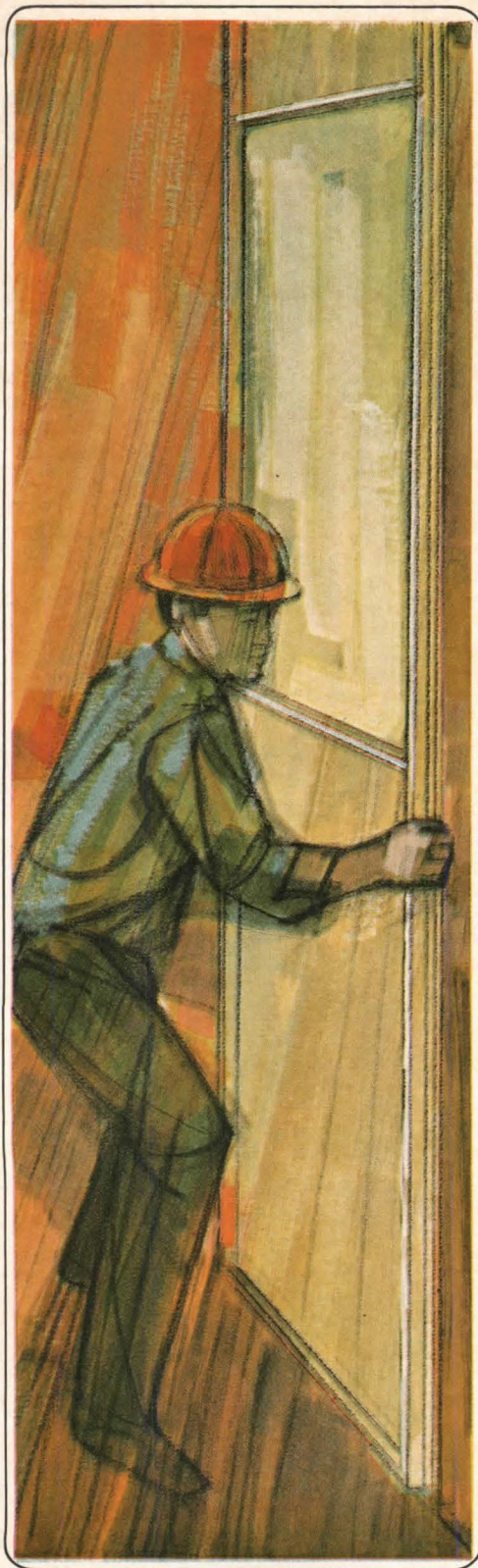
CUSH-N-BASE



*STC 47. INR + 19 with carpet and 32 oz. felt pad over 15/32" Homasote and 5" concrete slab. Tested in accordance with ISO-R-140 and FHA #750. Test data available on request.

homasote Company

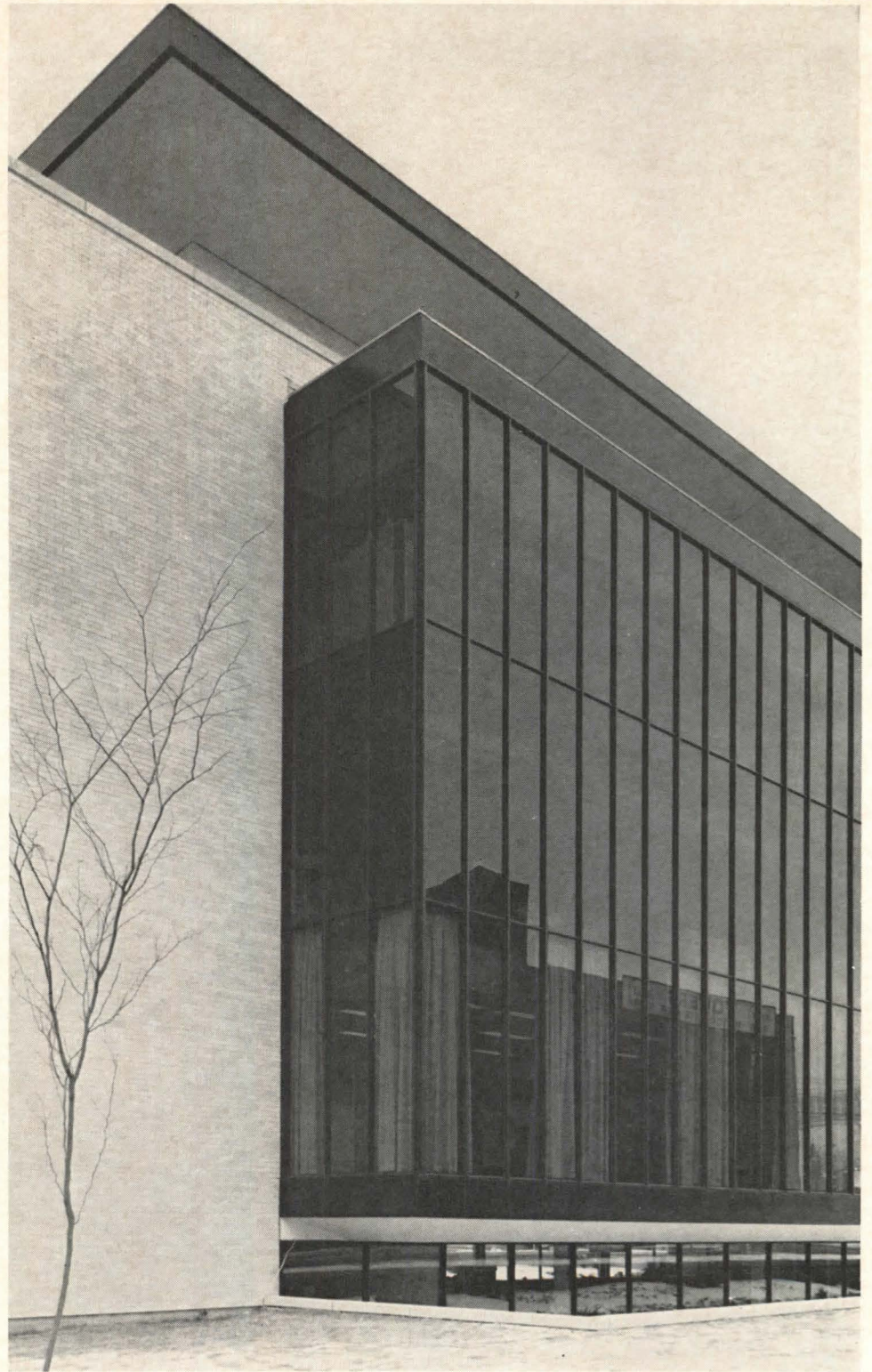
Trenton, N. J. 08603



New Pre-engineered Wall Systems

Fenmark wall systems offer pre-engineered answers to a variety of design requirements for one, two and multi-story buildings; for example, carrying the massive area of grayed glass on this Lowell, Massachusetts office building designed by Gensmer & Barton of Cambridge. Only steel is strong enough; only Fenestra offers a five-year performance warranty, and only Fenmark has all these features: hundreds of component combinations and sizes; watertight integrity; no exposed fasteners; condensation draining design and a rugged new oven-cured, two-coat, silicone-alkyd copolymer finish.

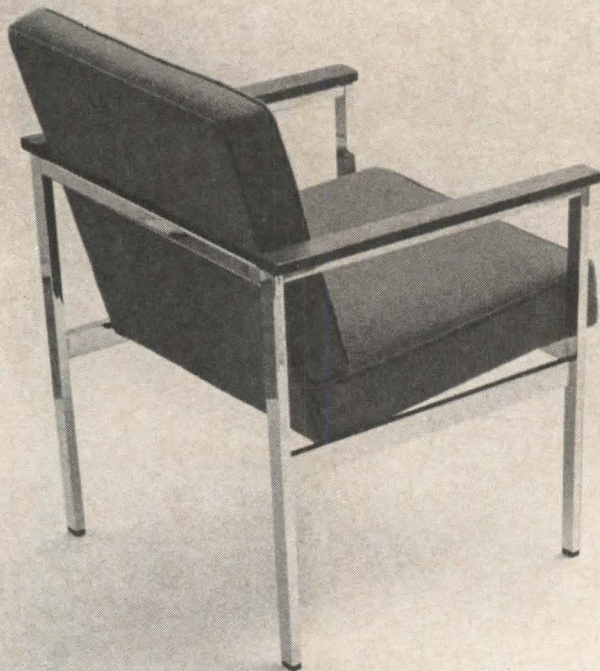
Performance begins with fast installation and compatibility with other systems: 1) To shear walls, add any of a variety of Fenmark units. 2) On one and two story buildings, top it off with D-Panel, the lightweight, longspan structural deck that provides a finished ceiling, plain or acoustical. You get the ultimate in simplicity and strength — one product, one trade, one responsibility. For the full story, check with your Fenestra engineering representative or write Fenestra, Inc., 1101 E. Kibby Street, Lima, Ohio.



FENESTRA

FENMARK GRID WALL SYSTEMS

We can't show you the most important part.



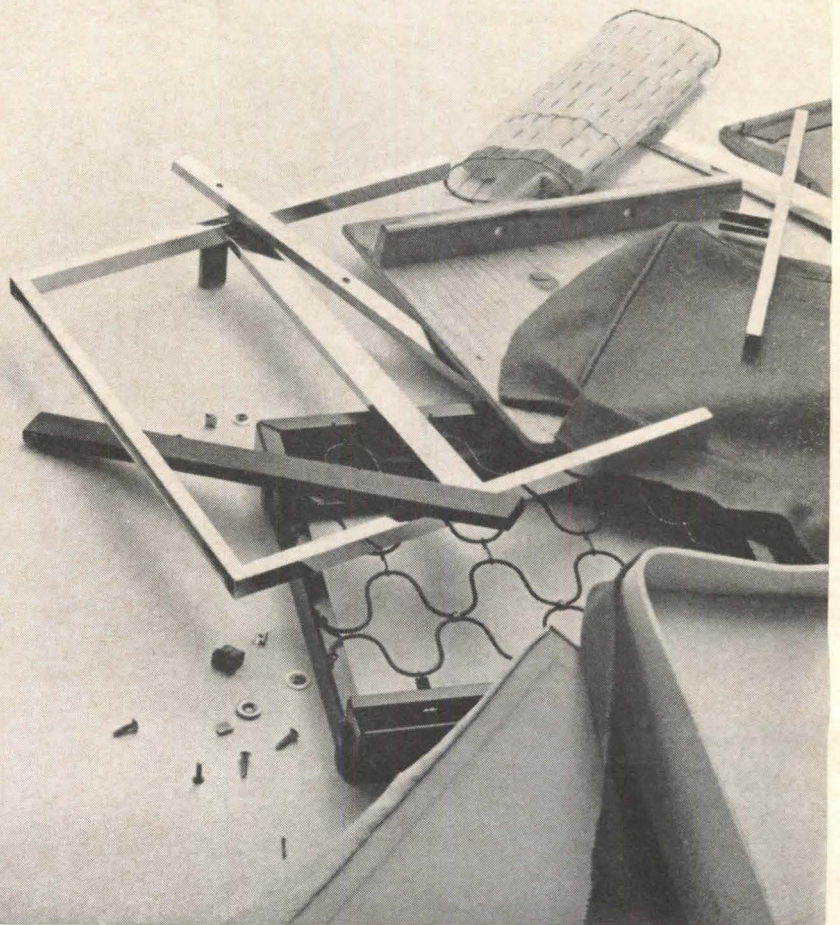
It's the trouble our furniture makers go to.

Their rule of thumb: anything in the Art Metal line worth doing is worth doing well. Right down to the last little upholstery clip.

Take our 900 line executive side chair. Comfortable. But firm. The no-sag spring seat construction will never let you down.

Another thing. All joints and seams are welded. Invisibly welded. Like this: metal clips are first welded to the legs. Then polished or brushed chrome steel stretchers are fitted over them covering the weld. Result: clean smooth joints and seams.

Everything about our executive chair is made the way office furniture ought to be. Furniture that looks beautiful and works beautifully—a solid investment for the management who pays for it.



ART METAL INC
JAMESTOWN, NEW YORK



Chairs by Stendig.

Mosaic introduces Champagne Glaze scored tile.
It's for people who want to be subtle without being dull about it.

There's never a dull moment with Champagne Glaze around.

Look how it brings that left wall to life. Yet it doesn't get pushy. It doesn't try to be the whole show.

It can't.

Champagne Glaze tile is like all other Mosaic tiles. It's absolutely color-compatible under any circumstances.

Notice how nicely it gets along with the outside wall of Velvetex 661 and our Egyptian quarry tile floor. And without stealing a thing from the recess wall of Velvetone

124 with highlights of Faintex 1291.

Champagne Glaze comes in five colors on a 4¼" x 4¼" scored wall tile body. Just to put your ideas in a little better light.

For prices, samples and availability, contact any Mosaic Representative, Service Center or Tile Contractor.

See Yellow Pages "Tile Contractors-Ceramic". Or write: The Mosaic Tile Company, 55 Public Sq., Cleveland, Ohio 44113. For comparable colors in the West: 909 Railroad St., Corona, Calif.

MOSAIC

"Mosaic" is the trademark of The Mosaic Tile Company.

And now American-Standard brings you

A Glenwall* that's longer in shape, more sanitary in use

Available with optional Vent-Away*, the new, built-in air-siphoning device that whisks odors down the drain



Now look at the Glenwall, the first off-the-floor toilet priced to compete with floor-mounted toilets. This *Elongated* Glenwall has a longer look that makes it even handsomer. And a larger bowl that puts more area under water for easier maintenance . . . helps keep the floor clean and sanitary. ☐ Optional with Elongated Glenwall is the Vent-Away toilet ventila-

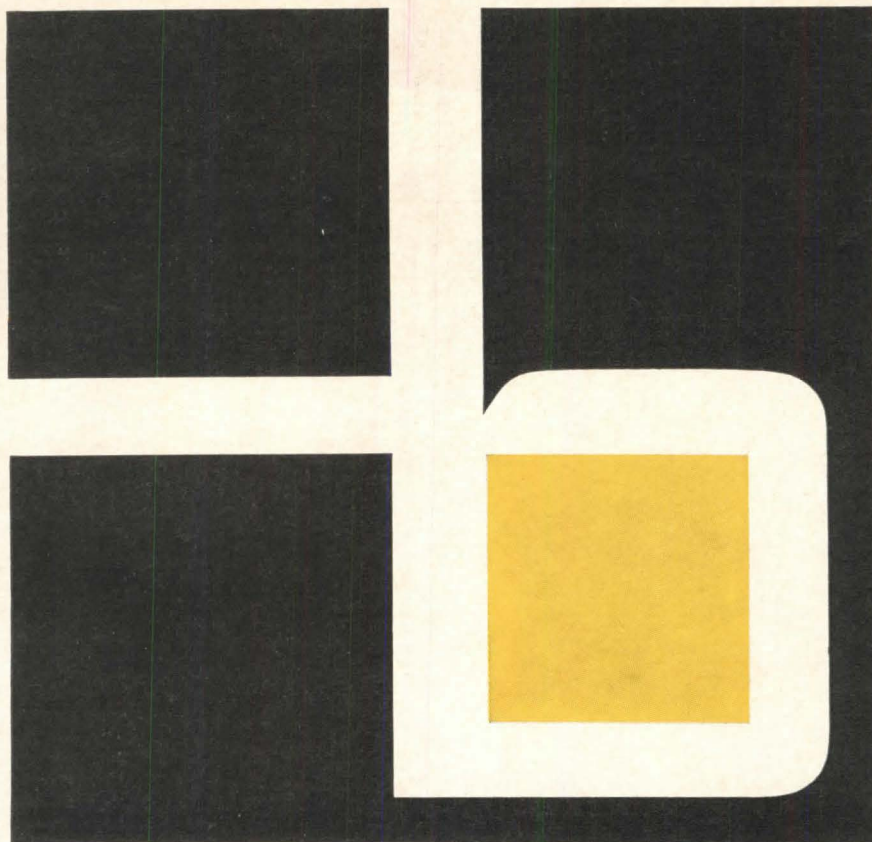
tor, a new American-Standard air-siphoning device. It whisks toilet odors down the drain before they can become bathroom odors. It is fast and quiet, with nothing to install, adjust or get out of order. Call your American-Standard representative for details, colors, etc. Or write American-Standard, Plumbing and Heating Div., 40 W. 40th St., N.Y., N.Y. 10018.

*Trademark AR&SS Corp.

AMERICAN-STANDARD



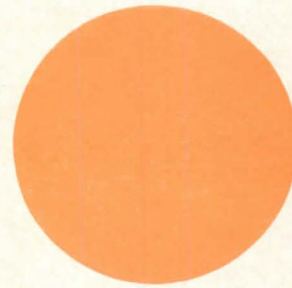
American-Standard and Standard are trademarks of American Standard & Standard Sanitary Corporation.
AMERICAN-Standard
PLUMBING AND HEATING DIVISION



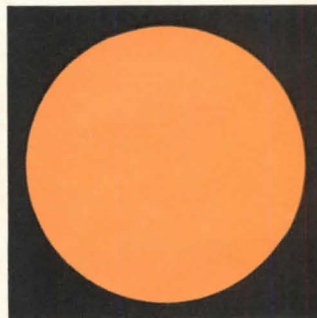
BAYLEY

NEW MARK, OLD TARGET—Have you seen the new William Bayley mark of quality and service? Our tradition of highest quality in metal windows and curtain walls is 88 years old. Our service, however, is strictly 1966. We use our new mark to remind you we're putting new ideas into windows, more application assistance on your project, assured on-time delivery at your site. The target: your satisfaction. The William Bayley Company, Springfield, Ohio. Request our newest catalog today.

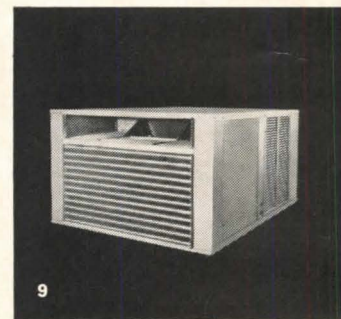
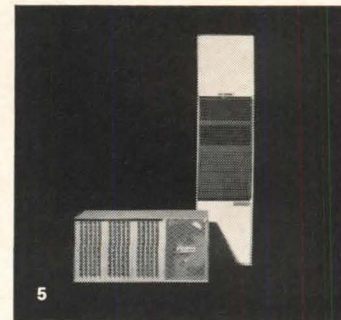
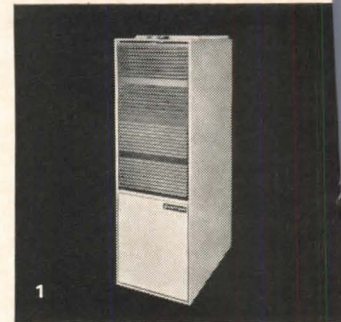
**What do you
want to do
with the heat?**

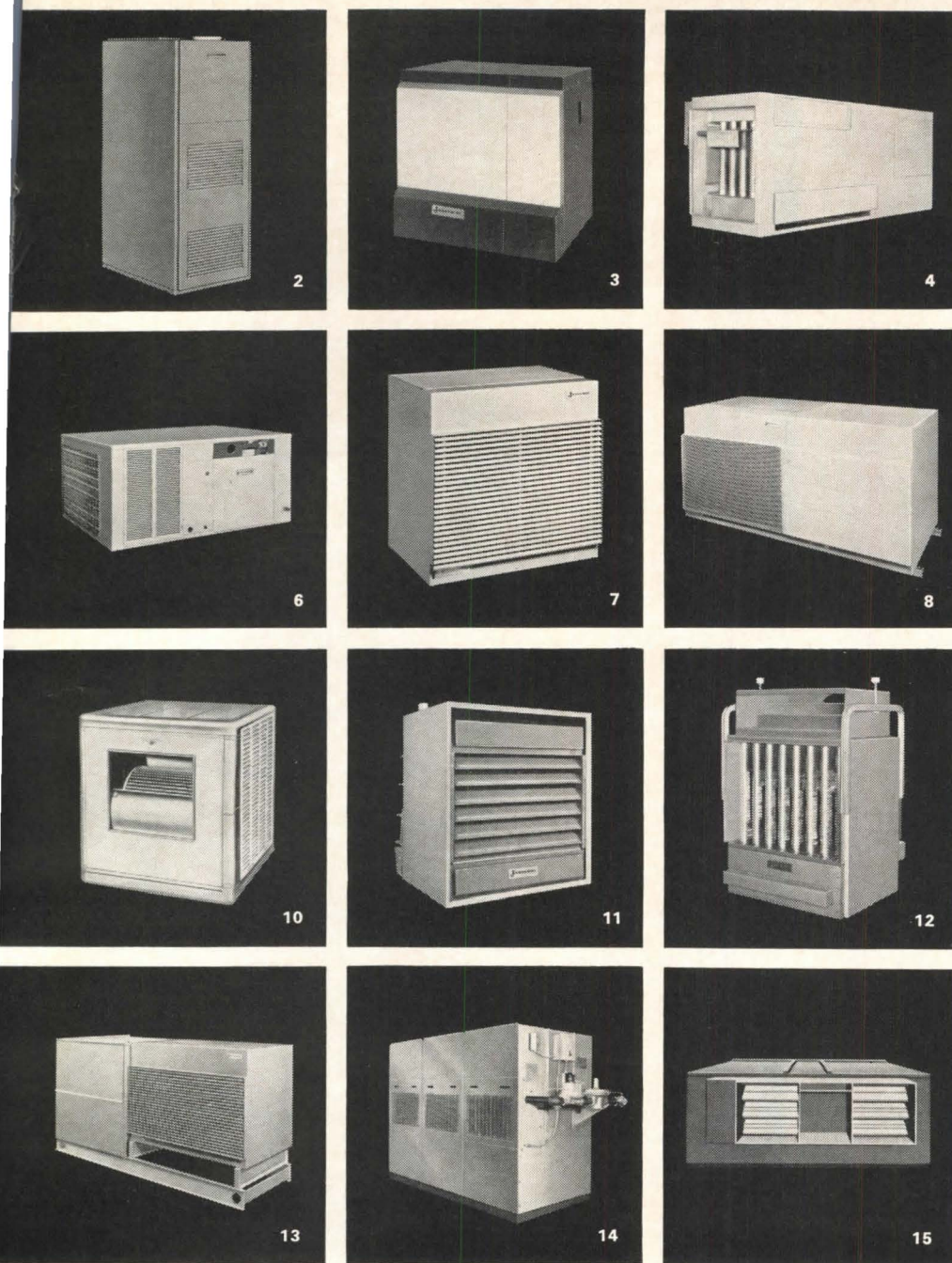


Take it out?



Put it in?





FOR RESIDENTIAL AND LIGHT COMMERCIAL HEATING

1. **Gas-Fired Forced Air Furnaces.** Up-flow or downflow models with belt or uni-drive. For natural, mixed or L-P gas. 50,000 to 225,000 Btu.
2. **Oil-Fired Forced Air Furnaces.** Up-flow, counterflow, lowboy and horizontal models. 85,000 to 335,000 Btu.
3. **Gas-Fired Boilers.** 49 sizes ranging from 60,000 thru 6,000,000 Btu. Steam and forced hot water. Includes models with storage tank water heaters.
4. **Horizontal Gas-Fired Forced Air Furnaces.** Compact for installation in basement, crawl space or attic location. 65,000 to 150,000 Btu.
5. **Year 'Round Comfort Package.** Compact gas-fired heating with matching precharged cooling system. Designed for small homes, apartments, zoned systems. 1 to 3 tons cooling. 50,000 to 150,000 Btu heating.
6. **Electric Cooling/Gas Heating Package.** Weatherproof package for rooftop or slab installation. Automatic change-over to heating or cooling. 2, 3 or 5 ton cooling. 65,000, 100,000 and 150,000 Btu heating.

FOR COOLING: ADD-ON OR INDEPENDENT SYSTEMS

7. **Electric Air Conditioning Units.** Weatherproof, top discharge, air cooled condensing units. 2 to 10 ton. Up to 20 tons when banked.
8. **Gas Engine Air Conditioning.** Low cost operation. Air cooled. Natural or LP gas and 115v. AC. 5 and 10 tons.
9. **Package Cooling Units and Heat Pumps.** Weatherproof, 2 to 10 ton capacity. Heat Pumps in either package or split-system models.
10. **Evaporative Air Coolers.** Evaporative cooling with blower and filter for either free discharge or ducted application. Up to 19,500 CFM for residential, commercial and industrial installations.

FOR COMMERCIAL-INDUSTRIAL HEATING AND/OR COOLING

11. **Gas-Fired Unit Heaters.** Rugged Dura-Tube heat exchangers. 24 Models from 25,000 to 350,000 Btu.
12. **Gas-Fired Duct Furnaces.** For outdoor or indoor installation. Aluminized or stainless steel heat exchangers. 50,000 to 700,000 Btu.
13. **Skyliner Rooftop Units.** For any combination of heating-cooling-ventilating. Natural, mixed or L-P gas heating. Electric or gas engine powered cooling. 5 to 20 ton cooling. 200,000 to 700,000 Btu heating.
14. **Heavy-Duty Gas-Fired Blower Heaters.** For either free-discharge or central use. 250,000 to 1,750,000 Btu.
15. **Direct-Fired Make-Up Air Heaters.** Provide large volumes of filtered tempered air to prevent drafts, air starvation in large plants. 5,000 to 100,000 CFM capacity. Also complete line of Indirect Fired Make-Up Air packages.

Janitrol makes the unit to fit your exact needs!

Whatever your heat-handling problems, you get more—and better—solutions from Janitrol. More products, with Janitrol's complete, broad line. More engineering know-how that pays off in dependable design, easier installation, more customer satisfaction. You get more field and technical assistance with Janitrol's expert field network and factory training. Faster availability from Janitrol's two factories plus 12 regional warehouses. It pays to get at least one estimate from Janitrol. For full details and specifications, contact your Janitrol representative. The name's in the yellow pages. *Janitrol gives you more to work with.*

JANITROL DIVISION
Midland-Ross Corporation
Columbus, Ohio



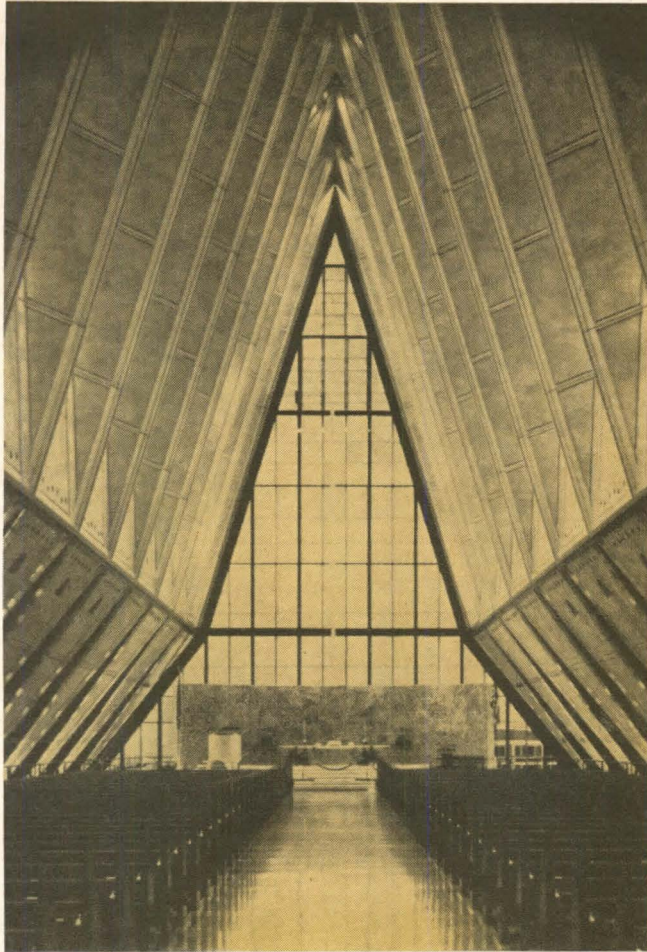
Inspirations

with

GLAS-

-WICH®

the MODERN
decorator's glass



Custom designing has taken on new dimensions. Glas-Wich, the latest in creative ideas, give you a chance to design with extra qualities for added interest. An invisible sound barrier, safety and heat absorbing qualities of Glas-Wich make it a designer's dream for beauty with utmost efficiency.

Example: Award-winning United States Air Force Academy Chapel. Glas-Wich reflects 90% of the heat from sun's rays.

Adventures in Glass
by **dearborn**
glass company

6600 S. HARLEM, BEDFORD PARK, ARGO P.O., ILLINOIS 60501

**It's All
Right
To Stack
Them
Up...
BUT!**

**Unless
You Build
Right, All
You Are
Doing Is
Stacking
Up Trouble**

Today, more and more parking facilities are multi-storied garages, both above and below ground.

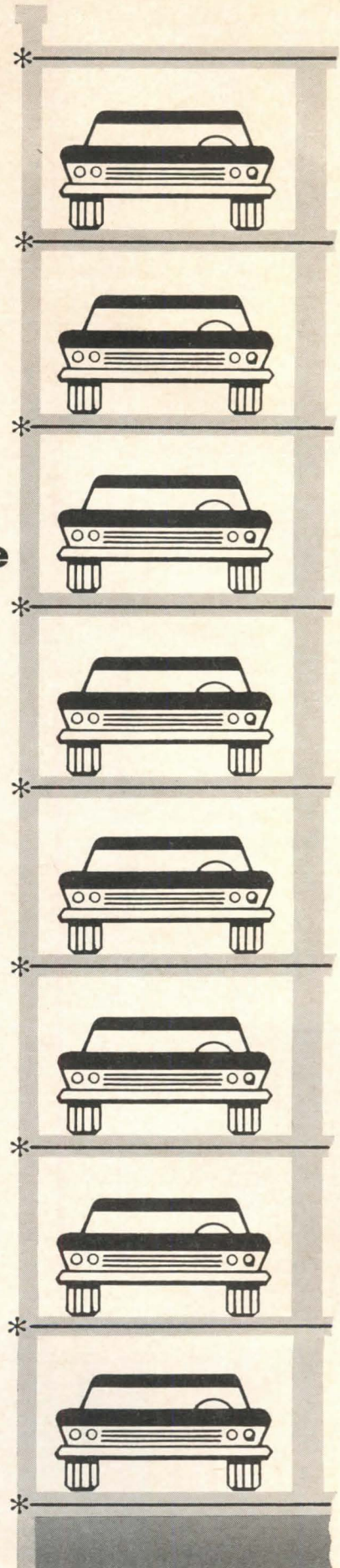
This means avoiding "drip-through" porosity is a vital construction factor.

* Carlisle Sure-Seal Rubber Membrane installed in decks and ramps forms an impassable moisture barrier . . . completely eliminates "drip-through" and saves your clients thousands of dollars in repairs and possible litigation.

Write today for complete information and specifications. Carlisle Sure-Seal has been both time and torture tested.



SPECIAL PRODUCTS DEPT.
CARLISLE TIRE & RUBBER DIV.
CARLISLE CORPORATION
CARLISLE, PA. 17013





An Invitation to Charter Membership in a unique and timely new program

THE LIBRARY OF URBAN AFFAIRS

...and an unusual Special Offer to accept any 3 of these
fine books (values to \$36.45) for only one dollar each

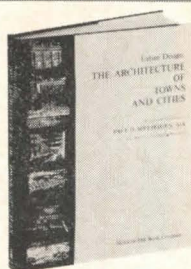
1. THE HEART OF OUR CITIES. *Victor Gruen.* An architect-planner's vigorous and profound analysis of the ills of our cities. With many workable suggestions for improvement. 150 illustrations. **List Price \$8.50**

2. THE DEATH AND LIFE OF GREAT AMERICAN CITIES. *Jane Jacobs.* A reasoned attack on current methods of city planning—with practical proposals for revitalizing our cities and halting decay. **List Price \$7.50**

3. CITIES. Provocative essays on the urbanization of the world's population, from the distinguished issue of *Scientific American*. Contributions by Sjöberg, Davis, Blumenfeld, others. Illus. **List Price \$4.00**

4. URBAN GROWTH DYNAMICS. *Chapin & Weiss, editors.* Eighteen specialists in city planning, sociology, and other disciplines discuss the phenomenon of urbanization in American society. **List Price \$8.95**

5. PLANNING FOR MAN AND MOTOR. *Paul Ritter.* Outsized volume analyzing the needs of people and vehicles in an urban environment. Over 800 illustrations. **List Price \$15.00**



6. URBAN DESIGN. The Architecture of Towns and Cities

Paul D. Spreiregen, AIA. Written expressly for The American Institute of Architects, this richly illustrated book thoroughly explains the design of towns, cities, and regions. Covers the history, principles, and practices of urban design in significant detail. Hundreds of sketches and plans of good design. **List Price \$12.50**

7. THE CHICAGO SCHOOL OF ARCHITECTURE. *Carl W. Condit.* A brilliant, lavishly illustrated assessment of the renowned "Chicago school," and their unique buildings. Reviews achievements of Sullivan, Wright, Root, Burnham, others. **List Price \$8.50**

8. THE CITY IS THE FRONTIER. *Charles Abrams.* A passionate statement of the city's indispensability to American civilization. Documents the city's ills and problems—and offers feasible solutions. **List Price \$6.50**

9. THE URBAN COMPLEX. *Robert C. Weaver.* The Secretary of Housing and Urban Development considers some of our cities' major problems: the impact of urbanization on society, the shortage of low-income housing, other topics. **List Price \$4.95**

10. THE CITY PLANNING PROCESS. *Alan A. Altshuler.* A searching analysis of current city planning theory and practice: planning in a democratic society, political and administrative obstacles to planning, etc. **List Price \$8.50**

WHY THE LIBRARY OF URBAN AFFAIRS?

Our cities have been called "the great unspoken, overlooked, underplayed problems of our times." But today people from many fields and disciplines are urgently seeking solutions to these problems and planning for the future. What has been needed is a *single source of authoritative, up-to-date information* on the death of neighborhoods, troubled schools, traffic chaos, explosive race problems, the "other America", and the many crises now sweeping the nation's urban centers.

THE LIBRARY OF URBAN AFFAIRS has been created to meet this need. It brings together — for the first time — the finest, most significant books on all aspects of urban life. Under the guidance of a distinguished Editorial Advisory Board, these books are chosen for their timeliness, their ability to cut through to the heart of a problem, to stimulate lively, even controversial ideas. Selections cover the entire spectrum of urban affairs, dealing with such topics as: *urban planning, city government, urban sociology, education and welfare, housing, crime and delinquency, family problems, and many others.*

As a Charter Member, you receive — each month — a special report on the current selection, often written by an outstanding authority on the subject. *All selections are available to members at savings up to 40%.* However, you need accept as few as four books during the next twelve months. (The Charter Membership Offer above counts as your first selection.) And you receive a *free Bonus Book* of your choice with every fourth purchase.

Why not join in this exciting new program designed for all those who are seriously concerned with the future of our cities.

Editorial Advisory Board

Charles Abrams
*Housing and Planning
Consultant*

Herbert Gans
*Associate Professor of Sociology
and Education; Research
Associate, Institute of Urban
Studies; Columbia University*

E. A. Gutkind
*Research Professor, International
History of City Development;
Institute for Urban Studies,
University of Pennsylvania*

Michael Harrington
Author, THE OTHER AMERICA

The Hon. Arthur Naftalin
Mayor, Minneapolis, Minnesota

Anna Arnold Hedgeman
*Committee on Race Relations;
National Council of the
Churches of Christ*

Joseph D. Lohman
*Dean, School of Criminology,
University of California,
Berkeley*

Frank Riessman
*Associate Professor, Department
of Psychiatry, Albert Einstein
College of Medicine*

Christopher Tunnard
*Director, Urban Studies
Program; Professor of City
Planning, Yale University*

CHARTER MEMBERSHIP FORM

Library of Urban Affairs 59 Fourth Ave./New York 10003 U-U01

Please enroll me as a Charter Member and send me the three books circled at the right, for which I will be billed only \$1.00 each plus postage. I understand that I need buy as few as three more books during the next twelve months, and I will receive a *free Bonus Book* of my choice after every fourth Selection.

Circle three:

1	2	3	4	5
6	7	8	9	10

Name _____

Address _____

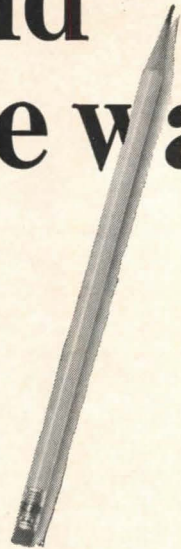
City _____

State _____

Zip Code # _____

Please be sure to insert correct zip code.

**Go ahead. Design a
ceiling that cools, heats,
lights, communicates,
controls sound and
beautifies just the way
you want it to...**



I will install it. And guarantee its performance, too!

By combining many essential functions into one system, today's electric integrated ceiling gives you new freedom in interior design. Take full advantage of that freedom. Create the ceiling that does what you want it to do, looks the way you want it to look. Then make it part of the electrical specifications and let your qualified electrical contractor take it from there.

Why an electrical contractor? Because most of the functions of an integrated ceiling are powered or controlled

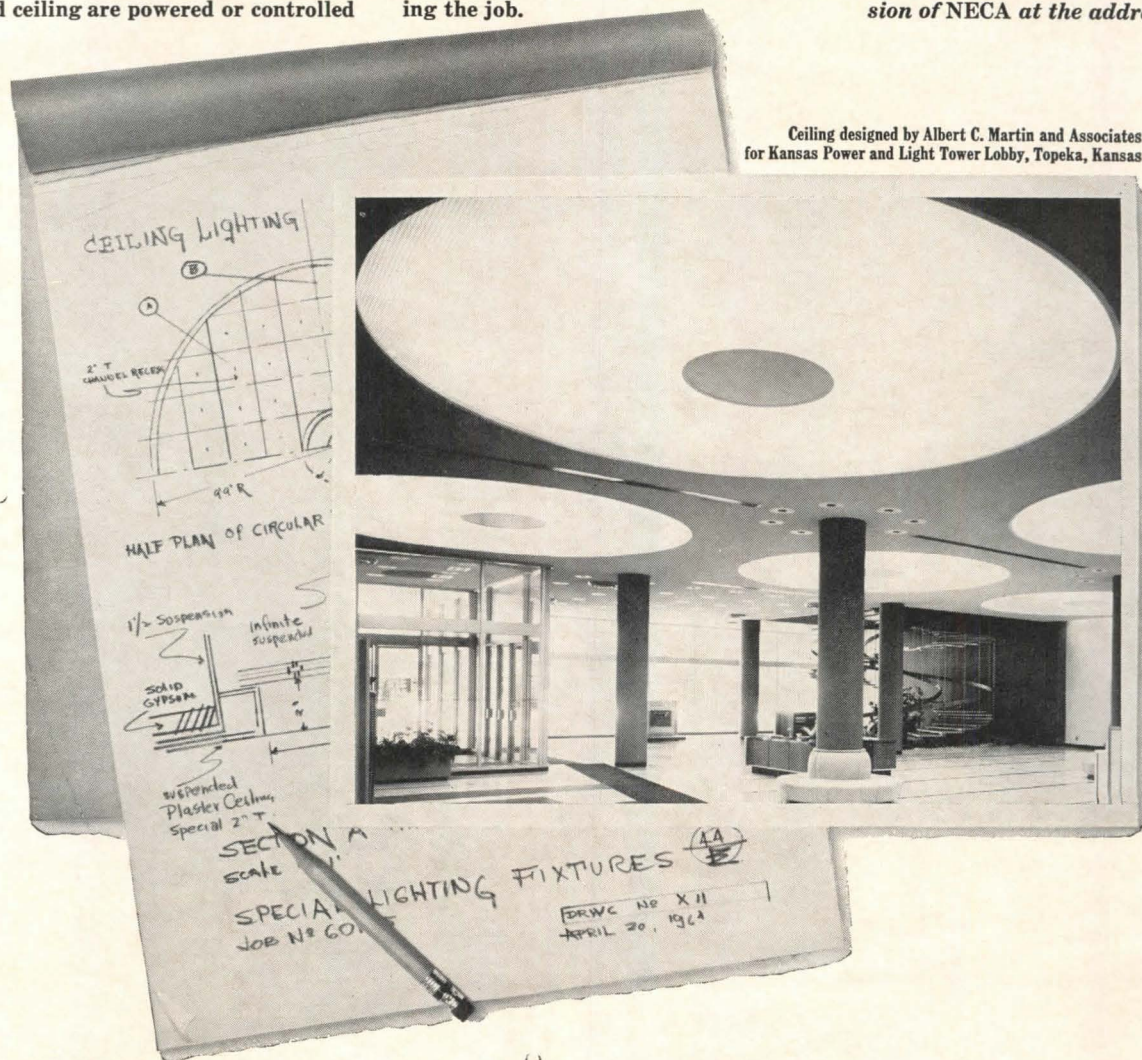
by electricity... and electricity is the electrical contractor's business.

Of course, proper installation will require the services of carpenters, sheet metal men, plasterers, plumbers, heating and refrigeration men. But your qualified electrical contractor has plenty of experience in coordinating the efforts of these specialists—and he has available to him established and recognized procedures through which jurisdictional questions can be settled without delaying the job.

And that's not all. Place the responsibility for your integrated ceiling in the hands of your qualified electrical contractor and he'll guarantee the performance, not only of the electrical functions, but of the entire electrically space-conditioned ceiling system.

NECA has prepared a film on integrated electric ceilings. To arrange a showing, contact the Marketing Division of NECA at the address below.

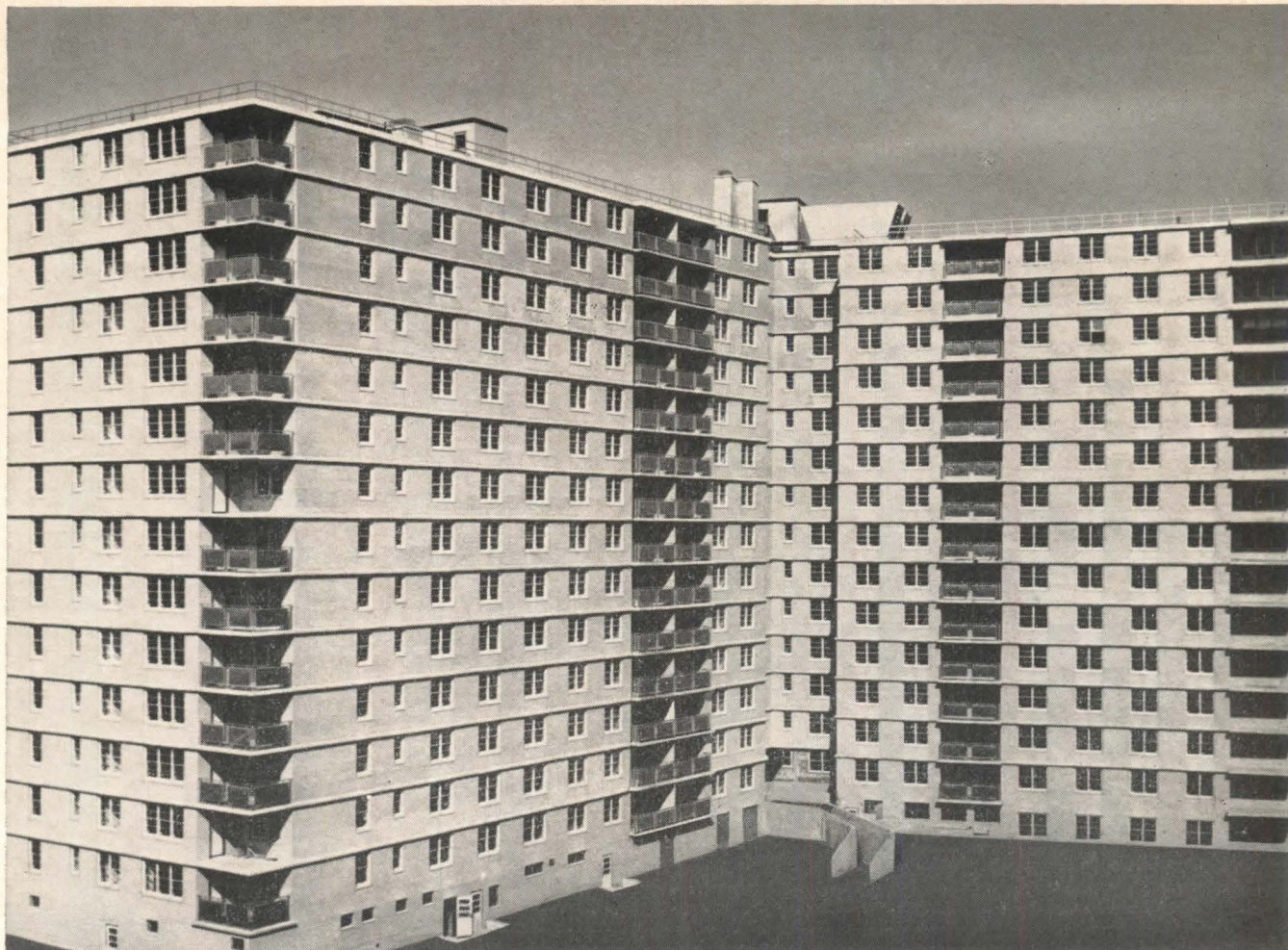
Ceiling designed by Albert C. Martin and Associates
for Kansas Power and Light Tower Lobby, Topeka, Kansas



Your Qualified Electrical Contractor

NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION, 610 Ring Building, Washington, D.C. 20036





Northbridge Park, Fort Lee, N. J.;
Lejo Construction Co., Leo Goodman,
John Guidera, Co-Owners; Englewood, N. J.;
Architects: Erwin Gerber & A. Pancani,
Newark, N. J.

"We made 280 apartments more homelike with Malta Wood Windows."

Our next one, under construction,
has Maltas, too."

What helps sell quality homes can also help fill apartments, condominiums and office buildings. When an apartment or office looks more homelike, tenants stay put. Malta Wood Windows dispel the institutional coldness of high-rise construction. The owner saves on heat loss, air conditioning and general maintenance. You can clean or brighten Malta Windows inside and out — from the inside. Malta Windows are easily removed without tools or trouble. Wood windows are best for high-rise where wind velocity makes ill-fitting metal windows noisy and costly. Add sales appeal and colorful charm with Malta Wood Windows. Find out how Malta gives your commercial building investment a new, fresh appeal for every particular tenant. Send for Catalog M66-2.



All Malta Windows display this 10-Year Warranty tag — Malta's written assurance of 100% performance through the critical years. They're built for a lifetime of satisfaction.

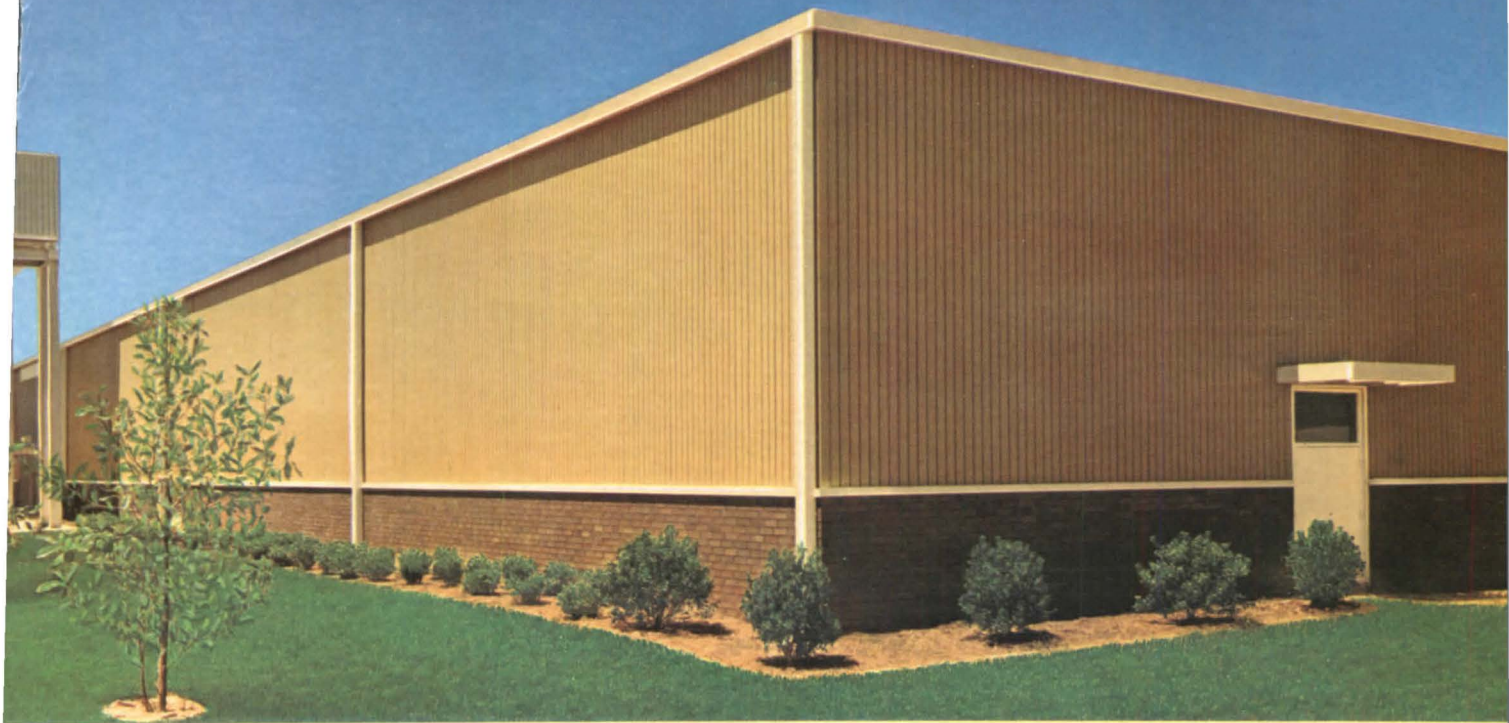


MALTA MANUFACTURING COMPANY
GAHANNA (COLUMBUS), OHIO 43020

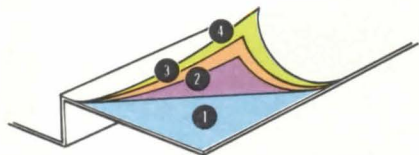
Plants in Malta and Zanesville, Ohio

***The color's baked on
so it won't bake off***

Foot & Davies
Division of McCall Corporation
Plant and Office
Atlanta, Georgia
Architect: Toombs-Amisano & Wells
Atlanta, Georgia
Contractor: Ira H. Hardin Co.
Atlanta, Georgia



***...and you have a choice
of 30 attractive colors
with Inland Wall Systems***



1. Panel is prepared with Inland's exclusive Ti-Co continuous galvanizing.
2. Chromate coating provides a bond between galvanizing and paint.
3. Epoxy resin prime coat serves as flexible base coat for final finish, and prevents flaking.
4. Panel is finished with alkyd melamine paint chosen for hardness and weather resistance.

Inland Steel Wall Systems save on maintenance costs, even after years out of doors. A rigorous exposure test in salt-air climate has proved the weatherability, color fastness and chalk resistance of Inland's two-coat, oven-cured Duofinish.

Duofinish gives the designer a palette of 30 weather-tested colors. Inland Wall Systems are available

in 5 different panel profiles, each with its own distinctive configuration and shadow line. Panels may be used insulated, uninsulated, and as fire walls.

For complete information, see Sweet's section 3b/Inl. Or write today for catalog 243 to Inland Steel Products Company, 4107 West Burnham Street, Milwaukee, Wisconsin 53201.

Inland Steel Products



Thiokol turns on its technological force to bring you a

SEAL OF SECURITY

Intensifying its quality assurance program, Thiokol has developed the first comprehensive "Architectural Specification Guide" for building sealants. The achievement backs up its new and advanced performance standards for polysulfide base sealants; its "Tested and Approved" seal* for compounds meeting the standards; its continuous monitoring of performance capability.

A significant contribution to progress in structural sealing, Thiokol's authoritative "Architectural Specification Guide for Sealants" offers depth information for easier, surer selection and application of compounds based on LP® polysulfide polymer.

The Guide encompasses a wide sealing spectrum, giving detailed specifications and procedures for glazing; for weatherproofing metal curtain walls; for sealing joints in concrete, stone, masonry, as well as deck and paving. Like the "Tested and Approved" seal*—a sign of quality sealant—Thiokol's Guide pro-

vides an extra measure of certainty in the job of specifying and applying building sealants.

*The manufacturer warrants by affixing this seal to his label that the product is a duplicate of materials independently tested and approved by—and in accordance with standards established by—Thiokol Chemical Corp.



Thiokol manufactures base materials only, not a finished sealant.

Now it's your turn

Write to Thiokol to get a copy of "Architectural Specification Guide for Sealants" and complete details of new performance standards set for compounds based on THIOKOL® polysulfide polymer. The resultant sealing security has no equivalent.

Thiokol CHEMICAL CORPORATION
780 N. Clinton Avenue, Trenton, N.J. 08607

THE ARCHITECTURAL FORUM

PUBLISHED BY URBAN AMERICA, INC.

EDITOR

Peter Blake, AIA

MANAGING EDITOR

Donald Canty

ART DIRECTOR

Paul Grotz

SENIOR EDITORS

James Bailey

John Morris Dixon, AIA

ASSISTANT TO THE EDITOR

Ann Wilson

EDITORIAL ASSOCIATE

Melissa Sutphen

EDITORIAL ASSISTANTS

Marie-Anne M. Evans

Ann Wilder

Ira Friedlander (Art)

BOARD OF CONTRIBUTORS

Robin Boyd, FAIA, Hon. FAIA

Rosalind Constable

George A. Dudley, AIA

Henry Fagin, AIA

Lady Barbara Ward Jackson

Edgar Kaufmann, Jr.

Burnham Kelly, AIA

Leo Lionni

Kevin Lynch

Walter McQuade, AIA

Sibyl Moholy-Nagy

Charles W. Moore, AIA

Roger Schafer

Vincent Scully, Jr.

Bernard P. Spring, AIA

Douglas Haskell, FAIA

CORRESPONDENTS

Philip H. Hiss (Southeast)

Orr Kelly (Washington, D.C.)

Donlyn Lyndon, AIA (West)

Roger Montgomery, AIA (Midwest)

BUSINESS MANAGER

Lawrence Steinberg

PRODUCTION MANAGER

Sal Tumolo

ADVERTISING MANAGER

Harold D. Mack, Jr.

PUBLISHER

Lawrence W. Mester

FORUM

This month's issue of the FORUM contains some well chosen words by our Midwest Correspondent, Roger Montgomery, who spends his spare time at the School of Architecture at Washington University, St. Louis, where he directs the Urban Renewal Design Study. Because his well chosen words are buried in a book review (p. 72), we feel that they should, perhaps, be given some additional editorial exposure.

What Mr. Montgomery seems to be saying is this: first, U.S. planners have just about as powerful an arsenal of weapons with which to attack city problems as their counterparts in Europe and elsewhere; and, second, U.S. planners seem to have been so badly intimidated by the McCarthyist trauma of the early 1950's, and so badly discouraged by the failure of the Liberal Left ever since, that they have refused to face up to the roots of our problems and, instead, have taken refuge in statistical research and in the development of more sophisticated techniques.

(We have, probably, oversimplified our correspondent's argument outrageously, but we hope he will forgive us. He made our imagination run wild.)

We should like to take Mr. Montgomery's (real or imagined) arguments one or two steps farther: Because a good many U.S. planners and urban designers seem afraid of making the ultimate, professional commitment—namely, to improve the human condition through architecture—they have had to find other commitments to make. Let us be specific: When a movement decides to throw in the sponge, it rarely announces that it will. Instead, it invents a rationale that will make throwing in the sponge look like throwing a discus. Before you know it, you have a new theory of design—urban *non*-design (everything is going to work itself out, and "The Mess" is really Pop Art). You also get a new kind of architecture—*non*-architecture or "action architecture"; and you get stream-of-consciousness-cities. In short, architects become non-architects.

We certainly do not think that all of our world should be planned! But we do believe that urban design is too serious a matter to be

left to the exterior decorators. What is being proposed by those who talk about "style" and "imagery" is the abandonment of our primary responsibility, which is and remains, as we have said before, the human condition.

We recall that there were some men, not very long ago—men like Le Corbusier, now easily maligned—who understood that the way to start rebuilding the world was to crash the party, to call for the most radical measures, to declare yourself deeply committed to changing the human condition. "When we began our symphony," Le Corbusier once said, "our continual role was to appear as tough guys, with dirty, muddy boots stamping into an elegant and tranquil society in order to make our point."

We recall these exhortations, and we propose to follow them. It is very diverting to hear about



Carcassonne (above) and San Gimignano (yes, we love them, too). But the time is NOW, and the crisis is NOW, and the commitment is to the NOW.

(In the time it will take you to read this issue of the FORUM, the population of the earth will have increased by about 27,400 human beings, net. End of sermon.)

CITIES

YEAR OF DEMONSTRATIONS

President Johnson has asked Congress to (belatedly) fund the rent supplement program, continue other urban aids at about their present (inadequate) levels, and begin a series of (limited) demonstrations of what a well planned and designed environment could be like.

The demonstration proposals were unveiled with oratorical fanfare in the President's special mes-



happily displaying a model of the vest pocket park (above), to be completed this summer, said: "While the primary purpose of this plaza will be to provide an attractive outdoor resting place in the midst of a huge city, I hope that it will have equal importance as an experiment in a new kind of small urban park."

New York's new mayor, John V. Lindsay, and his energetic parks commissioner, Thomas P. F. Hoving, hope so too. They have asked the state legislature for the money and authority to develop \$95 million worth of vest pocket parks and recreation areas in congested parts of the city. A forerunner of these already is planned on a site originally acquired for an expressway whose fate is in doubt. Designed by M. Paul Friedberg, it will be a "knockdown" playground for easy dismantling in case the road should eventually go through.

AUTOLAND

HELP!

Federal Highway Administrator Rex M. Whitton's recently appointed Advisory Board of Urban Consultants (see Jan./Feb. issue) is now preparing "guidelines for integration of highway facilities in the urban environment." Meanwhile, apparently, Whitton feels free to ignore such matters altogether: in late January, just two days before the new Board was to hold its first meeting, Whitton approved plans for a devastating elevated, six-lane expressway through New Orleans's Vieux Carré.

As approved by Whitton, the expressway will be about as unintegrated as one can get. It will run right along the Mississippi shore and smack in front of his-

toric Jackson Square, overwhelming the French Quarter and squelching any hopes of ever developing the shabby riverfront into a pleasant open space.

Various citizens groups have been fighting the scheme since it was first proposed by none other than New York's Robert Moses nearly a decade ago. Many alternate schemes to save the river and the Vieux Carré have been put forth; some have been rejected, others ignored completely, by the City Planning Commission.

Since Whitton's approval was announced, protesters have grown in numbers and volume. One group, Vieux Carré Property Owners and Associates, Inc., has sent letters to newspapers all over the country, "seeking help from the nation" in its cause. A group of young New Orleanians has been joined together under the name "HELP" (for Help Establish Logical Planning), and are distributing handbills (below) and posters throughout the city. Another group, the Louisiana Council of the Vieux Carré, is seeking to coordinate the various protest activities and is pressing for an urban planning survey of the area.

Whitton's new Advisory Board reportedly would like to do a thorough investigation of the New Orleans scheme, but so far Whitton hasn't asked them. Apparently, the Board's advice is to be limited to hypothetical cases.

HELP!

P. O. BOX 2456
CUSTOM HOUSE STATION
NEW ORLEANS, LA. 70116

(Help Establish Logical Planning)



AUTOPHOBIA

The First International Conference on Urban Transportation, which brought more than 1,200 planners, designers and public officials to Pittsburgh last month, seemed almost morbidly preoccupied with the automobile. Speaker after speaker spent as much time attacking cars as advancing ideas for other modes of travel.

"We have made the cloverleaf our national flower," mourned Stuart T. Saunders, chairman of the board of Pennsylvania Railroad. "As road congestion increases, as highway deaths reach approximately 1,000 a week, and more and more valuable land is blacktopped from the tax rolls, we are finding that expressways alone are not the answer."

Architect Max Abramovitz put the problem even more succinctly: "New York City moves into its own core three and a third million people a day," he said. "Nine per cent come by car and taxi, 72 per cent by subway, 11 per cent by commuter railroads. Now, if we doubled every street in Manhattan, every avenue, every bridge, every tunnel—and I needn't tell you what that would do to the city and what it would do to the dollar sign—we would only raise the 9 per cent [in cars and taxis] to 22 per cent. We are on the wrong track."

The right track is the railway track, most conference participants agreed. "Just as the Federal government has supported the interstate highway system with 90 per cent financing," said Dr. William D. McClelland, chairman of the Allegheny County (Pennsylvania) Commissioners, "it must now furnish the same measure of support for mass transit in the metropolitan areas of the United States."

REFORM

MORE IN SORROW

There were bad guys in all of New York City's boroughs, or so it seemed last month when the State Investigation Commission held public hearings on management of the state's Mitchell-Lama

middle-income housing program. In Riverdale, Coney Island, Harlem the charges were the same: favoritism in the selection of project sponsors, huge overruns for builders and for extraneous consultants, fat legal fees for prominent elected officials, while law firms represented sponsors and builders.

Irregularities are perhaps inevitable in the administration of such a vast program as Mitchell-Lama. Since its inception in 1954, it has provided 37,000 apartments for families earning too much to qualify for public housing and too little to afford decent private dwellings. Projects for 35,000 more units are either planned or under construction. The law allows limited-profit housing companies as the sponsors, to get lower interest, long-term mortgage loans for 90 per cent of the cost of the project. No other program, Federal or state, has produced half as many apartments for New York City's middle-income families.

The fault is not in the Mitchell-Lama law itself, a point made clear when the Commission recommended tighter administrative procedures but no legislative remedies. Its criticism was voiced more in sorrow than in anger, sorrow that the scandal would provide ammunition for the enemies of publicly aided housing.

SYSTEMS

THE PLANET EARTH

For a while in the early sixties it looked as though man's last frontier was somewhere out among the stars and there was a rib-bruising rush among some of the nation's major corporations to help take the first step toward putting man on the moon and getting him back again.

But suddenly, in mid-decade, here came the realization that some of the real frontiers, with the greatest challenges—and the greatest profits—lie much closer to home. The aero space industry, in particular, has discovered that what it has to sell is not just rockets, missiles, super sonic aircraft and other hardware, but the ability to solve problems. And the problems are no further away than the nearest freeway or the closest polluted stream.

With more than its share of problems, California has begun to channel the abilities of its business

(continued on page 8)

Mr. Johnson's Cut-rate Revolution

On January 27, in his special message on cities, President Johnson offered Congress the opportunity to "set in motion forces of change in great urban areas that will make them the masterpieces of our civilization." He proposed "a massive Demonstration Cities Program . . . an effort larger in scope, more comprehensive, more concentrated, than any that has gone before." He then asked Congress to devote .0106 per cent of the Federal budget for fiscal 1967 to begin the task. Please note the position of the decimal point.

Mr. Johnson thus widened the oratory gap—the distance between Presidential prose and budgetary proposals in urban affairs—to a new dimension. It was particularly unfortunate that the Demonstration Cities Program should be the subject, for contained within this program are more innovative ideas than have appeared in a decade of housing bills and messages. Carried to their logical conclusion, they could produce a virtual revolution in the form of Federal involvement in urban affairs.

The basic concept behind the program is to bring to bear on slum neighborhoods the full range of available improvement programs—physical and social, Federal and local, public and private—in one grand concerted attack. Its aim, according to Secretary Robert Weaver of Housing and Urban Development, would be "to concentrate all available resources in planning tools, in housing construction, in job training, in health facilities, in recreation, in welfare programs, in education, to improve the conditions of life in urban areas."

The program's standards are exacting, its formula for aid complex

To qualify for the program's special financial aids, each local effort would have to meet a series of significant specifications:

►It would have to be neighborhood-wide, and big enough to affect the development of the entire city;

►It would have to provide "a substantial increase" in the stock of low and moderate cost housing, and of shopping, transportation, and recreation facilities needed to make up a "balanced" neighborhood;

►It would have to promise "marked progress" in upgrading the lives of the poor, not only by including educational and social services, but also by encouraging their participation in the planning of the program and providing "maximum opportunities for employing residents of the area" in its execution.

An almost equally significant set of standards is contained in the criteria by which applications would be culled. The demonstration projects would be judged by whether they "encourage good community relations and counteract the segregation of housing by race or income," which makes this the first housing program to have integration as a positive goal. Other such criteria include the application of a "high standard of design" and the use of advanced building technology.

The encouragement of these reforms would be in a lump sum of Federal money, arrived at through a complicated formula. HUD would compute the amount on the basis of paying 90 per cent of the cost of planning each demonstration program; 80 per cent of administering its non-Federal aspects; and 80 per cent of the local share of federally aided activities. If, for example, one of the social aspects of the program were carried out with matching funds from the U.S. Department of Health, Education and Welfare, HUD would pay 80 per cent of the half that HEW didn't—leaving the city

theoretically obligated for only 10 per cent of the total.

The obligation is theoretical, because once the city gets the money for a demonstration program, it can be spent almost any way it pleases. The money is, as the feds say, "unearmarked" except that it must advance the overall goals of the program. To return to the example above, having used the HEW program to arrive at its share of HUD demonstration money, the city could cancel the HEW part altogether and use every penny for urban renewal.

Another peculiarity of the formula is that only existing programs, or those for which application has been made, can be used in computing the amount of demonstration aid. Thus, our city-in-point could not suddenly make up a long list of new physical, social, or educational projects it wants to undertake as part of the demonstration, then base its application for HUD money on them. Each must already be underway or in preparation, although, again, once the city has the demonstration money it can start whatever new projects it wishes.

To see that the city finishes what it starts and keeps to its stated objectives, it would have the watchful assistance of a resident Federal coordinator. Immediately after proposal of the demonstration program, this individual was dubbed Supermayor by local officials fearful of their sovereignty. HUD Secretary Weaver invited 25 real mayors to his office a few weeks ago, and attempted to convince them that the coordinator would be theirs, not his. He was reported moderately successful.

The importance of the program is in its concepts, not in its scope

The amount proposed for the program in the current Johnson budget is \$12 million, which, it can be argued, is not quite as pitiable as it first sounds. It is only the planning money, and HUD believes it will take a year to get through the planning phase. The

demonstration programs proper would be carried out in the following five years. Congress will be asked to make an advance commitment of \$2.3 billion, to be appropriated over these six years, which HUD currently intends to spend in 60 to 70 cities.

Still, the importance of the demonstration cities program clearly is in its approach, rather than its scope. The key concepts are as follows:

1. The program is concerned with people as well as buildings. Its objective is the renewal of the lives of the urban poor, not just their dwellings. It should encourage a far closer liaison between physical and social improvement agencies—and a widening of goals among local housing and renewal officials. It would constitute a concerted (if limited) attack on the social ills by which physical blight is created, not just on the symptoms.

2. The program will, therefore, focus the tools and money of the Federal government where they should be focused—on the nation's urban slums. Federal urban renewal assistance has been spread among more than 800 cities. It has also been diverted to any number of noble purposes—the upgrading of the cities' images, the luring of the middle class back from the suburbs—while the slums remain. The demonstration program, with its requirements for low-income housing and assistance to the poor, puts first things first.

3. The program also provides the means of guarding the integrity of its goals. The idea of installing a Federal coordinator in the demonstration cities is likely to be unpalatable to the degree that it is necessary.

In addition to providing a stick, the program also holds out a carrot to encourage the enlightenment of city hall. Competition among cities for the demonstration money already has begun, and competition is, after all, the American way of encouraging excellence. Also, this is money the cities can very largely use as they please—an especially nice kind of money to get—so long as they remain faithful to the objectives they themselves

have set for their projects.

4. Finally, the idea of demonstrations in itself has special promise. The condition of the urban environment remains the great cultural blind spot of the American people. A case can be made that they don't demand anything better in the way of cities because they don't know anything better. The creation of a few "masterpieces" might open their eyes in a way that words (or pictures of European cities) cannot.

The amount Mr. Johnson is asking won't seem so 'massive' cut 60 ways

But urban masterpieces don't come as cheaply as the President would have us believe. In his cities message, Mr. Johnson correctly pointed out that "the size and scale of urban assistance has been too small, and too widely dispersed." And again, "Insufficient resources cause extensive delays in many projects. The result is growing blight and overcrowding that thwart our best efforts to resist them."

The Demonstration Cities Program would correct some of the dispersion, but would not go far toward bringing the remedies into scale with the problem. The expenditure of \$2.3 billion over six years, split among 60 or more cities, sounds a good deal more "insufficient" than "massive."

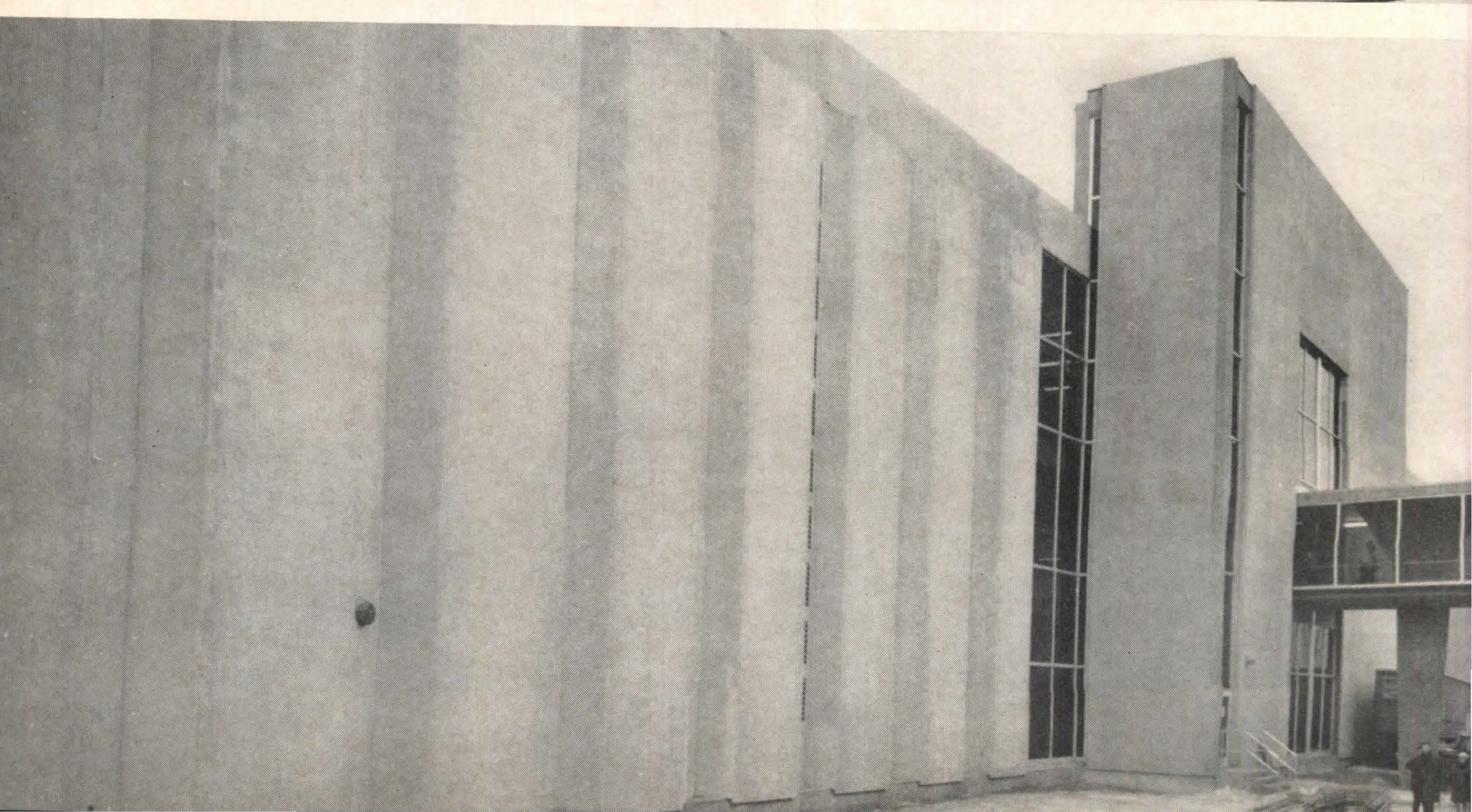
This amount will be supplemented, of course, by funds from other Federal programs, and from local public and private sources. HUD has had a series of "statistical models" constructed which indicate total outlays of \$5 to 6 billion by all concerned.

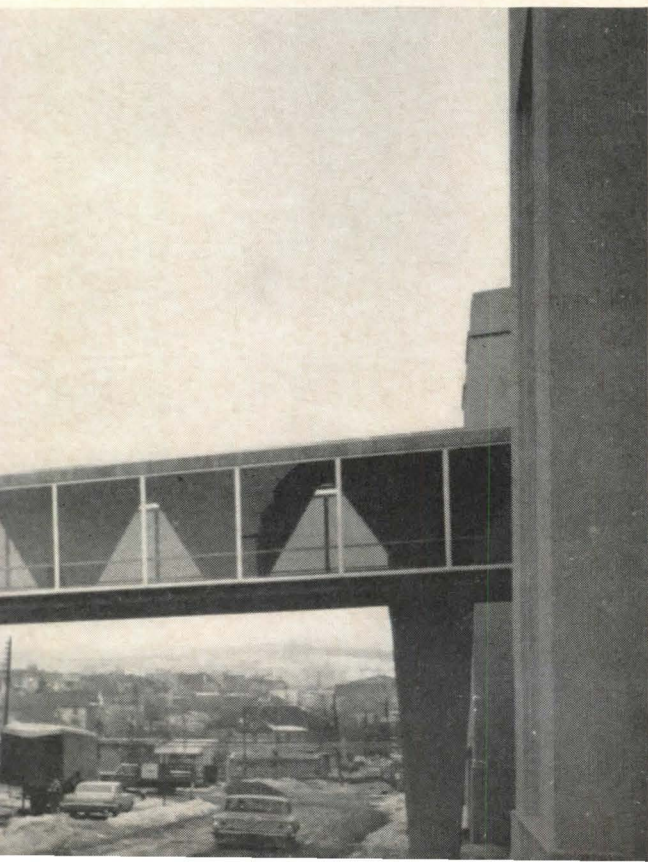
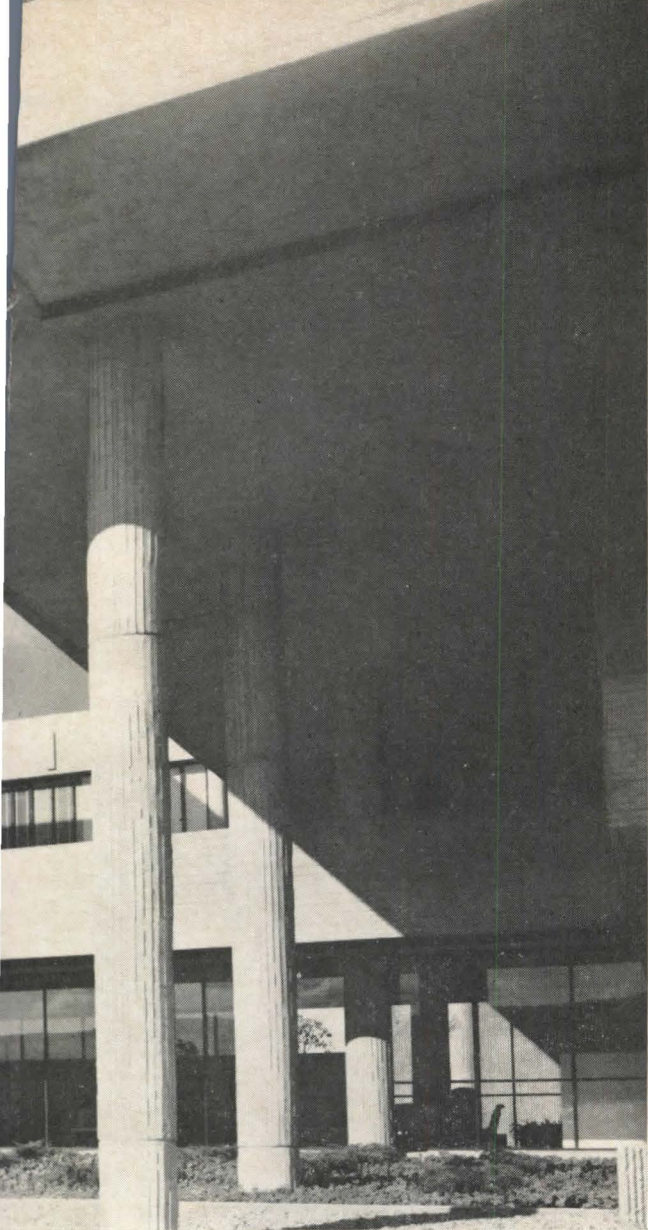
In this respect, however, it seems curious to limit the cities' efforts by holding their grants to the amounts required to carry out existing programs. The intent of the program seems to be to change and broaden the cities' attack on their slums, not just to provide side-door financing for doing more of the same. This clearly implies the use of tools the cities have not previously thought to try.

THE Demonstration Cities Program is, in the end, undistilled domestic Johnson. It contains ideas bold enough to please the liberal reformers (particularly the academic reformers of Cambridge and environs, now so well represented at the highest levels of HUD). But it is sufficiently bound up in administrative and budgetary restrictions to appease conservatives, inside Congress and out. The President has again demonstrated that, in regard to urban problems, his vision is high, his reach long, and his fist all too tight.

Past urban programs, the President said in his cities message, "have built a platform from which we may see how far is the reborn city we desire." It would be unfortunate if the Demonstration Cities Program, for all of its ambitions, merely built the platform a little higher, and left the view almost as before.







IBM

THINKS TWICE

When architects think of the International Business Machines Corporation, they are apt to think of buildings like the one at the upper left: adventurous, distinguished, designed by a big-name practitioner (in this case, Paul Rudolph). Over the past decade, the blocky IBM monogram has been made a symbol of enlightened corporate patronage.

But recently that monogram has been appearing on buildings like the one beneath: ungainly, undistinguished, and, worse yet, designed by engineers for a package builder. Overnight, it seems, IBM has become less a patron than a hard-nosed client out to build cheap and fast.

The apparent change, beginning late in 1963, has become the most talked about open secret in architecture. IBM, the story goes, became fed up with the cost of what the big-name architects were doing. Some jobs in design were cancelled altogether, others were cut to the bone. Finally, IBM began letting major contracts to those arch-enemies of architects, the package builders.

In outline, the story is substantially accurate. IBM has indeed gone through a sharp change in building policy. But in reality, the situation is more complex—and more instructive—than the rumors have it. To find the facts of the situation,

The handsome new manufacturing, engineering, and administration building at East Fishkill, New York (upper left), was designed by Paul Rudolph in 1963; IBM would never do it that way again. A nearly completed factory at Endicott, New York, was designed by Burns & McDonnell, Engineers (for the package contractor, Huber, Hunt & Nichols); IBM didn't do it this way before.

the FORUM talked both to IBM officials and their architects.

The conversations were necessarily guarded and mainly off-the-record. From them, however, certain conclusions emerge. One is that IBM was never as open-handed a patron as it had been pictured. Another is that the corporation still has architectural aspirations, although more limited than in the past. And a third is that its change in policy was brought about less by a search for real economy than by a conscious change of image.

In 1956, when IBM started its design program, it had been in the computer business only a few years. Thomas J. Watson Jr. had taken over from his aging father, and was remaking the corporation inside and out. Watson wanted every visible part of IBM—buildings, graphics, and products—to bespeak a growing company that had tied its future to advanced technology.

To guide his design revolution, Watson chose Eliot Noyes, whom he had met when Noyes was designing an IBM typewriter in the office of Norman Bel Geddes. Noyes, who had a background in both architectural and industrial design, had since opened his own firm. Watson invited him to become IBM's "consultant director of design."

Noyes brought in Paul Rand to design the IBM monogram, and set about giving the company's products the clean-line, no-nonsense look they have had ever since. He then turned to the task of giving IBM's buildings architectural quality to match its growing corporate leadership.

IBM: Progress

Noyes himself broke the architectural ice, first by remodeling IBM's Manhattan headquarters and then by designing a crisp new laboratory (top, right) for its production complex in Poughkeepsie, N. Y. The laboratory was not intended as a prototype, however: Noyes had convinced Watson that the only consistent thing about IBM buildings should be quality. His idea was to bring in top architects—one of the first was Eero Saarinen for the Rochester, Minn., factory (second from the top)—then let them react in their own ways to the specific conditions at hand.

This idea was adopted and applied to the three kinds of building programs that IBM had underway. The first was the construction of "corporate buildings" for IBM's own use and ownership (the Poughkeepsie labs, the Rochester factory, Saarinen's research center at Yorktown Heights, N. Y., shown at bottom right).

The second was construction of IBM branch offices throughout the U.S., built by entrepreneurs partially or wholly for IBM occupancy. In exchange for substantial leases as the bellwether tenant, IBM obtained a large share of control over design and construction. Some of IBM's biggest urban landmarks (the 13-story Pittsburgh branch by Curtis & Davis, the 19-story Seattle branch by Minoru Yamasaki) were built under this arrangement.

The third was construction of overseas branches through the subsidiary IBM World Trade Corporation, a program that constituted a privately financed architectural Marshall Plan. Europe is dotted with impressive IBM buildings (among them Marcel Breuer's sculptural research laboratory on the French Riviera, third from top).

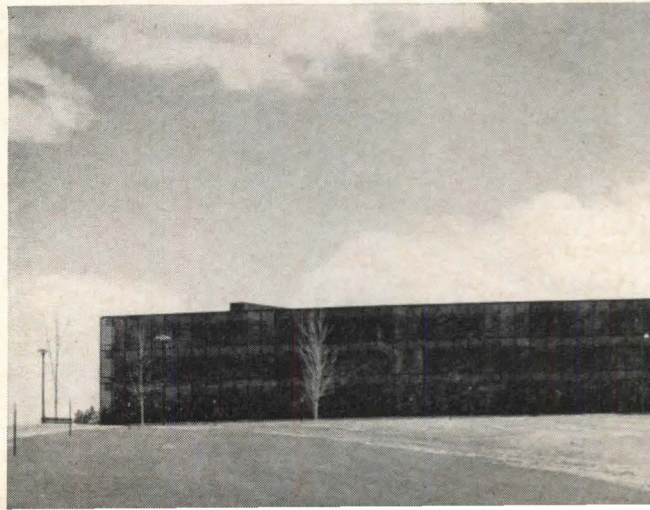
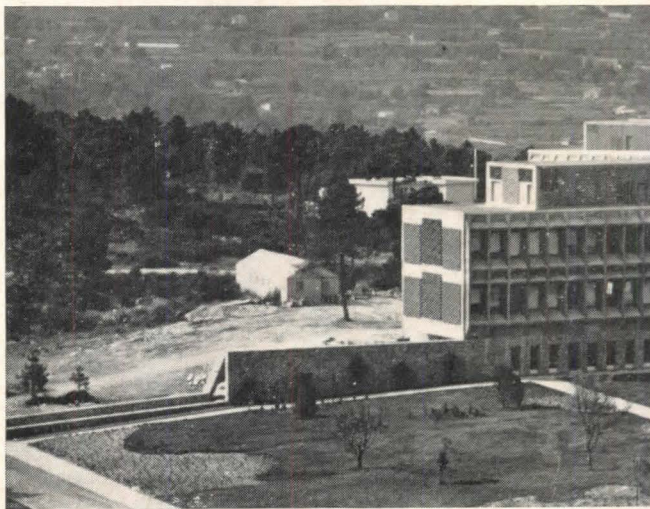
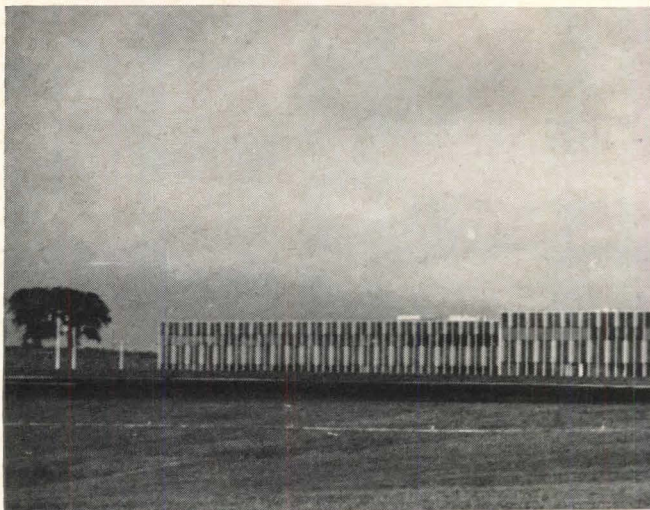
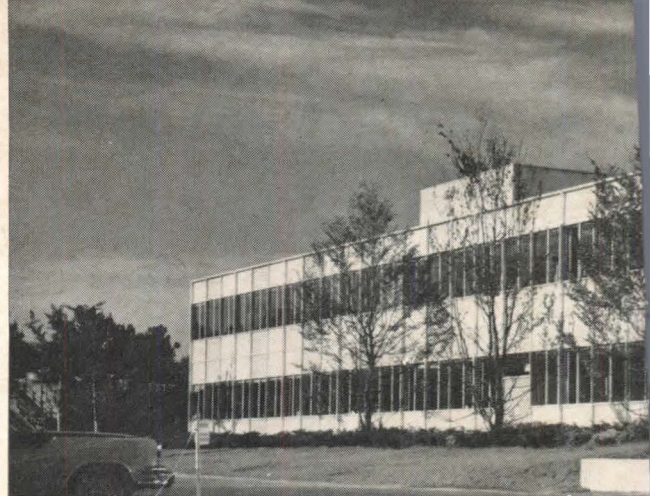
Architects chosen for the flood of prestigious IBM commissions of the late 1950's dealt directly with the IBM people who would

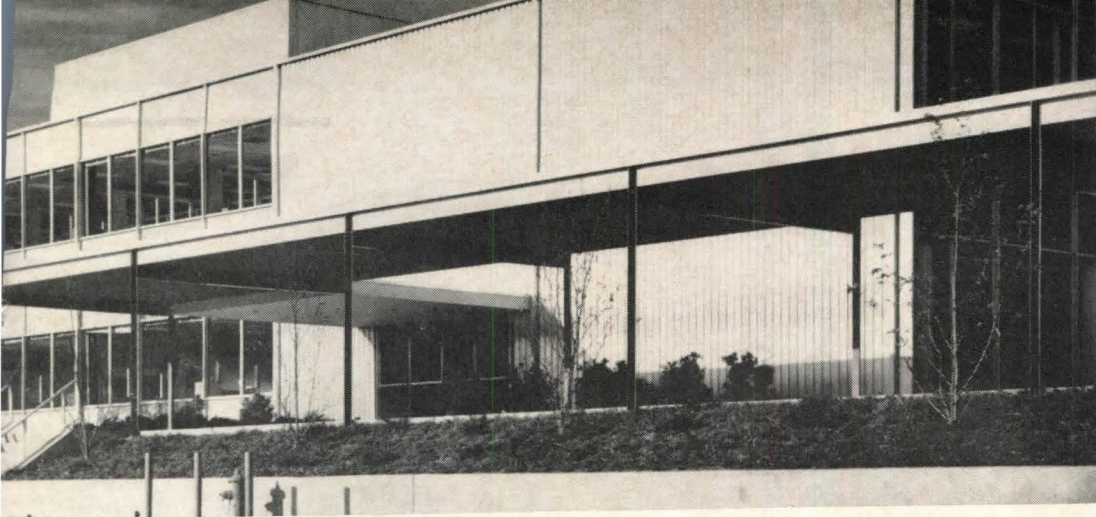
use their buildings. There was no overall control of design, except for an undogmatic review by Noyes in his role as consultant. Watson's interest in good architecture, coupled with Noyes's direct access to Watson, was a potent influence during this period.

It is important to record that even in these early years not every IBM building was an architectural landmark. The company built its share of mediocrity, and received its share of complaints from architects about the kinds of contractors it used and the number of changes it made. Economy waves came and went with regularity. The company's building policy was by no means fixed on a goal of excellence at any cost.

By the early 1960's, in fact, this policy had changed in a way that foreshadowed what was to come later. As the rate of building increased, IBM felt the need for more centralized control of its construction program. All company-owned projects were placed under a Corporate Facilities Planning Department, which prepared preliminary layouts and worked closely with architects. This department, in effect, became the client, rather than the people who would use the buildings. Control over the design of leased branch offices was given to regional sales headquarters in Los Angeles, Chicago, and New York.

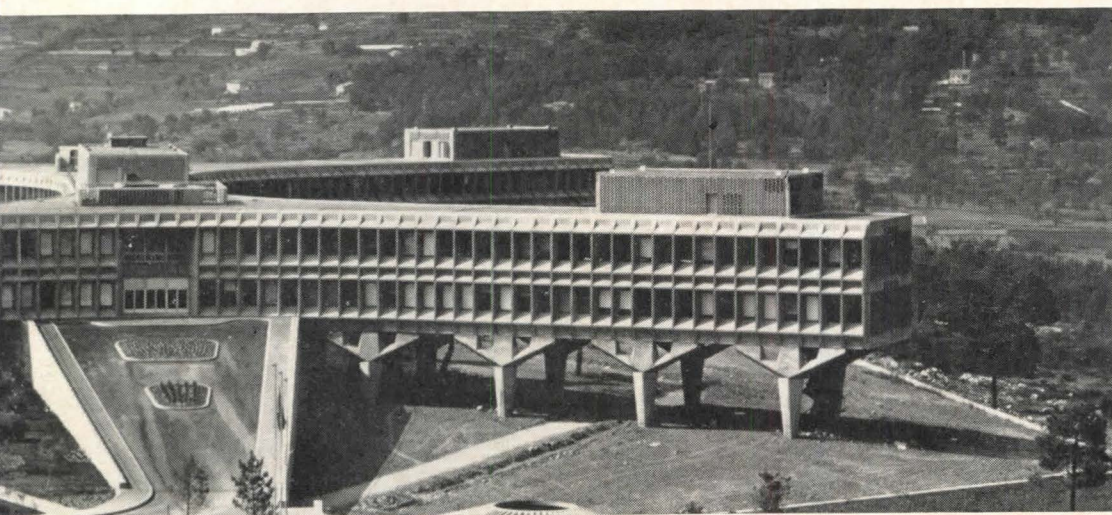
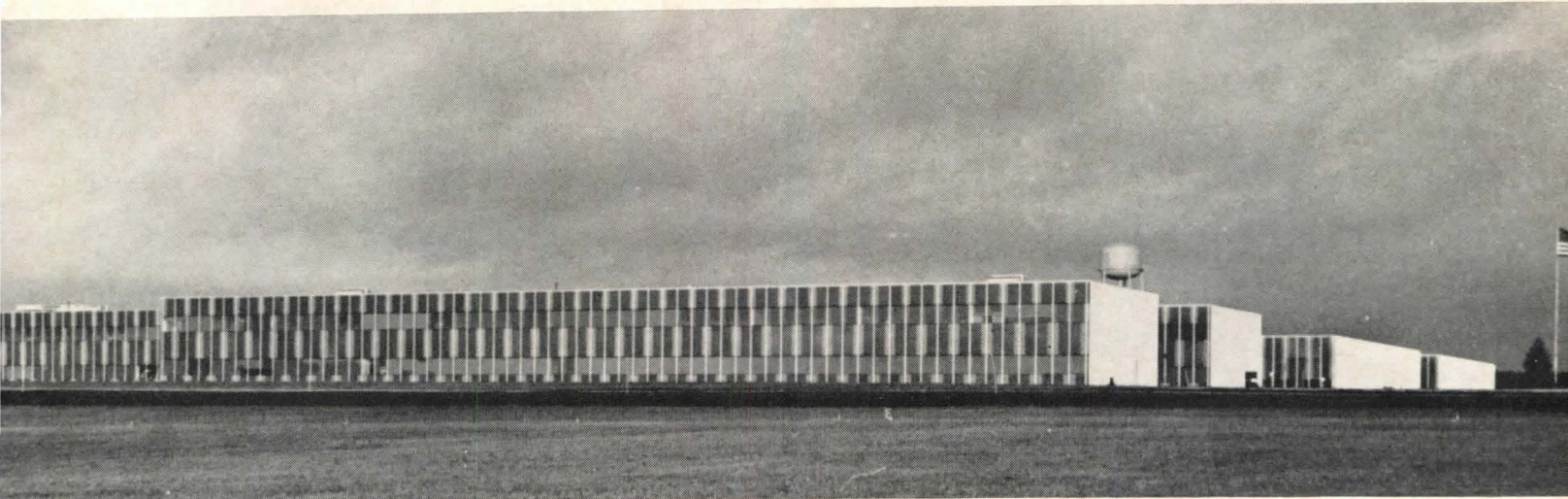
One architect who worked on several IBM buildings, before and after this change was made, recalls wistfully how "satisfying" it was on his first job to work directly with the people who would have to live with the project. Later, he said, he was subject to "policies from above, inflexibly applied" and "conventional, often old-fashioned concepts of economy." There was always a second line of communication for Watson's policies through Eliot Noyes. But even a man of his energy couldn't be everywhere at once.





Eliot Noyes's product development laboratory at Poughkeepsie, New York (left), was heralded in the Forum (February 1957) as introducing "a whole new public personality" for IBM. With curtain walls of aluminum and gray porcelain enamel, Noyes demonstrated that there was an alternative to "Williamsburg" and "Late Newton High."

One of the other early achievements of IBM's new design program was a factory at Rochester, Minnesota (below), by Eero Saarinen & Associates. Its vivid blue porcelain-enamel clad walls, folding around landscaped courts, made it, said the Forum (October 1958 issue) "a vibrant departure from yesterday's dreary factories."



While IBM was building a reputation for forward-looking architecture in this country, its wholly owned subsidiary, IBM World Trade Corporation, was building with equal sophistication in Europe—also under the watchful eye of Eliot Noyes. Marcel Breuer's Development Engineering Laboratory at La Gaude (left), near Nice on the French Riviera was the most impressive.

The most dramatic architectural image produced by the IBM design program was the 1,000-foot curved facade of Eero Saarinen's Research Center at Yorktown Heights, New York (below). The building introduced a new concept of windowless laboratory spaces and was an unprecedented effort to blend architecture and terrain. "At only \$23 per square foot," commented the Forum (June 1961 issue), "such elegance is quite an achievement."



IBM: Crisis

At the end of 1963, IBM's building program underwent an upheaval that made all the previous changes seem minor. To many architects working on IBM projects at the time, it seemed like a cataclysm.

For one thing, control over all building in the U. S. was turned over to a single, central Real Estate and Construction Division, headed by the former general manager of IBM's Typewriter Division, H. Wisner Miller Jr. The title of the new division indicated one major reason for its establishment: IBM had decided to invest in some real estate—its own branch office buildings.

The other reason soon became clear: central control would make possible a sweeping change of design direction throughout the company. IBM's architectural image up to that time had been fine for a company working its way up in a pioneering field, but now the situation had changed. Computers had become very big business indeed and IBM held an awesome lead, with over 70 per cent of U.S. production. Smaller producers that had been passed at the first turn—or

entered the race late—were snapping at the company's heels.

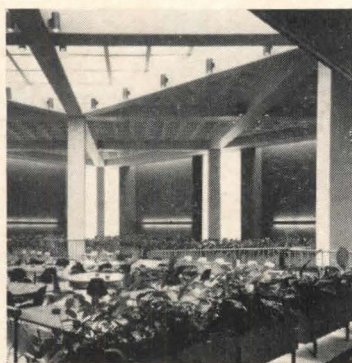
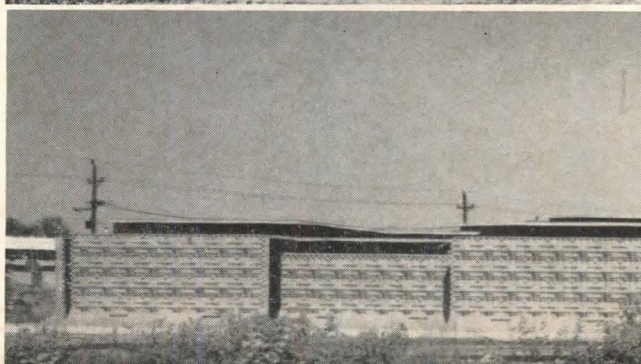
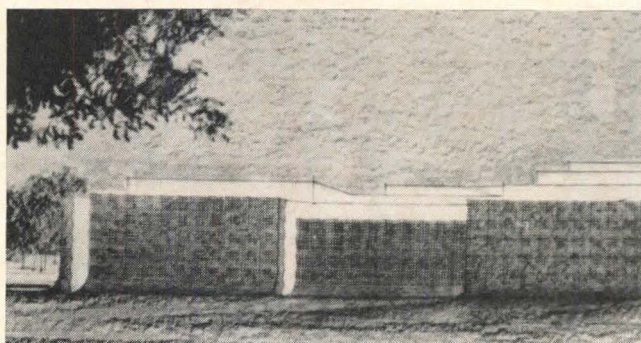
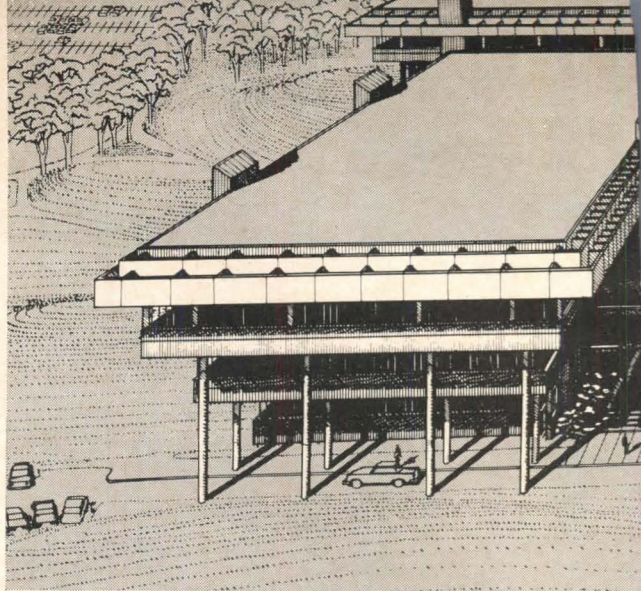
In this situation, IBM apparently decided that an image of wealth was a liability. Customers might suspect they could get a better deal from plain-pipe-rack competitors; the federal government—both a customer and a regulator—might begin to wonder about IBM's domination of the field.

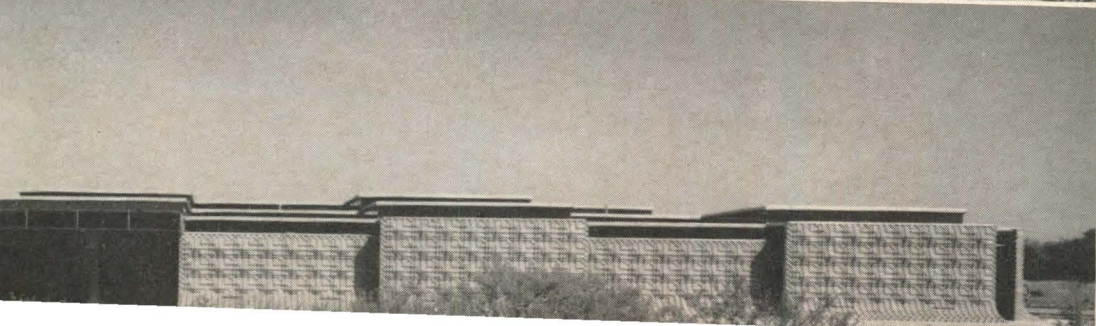
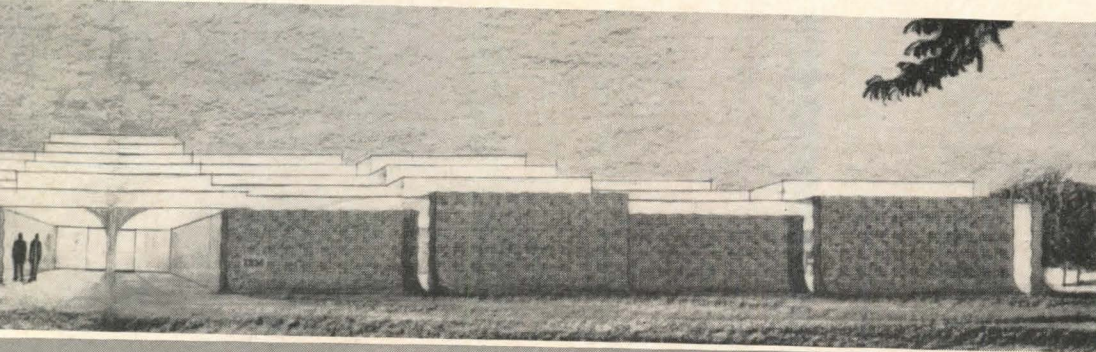
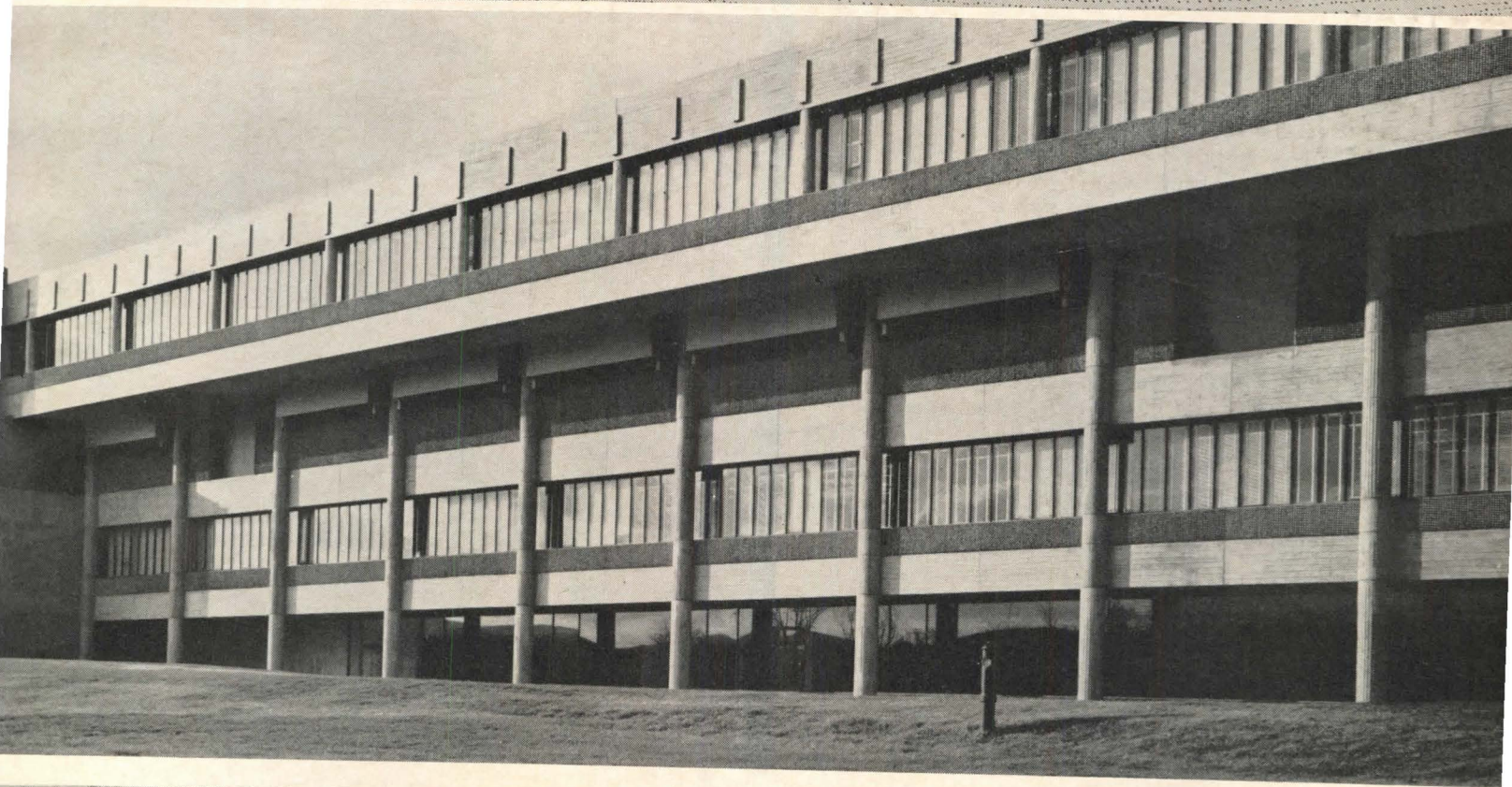
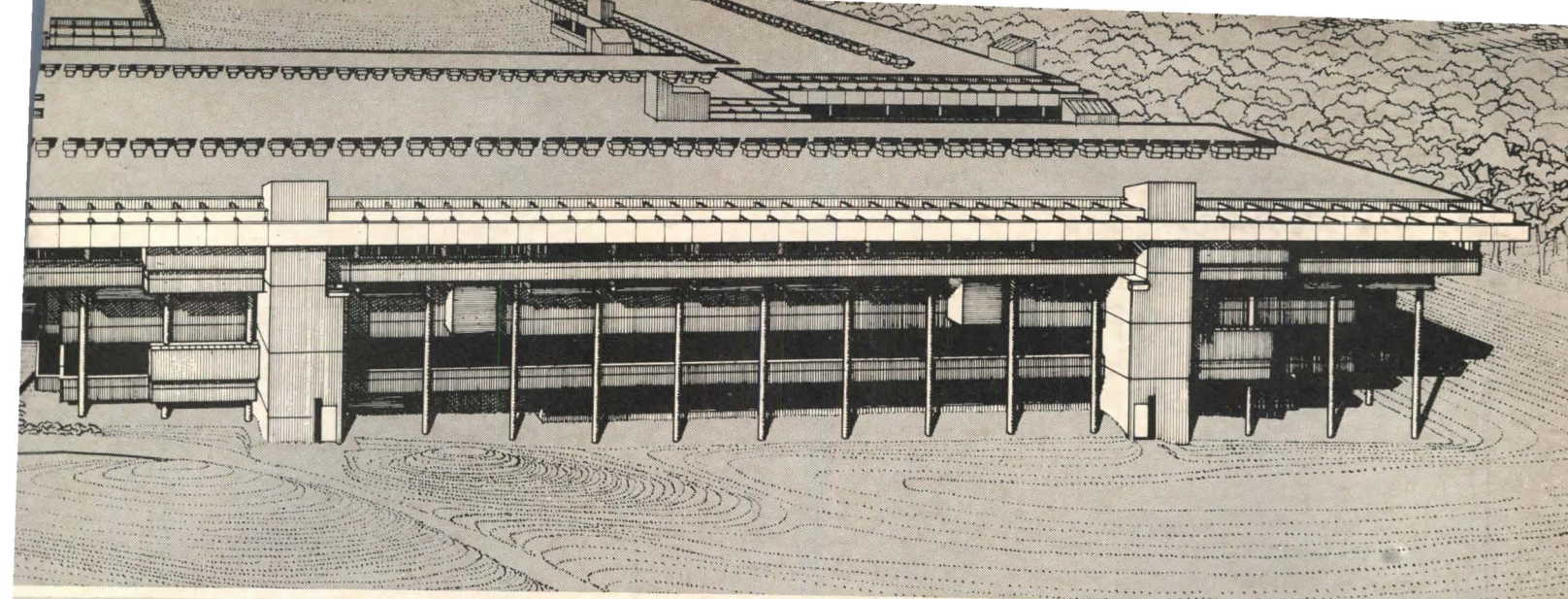
WHEN the wind changed the architects were the first to feel it. The new division set right to work scrutinizing every job in progress for signs of apparent lavishness. "Apparent" is the key word here: one architect who rode out the storm (and many didn't) sums up the general reaction: "IBM wanted austerity, at any price."

The price, in some cases, was waste. Stories abound of carpet removed or fine wood painted over. On one project glazed brick judged too elegant for walls was reportedly disposed of by building storm sewers out of it.

A typical example was the tale of what happened to a modest employee cafeteria at Endicott, New York (left). Designed by Sherwood, Mills & Smith as an inward-focused refuge in a drab industrial neighborhood, it was scored by a high ranking IBM executive as a "country club". Planters, carpeting and a sculptured wood screen—all installed in full accordance with program and budget—were removed.

Where it was not yet too late, designs were cut back on paper. The effect can be seen by comparing designs for two buildings, as published in the *FORUM*, with the same buildings as constructed (right). These two designs were as extravagant in form as any IBM ever accepted. The finished buildings not only show the immediate effect of IBM's austerity drive, they represent a kind of architecture IBM no longer seems to want at any price.





Paul Rudolph's IBM building at East Fishkill, New York (above), was conceived as a factory, laboratory, and headquarters for the Components Division (which no longer exists as such)—all in the same elegant package (top view, from February 1964 issue). One of its most expensive features, a mechanical floor sandwiched between the two occupied floors (except where all three are used for offices) was a requirement of the client. In a last-minute effort at economy, the concrete sunshades were removed, leaving their stubs as reminders of a silhouette that might have been.

IBM's Garden State Branch in Cranford, New Jersey, by Victor Lundy (left), also bears the scars of the new austerity policy. Its exotic stepped-pyramid roof, with clerestories at every step to light the 220-foot-square interior (top view, from December 1963 issue), was lopped off, leaving a mere fringe of setbacks around the edges (bottom view, from June 1965 issue).

IBM: Outlook

The package builder appeared on the IBM scene only after the newly formed construction division was beset with a sudden demand for millions of square feet of space. Unlike earlier surges of construction, this one was composed largely of factories.

In April 1964, to meet mounting competition head-on, IBM introduced its new "360" line of computers, which made such an overwhelming hit that the company has so far been able to fill only a portion of several thousand "360's" on order. In an effort to catch up with the backlog, IBM reportedly boosted its annual construction budget from around \$30 million in 1962 and 1963 to around \$70 million since then. Miller estimates that "85 to 90 per cent of current building effort stems directly from the 360".

Of the 19 major projects started under the new division, nine have been built under package contracts. Miller claims he has turned to the package dealer only where speed was the overriding consideration. He is aware, he says, of the virtues of the architect-designed, architect-supervised building, but he insists that they cost time and money. Most architects will concede that professional service takes more time, but contend that it insures greater economy, in terms of value received.

One of the undoubted attractions of the package builder is that he offers space of a specified quality at a definite cost, on a prescribed schedule. Much corporate decision-making—and reconsideration—is simply eliminated, but there is a need for more detailed programming.

For some of his new building projects, Miller has recently tried a phased-construction system not uncommon in industrial building: Contracts are let in sequence, the architect remaining in control from start to finish. IBM seems pleased with this approach, which has allowed occupancy of some space barely a

year after the start of planning. (The AIA Industrial Buildings Committee, which urged Miller to try it, is equally pleased.)

Having tried at least three distinct methods of building design, IBM is naturally coming up with a mixed bag of results. Some of the best architect-designed IBM buildings completed in the past year—buildings like the Philadelphia branch office (right) and the Milwaukee branch (Nov. '65 issue)—were actually designed before the division was established. The phased-construction system is producing big straight-forward factories by big production-oriented firms (top right). The package-contract buildings (lower right) are, predictably, the least impressive.

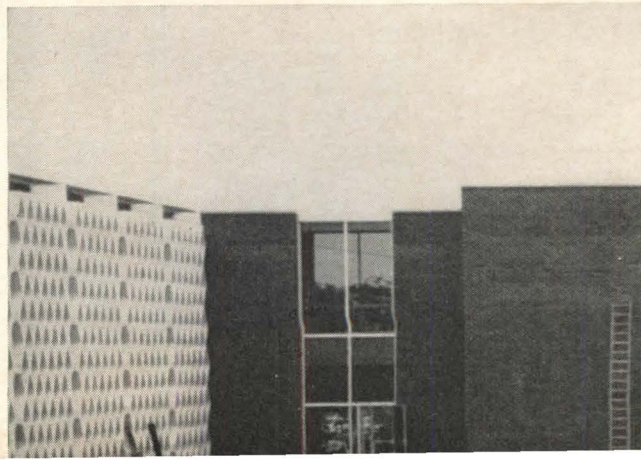
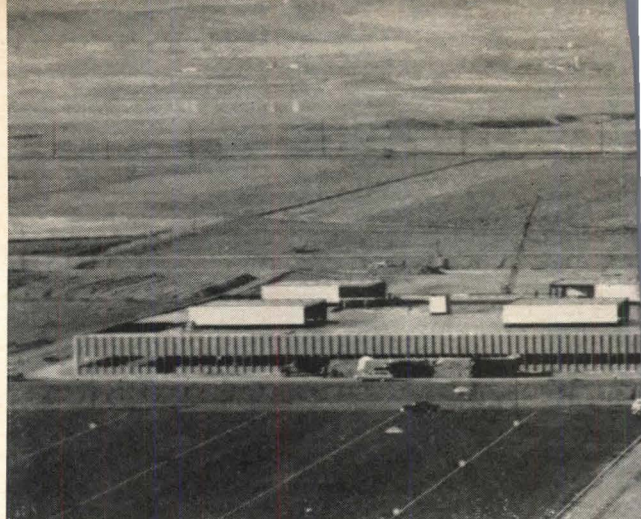
WHERE IBM will go from here appears uncertain. Miller is quite willing to go on building all three ways, depending on the situation, but he clearly wants no artistic nonsense from his architects. ("In some cases," he told a Building Research Institute conference last year, "architects resist accommodating the owner's needs under the guise of architectural integrity.")

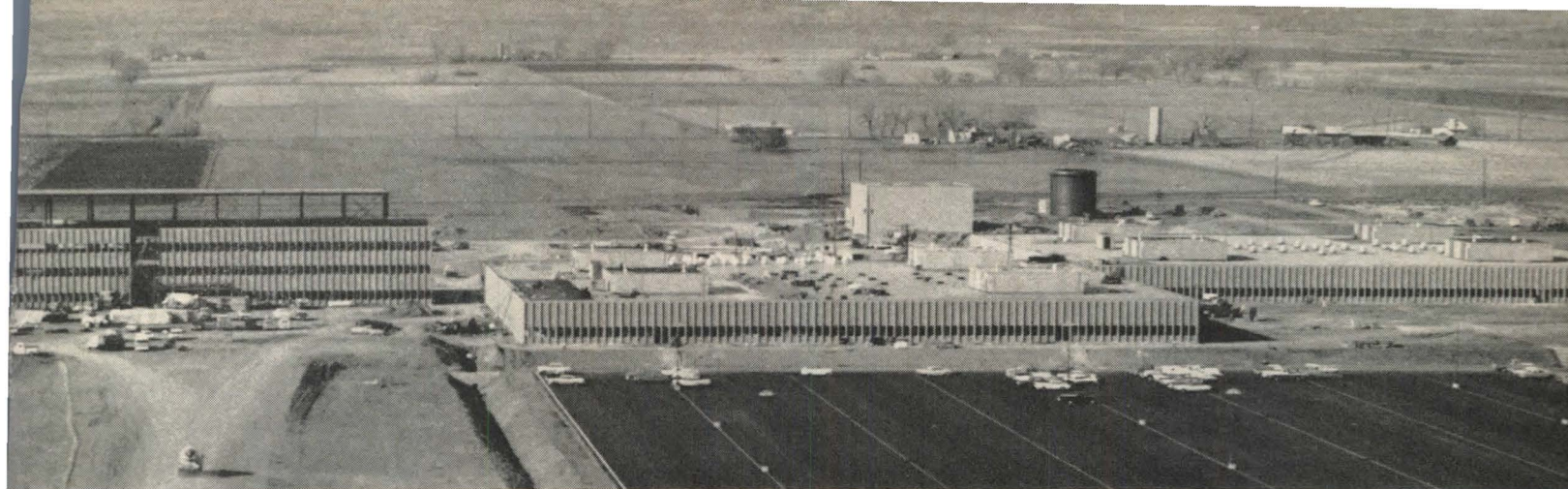
Noyes, who should know, says the period of adjustment is about over and predicts that IBM will begin some fine buildings in the near future.

Watson, whose attitude will count the most in the long run, isn't saying much about architecture at the moment, at least not publicly.

The lesson of the IBM story to date seems to be this: IBM turned to the architects not so much for quality or efficiency but for an *image*. Image-making is a seductive job for the architect; it leads to extravagance—of form if not of cost—and diverts attention from the task of solving straight-forward problems. And the danger for the architect as image-maker is clear: the day may come when the client no longer wants that image.

—JOHN MORRIS DIXON





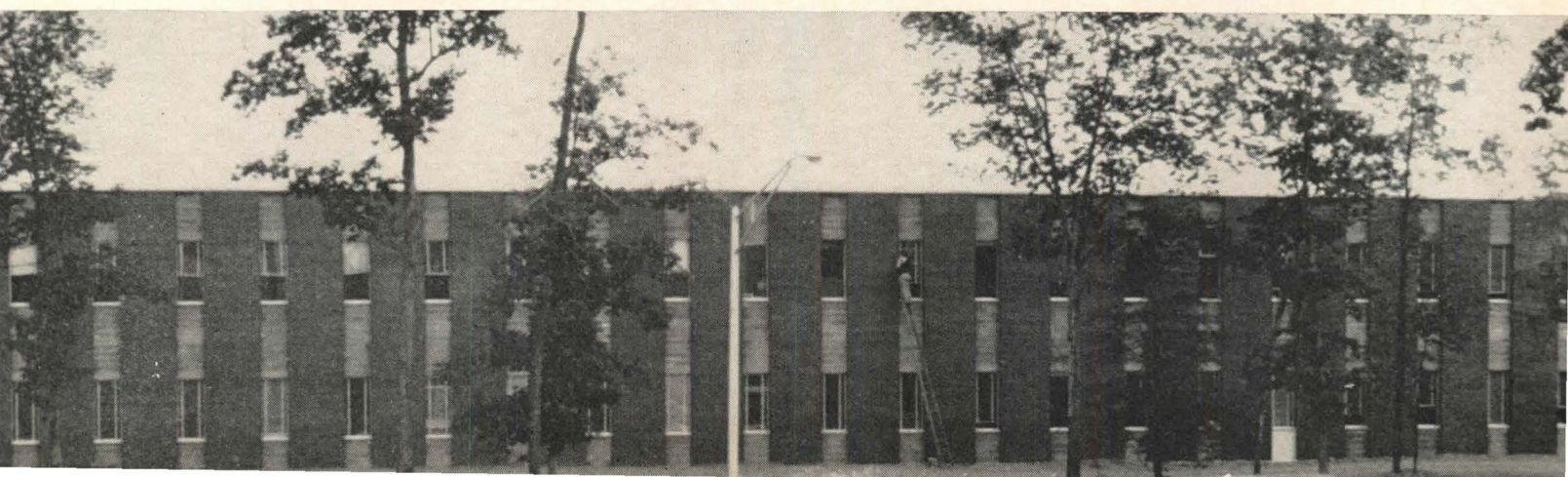
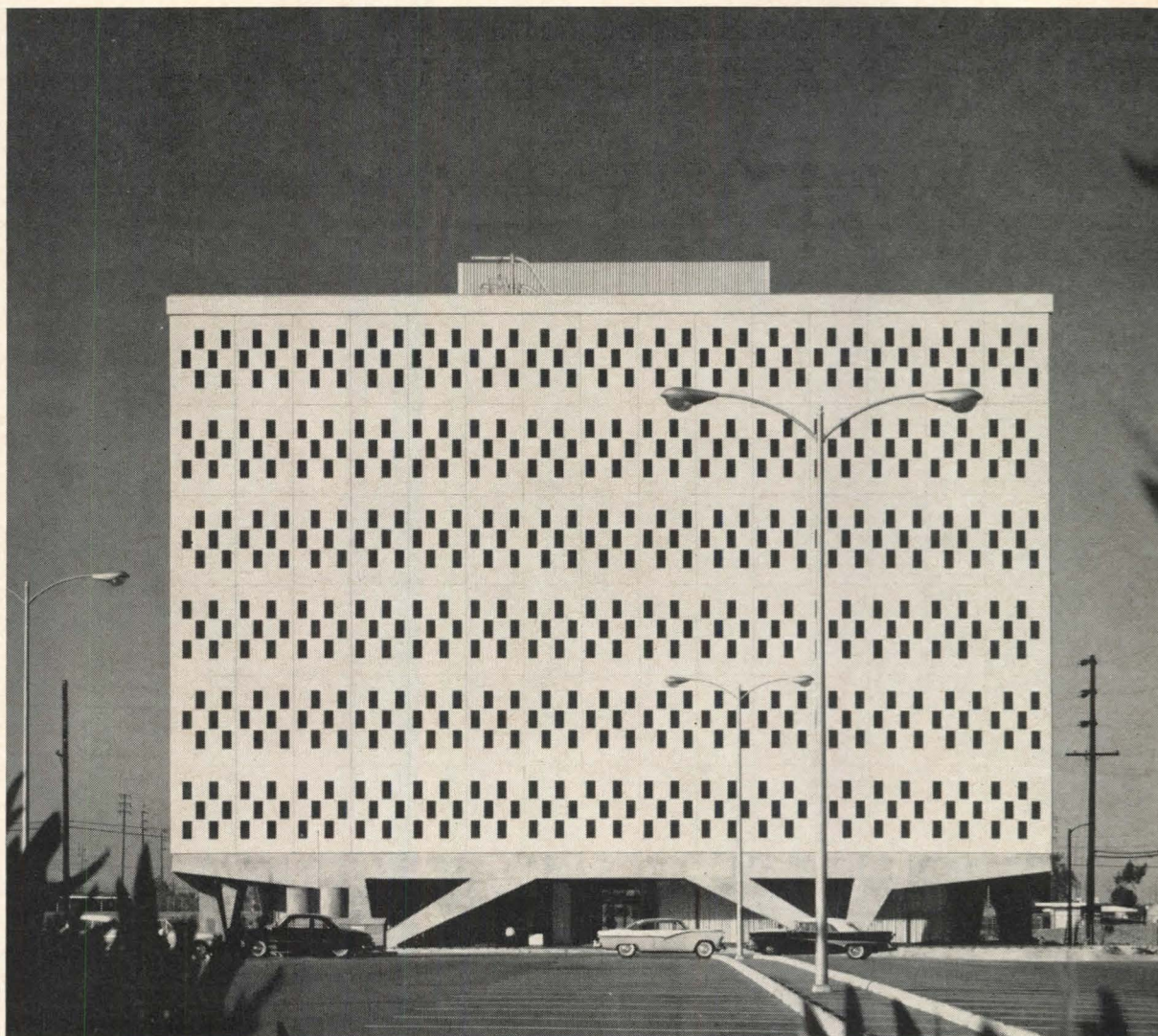
The scale of IBM's present building program is indicated in their 465,000-square-foot manufacturing complex now under construction at Boulder, Colorado (above). It was designed by Smith, Hinchman & Grylls following a phased system, with contracts let for site work, foundations, etc., before later stages of design were completed. Walls are of precast panels, with a coarse exposed aggregate. The Rocky Mountains give the plant a fortuitous backdrop.

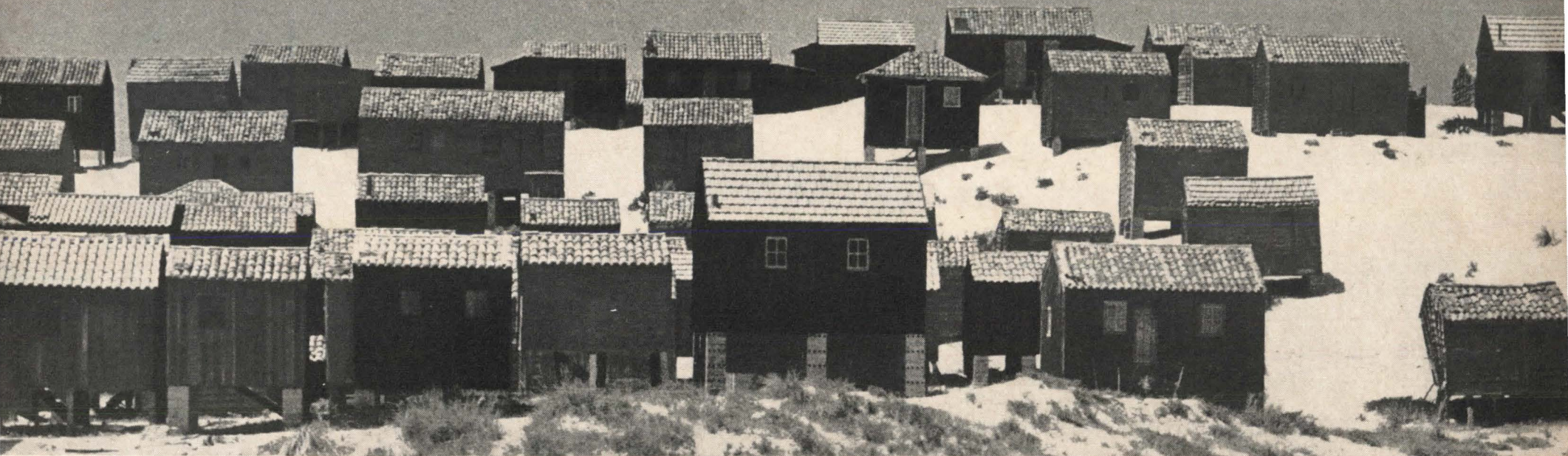
IBM is still building branches all over the world, all of them designed by architects. The recently completed Philadelphia branch (left) by Vincent Kling, the first one of them to be actually owned by the company, brings the sharp contrast of dark glass and limestone to the general drabness of Penn Center.

The new Los Angeles "aerospace" branch office (right) is one of several recently designed by Eliot Noyes, IBM's consultant director of design. In an apparent effort to demonstrate the economies possible through design, he has been experimenting with precast concrete wall systems that include built-in sun control.

A products development laboratory at Poughkeepsie, New York (below), is one of the recent IBM buildings constructed under package contracts. In a mere 12 months from the start of planning, at a cost of about \$14 per square foot, the company obtained 150,000 square feet of just plain space.

PHOTOGRAPHS: Page 32: Scott-d'Ara-
zien, Sickles Service. Page 34: Ezra
Stoller, Baltazar Korab, IBM, George
Cserna. Page 36: Louis Reens. Page 37:
Scott-d'Ara-
zien, George Cserna. Page 38: Don Carlson, Ezra Stoller Assocs.
Page 39: Amir Farr.





REPETITION WITHOUT MONOTONY was characteristic of the earliest human settlements.

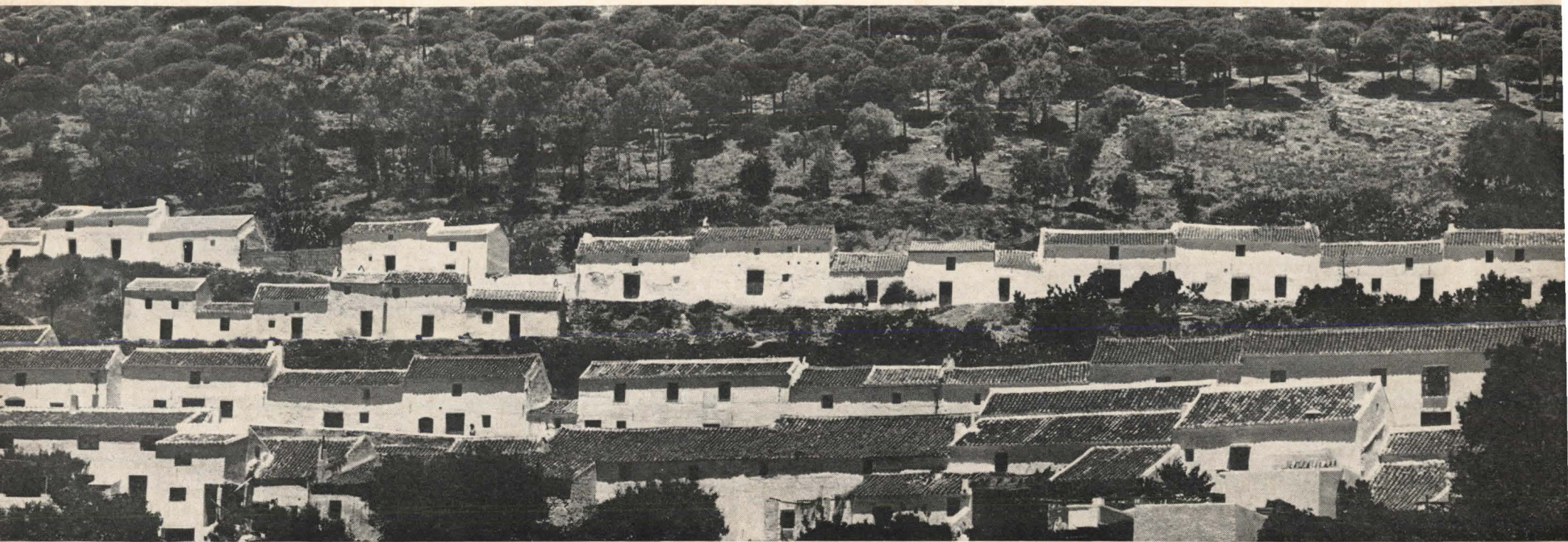
Dwelling forms determined by a limited range of materials and techniques produced an underlying consistency; specific needs and irregular terrain caused variations in dimensions, openings, and smaller elements from house to house. In isolated places, where building methods have not changed for centuries, the result still can be experienced today. Throughout the Mediterranean region there are ancient communities that illustrate the possibilities of repetitive form, using a variety of basic building blocks.

PHOTOGRAPHS AND COMMENTARY BY MYRON GOLDFINGER, NEW YORK ARCHITECT AND DESIGN CRITIC AT PRATT INSTITUTE.

The box-like buildings that make up the Portuguese fishing village of **PALHEIROS DE TOCHA** (above) stand in parallel rows above the undisturbed sand of a broad beach. They are roofed with red tile and supported on wood piles, except where the piles have recently been replaced with concrete block piers. There are smaller sheds among the houses, and many of the houses are now becoming sheds as new and undistinguished dwellings are built nearby.

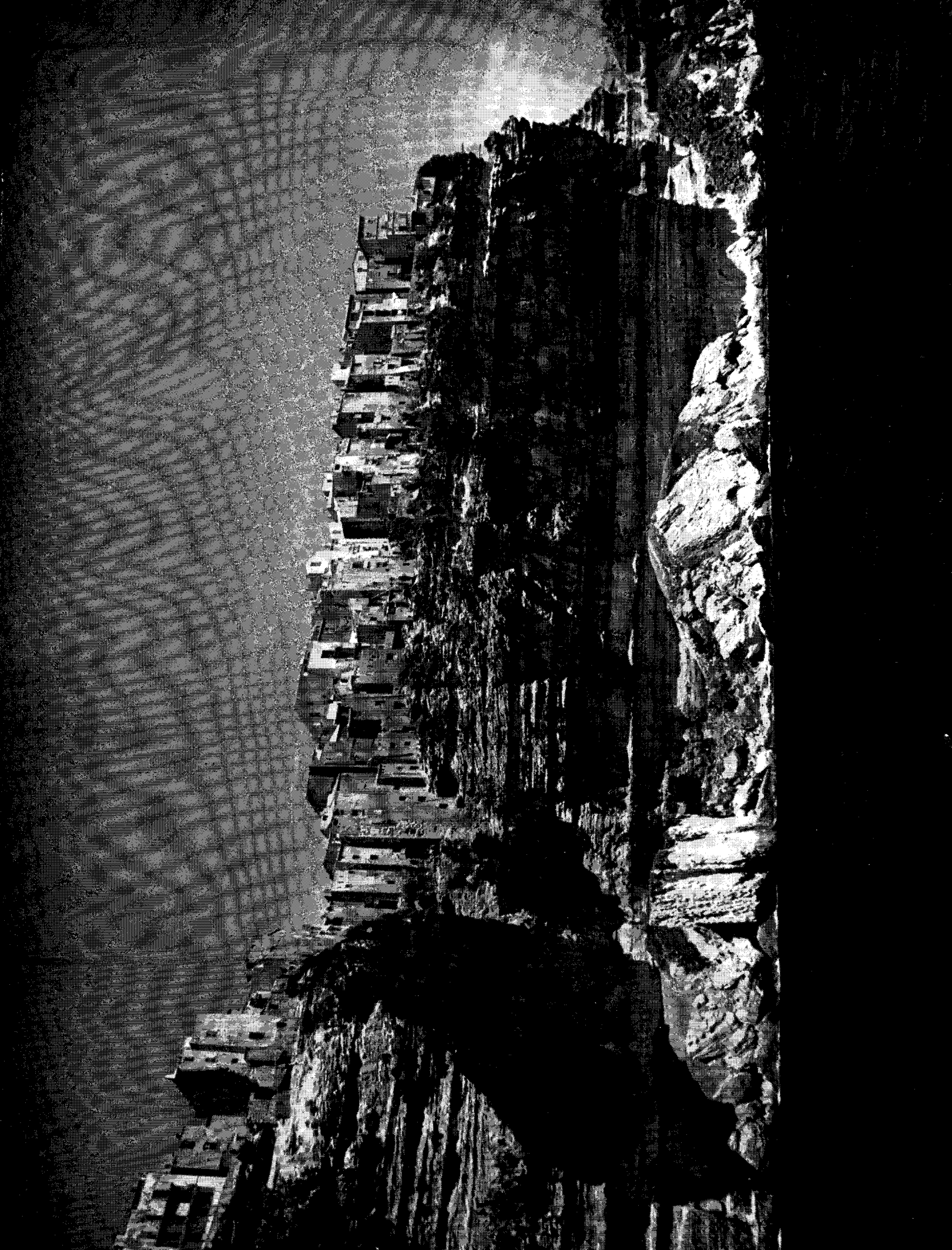
The Aegean island port of **MYKONOS** is a labyrinth constructed of white cubes. Slight changes in grade and subtle bends in the street produce the small offsets from cube to cube that lead the eye on along the streets. The softened edges of the whitewashed walls ease the sweep of vision from building to building. This play of forms is enriched by small areas of intense color on wood doors, window frames, balconies and railings.





The Andalusian farm village of **MIJAS** is made up of rows of houses running along the contour lines of a steep hillside, facing outward toward a distant view of the Mediterranean. Because their depth is limited by the terrain, the houses present their broad sides to the elongated, terraced streets. The continuity of the whitewashed walls and the slightly offset red tile roofs accentuates the horizontality of the village.

The town of **BONIFACIO** rises atop a sheer cliff on the southern tip of Corsica, across the straight from Sardinia. The boldness of the buildings, crowding precariously up to the edge, matches the boldness of the site itself. The narrow houses sprout up like a cluster of plant shoots from the strong horizontal rock shelf

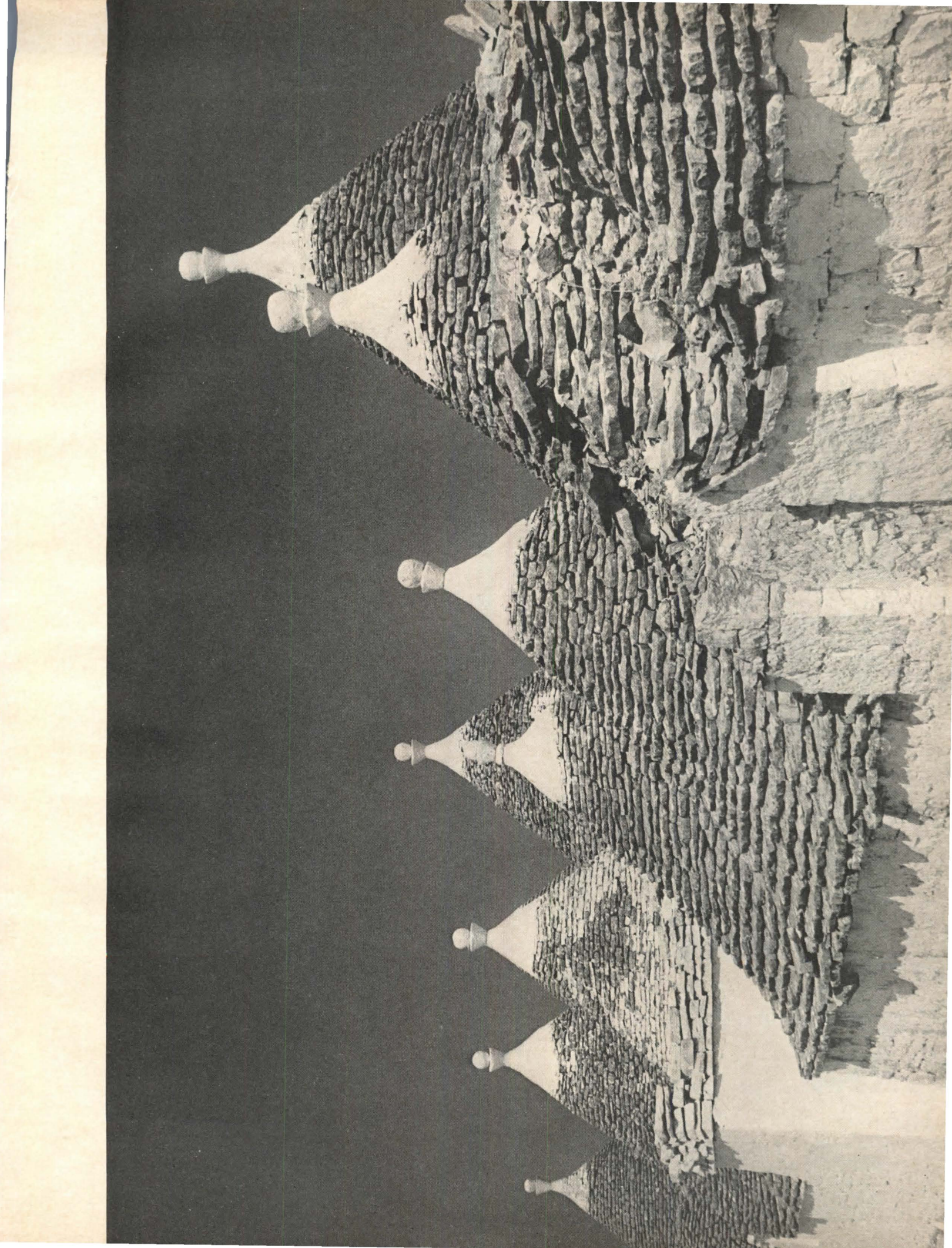




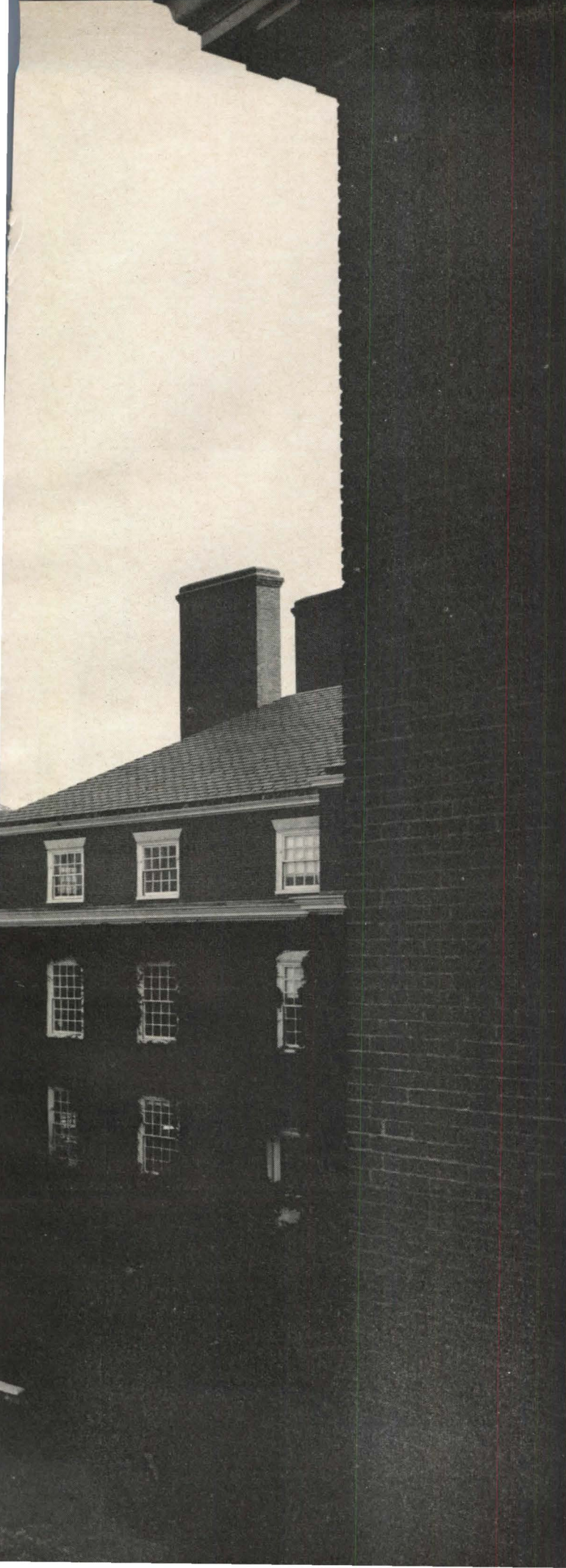
Masonry barrel vaults are the dominant architectural elements on the Aegean island of **THIRA**. The rows of houses are linked in an interdependent buttressing system. Variations in the height of the vaults, determined by differences in the width between party walls, give individuality to the houses.

ALBEROBELLO (below) is the only substantial community of *trulli*, which are found only in the Apulia region of Italy. Each *trullo* consists of a square or rectangular base topped by a conical dry stone roof with a chalk-coated finial. Although the sizes of the cones vary, the proportions are maintained. The *trulli* are clustered together, buttressing each other, to form houses or groups of houses.

Just as the technical limitations of the past led to repetitive form in housing, the advance building techniques we will have to apply to our massive future needs will lead naturally to standardization. Whether the result is satisfying order or numbing monotony will depend on the sensitivity of architects to human needs for variation, privacy, and community identity. The old communities shown here respect these needs; they indicate the kind of visual order that we ought to be seeking for housing today.







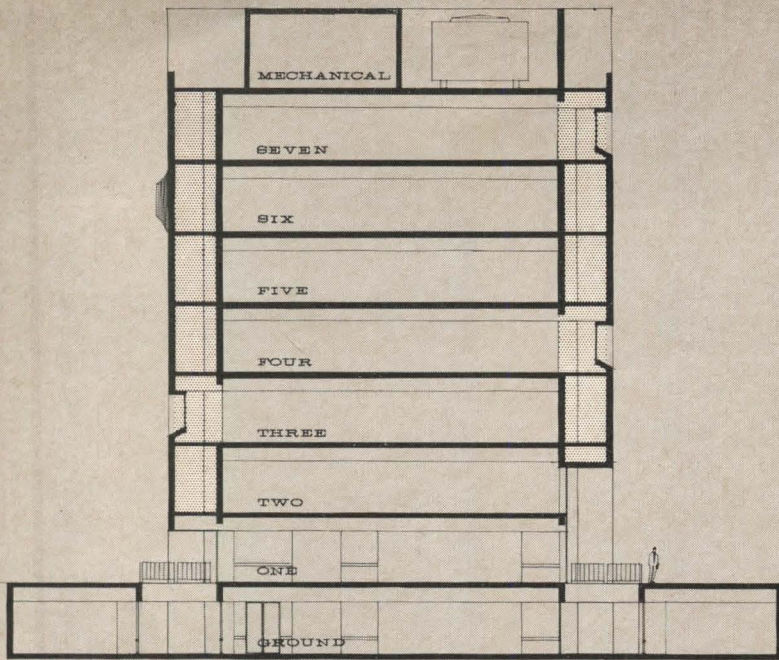
The curious Walls of Larsen Hall

That which stands, at left, behind the grassy Georgiana of Radcliffe College, is known officially as Roy E. Larsen Hall, the home of Harvard's high-powered graduate school of education. Around Harvard, it is known by several other names as well, most of them allusions to its form and curiously fenestrated walls.

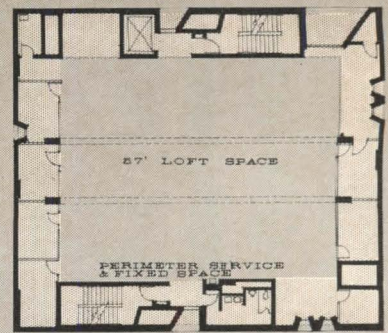
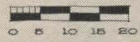
William W. Caudill, the building's architect, cheerfully cited some of them at the dedication ceremonies last fall: "the genial robot," "mosque modern," "a three-dimensional IBM card," "Larsen's Castle." Caudill expressed a preference for the last.

"What's wrong with castles?" he asked. "They were conceived in terms of logic and economy, and so was this building. Those old towerhouses were most ingenious. I like to think Larsen Hall is too, particularly in the way it connects with the earth and with the sky. The old-time castle planners knew what they wanted."

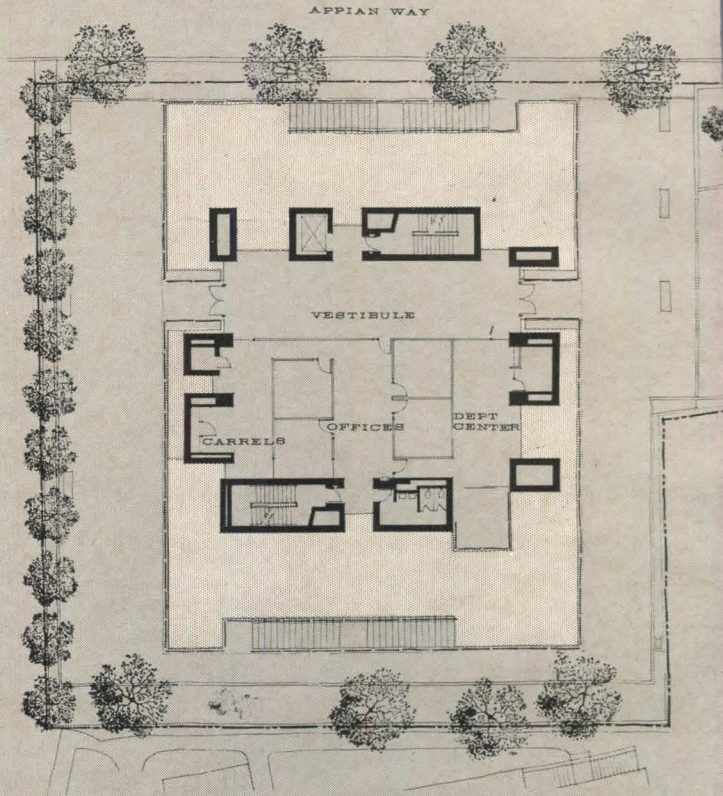
Caudill and his clients also knew what they wanted in Larsen Hall, and are, for the most part, pleased with what they got. On the following pages are, first, a summary of their intentions and of how these intentions were carried through; then a dissent from one of those at Harvard who is not so pleased with Larsen Hall; and finally, a conclusion which will do little to still the controversy.



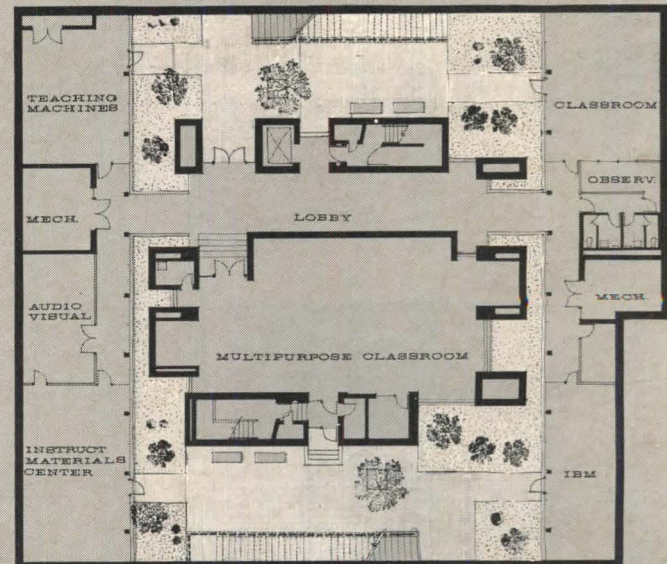
CROSS SECTION



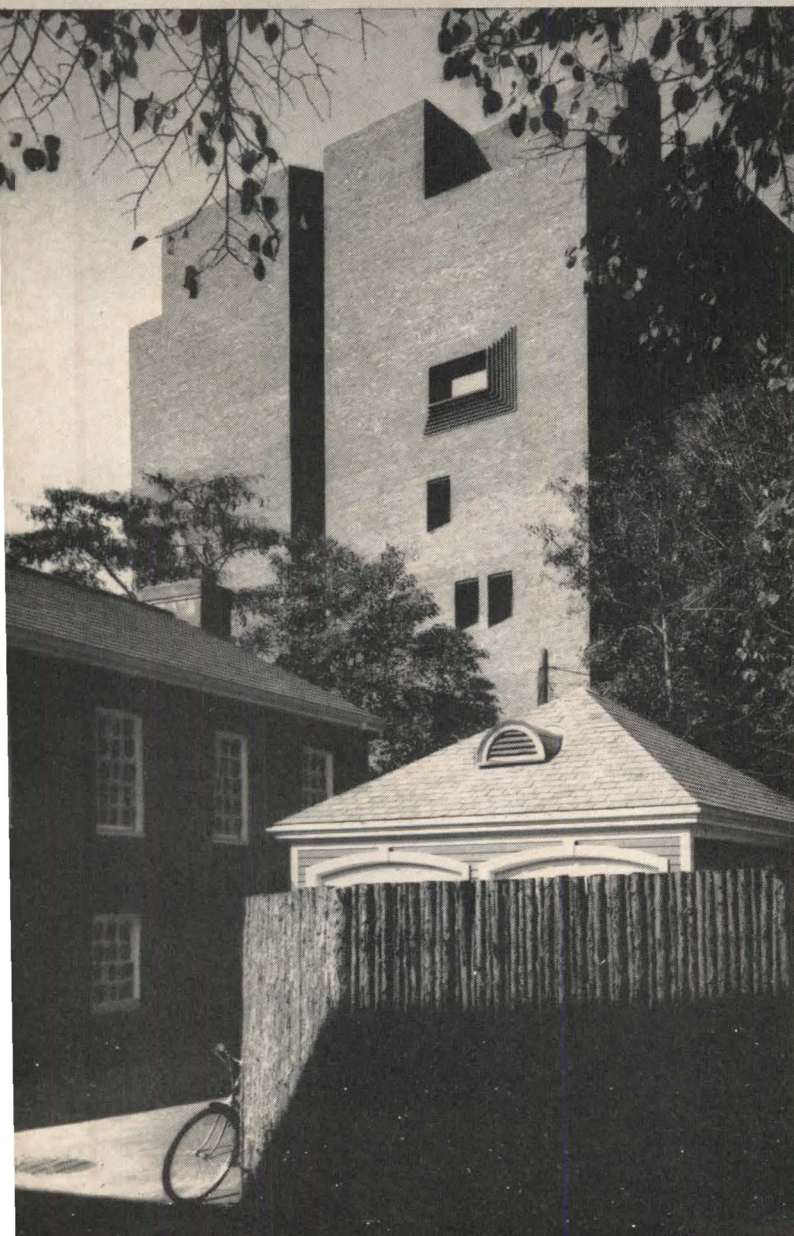
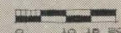
FLOORS 2-7 SIMILAR

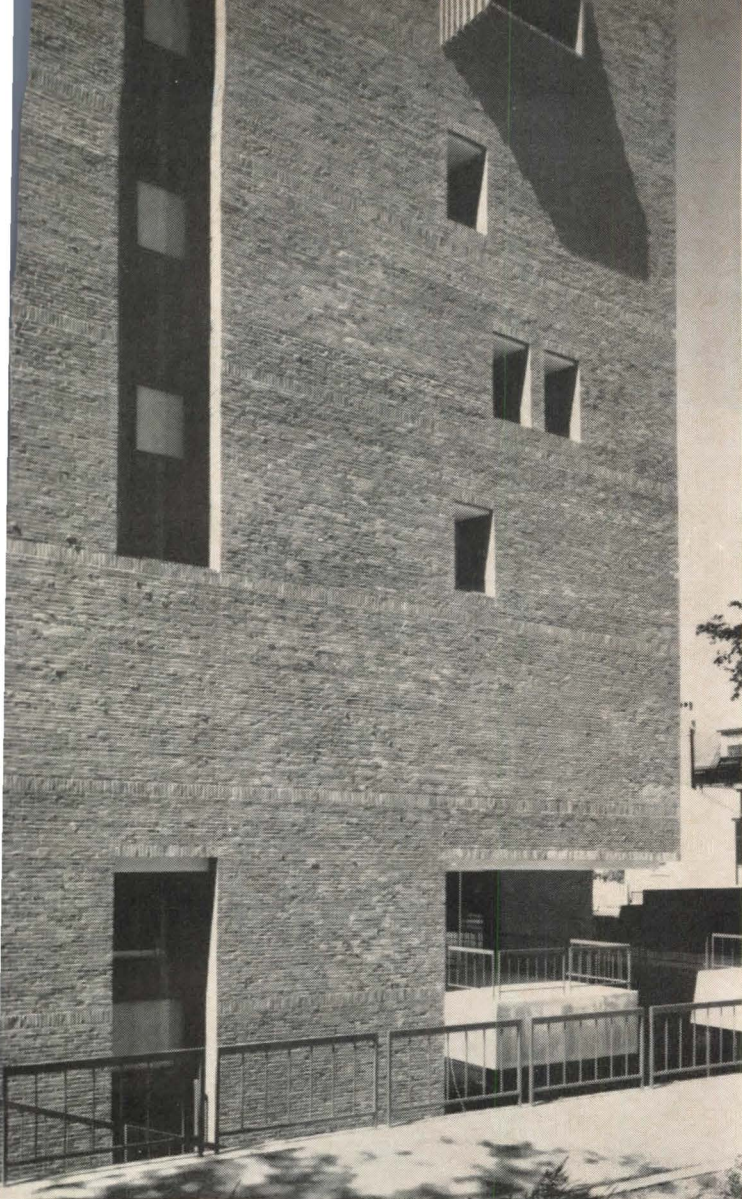


FIRST FLOOR AND SITE

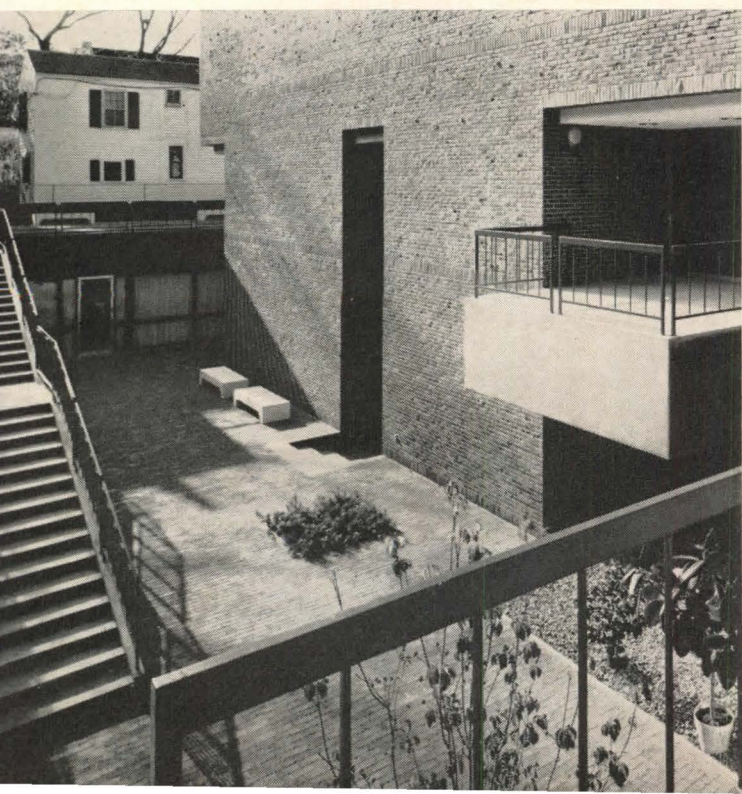


GROUND FLOOR





Larsen Hall is rooted a level below grade, in a sunken court ringed by specialized spaces. Bridges to the vestibule span this landscaped moat.



The plan and program: A sunken court, an unobstructed core

The departmental building committee asked three things of its architects, according to Chairman Robert Anderson: to design a building that would be "memorable visually, an eye-catching symbol"; to provide "a fluid, flexible space appropriate to the constantly changing needs of our profession"; and "to make certain that our building would be a congenial neighbor."

Armed with these objectives and specific space requirements, Anderson's committee sat down with a team of nine Caudill, Rowlett & Scott architects and engineers in a corner of the Harvard Faculty Club made over into a temporary drafting room. Five days later they emerged with the preliminary scheme for Larsen Hall.

It was organized around what Caudill calls the "exo-skeletal" principle. Everything unmovable—columns, stairs, elevators, air shafts, electrical raceways—is on the perimeter, leaving an unobstructed loft at the center. Of the six upper floors, four house individual faculties or programs of the department, and each has chosen to subdivide the loft space differently into offices, seminar rooms, and conference rooms. Each also has its own meeting-dining room, dubbed the "watering hole."

A certain amount of neighborliness was imposed on the building by local zoning rules: it fills the entire permissible seven-story envelope, and gains an eighth by means of a sunken court. Other gestures of politeness were the breaking of the roofscape to echo the shapes of nearby chimneys, and the use of local brick ("Harvard tweed": Caudill). The below-grade and ground floors have large glass areas to reduce the building's massiveness, but those above do not: the brick walls are broken only by large windows at each "watering hole," and smaller ones serving 36 per cent of the perimeter rooms.



A typical office floor: "Agglomerations of cells fixed in materials and techniques that will prove . . . as permanent as load-bearing masonry walls."



The vestibule (above) and its arched entrance (below): "When Richardson used an arch, he gave it a grandeur . . . that made it contemporary."



A dissenting opinion: Inflexibility within, Expressionism without

The following appraisal of Larsen Hall is by James Ackerman, chairman of the Harvard department of fine arts. It is excerpted from the fall issue of Connection, published by students of the Graduate School of Design, Carpenter Center, and the Fogg Art Museum at Harvard.

Nobody wanted a bad building. The faculty of the School of Education hoped for something they could be proud of, and the architects must have thought of a Harvard commission as a chance to prove themselves in competition with the great designers of two centuries who have built here. The contractor handled the brick veneer with sensitivity, and everyone strained to do as little violence as possible to the historic area of Christ Church and small houses in which the building is sited. Zoning restrictions necessitated a low percentage of land coverage. Nothing was neglected or rushed. In a word, the goals of the school and of the designers seem to have been fulfilled. But they were the wrong goals.

I am not concerned so much with the building as with the state of mind it represents, which is common in recent architecture.

There are two education buildings. One, devoted to utility, is an eight-story office block. The other, devoted to expression, is a cubic shell with some apertures and bumps. The two are almost independent. This is not said in criticism but as fact; in principle, such separation is not wrong unless it serves no reasonable purpose or inhibits the activities of the users of the building (there are, for example, some fine Baroque facades applied to Medieval churches).

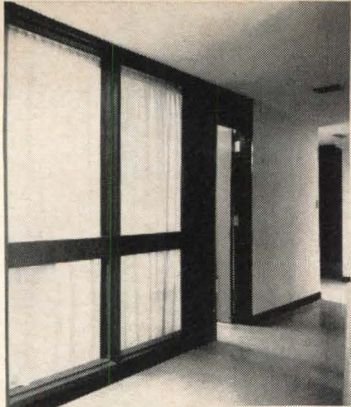
But before putting Larsen Hall to that test, let us ask what the expressive shell expresses. In its materials, predominantly brick, it states its community

with the other big buildings in the neighborhood (nothing could have been done to make a bond with the small wooden buildings); by its form (blockiness, mass, deep openings and projections, minimal glass surface, absence of subdivision by floor level except by a variation in the brick courses), it seeks to state a number of purposes: the weightiness and solidity of an institutional building and, in its Roman/Romanesque arches and Medieval window embrasures, some link with a distant past.

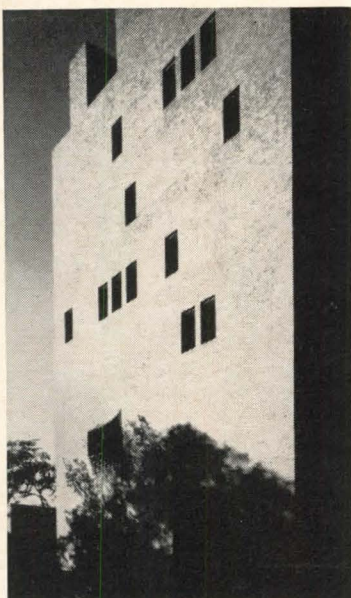
The choice of a brick veneer in this site is acceptable; it obscures the nature of the structure and evades mid-20th century techniques, but neither the revealing of structure nor the use of new technologies can guarantee good design. But to what end is the veneer used?

Like much recent architecture, it aspires to monumentality, tradition, richness and variety as an antidote to the esthetic of the glass box. The glass box, however, has the virtue of being ordinary prose, which anyone who knows the language can talk passably (though it is hard to speak elegantly). The architecture of monumental expressiveness is poetry, an infinitely more difficult and demanding form of communication that has to be composed with learning and sensitivity. In either prose or poetry, banality is common, but in poetry there is the added danger of sham.

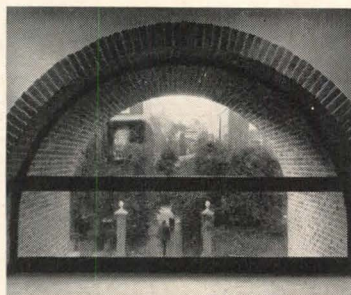
LARSEN HALL'S closest parallel is to European Expressionist design of the twenties and thirties (cubic masses of the block, windows emerging in relief or penetrating, with canted jambs suggestive of Gothic defensive towers, vertical slashes of shadow, big arches referring to an undefined past, and in general the exaltation of effect over considerations of convenience). Expressionist theory, which freed the artist, by virtue of his genius, for inspired creation, and absolved him of a responsibility to society, to tradition, or to current technology, produced the kind of architecture that superficially resembles what



Glass partition (now draped); "Every passerby a potential disturbance."



Larsen Hall windows: "The most arbitrary motives of this arbitrary decade."



Another arch, from inside and out: "The upper stories cross the span . . . as if forced in as an afterthought."



any freewheeling romantic designer of our time might hit on, whether or not he knew that a theory existed. The original Expressionists did produce some moving buildings; Mendelsohn is a good example. Expressionism today is an anachronism.

A look at two elements serves to demonstrate the point. The bulging window frames on all four elevations—hanging Zigurats, to mix a Babylonian metaphor—may be the most arbitrary architectural motifs of this arbitrary decade. If an element is contrary to structural logic and practice, if it is wholly unrelated to past or current vocabulary, and if it inhibits the very function for which it is designed (in this case by screening the window from the light and view), it is indefensible even if it should be beautiful.

Second, the entrance arches do not function structurally, but only as vague references to an antique system that has no relevance to our lives here and now. This is not to say that arches or historical allusion cannot be relevant; when Richardson used an arch, he gave it a grandeur and individuality that made it contemporary and challenged the Middle Ages. But these are cut-outs designed to vary the facade, architectural equivalents of the three holes that dignify Buick fenders. They are not portals even; the true entrances, as seen from the interior, are glazed rectangular bays, and the two upper stories cross the span of the arch, as if they had been forced in as an afterthought.

To say that the outer shell fails expressively is not yet to say that the shell concept is mistaken. It was elected for sound reasons. A plan in which the utilities, vents and vertical circulation occupy shafts on the perimeter, leaving an unencumbered core, could easily better conventional solutions for office blocks by permitting flexibility in distributing partitions.

The freedom of interior planning bought by the School of Education at such cost is squandered on most floors by a disposition which is no different from

that of a conventional block: a central core (of offices, not utilities), an annular corridor, and an outer ring of offices inserted between the stairs, toilets and elevators. Everything is introspective: the core dwellers look out, the perimeter dwellers in, at the dreary corridors, or across them at one another, and every passerby is a potential disturbance.

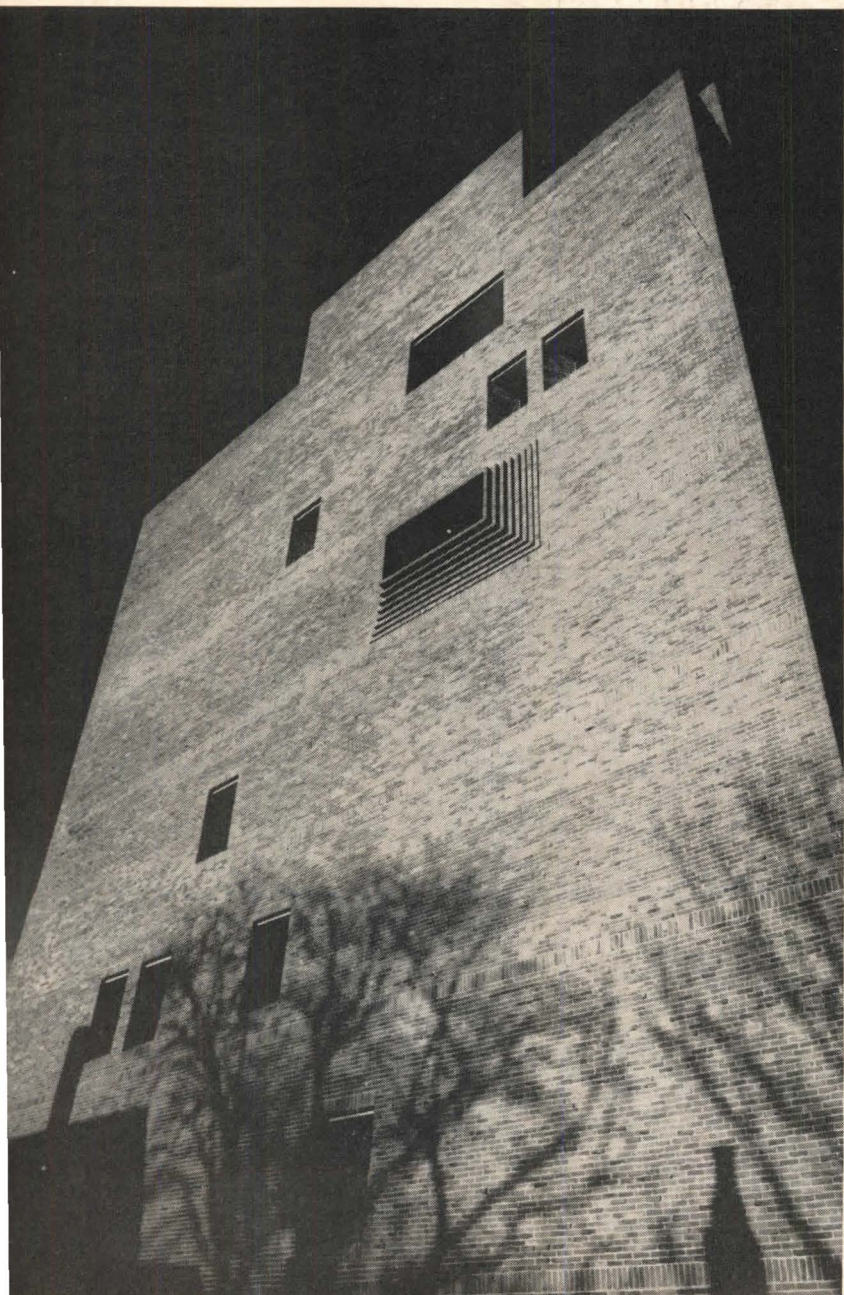
The small size of the offices dictates the use of glass partitions, and the lack of a view or of natural light cannot induce concentration in these circumstances. The total floor space is so small that where larger areas are opened out for secretarial pools and study rooms, they must double as circulation; at every desk one has the sensation of being in a popular restaurant at the rush hour.

The greatest misfortune of all is that the principle of flexibility was practiced only in the initial planning decisions. Then the floors were subdivided into agglomerations of cells that are fixed in materials and techniques which will prove to be, in our future building economy, as permanent as load-bearing masonry walls. It is incomprehensible that Harvard's School of Education, which pioneered in the concept of the multipurpose classroom with movable partitions, should have imposed on itself and on future generations such an inflexible workhive.

IMPLIED at the start that something was wrong with the state of mind that produced the design. Originally I should have defined it as willful, but now it seems simply confused. The architects, like most of their colleagues in this country and abroad, just did not know where they belonged in the evolution of architecture. They wanted to affirm certain traditions but couldn't. By misunderstanding, they cut themselves off from their inheritance and were left stranded with only their talent. It is not a mean talent, but it suggests the brilliant style of some writers who have nothing important to say. Serious architecture needs more than that.



One of the wide windows peers out on a 19th century roovescape. Larsen Hall's own roof line was broken to reflect the robust Georgian chimneys.



FACTS AND FIGURES

Roy E. Larsen Hall, Harvard Graduate School of Education, Cambridge, Mass. Architects: Caudill, Rowlett, Scott. Engineers: Wald & Zigas (mechanical and electrical). General Contractors: Wexler Construction Company. Total building area: 47,215 sq. ft. Cost: \$1,464,132 (excluding land, landscaping, furnishings, fees). PHOTOGRAPHS: Robert Damora; except page 49 top, page 50, page 51 top two and bottom by Lois M. Bowen. Page 51 third from top, Harvard.

The form and context: Assertive patterns, larger than life size

Both Caudill and the dean of the department, Theodore Sizer, decline to rebut the Ackerman criticism. In response to earlier barbs, however, the Caudill firm did prepare a fact sheet for use of school personnel.

In it, the architects spoke of the "feeling of permanence" which they had sought, and acknowledged "a reaction against curtain walls as being dated circa 1945-1960." The fenestration, they said, "is not entirely arbitrary. Most of the windows are located where they were felt to be needed. It could be argued that all exterior wall rooms should enjoy their views, but this would lead to a glass box, which would not consider the climate [or] heating and cooling costs."

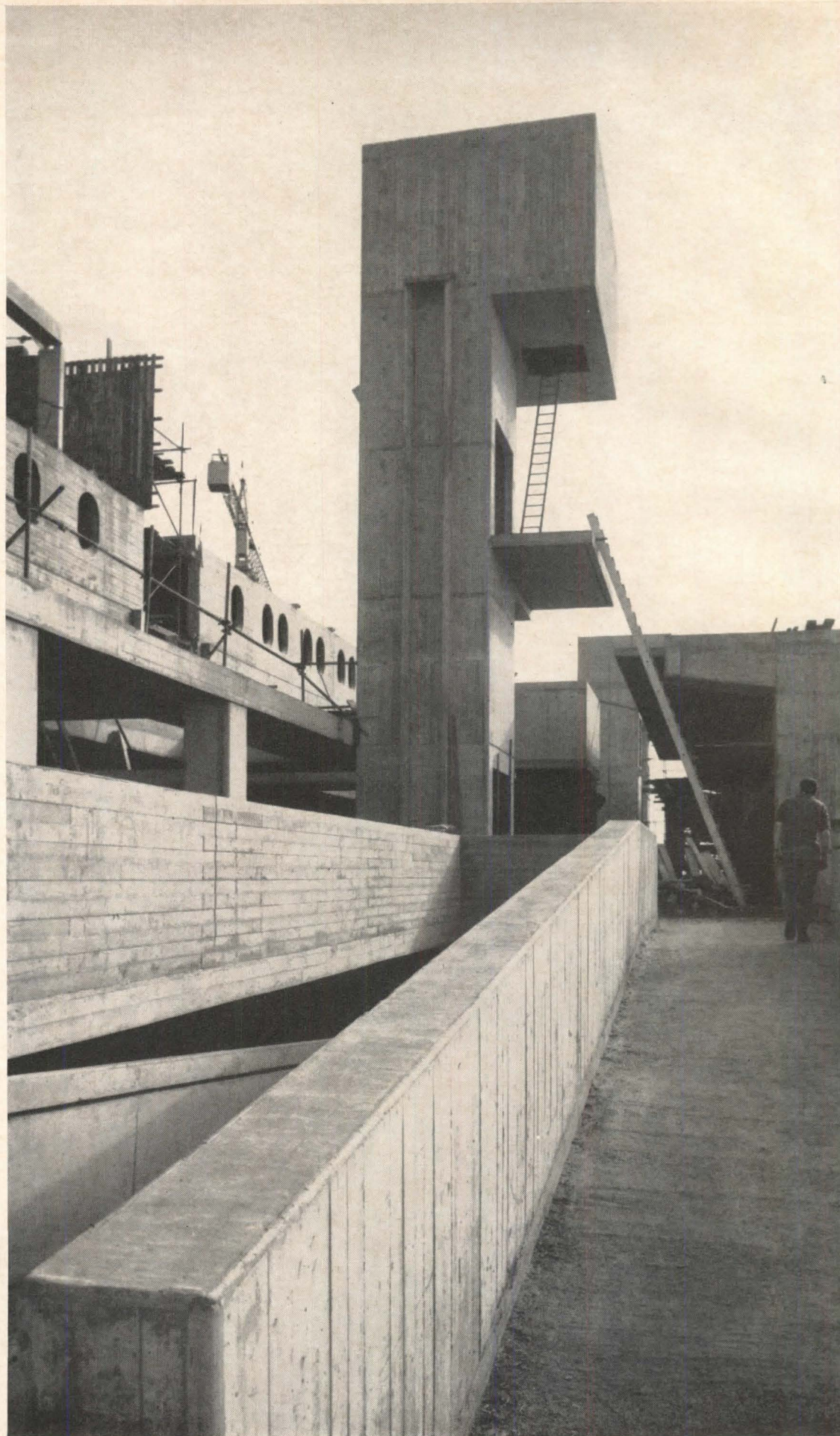
Sizer says he hears remarkably little grumbling about the building from his faculty members, and suggests three reasons for their relative contentment: first, they had been scattered about the campus "in ghastly places"; second, the barrage of outside criticism has made them defensive about the building; and third, they were given ample opportunity to express their opinions. Sizer's own opinion of the building is favorable, but he adds: "Personally, I would like to see more windows."

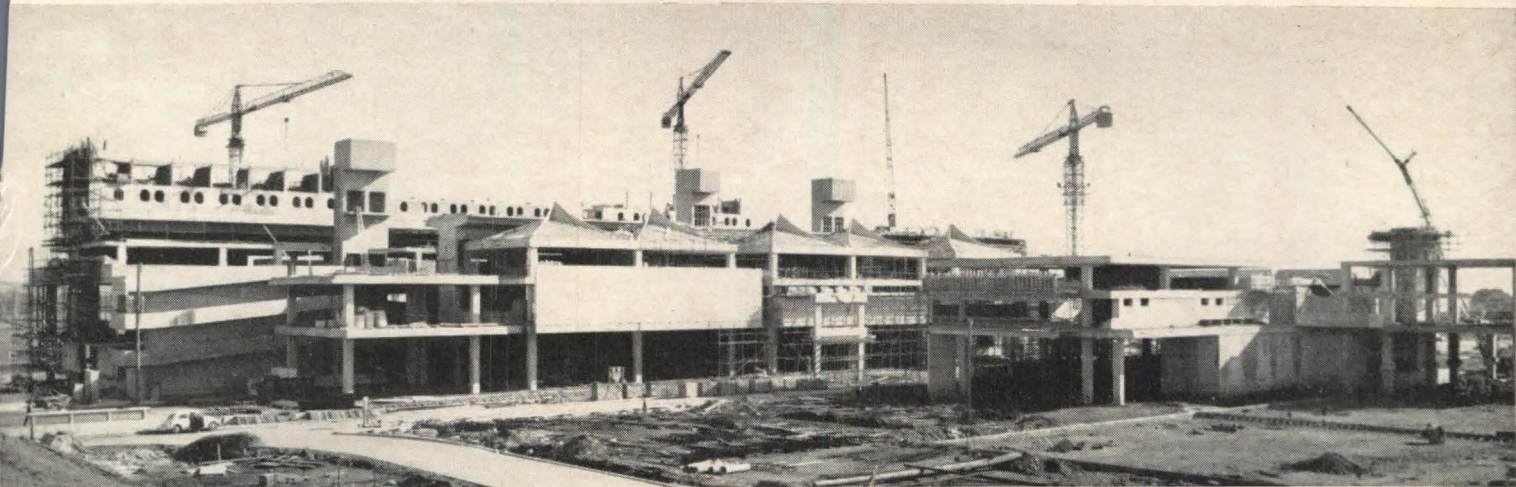
Yet it is the paucity and patterns of the windows which make Larsen Hall what it is, like it or not. The walls were treated as graphic devices in an attempt to make an ordinary building look extraordinary. In the process, they also made it look larger and more assertive, to the detriment of its context.

Harvard and Radcliffe will survive; in the view at right, it is still the greenery and the Georgian which prevail. But the needless damage done by Larsen Hall (and some other recent Harvard buildings) suggests that it may no longer be enough for an architect to satisfy himself and his immediate client.

—DONALD CANTY

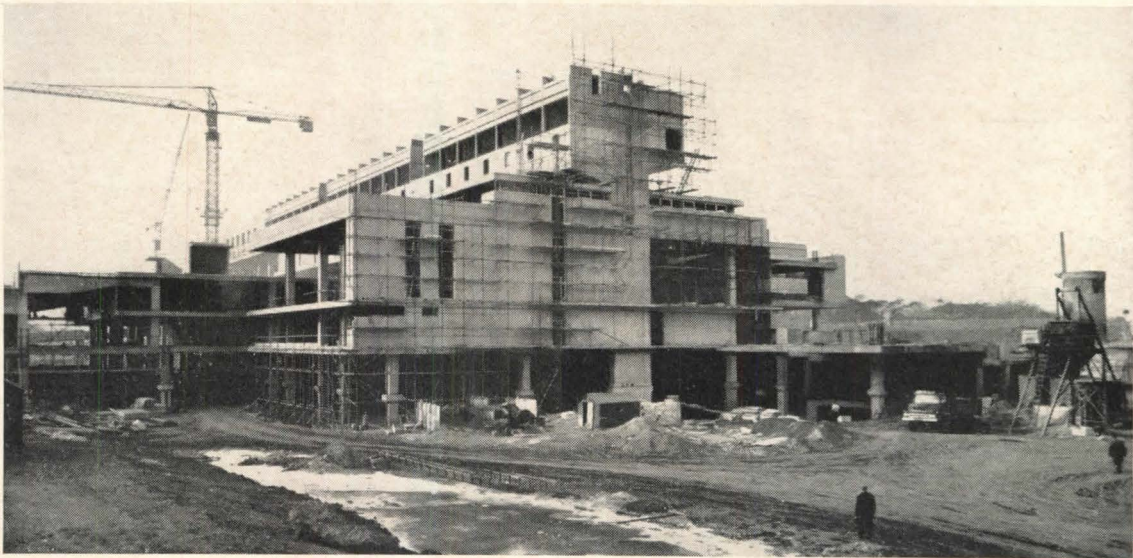






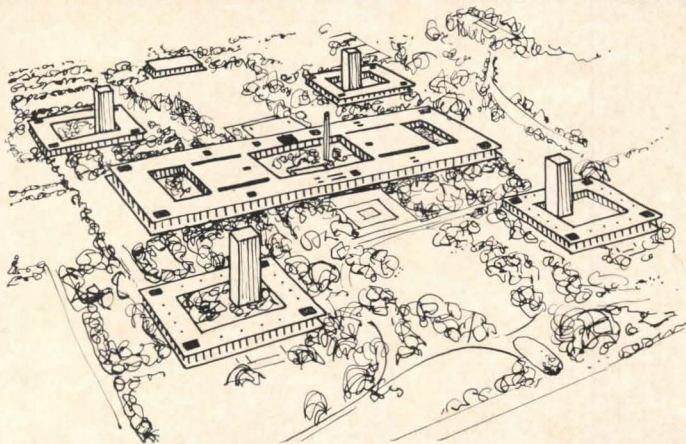
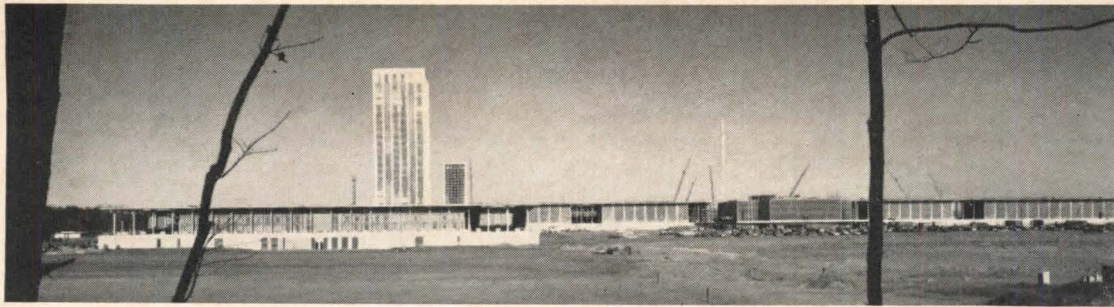
LINEAR CORE FOR A NEW TOWN

Mechanical shafts (example left) add a vertical dimension to the drama of the growing linear sculpture that is the town center of Cumbernauld, Scotland. Perched atop a hill not far from Glasgow, this first phase of construction houses all commercial facilities needed by a community of 20,000, as well as public chambers (pointed roofs, top photo), and a strip of penthouses with portholes on one side (top) and picture windows on the other (right). Eventually the single-structure center will serve 70,000 residents. Architect is Cumbernauld Development Corp.



QUIET BACKDROP FOR A SQUARE

Studiously self-effacing, John Carl Warnecke's Court of Claims building creates a quiet backdrop for the 19th century row houses which wall the east side of Washington's Lafayette Square—as quiet a backdrop as a 140-foot-high dark brick building can provide, that is. The broad facade is accented only by bay windows on its top two floors which peer out over the rooftops of historic Madison Place. The bay windows reappear in the gate house (second building from right), which shelters a covered passageway to the landscaped courtyard and the nearly landlocked main building behind.



FORMALITY FOR A CAMPUS

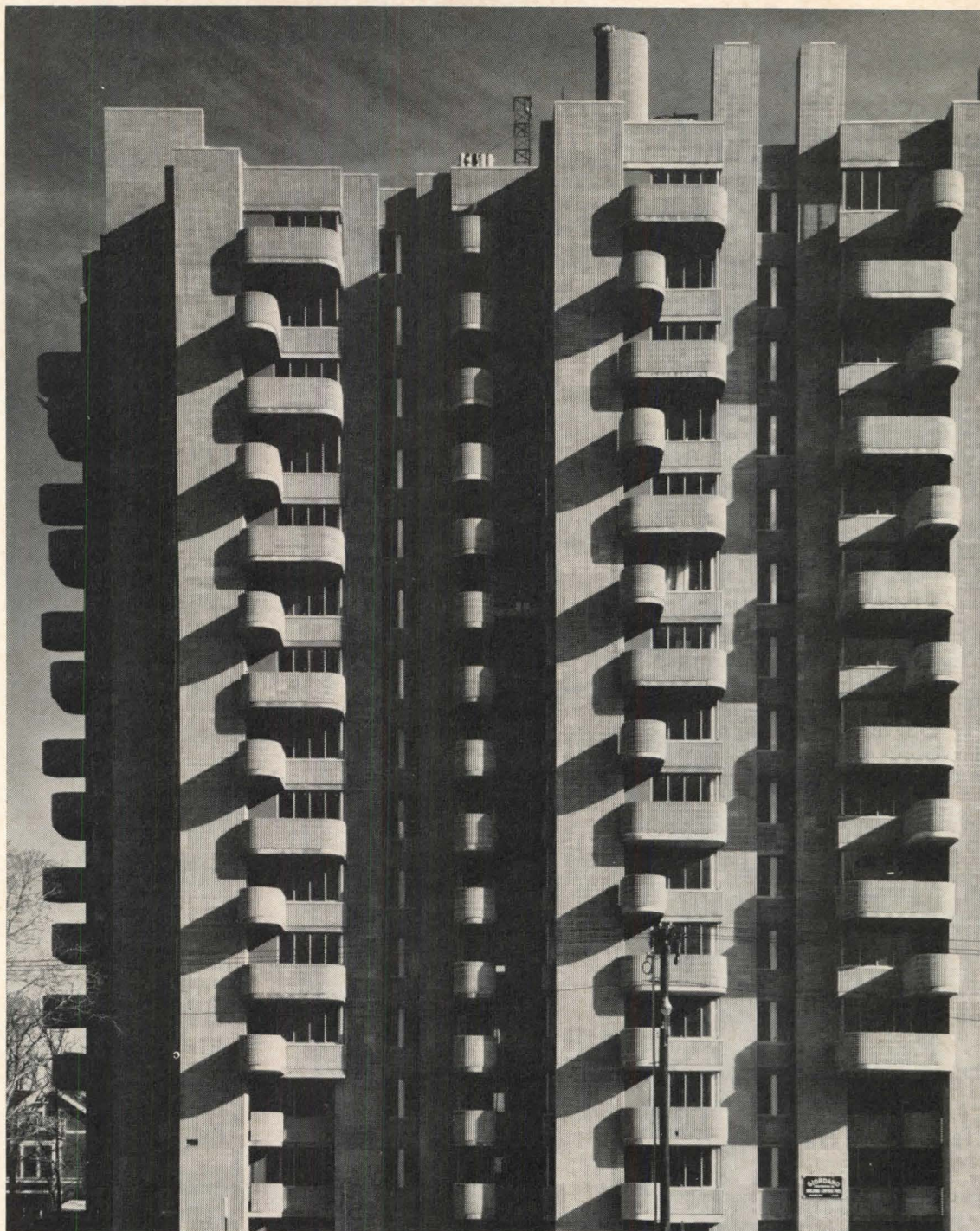
The first dormitory quadrangle of Edward Durrell Stone's new Albany campus of the State University of New York is now the nearly symmetrical home of 1,150 students. Its offset tower (below) has two- and three-story window walls between continuous precast concrete mullions. Stone's determinedly formal plan (sketch at left) calls for four such quadrangles, at the corners of a giant academic complex. A second is partially occupied, the initial segment of the academic complex (top photo) will be put to use this month, and completion is scheduled for 1975. So far more than \$72 million in construction contracts have been awarded for the giant complex.



SHOOTING GALLERY FOR ATOMS

The two-mile-long "klystron gallery" (definition on request) of Stanford University's Linear Accelerator Center (right) is probably the longest building in existence. A simple steel frame structure with metal siding and roof, it contains mechanical equipment for the world's largest straight line atom smasher. Every 30 feet the building bumps out to enclose a control room on the north and power and water sources on the south. Twenty-five feet below the full length of the gallery's concrete floor lies the accelerator housing, the world's longest cast-in-place concrete tube without expansion or contraction joints. (The slash over the building is an auto overpass for a proposed freeway.) Architect-engineers are Aetro-Blume-Atkinson, with Charles Luckman Associates.





BALCONIES FOR THE ELDERLY

Crowning a low knoll along New Haven's Oak Street Connector—as if to guard the ravine through which the unfinished highway will pass—stands Paul Rudolph's nearly completed Crawford Housing for the Elderly. From its 109 balconies, one for each apartment, residents will be able to enjoy a broad panorama of the city's urban renewal accomplishments. Among the landmarks they will see are Rudolph's Temple Street Parking Garage and his Yale School of

Arts and Architecture.

In this building Rudolph has expressed his interest in cylindrical forms and corrugated surfaces in a very uncomplicated way. The poured-in-place concrete frame has been enclosed in special concrete block with a ribbed surface. The stacks of balconies reproduce the ribbed pattern at vastly larger scale—and with variations. Broad, conventional balconies alternate with deep pulpit-like balconies; even this rhythm is broken here and there to stave off monotony.



PHOTOGRAPHS: Pages 54 and 55: Cumbernault Development Corporation. Page 55: bottom, J. Alexander. Page 56: left, top and bottom, Ezra Stoller Associates; right, Sunderland Aerial Photographs. Page 57: Robert Perron.



PITTSBURGH LIBRARY: CLASS AMID THE CLUTTER

Paul Schweikher's little branch library in Pittsburgh's Knoxville section sits calm and cool among garish neon-lit storefronts and crumbling Victorian houses. It seems not the least disturbed by the surrounding turmoil—not even by the tangled cat's cradle of wires overhead (opposite page).

The building's double-hooded, heavy-browed form gives it strength enough to draw attention from the din around it, yet its simplicity makes it appear as though it is not really trying to compete at all. In short, it is the most successful piece of small-scale urban design that Pittsburgh has seen in a long time.

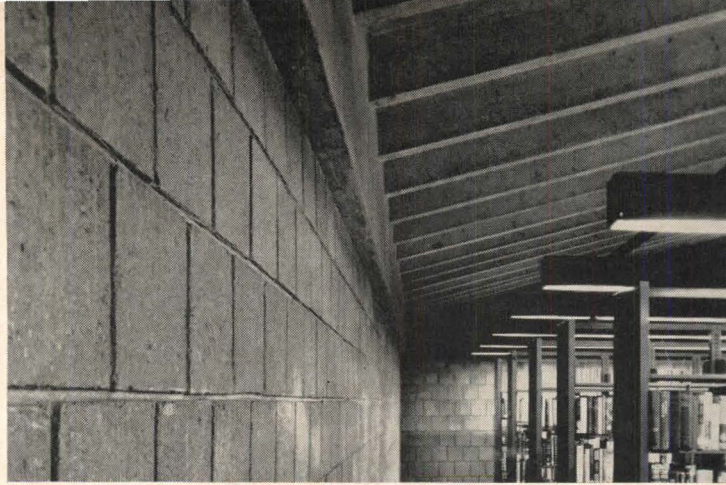
Schweikher's restrained use of materials accounts for a great deal of the building's rock-like calm. On the exterior, the materials are various shades of gray: concrete block walls, exposed concrete columns and beams,terne steel sheets on the hoods and roof, and granite paving at the entrances (the same as that used on the street). All but the

steel appear again inside, with the addition of white acoustic plaster within the hoods, oak strips over plywood in front of the service desk, and dark gray linoleum on the floor of the central reading area.

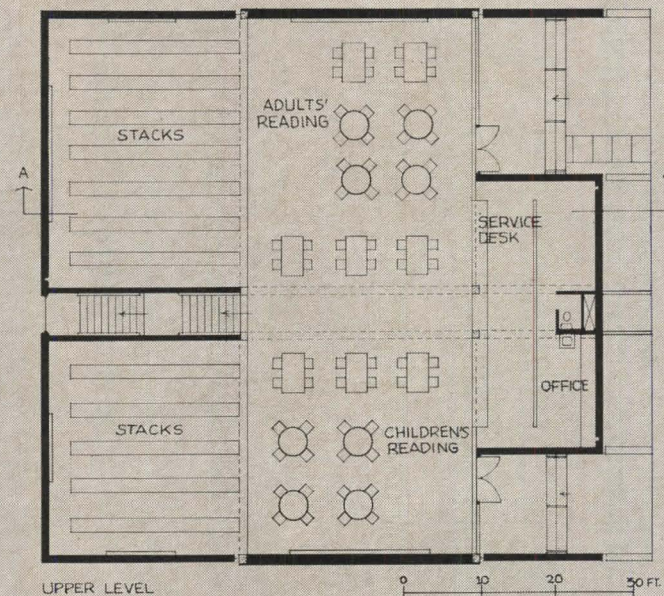
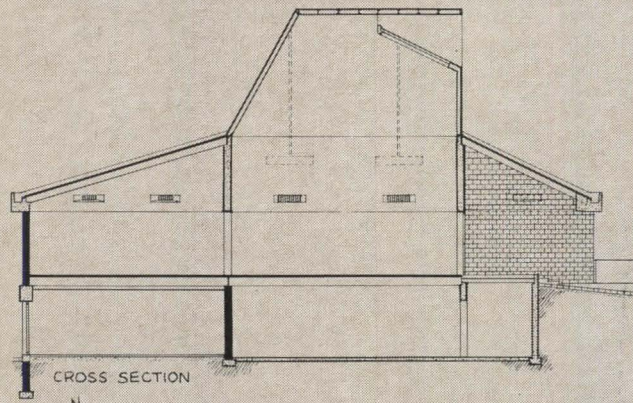
Given this neighborhood as a setting, Schweikher felt that the library's interior had to be a "quiet zone," a retreat from the cacophony outside. He also felt, however, that the space must not be entirely isolated and aloof. So he set the two entrances—one for children, the other for adults—deeply in from the facade, but encased them in glass to provide a shielded link with the sidewalk (below). And he placed the two wedge-shaped monitors above the central reading area, with slots cut in them for natural light.

The split between the hoods divides the children's reading room from the adults'. The children's space is smaller than the adults'—which explains why the hoods are unequal in size: they express the scale of the human activities going on below.





The library's two reading areas occupy the high, central portion under the hoods (section, left, and photo, opposite). Flanking the reading areas are book stacks (left) at the rear and glassed-in offices behind a long service desk (bottom and opposite photos) between the two front entrances. Precast concrete double-tees, exposed on the ceilings inside, support the low roofs over the two sections. The children's and adults' book stacks are divided by a staircase (floor plan) to the lower floor and rear entrance. The lower level contains a "story hour room," employee lounge, rest rooms and mechanical-storage space.



FACTS AND FIGURES

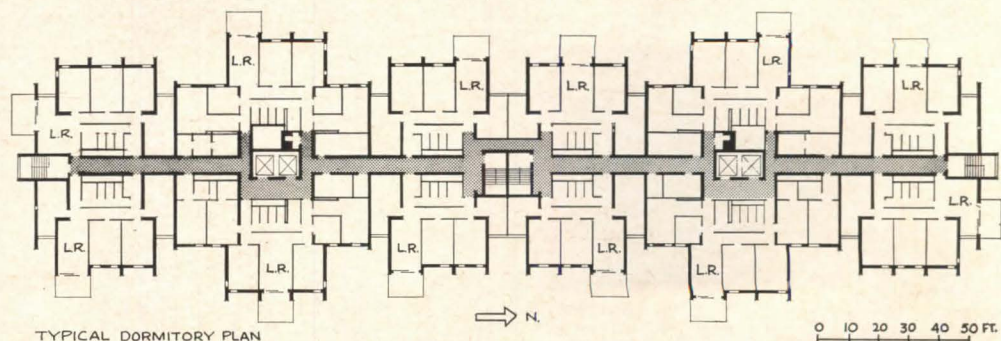
Knoxville Branch, Carnegie Library of Pittsburgh, 400 Brownsville Rd., Pittsburgh, Pa. Owner: City of Pittsburgh. Architect: Paul Schweikher. Engineers: Joseph Spagnuolo (structural); Dodson Engineering Co. (mechanical); Frank T. Wadlow (electrical). General Contractors: B. Zambrano Co.; J. R. Huhn. Building area: 9,919 sq. ft. Construction cost: \$185,200 (\$18.68 per sq. ft.). PHOTOGRAPHS: Pages 58-59, James Cook; Pages 60-61, Clyde Hare.





STUDENT DORMS: A UNIVERSITY TRIES VARIETY

BY DONLYN LYNDON





Sited along a Seattle ridge, the University of Washington campus is a grand composition of axes and spaces dotted with monumental and, for the most part, powerful old buildings. Recent additions have been self-effacing, in the neo-Gothic, neo-Yamasaki manner, out of studied deference to their surroundings.

Kirk, Wallace & McKinley now have bypassed both the

mode and the deference in adding a new dormitory to the west edge of the ridge, immediately adjacent to the one they completed there nearly three years ago (Aug./Sept. '64 issue). The two are totally unlike, a fact reflecting these architects' unusual capacity for learning from experience, and their clients' willingness to try a variety of living conditions for the students.

Haggett Hall (right above), the first, accommodated 800 students in units of 100; each floor housed 50 and braces of two

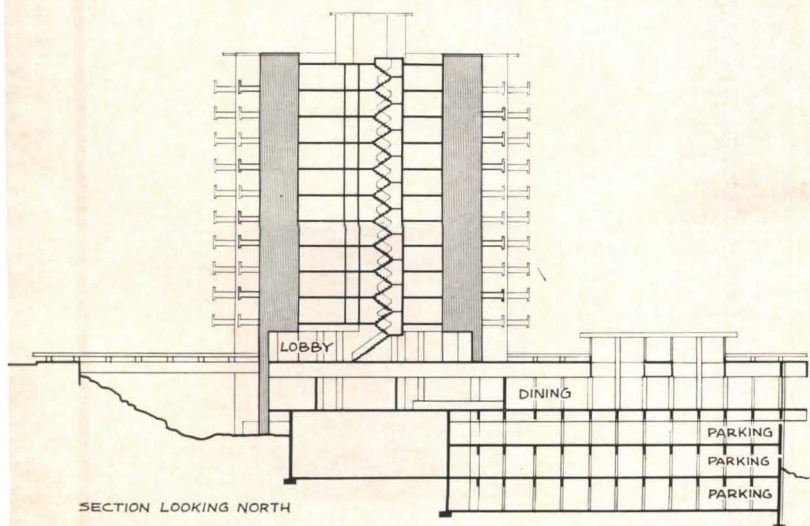
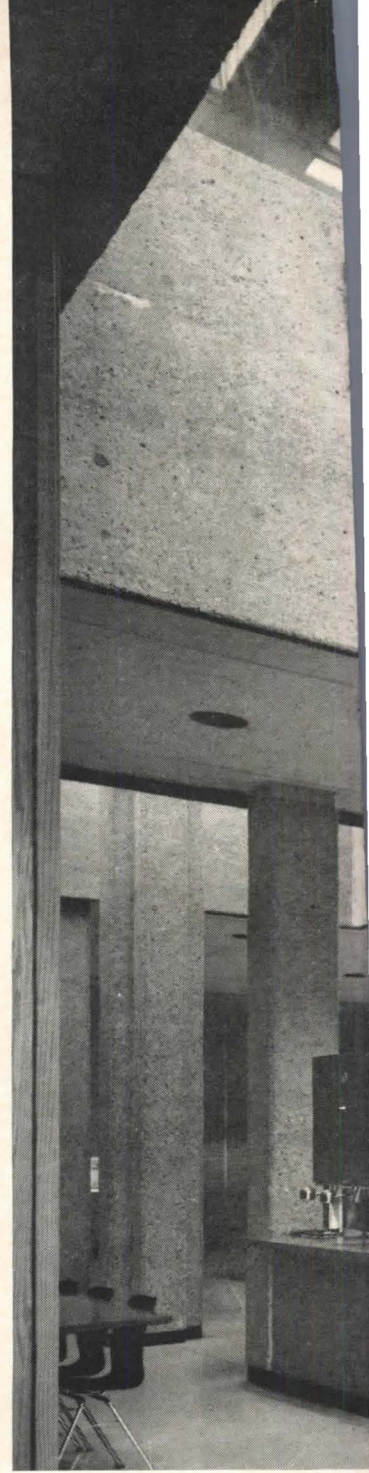
floors were joined by two-story lounges. The basic unit of McMahon Hall, the new building, is a close grouping of eight to ten students, in small bedrooms clustered around a communal living room. There are 12 clusters per floor (plus an adviser's apartment, small typing closets, and laundry facilities) bringing the student population to 1,000.

The living rooms all have large, cantilevered balconies, staggered within the standard bay according to variations in cluster arrangement. Seen at a

distance, this is a building of ominous bulk; seen at close range, the way its users see it, the balconies' pattern makes it far less overwhelming.

This pattern gives McMahon Hall its visual form, and thus the strong visual identity that justifies its departures from Haggett. In Academic Gothic days, students lived in quadrangles whose central spaces created a pervasive sense of place. When site and budget dictate a monolithic arrangement, the structure itself must be the place.

Mr. Lyndon is the Forum's West Coast correspondent and chairman of the University of Oregon's department of architecture.



As did its predecessor, McMahon Hall puts its steeply sloping site to good use. Extending out over the hillside is a platform containing three levels of parking and one of dining rooms (see section). The platform's roof, at the main floor level of the building, is a large terrace, effectively walled on one side by Haggart Hall (photo above).

What appear to be glazed pavilions atop the terrace are the superstructures of clerestories for the dining floor beneath. This floor (lower portion of plan at

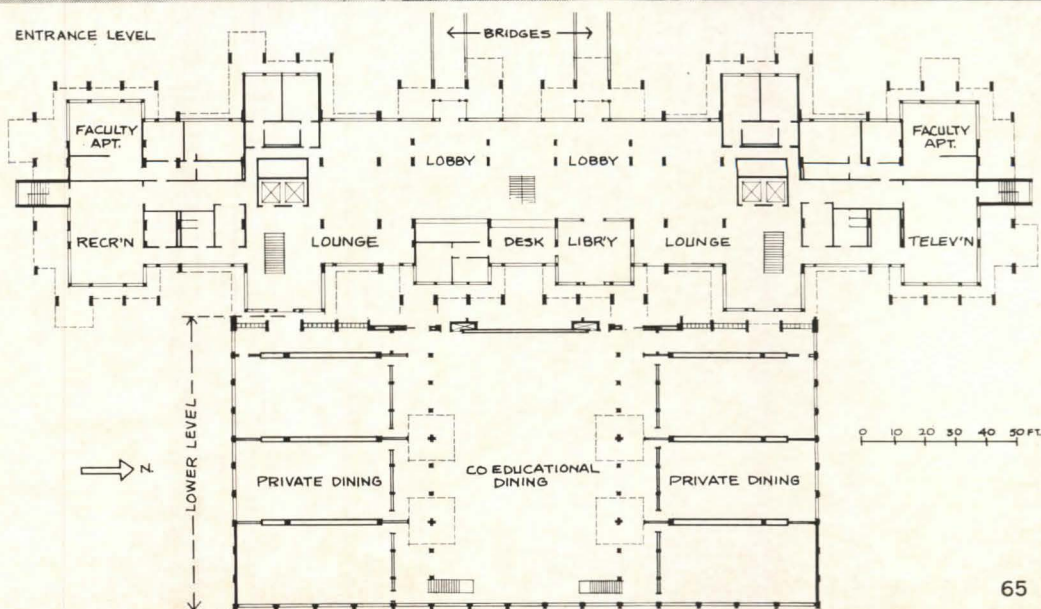
right) contains a large dining room, seating 300 students, flanked by six smaller banquet rooms seating 100 each.

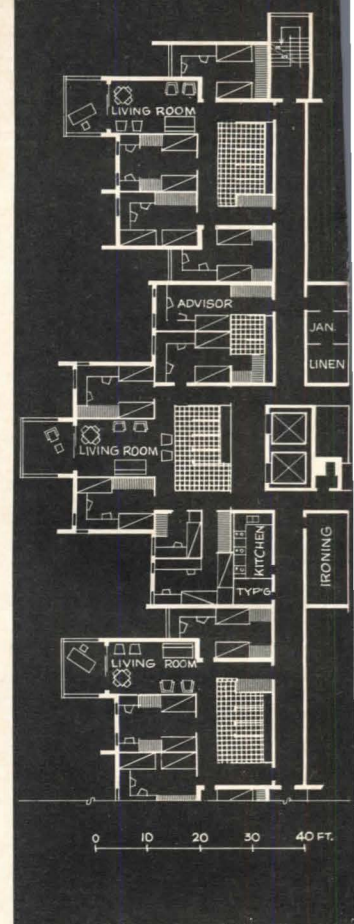
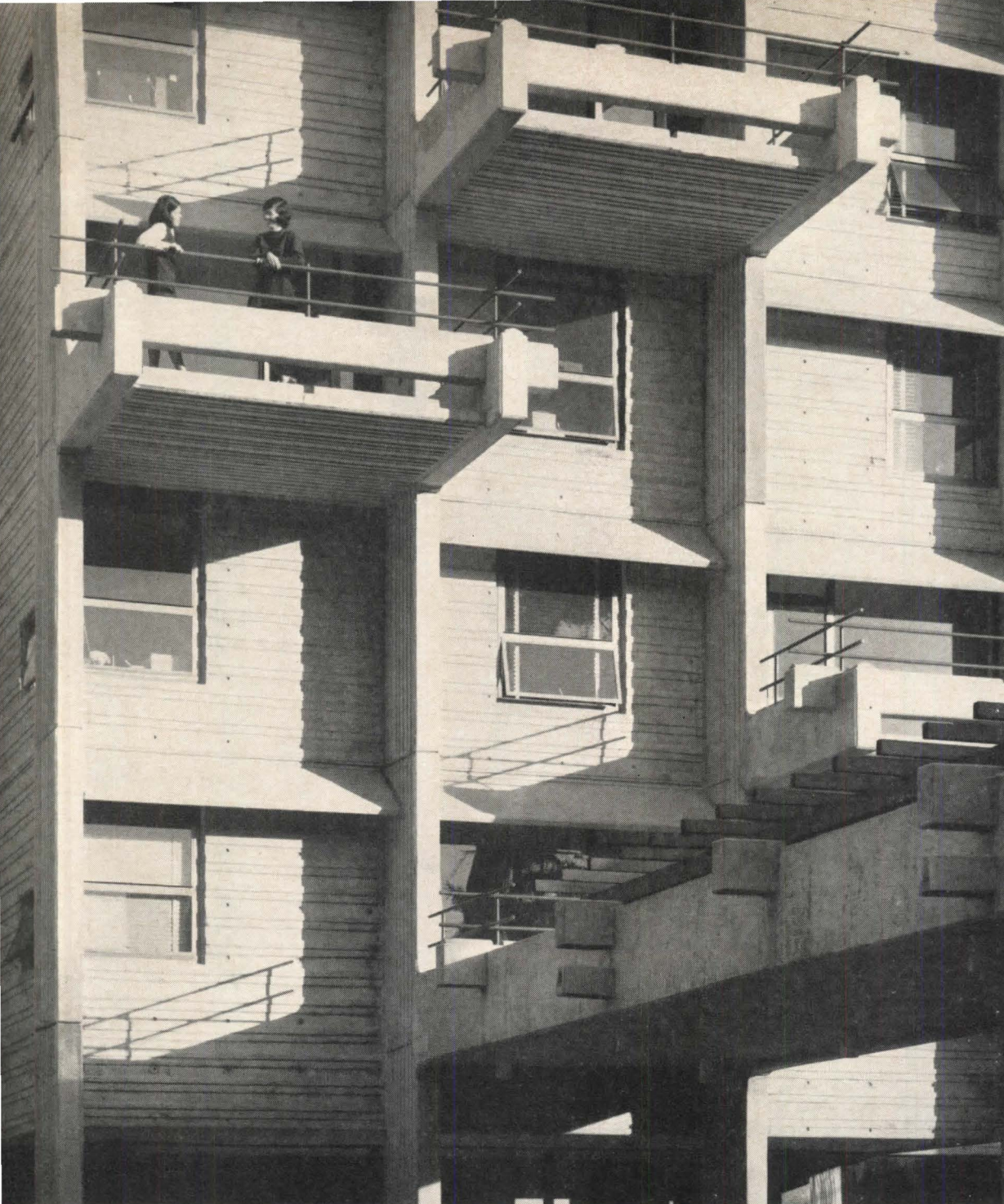
The clear spans made possible by placing these parts of the building out over the hillside, away from the main slab, are supported by two rows of rough-surfaced concrete columns that bound the large room (photo above and plan right). These rows pass directly through the four clerestories, and one column, differentiated from the rest, goes all the way up to sup-



port the trellised roofs of the projecting pavilions overhead.

On the main floor of the building proper (upper portion of plan), similarly exposed and bush-hammered piers serve to channel paths of circulation. This floor contains a small library, which is constantly in great demand, and the building's only common lounges. The lounges, pockets of seating between the columns and off the paths, are used mainly as waiting rooms: the main student gathering places are the living rooms in the clusters upstairs.





The cluster scheme means that each resident of McMahon Hall has three kinds of spaces immediately available to him: a study and sleeping space (usually shared with one other), a living room (small photo), and a balcony. The bedrooms are slightly smaller than usual, to gain space for the living rooms.

It is in the cluster corridors where the economy with which McMahon Hall was built begins to show (the architects point out that while Ivy League schools spend as much as \$15,000 per

student for cluster quarters, state universities allow \$6,000 at most). These corridors are tight and confusing, lacking the columnar order of the main floor.

Once inside the clusters, however, the living rooms and balconies again make clear the building's social and structural order. From inside as well as out, the network of slender, overlapping members — balconies, columns, and slanting sunshades — surround McMahon Hall with a thick and active boundary of penetrated space.

FACTS AND FIGURES

Edward and Theresa McMahon Hall, University of Washington, Seattle, Wash. Architects: Kirk, Wallace, McKinley & Associates. Engineers: Worthington, Skilling, Helle & Jackson (structural); James B. Notkin & Associates (mechanical); Thomas E. Sparling & Associates (electrical). Acoustical consultants: Robin M. Towne & Associates. Kitchen consultants: John Byers & Associates.

Building area: 254,266 sq. ft. in student and dining levels; 60,250 sq. ft. in parking levels; 10,000 sq. ft. mechanical space. Total capacity of building: 1,000 students. Construction cost: \$5,368,293.

PHOTOGRAPHS: Hugh N. Stratford.



BUILDING A BETTER FARMHOUSE

The houses presented on the next three pages are "extremely" pleasant, happy, smooth, kind, gentle, clean, clear, nice, new and good. But they are only "moderately" quiet, modern, relaxed, beautiful, sharp, bright, peaceful, dry, strong, fresh, calm and full.

That is how agricultural workers in California's San Joaquin Valley evaluated them recently in a "semantic differential" survey. Their opinions are important, because the houses were developed specifically to meet their needs and to suit their meager incomes, which average less than \$3,200 a year per family. They are intended as alternatives to the inadequate housing that private builders are currently providing.

The three prototypes shown here are the results of a two-year demonstration project carried out by the University of California's architecture department under a grant from the U.S. Department of Housing and Urban Development. The Berkeley project team was headed by Henry Sanoff, an assistant professor of architecture, and included Tyrus Porter, Amos Rapoport and Patrick Morreau.

Despite the near-poverty incomes of nonmigratory farm workers in California's agricultural belt, builders find them a fairly lucrative market for housing. (Migratory workers are another matter. Their incomes are even lower, and they are, of course, on the move.) Typical builder houses, which sell for as little as \$7,000 exclusive of lot, provide little more than basic shelter. They are stripped-down, cramped and uncomfortable versions of tract housing.

Such a typical builder house for a nonmigratory farm worker and his family contains about

800 square feet, divided into a restrictive three-bedroom plan. Its rock-bottom price rules out such niceties as washing machines, refrigerators and heating equipment. It also excludes air conditioning, yet there is nothing in the design of the house to compensate for the lack. As a result, it is a bake oven through much of the year in the hot, arid climate of the Valley.

The three prototypes developed by the Berkeley team are handsome evidence that builders can profitably offer much more for the money. The designs were arrived at only after a painstaking series of surveys and tests:

- Interviews were conducted with 160 farm workers' families to learn their living patterns, economic conditions and attitudes toward their housing.

- A "climatic profile" of the San Joaquin Valley area was developed to determine the variables of temperature, humidity, wind speed, precipitation and other climatic factors affecting the design of dwellings.

- A climatic field test was staged, using test structures in both concrete block and plywood, to measure the effects on internal temperatures of various combinations of materials, roof configurations and sunshades. (A HUD-assigned goal of the project was to provide interior comfort without the expense of mechanical cooling devices.)

- Climatic data were fed into a computer at U. C. L. A., which was programmed to simulate the thermal behavior of enclosed spaces covering a broad range of design possibilities.

- Studies were made of the relationships between orientation and building forms as influenced by solar input, and of thermal comparisons between one- and two-story houses.

The results of all the research became the ingredients of the program. They were tabulated into 102 measurable functional requirements, grouped under 11 activity classifications: indoor living, indoor cooking, toilet, indoor sleeping, outdoor living, working, mechanical, construction, storage, security, thermal controls and ventilation. Finally,

these were translated into three dimensional designs.

The three prototypes are now nearing completion at the end of a cul-de-sac in West Fresno, amidst one of the area's worst shantytown sections. In the sizes and arrangements of their interior spaces—as well as in appearance—they are a vastly superior alternative to what is marketed today. But a number of questions have yet to be resolved.

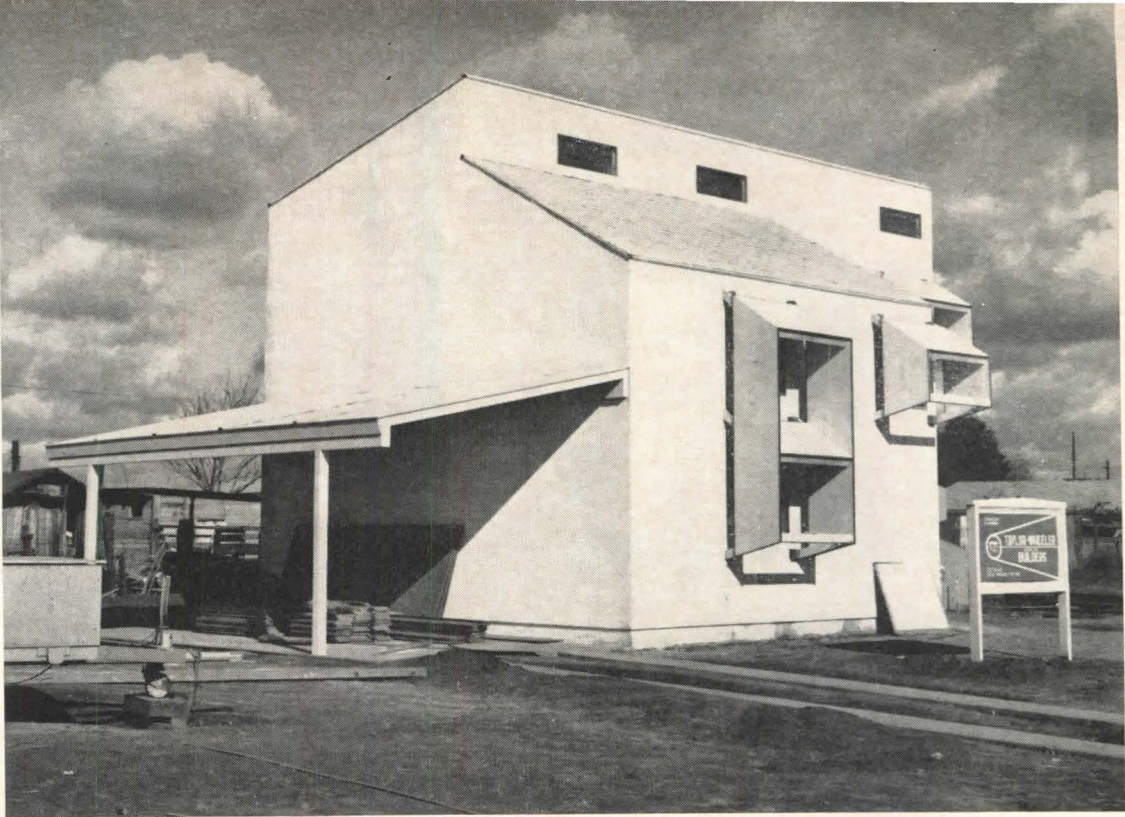
One involves their cost. They were built by a private contractor, using a critical path method, for an average of \$8,000 each—a figure above the reach of most farm workers. Sanoff claims that if builders combined the use of the many factory precut and prefabricated components designed for the houses with their own familiar techniques of stockpiling and building in volume, the unit costs could be reduced to less than their current output.

Also in question is the acceptance of the houses—by the all-important builders and lenders, as well as by the farm workers themselves. The results of the semantic differential survey were encouraging, if somewhat confusing, but the workers' evaluations were based on model photographs and handsome drawings. The same test was given to lenders with less heartening results. They rated the houses "extremely" new—hardly a compliment coming from lenders—and "moderately" obvious, unusual and dry. They were undecided whether they liked the houses. Both groups will be tested again, using the actual prototypes.

Builders will be offered free construction drawings from which to build prototype houses. However, the project has potential value apart from such end products. Sanoff feels the measure of its success will be the degree to which builders pick up the concepts behind the prototype designs for use in their own houses. Architects, too, have something to learn from the researchers' determined attempt to develop systematic information about the places and the people for whom they design.

—JAMES BAILEY

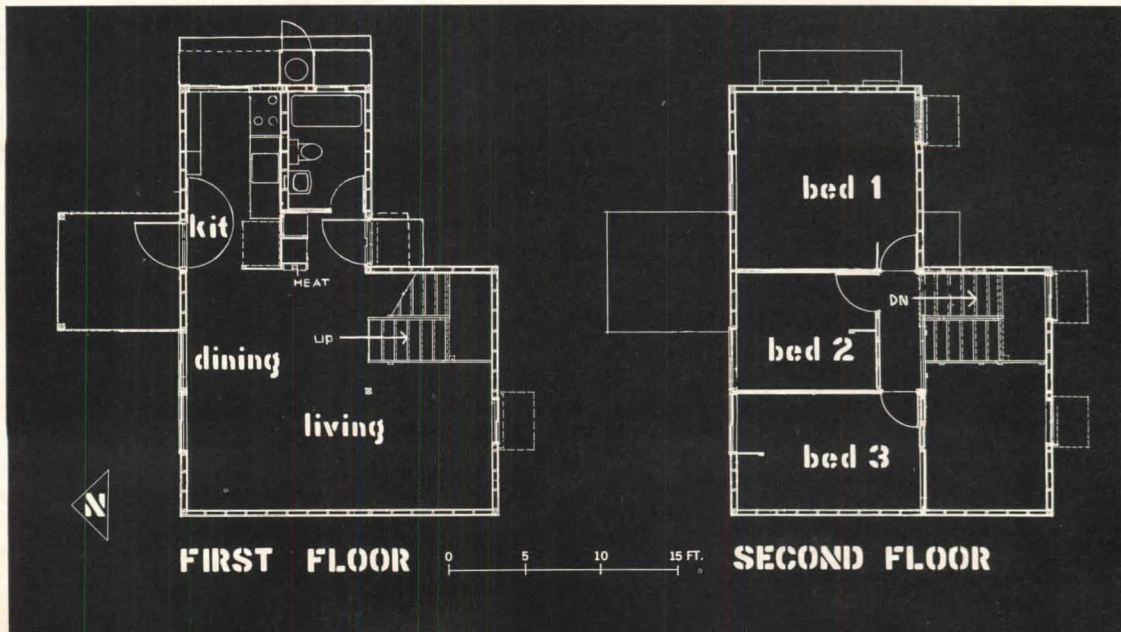
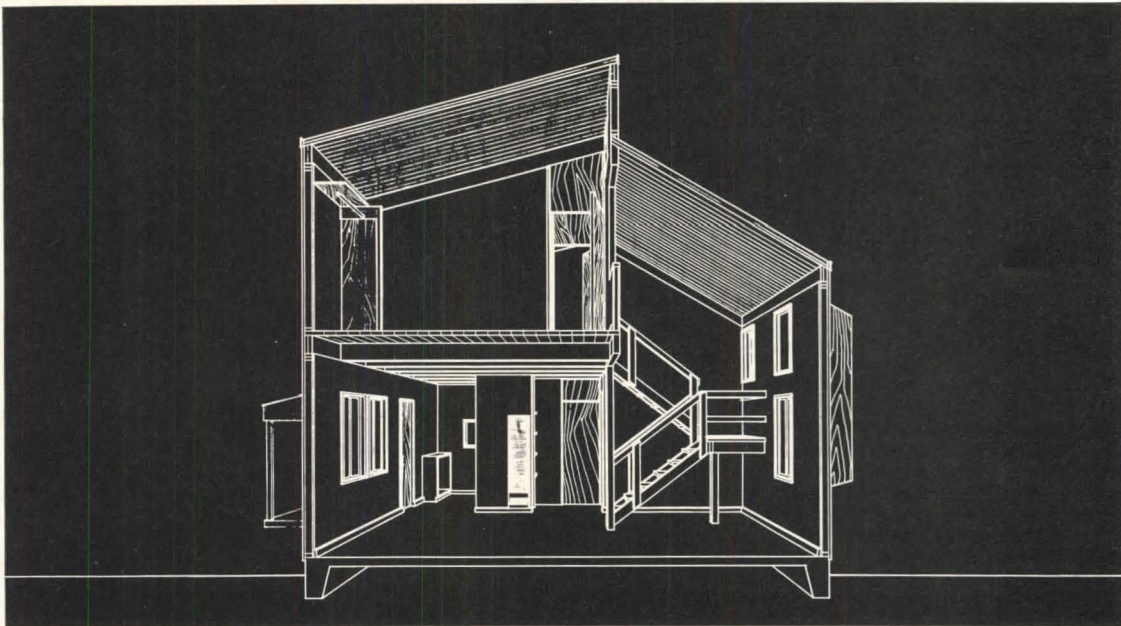
Prototype 1: Balloon frame with lath and plaster



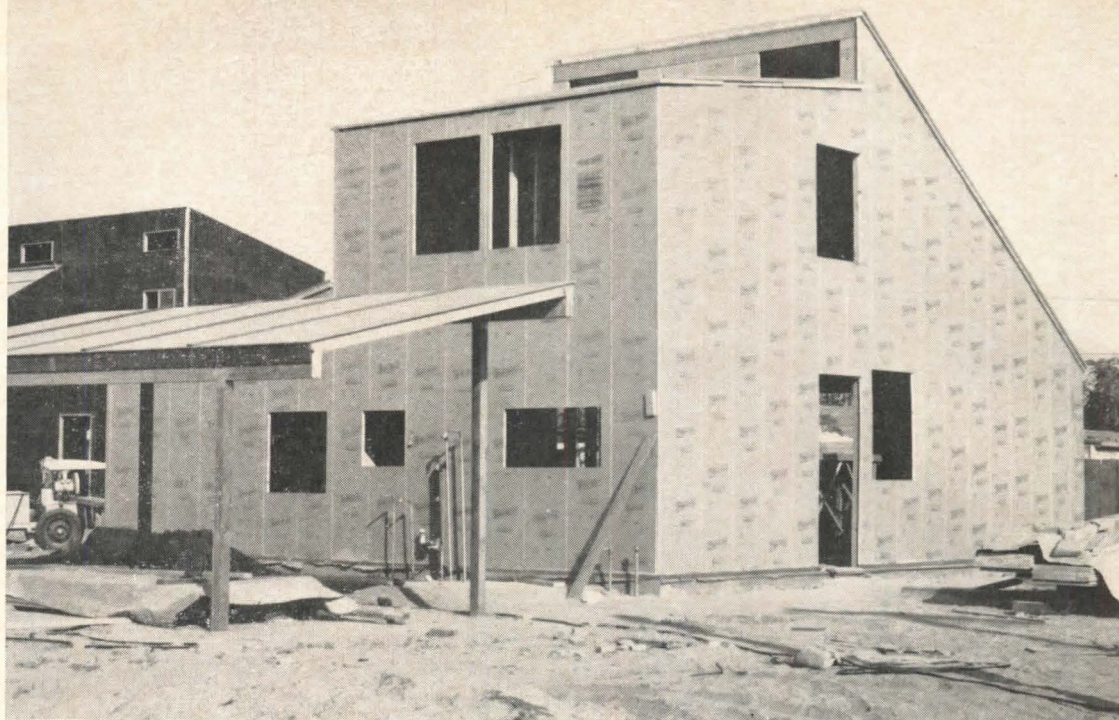
Research for the demonstration project showed that three of the most effective ways to lower inside temperatures during hot weather were the use of sunshades over critical window areas; highly reflective white surfaces on exteriors, including roofs; and a two-story plan, with the second floor acting as a shielding and ventilating device. All three prototypes employ these techniques.

The scheme at right has its three bedrooms on a second-level loft (below) beneath a roof slope which allows low ventilation inlets on the north and high outlets on the south. Part of the living area is two stories high, increasing both the sense of space and the circulation of breezes. As in the other two plans, the dining area is large enough to accommodate a family of six at one sitting, satisfying a common complaint of the families interviewed.

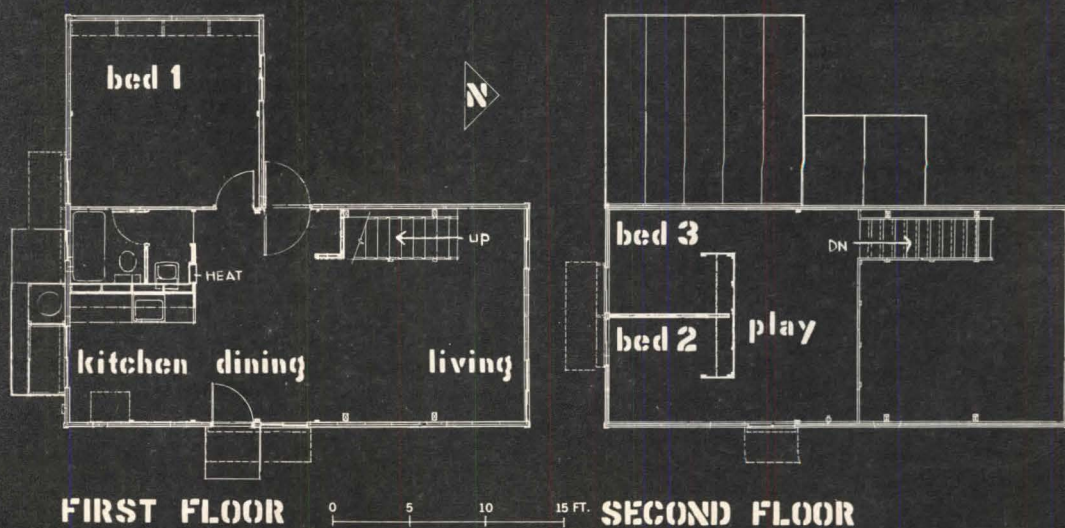
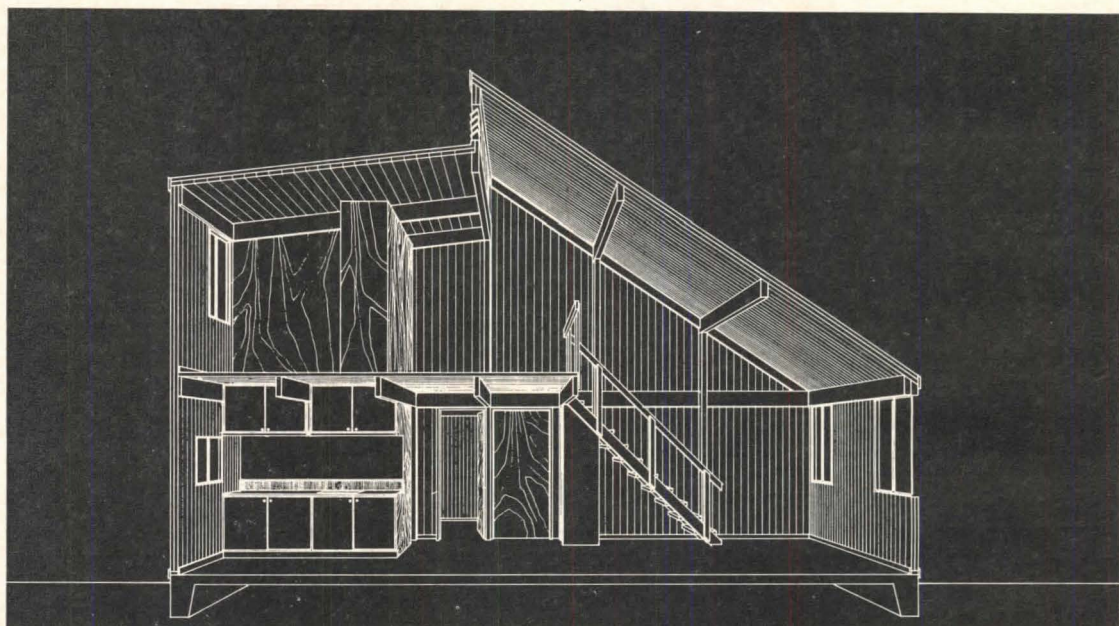
Structurally, this is the most conventional of the three houses. The balloon framing system uses 2-in. by 4-in. studs supporting 3-in. by 10-in. floor beams. Exterior walls are cement plaster over wire lath, and interior walls are plywood. Between them is aluminum foil insulation.



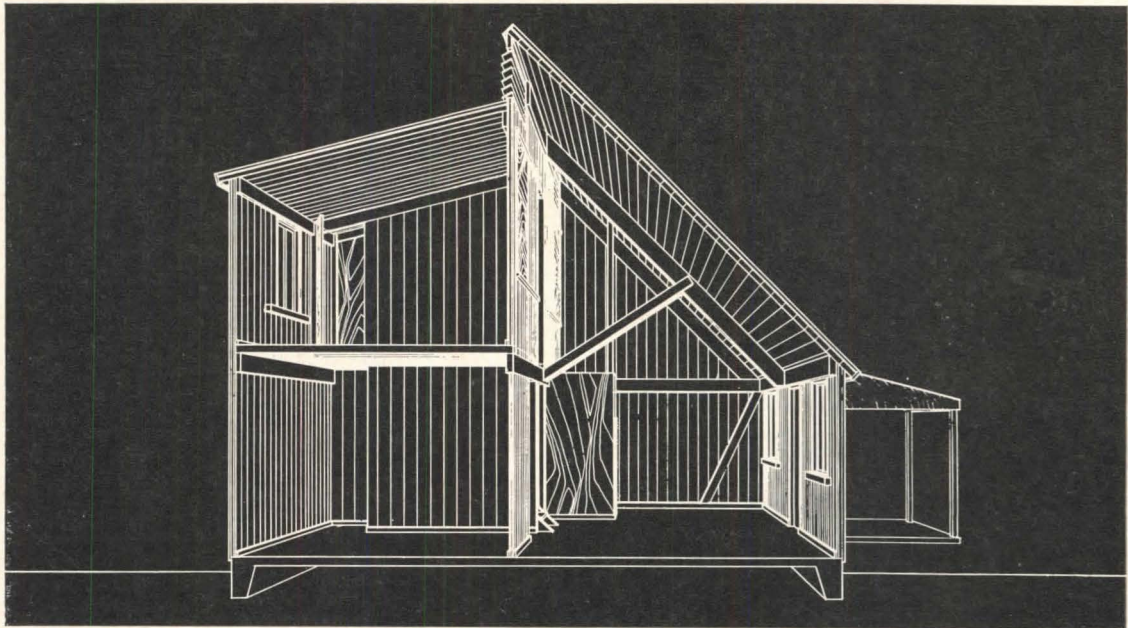
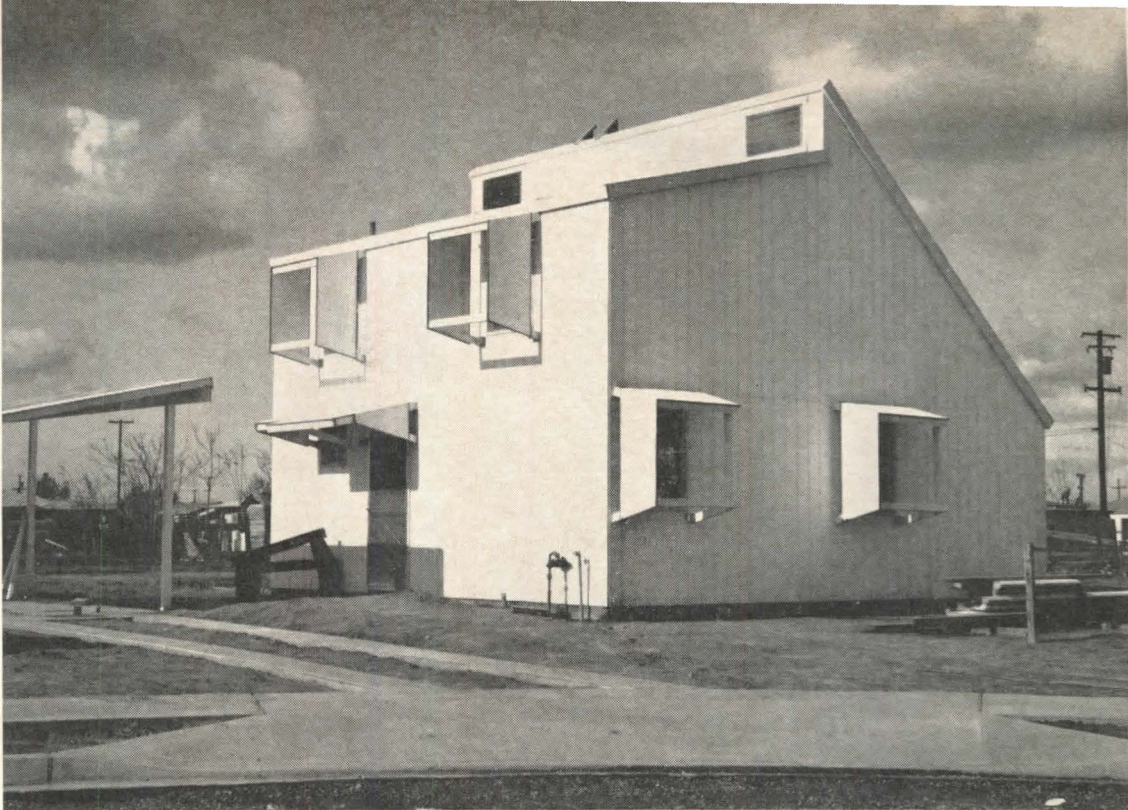
**Prototype 2: Wood sandwich
with a vapor barrier**



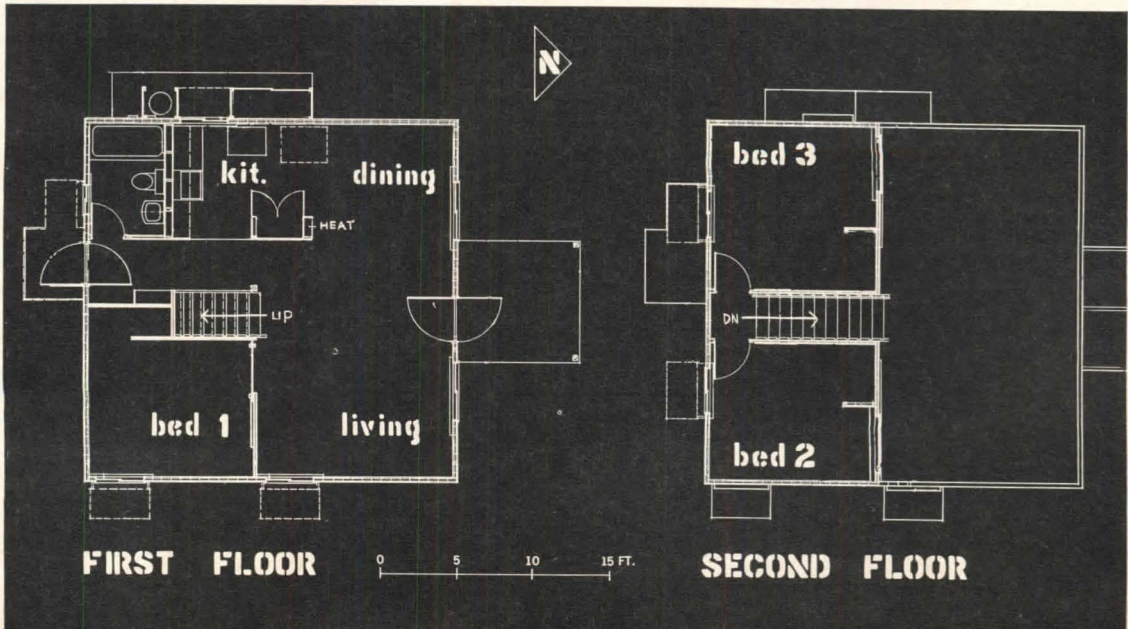
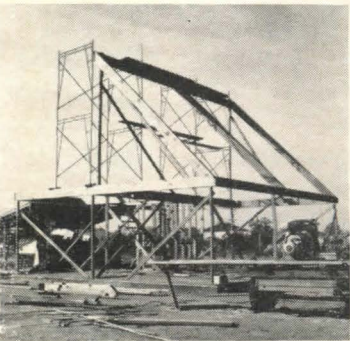
The other two prototypes are similar in profile and section, but the house shown here (pictured above, right, under construction) has a one-story wing jutting from its south side (below). The parents' bedroom is in this wing, and the second-floor loft contains the two children's bedrooms, which open onto a small play area easily visible from the open living area below. The house employs a sandwich wall system composed of two thicknesses of 2-in. by 6-in. wood planks spanning vertically on the interior and horizontally on the exterior, with a vapor barrier between. All three houses rest on monolithic concrete slabs, which are colored and dust coated.



**Prototype 3: Double walls
from precut planks**



This scheme, square in plan, also separates the second-level children's bedrooms from the first-floor parents' bedrooms. It offers more space for the children's bedrooms, which are separated by a central stairway, but sacrifices the balcony play area. The house is of wood deck construction using three-ply laminated planks 8 inches wide with varying thicknesses depending on use and loads. The wall planks are fastened to the structural members (construction photo, below) and provide both interior and exterior surface, thus eliminating one erection operation. They are shop-coated white on the exterior and are left unfinished inside. Planks also provide both finished ceilings and second-story floors.



REBUILDING CITIES. By Percy Johnson-Marshall. Published by Aldine Publishing Co., Chicago. 374 pp. Illustrated. 8½ in. by 12 in. \$15.00.

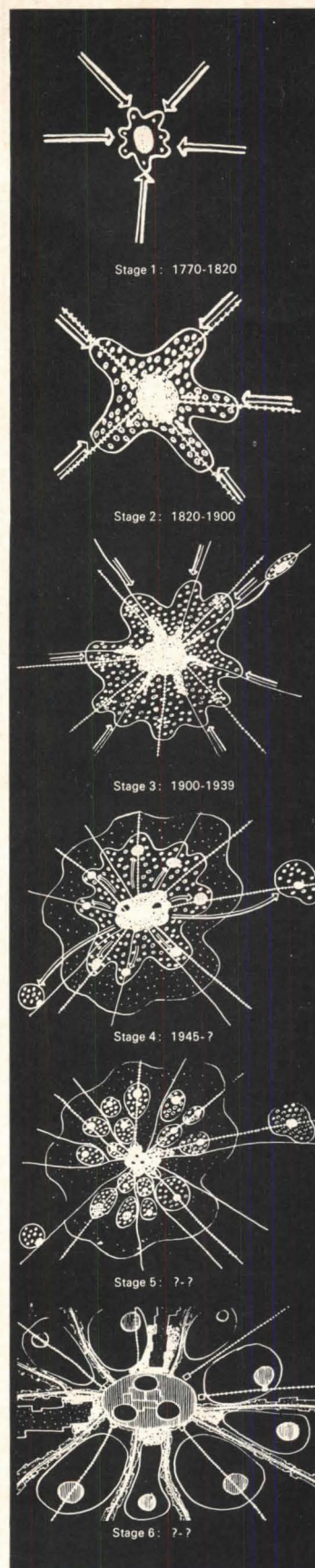
REVIEWED BY ROGER MONTGOMERY

As seen through North American eyes, Professor Johnson-Marshall's generously illustrated book shows again the vast gap between European-style urban renewal planning and the equivalent here. The division corresponds to that which separates the physician's work from the laboratory researcher's: one tries to heal the body, the other is satisfied to describe it. The British author of *Rebuilding Cities* rebuilt cities; American planners write about "urban growth dynamics" over which they have no control, and about other pale substitutes for actual city building.

Planners on both sides of the Atlantic once held similar aims. But American planners have been defeated by their society's ambivalence toward the land (a wilderness to be burned out, chopped down and mined away) and toward the cities (lair of shame, vice, crime, evil foreigners and colored people). Our planners clutch wildly at trend guessing in the hope that they can outsmart the speculators. They seek to plan indirectly according to a wishful and discredited faith in a perfect, laissez-faire market. The reasoning is simple, though results show it fraudulent. It holds that poor information makes the market imperfect, and that planners can make good information available through data processing, thereby perfecting the market and automatically building better cities. We are surrounded by the evidence that this reasoning does not work.

The spirit differs in England and much of continental Europe. There urban land is not simply a commodity to be bought and sold. Even the speculative, pre-law housing of 18th and 19th century English cokerowns bred a redeeming love that welcomed and helped to build old Ebenezer

Mr. Montgomery is the Forum's correspondent in the Midwest. He is also director of the Urban Renewal Design Study, School of Architecture, Washington University, St. Louis.



Percy Johnson-Marshall's "urban diagnosis" of the modern city's evolution from industrial magnet (Stage 1) to future regional center with satellite towns (Stage 6).

Howard's Letchworth and Harlow and, now, Cumbernauld.

Perhaps the failure to successfully challenge greed as the shaper of cities has led to the current American fashion for city planning as a social movement, and to abandoning the cause of civic design. Instead of turning to left politics, our liberal planners have been driven by McCarthyism and left-liberal despair to search for social change through technique: a kind of socialism by land use planning. How else can one explain the new contents of the professional planning press, the advanced Community Renewal Programs and the prevalence of planners in the poverty program?

Professor Johnson-Marshall does not argue these issues. He does not even recognize them. Perhaps, since he has planned cities to meet evident needs, and *built them as planned*, he can maintain his focus on urban design. *Rebuilding Cities* simply tells how London, Coventry and Rotterdam got renewed after the war. It tells it directly, from personal experience, without special pleading for pat solutions.

The author has devoted the copiously illustrated first part of his book to the history of urban design, to a survey of its chief components, and to some of the theoretical formulations that have guided its evolution. The text here is unexceptionable, but why was it included? Was it meant as a layman's introduction to a primer on urban design?

Here lies the main problem of the book. If, indeed, it was meant as an introductory text for the nonprofessional, as the first three chapters suggest, it is too big and heavy, and the case studies, particularly their graphic accompaniment, are too detailed. It will never make the paperback lists without savage cutting.

As professional literature, *Rebuilding Cities* has problems too, but it makes some very important contributions. Nothing is more needed in the literature of urban design than good case studies that illuminate city building processes. We have had more

han enough hortatory prose condemning ugliness and praising beauty. We need to get down to cases. Professor Johnson-Marshall does just that.

After an illuminating five-page summary of British planning and area development legislation, the book tackles the postwar rebuilding of London. No great world city has equalled London's record in reconstruction. Metropolitan Moscow may have built more apartments; certainly metropolitan Los Angeles has built more houses. But what a difference between the bureaucratic concrete boxwork of Moscow suburbs, or the undisciplined free enterprise ticky-tacky of Los Angeles, and maturely planned, convincingly composed and detailed work of London's County Council. So strong, in fact, is the LCC work, it has become a kind of academy—a good one mind you. The current rebellions of young London architectural students prove the point. Ask one. He will likely claim he prefers California ticky-tacky or soviet plug-in.

Percy Johnson - Marshall worked in the middle of LCC's rebuilding effort during the first crucial postwar years. He played a major role in the evolution of that new academy of civic design as head of the Reconstruction Areas Group in the town planning division. (He now holds the chair in urban design at the University of Edinburgh.) In the book he recounts the design intentions and implementation struggles associated with several major renewal campaigns. These are illustrated with the most informative set of plans and photos to appear so far, at least on this side of the Atlantic. What he does not do is give quite enough detail in writing about these London case studies to satisfy professional and scholarly needs.

Obviously, the larger realm of metropolitan planning, and the smaller one of housing standards and prototypes, play a coordinate role in urban design. To understand the evolution of the Stepney-Poplar plan, it would help to know something about the changing—or unchanging—

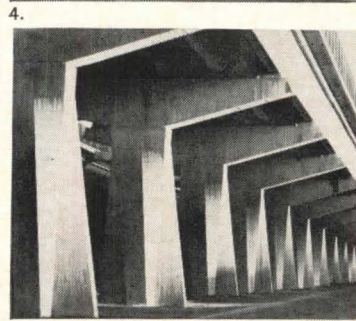
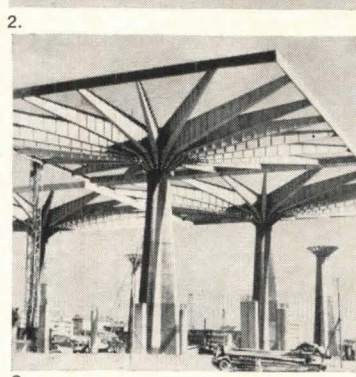
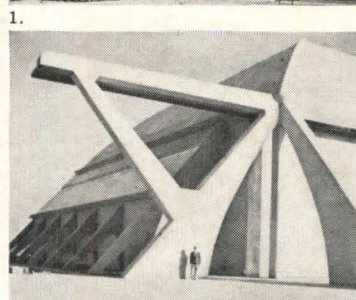
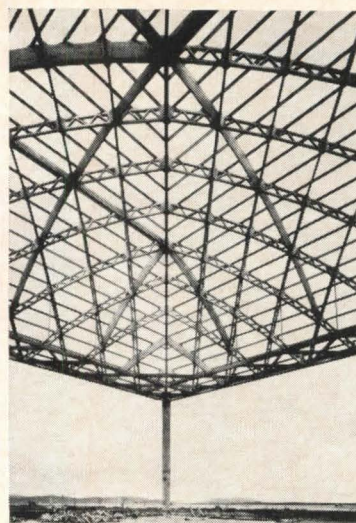
perspectives regarding the size, quality, social class orientation and location of the housing stock in greater London. It would help too to know something about the evolution of the LCC point block. Looking back over the book, it is hard not to wish that the opening chapters had been devoted to this kind of planning and architectural background for urban design in London, Coventry and Rotterdam.

The Coventry chapter concerns the rebuilding of the blitzed core area. In 1940, the author was bombed out of his house while working there as a planner. With Coventry's chief architect, Donald Gibson, he helped germinate the plan now realized in the reconstructed center. The illustrations record the progress from a lukewarm classic formalism to a freer, functionalist planning.

Rotterdam appears as the third case study not because the author participated in its rebuilding, as he did at Coventry and London, but because of its unique success, and because of Johnson-Marshall's close acquaintance with both the city and its planner, Cornelius Van Traa. This account of Rotterdam's reconstruction gives just a hint of what these case studies might have been had the perspective been larger. Before dealing with the familiar urban design elements of Lijnbaan and Coolingsingel, it tells of the preliminary economic planning and reconstruction which made Rotterdam the leading port of postwar Europe, and thus built a solid foundation for successful renewal.

The most intriguing and thoughtful passage among the three case studies occurs at the end of the chapter on London. Here Johnson-Marshall speculates about the future of area development plans—urban renewal plans in American jargon—and offers some recommendations about their effective form.

The book winds up with a rather pointless little coda containing six conditions for city well-building, and some gratuitous photos of Brasilia, the Horg area of Stockholm, a couple of American urban renewal proj-



(1) Airplane hangar, 1939. (2) Airplane hangar, 1936. (3) Palace of Labor, Turin. (4) Corso Francia elevated road, Rome.

ects, and whatnot. Now that Britain has suddenly become home base for some of the most far-out and imaginative ideas about future city form, can a British urban design professor talk seriously about Brasilia in the fade of *Archigram* and clip-on?

This book makes one thing painfully clear: American planners have statutory authority at least equal to that of British planners to govern urban design in their urban reconstruction projects. That they make so little effort to use this authority, to extend planning beyond a two-dimensional determination of land use, underscores the difference in spirit behind planning on the two sides of the Atlantic. Maybe we have to go through a social reform phase before we can develop authentic and widely built American urban design.

AESTHETICS AND TECHNOLOGY IN BUILDING. By Pier Luigi Nervi. Translated from the Italian by Robert Einaudi. Published by Harvard University Press, Cambridge, Mass. 199 pp. Illustrated. 8 in. by 9 3/4 in. \$9.95.

REVIEWED BY TONY ALEXANDER

How exciting it is to find in a world of seemingly endless opportunity and freedom, a man like the Italian engineer-architect, Pier Luigi Nervi, who asserts that freedom comes from understanding and beauty from dedication (if that is a synonym for hard work, too!). Here is a rejection of "arbitrary esthetic emotion"—that escape hatch used by many designers equipped with half-digested technology, when they are faced with increasingly complicated design programs.

The most significant chapters in Nervi's book are the middle two, which deal with poured-in-place concrete, and with its logical further development, precast concrete, respectively. Here is reflected the author's obvious enjoyment in the creation of his many buildings, shaped by technique, economy,

Mr. Alexander, a British architect, was trained at the Architectural Association of London and has worked in the office of the engineer Ove Arup, and in other London offices. He is now working in New York.

and by his esthetic judgment. Most of his schemes were completed within a tight schedule, and yet he emphasizes, throughout his book, the long search for "correct building" which in the end produces clarity, speed, economy, and high quality.

Architects are always a little in awe of the engineer who can produce fine building. Such an engineer, who is closely involved through his own construction firm in the techniques of building, tends to expose the cloistered position of the architect in his drafting room, looking for photogenic solutions to his problems. Lack of technical understanding on the part of architects has often produced awkward and highly repetitive details. According to Nervi, many architects are unaware of the superfluous costs they have imposed, and have missed the opportunity to create a more coherent design as well.

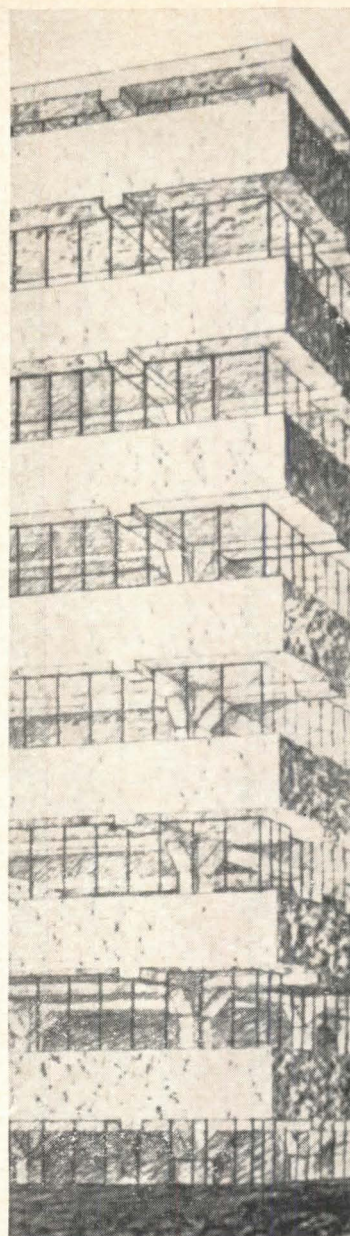
The two central chapters of Nervi's book are admirably illustrated with photographs of generative structures as well as finished buildings. These chapters are preceded by a neat little survey of the past which could have been written by any intelligent commentator; and they are followed by a chapter on the future training of architects. The latter, though a useful reminder, is largely repetitive of the exciting implications inherent in Nervi's working methods.

In this age of specialization it is comforting to read Nervi's frequent acknowledgments of his collaborators' contributions. These acknowledgments indicate that fine building is still possible where intelligent architects and engineers work together.

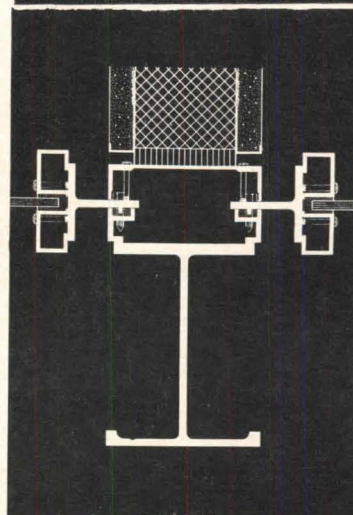
MIES VAN DER ROHE. *The Art of Structure*. By Werner Blaser. Published by Frederick A. Praeger, Inc., New York, N.Y. 228 pp. Illustrated. 10 in. by 10½ in. \$25.00

Ever since 1947, when Philip Johnson published his detailed monograph on Ludwig Mies van der Rohe there have been several books about this remarkable architect. The present one is, by far the most handsome to date.

The trouble with writing about



Above: Detail, project for an office block in reinforced concrete, 1922. Below: Typical joint between bronze sections and fast-sheet window frames, Seagram Building.



Mies is that it is a bit like climbing Mount Everest. The reason one does either is that Mies (or Everest) are *there*. He (or it) is not exactly news. As a matter of fact, Mies is non-news. The reason one is inclined to write about him is that he is, quite simply, the purest of our time.

Purity in an artist (including an architect) often means self-effacement. Mies, for example, once told an interviewer, who had been trying to pump him for hours, that "I don't want to be interesting—I want to be good!" In other words, Mies' contribution to the 20th Century debate about architecture has been, quite simply, a "No Comment"—repeated over the past fifty years or so, with more or less emphasis.

This book is as good as it is, in part, because it is an approximately 220-page "No Comment." It is beautifully designed, in the exquisite typography preferred by Mies, and laid out with the incredible subtlety of proportion that is a part of Mies' architecture. (Though the book appears to be perfectly square in shape, for example, it is actually half an inch taller than it is wide since—as Mies, and the author obviously realized—any book printed with horizontal lines of type would always look wider than it actually was; so that one had to add a half inch to create the illusion of a perfect square). The book is as good as it is, also, because it is produced with immaculate care. Though Mies, as a person, hardly appears in it at all, the whole book is a portrait of this extraordinary perfectionist.

There are, however, one or two shortcomings. To begin with, while the nominal author is a Swiss architect, Werner Blaser, Blaser acknowledges Mies' "untiring and sympathetic assistance"—which is fine, except that some readers may be lead to believe that this is an impartial evaluation of Mies' work. It is not.

Secondly, the book is rather astonishingly incomplete—a particularly surprising fact since Mies, himself, seems to have had a decisive hand in determining its contents. Fewer than fifty of

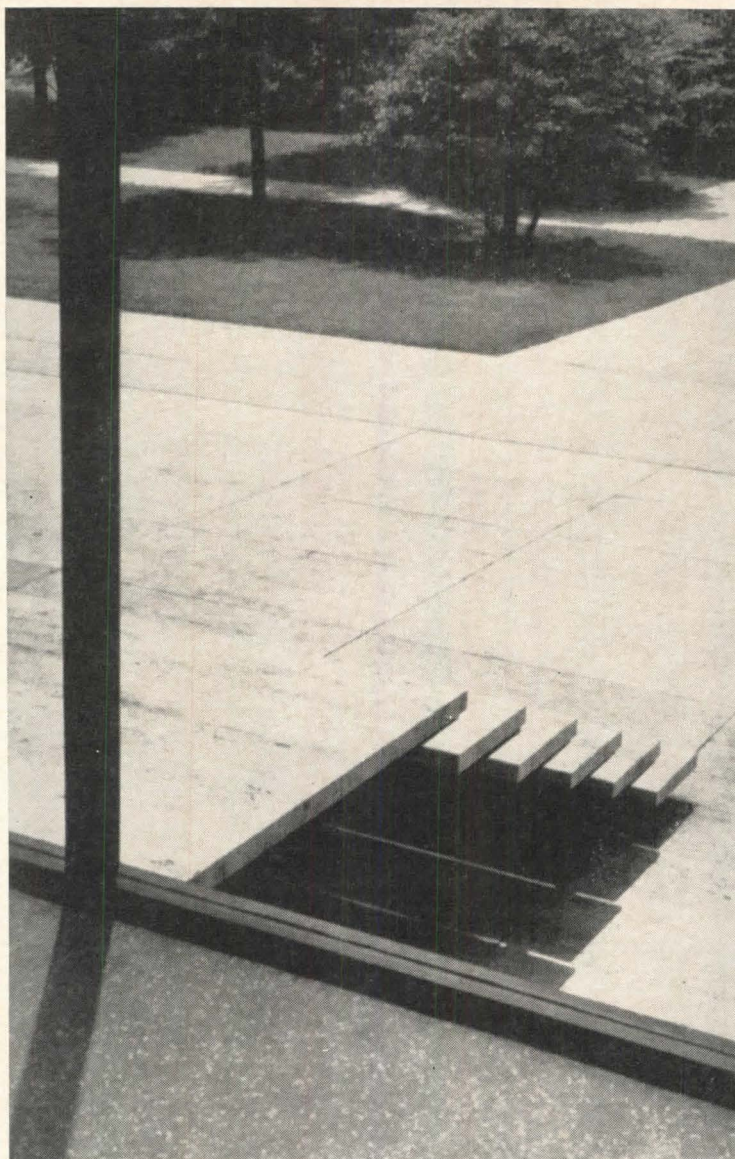
s 228 pages are devoted to Mies' work in Europe prior to 1938. Yet, that work encompassed more than 25 years, and included such beautiful structures as the 1930 Tugendhat House in Brno, Czechoslovakia; and the equally significant project of 1912 for the Kröller House—never actually realized, but still built, full-size, as a *maquette* in wood and canvas. And there are many other omissions.

This is unfortunate, for much of Mies' American work has a strong family resemblance, and occupies most of the pages. The reason is that Mies decided, upon his arrival in the U.S., that ours was a steel-building country; that steel-framing had a certain, inherent discipline of its own; and that, until the steel-technology of the U.S. was radically altered by scientific innovations, there was no particular reason for changing the character of steel-framed building.

There is a refreshing lack of concern with fashion and novelty in all this; but the overall impression thus created is a disservice to Mies. For, especially in his earlier, European work, he was the one, perhaps the only modern master to have taken Frank Lloyd Wright's curiously old-fashioned 19th century concepts of space, structure, forms, and of detail, and to have transformed them into an unmistakably 20th century idiom.

Yet, by concentrating on a very few selected pre-1938 structures, the author (and Mies himself) have made a point that they may not have intended to make at all, but that is quite startling to professional Mies-watchers. This point is that there is a very close relationship between Mies' earliest projects, and his most recent work; and that much of the infinitely polished and restrained construction of the years after his arrival in the U.S. may have been merely a period of reassessment for him—after which Mies seems to have picked up where he left off around 1930, and proceeded to much more daring structures.

For the most exciting projects illustrated in this book are sep-



Above: Steps leading up to Crown Hall, I.I.T., Chicago. Below: Mies.



arated by forty years or more. The all-glass skyscrapers sketched, rather intuitively, around 1920; and the amazing, concrete-and-glass office building project of 1922 are illustrated here in sufficiently large size to show that they contained the germs of some of the latest *avant garde* notions of our day. The details of the concrete building, especially, are prophetic of Le Corbusier's final buildings.

In the middle Fifties, Mies appears to have picked up where he had left off several decades earlier.

The tip-off signaling this renewed spurt of energy and imagination (Mies, by this time, was close to 70 years old) can perhaps be found in his return to the two-way cantilever—to the building whose corners are unsupported by columns.

This kind of daring was evident in the earliest Mies projects; but when he began to build in Chicago, he seemed to feel more comfortable with a simple rectangular cage-structure, with columns spaced at regular intervals and firmly supporting each corner.

Now, however, Mies, almost 80 years old, has returned to the daring visions of his youth: his Museum of Modern Art for West Berlin, now under construction, will be a great, glass-enclosed space, sheltered under a steel roof about 200 feet square to be supported, in turn, on only eight steel columns pulled back from the corners, so that the roof will shoot out beyond the columns by more than 50 feet!

To some, this single-minded pursuit of an ideal—perfect, rational structure; perfect, rational detail; perfect, rational space—may seem of limited importance. And perhaps it is. But they might remember that there was once a man called Lorenzo Ghiberti, who spent his entire life on the making of those perfect doors of the Duomo in Florence. And historians consider those doors, in retrospect, to have signified the beginning of the Renaissance. Ghiberti, too, did not "want to be interesting;" he wanted "to be good." He and Mies have turned out to be both.—P.B.

(continued on page 91)

"ONE TWO THREE"

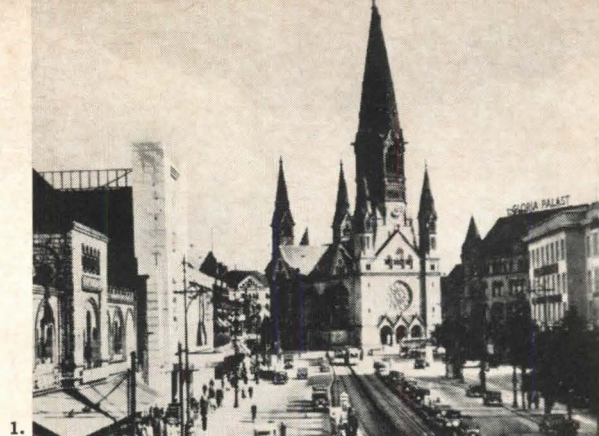
IN the center of West Berlin, not far from where Billy Wilder's famous 1962 movie by the above name was filmed, there stands the collection of buildings shown here. It is one of the more controversial architectural ensembles of recent years.

The collection consists of the bombed remains of what was once an ungainly neo-Romanesque church (the Kaiser Wilhelm Memorial Church), plus four steel-framed structures of varying shape, function and height, designed by Egon Eiermann, the architect of the new German Chancellery in Washington (see May '65 issue). These five elements sit on a rectangular platform, 350 feet long, 150 feet wide, and raised six steps above a pedestrian traffic peninsula that extends into one of the busiest intersections east of Times Square.

A visitor's first reaction to seeing this odd ensemble is to ask why it is there at all.

The original church (1), built in 1895 by Schwechten, was a pompous mass, unsubtly placed smack in the center of half a dozen major vistas. Hitler's war unwittingly saved the Kaiser's memorial from itself: the ruin that greeted Allied troops in 1945 (2) was a strangely haunting symbol. There was no audible popular demand for the reconstruction of the Memorial Church, or for doing anything to the ruin except to leave it standing, forlornly, on what was then a little traffic island. So, why didn't the powers-that-be leave well enough alone?

The answer is that powers-that-be rarely do, and this case was no exception: in 1956 the authorities decided upon an architectural competition for the rebuilding of the church. Eiermann won that competition, and this ensemble (3) is the result.

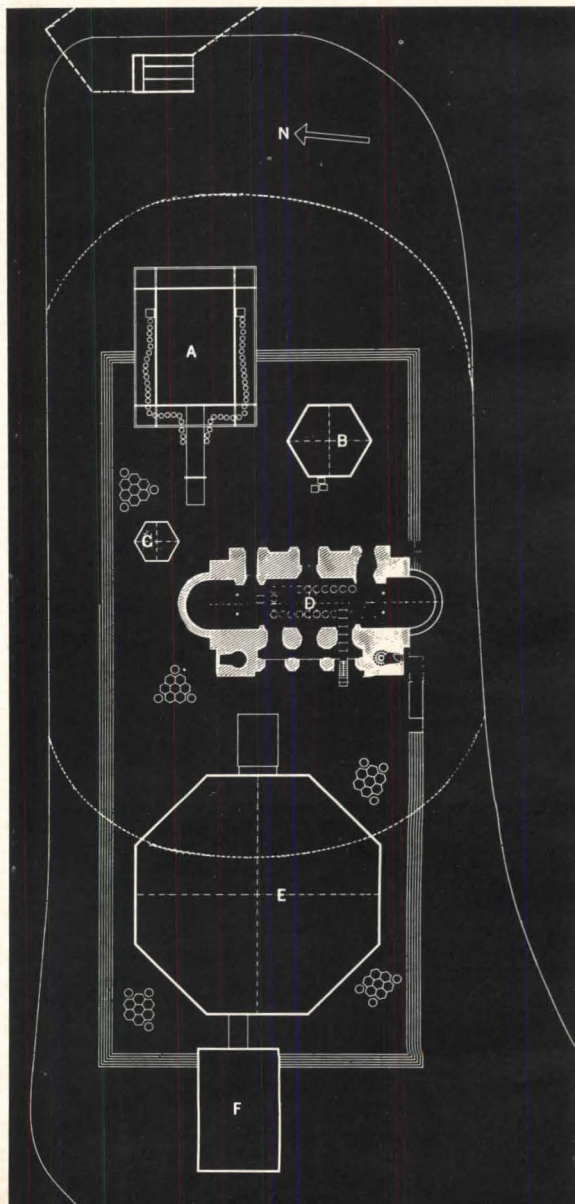


1.



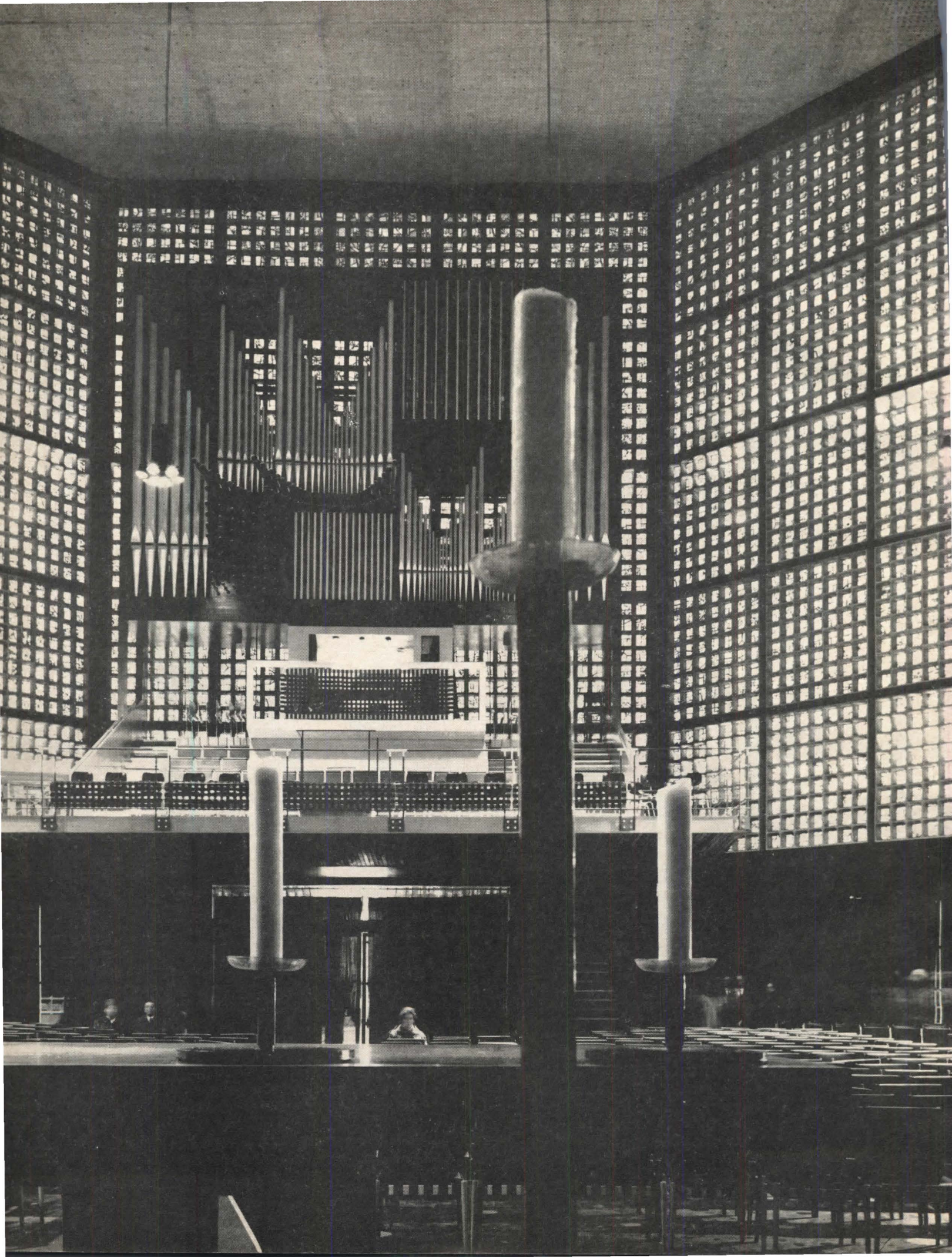
2.

3.

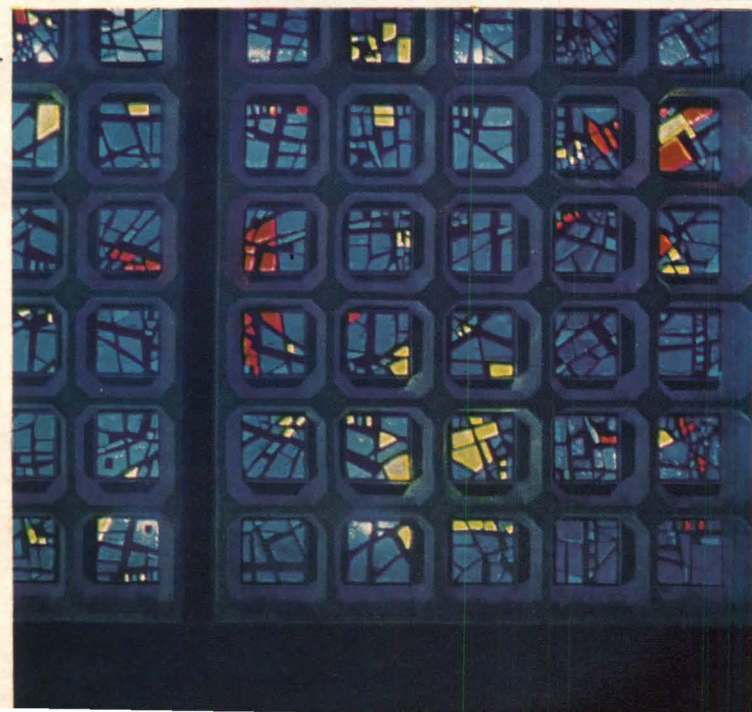
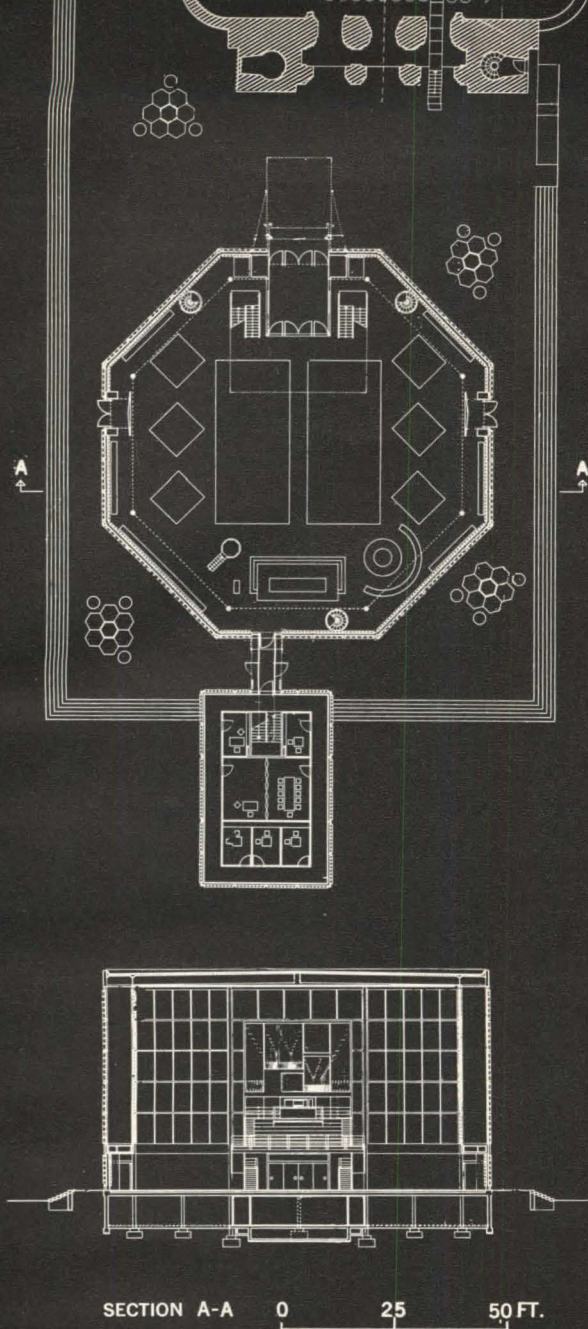


(1) 1895: Original Kaiser Wilhelm Memorial Church, designed by Schwechten. (2) 1945: Bombed-out ruin as it looked after World War II. (3) Site plan and bird's eye view of new Memorial Church, with additions by Eiermann, as completed last year. Plan shows original traffic island (dotted lines) and new, larger pedestrian traffic peninsula (solid line). Rectangular platform on traffic peninsula supports: A. Chapel; B. New, hexagonal belltower; C. Smaller tower (not built); D. Ruin of original church; E. New octagonal church; F. Parish house. Pedestrian peninsula is joined by underpass to new Europa Center to the east.





MEMORIAL CHURCH: GLASS TAPESTRIES FRAMED IN STEEL



(4) Interior of church, looking back from the altar toward the organ. (5) Main floor plans of church and parish house. The latter contains conference rooms on the main floor and, below, a library lit through clerestories. (6) Section through church, looking toward organ. Above the opaque, 10-ft.-high "base-course," the double glass wall rises up, with a 7 ft. space between exterior and interior screens. Lights inside this space make the church glow at night. The full ceiling height is 60 ft. (7) Color sample of stained glass used in all the new buildings.

EIERMANN's prize-winning design made it clear that he, too, wondered what all the excitement was about. He seemed to say that one should either leave the ruin untouched, or else replace it entirely. His entry (one rectilinear and one curvilinear version) assumed a clean sweep, and he won.

As Eiermann developed his scheme, he began to reconsider: not only would he keep the somber ruin as a part of his composition, but he would also make the composition a marriage of his two alternative competition entries. So his final ensemble consists of rectangular structures as well as polygonal ones, and retains the ruin.

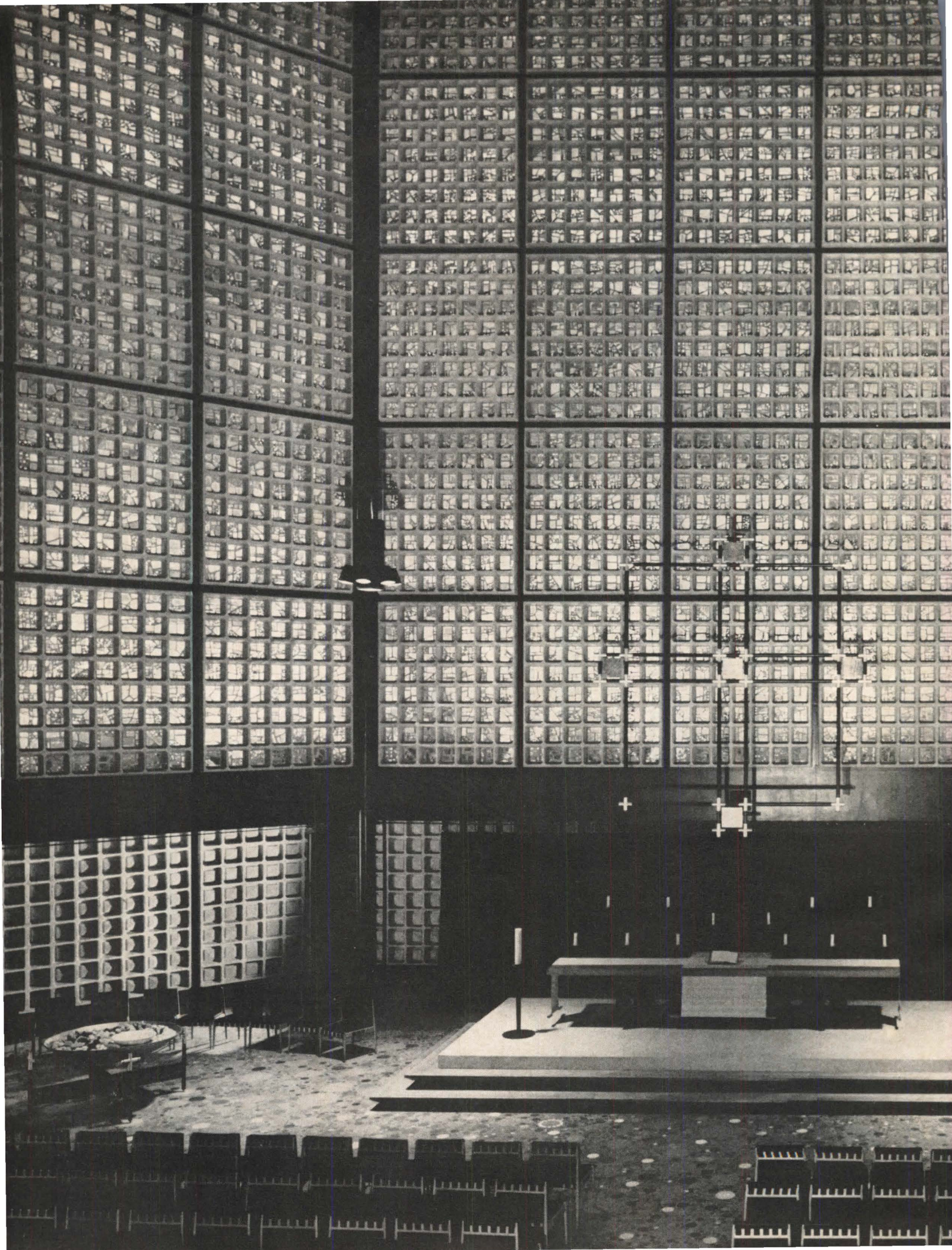
He also retained three important elements of his original scheme: he turned the traffic island into a traffic peninsula; he made the new church a complex of several architectural objects; and he made those objects almost translucent—a series of stained-glass tapestries hung between stanchions of steel.

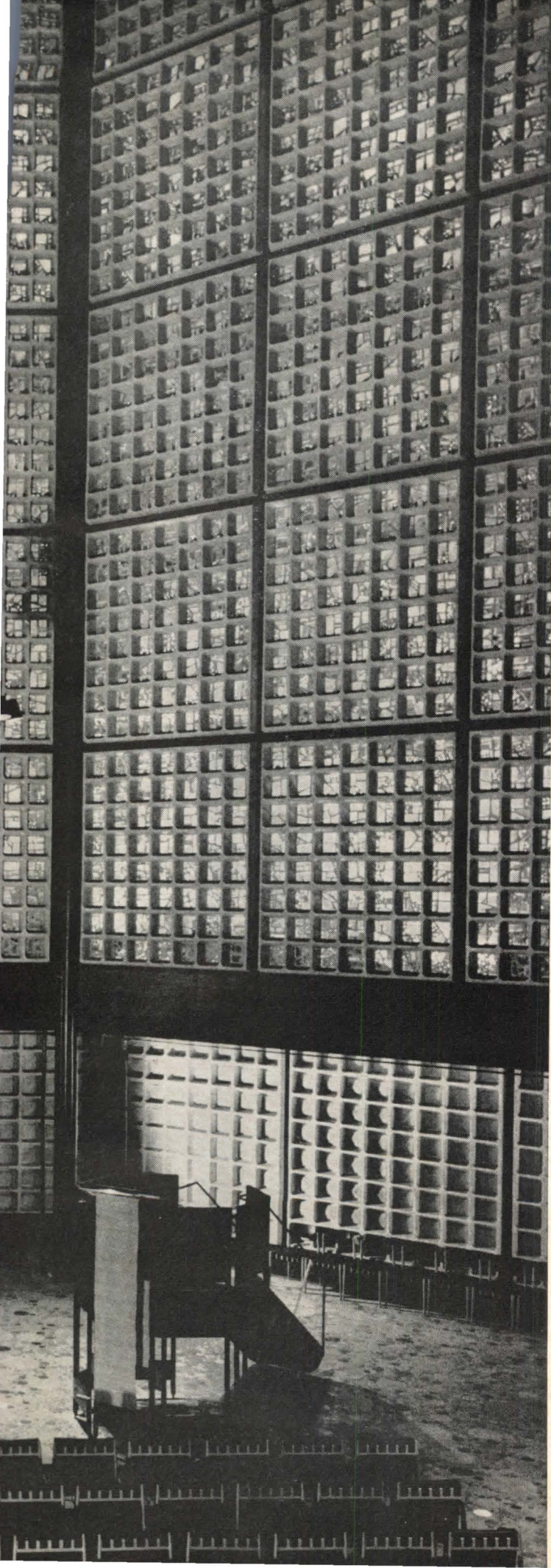
As a modern counterpoint to the existing chunk of masonry, Eiermann chose a delicate idiom. His four new structures are all enclosed with double screens of stained glass.

In the church (left) and the belltower (p. 83), the double screen is lit from within; so that the interiors glow night and day; and the exteriors glow, like lanterns, at night.

The effect inside is spectacular: the church is flooded at all times with blue-yellow-and-red light (see color detail at left). Moreover, the double wall serves as a sound barrier: one enters from the noise of a "Times Square" and is received into the eerie quiet of a blue grotto.

The effect outside is less successful: in daytime, the concrete grid holding the stained glass gives the four new structures a massiveness Eiermann probably did not seek. But at night (see p. 77), the effect is everything the architect intended—the great black silhouette of Kaiser Wilhelm's strange memorial looming against the sky, and surrounded by the glow of cheerful lanterns.





**MEMORIAL CHURCH:
LUMINOUS SANCTUARY
FROM A NOISY CITY**

THE new church would be a success in any setting for the dominant impression received upon entering the octagonal space is that of "sanctuary." It is very quiet here, despite the roar of Mercedeses and VW's outside. Everything is bathed in bluish light, with occasional accents of red, green and yellow. A few incandescent lights are suspended from the dark ceiling above, and there are some candles on the simple altar.

Mies van der Rohe once said that we would build no cathedrals in our time, and this church is no great cathedral. But in this quiet, luminous space, it comes as close as we are likely to come in our age. Others have tried to build churches that are, in effect, one huge stained-glass window wrapped around the worshipper. But most have failed because they tried to get "arty."

Eiermann resisted the temptation successfully. This church is, quite simply, a great space, quiet, suffused by light (8). There is nothing in it that smacks of self-conscious design, no detail a visitor is likely to recall after he has left—only the overall impact.

With one, unfortunate exception, that is: Eiermann had proposed a simple cross, only 3 feet tall, to be placed on the altar, and to be made of precious metals and stones. This would have been entirely in keeping with the unpretentious nature of the space, but the church authorities did not consider it sufficiently impressive. So he designed the large, suspended, almost invisible cross shown at left. This was accepted, as an interim solution, until such time as the church "could find a good sculptor" to supply a permanent symbol.

One day, the Protestant Bishop of Berlin, Dibelius, felt that he had found just the man; and soon thereafter a hefty cruciform Jesus, by the Munich artist Hemmelter, was suspended over the altar, in place of Eiermann's cross. Unhappily, the Savior looks as if he had been caught in the midst of a swan dive from the high board. He appears to be made of gingerbread, painted gold.

(8) View of interior, looking toward the altar. Originally designed to hold 900 worshippers, the church has become so popular that it is kept open all day and long into the evening, and seating for an additional 600 worshippers had to be brought in. The simple, almost invisible cross suspended above the altar has now been replaced by a gilded, rather banal figure of Jesus on the cross.

In addition to the new church and its connected parish house, there is a hexagonal bell tower 170 feet tall, and a small, rectangular chapel (9).

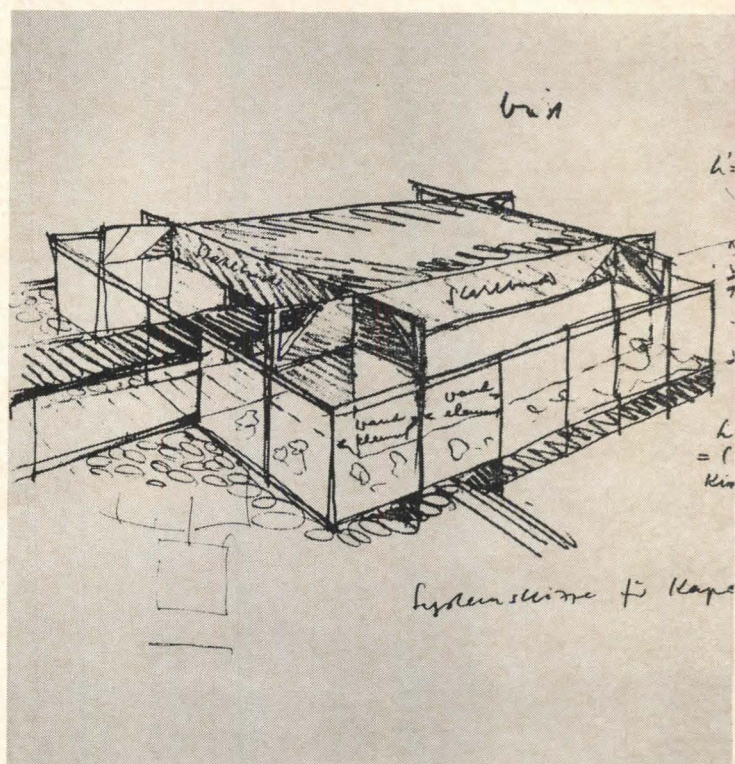
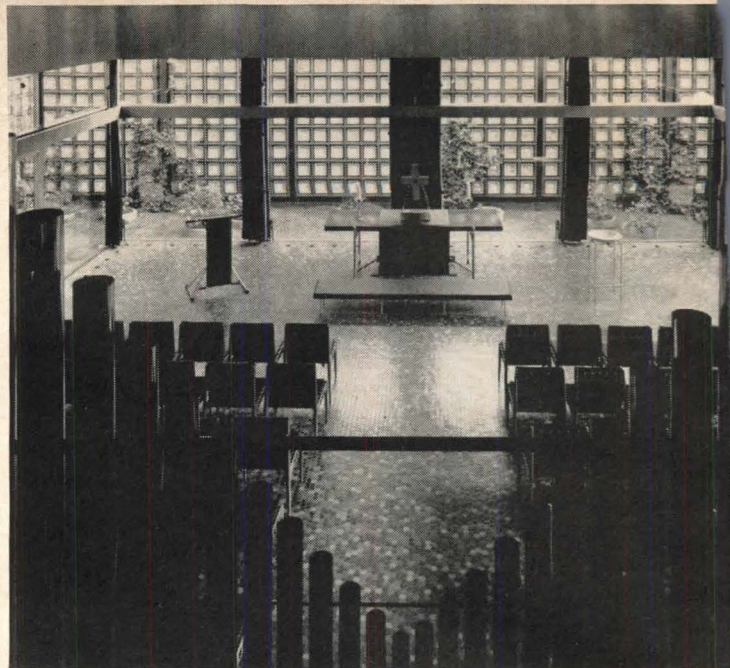
The bell tower (12) is treated, structurally, much like the church itself. But the chapel is handled differently: its roof is hung from four overhead girders (10), and the glassy interior is surrounded by a 10-foot-wide peripheral garden and a stained glass "fence" that assures visual and acoustic privacy. Of all the structures that make up the new church, this chapel is the most expressive (11).

How successful is the church? In popular terms, highly so. In critical terms, grudgingly so: those who wanted to leave the ruin alone now admit that it would have been lost in this large, poorly defined "Times Square." Those who wanted to replace it now admit that some symbolic significance attaches to the ruin. Those who thought Eiermann's grouping was too busy now admit that the long, elevated platform ties the five structures together, and that the new accessibility of this platform to pedestrians is a major urbanistic success. And those who once questioned the height of the new bell tower (close to that of the ruin), now admit that the new office towers rising all around the square will soon dwarf the church anyway—and who is to say that one dwarf is better than two?

One's principal reservation has nothing to do with the church per se. It has to do with the architect. Because the Memorial Church is so very visible, Eiermann may be remembered by this commission above all others. This would be unfortunate, for a *Son et Lumière* spectacular, however tastefully done, is not a very serious 20th century problem. Eiermann has done and is doing much more significant work. He deserves to be judged by that.

He also deserves a medal (of gilded gingerbread) for having cared so much about a project that, somehow, doesn't seem quite real.—PETER BLAKE

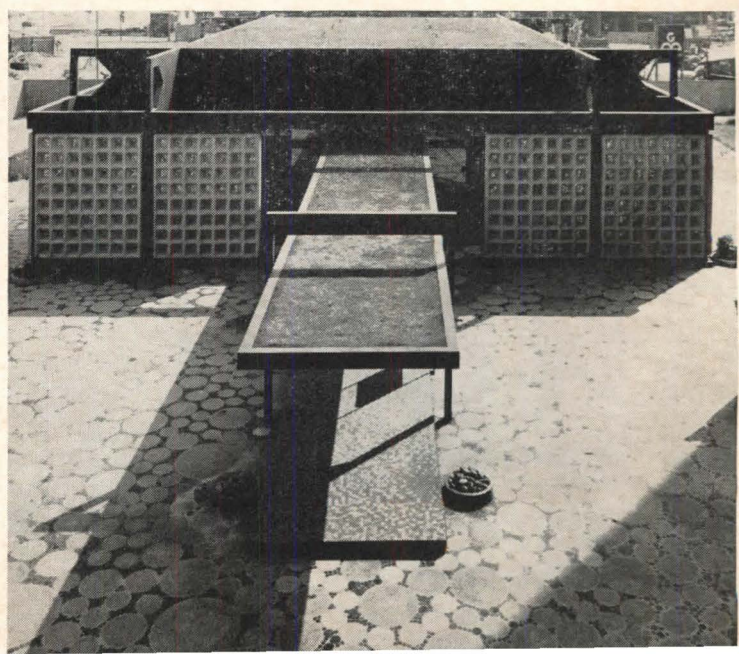
MEMORIAL CHURCH: A CHAPEL, A TOWER, AND AN APPRAISAL



(9) Interior of small, rectangular chapel. Building is one story high and surrounded by 10 ft. deep peripheral garden strip. Stained-glass "fence" beyond protects it from surroundings. (10) Sketch by Eiermann showing structural system supporting roof of chapel. (11) View of the new chapel from the west. (12) Old church steeple and new bell tower against Berlin skyline.

FACTS AND FIGURES

Kaiser Wilhelm Memorial Church, Berlin, Germany. Architect: Professor Egon Eiermann. Structural Consultants: Professor Bickenbach & Professor Sattler. Contractors: Grun & Bilfinger (Concrete); Heyking, Gollnow & Dellschau (Steel); Gabriel Loire, Chartres (Stained Glass); A.E.G. & Schmitt-Strahl (Lighting); and others. PHOTOGRAPHS: Horstheinz Neuendorff except Page 76: middle, Pictorial Parade. Page 78: Reinhard Friedrich.







FORUM CONT'D

aero space industry toward this newest frontier. In recent months, Lockheed, Aero-Jet General and North American Aviation have completed massive studies for the state, suggesting broadscale attacks on such down-to-earth worries as waste disposal, mass transportation, control of crime and delinquency and a statewide information system.

So far, the Federal government, which has been pouring most of its research money into space and weapons, has lagged in encouraging the systems approach to the solution of such problems as pollution, transportation, urban growth and education. But a House subcommittee has been warned that the time to begin solving some of the big problems of life on earth is right now.

Within 25 years, said Jack J. Jones of North American Aviation, we can expect all vehicles, from boats to airplanes, to be traveling five times as fast as they do today. Unless something is done to prepare for that day, he said, the result will be a "disastrous jumble."

The effort, the committee was assured, will cost vast sums of money. A small model transportation system, it was estimated, would cost \$200 million and the effort to reach the perhaps unrealistic goal of making every stream sparkling clean could cost \$20 billion a year—as much as the nation now spends each year on primary and secondary education.

WASHINGTON

EVERYTHING BUT

The Rayburn Office Building has kitchens in each of its 169 office suites. They are equipped with refrigerators and cabinets, but no sinks.

Rep. William H. Ayres of Ohio, a former plumbing contractor, took to a televised news conference to bemoan that fact and allege that some of the "\$20 to \$30 million" spent for change-orders on the building had gone down nonexistent drains. Plumbing for the sinks was supposed to be roughed-in behind the kitchens' plaster walls, but Ayres said he had two carpenters bang on the

wall and they sounded solid.

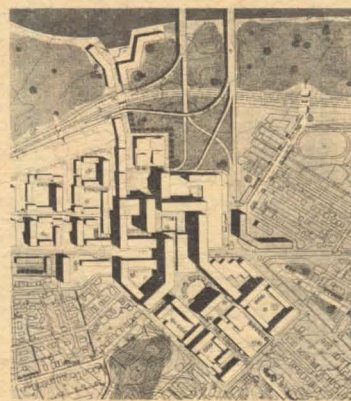
The office of the Architect of the Capitol J. George Stewart produced drawings to prove the plumbing was there (or, at least, was supposed to be there), but this "documentation" did not mollify Ayres. He said he would attempt to withhold the final \$10 million payment owed Contractor Matthew McCloskey. "McCloskey isn't going to get our money until we get our sinks," Ayres said.

It is not entirely clear whether Congressman Ayres thought the 169 missing kitchen sinks were worth all of \$10 million. If so, the unit cost would be just under \$59,763.32 per kitchen sink, which strikes us as a trifle high even for the Rayburn Office Building.

SUBWAY CLUSTER

What to do where the subway stops was the subject of a report delivered last month to the National Capital Planning Commission by Victor Gruen. The report proposed intensive, multi-use multi-level development of the "urban clusters" envisioned by NCPC at major stations in Washington's new transit system.

Gruen found that land values pyramided at the point of the stop, and suggested that development of the cluster (he prefers "core") be in the form of a sandwich for maximum density (subway level, below, roof plan, bot-



tom). Layers of the sandwich would be various land (or platform) uses including residential, an employment center, service commercial, and parking. Boundaries of the cluster would be kept within a quarter-mile radius of the stop, or an approximate five-minute walk.

Gruen warned that it would take a little adjustment to make his prototype scheme reality, including changes in zoning and building codes and the exercise of strict architectural and land use controls. He suggested dovetailing of urban renewal and public transportation financing under a unified policy of land acquisition.

BEAUTY'S BOUNTY

Since last May, children at nine District of Columbia schools have, with inspiration from Mrs. Lyndon B. Johnson, helped plant trees and shrubs to beautify their schools. Now 52 more schools are clamoring to get in on the beautification program.

The reason: The number of windows broken at the beautified schools has been cut at least in half. For principals and school administrators, this is a major item. Last year, it cost the District \$119,320 just to replace the windows broken by children who had nothing better to do.

EVEN A SWIMMING POOL

To some, building a swimming pool as part of a slum rehabilitation project might seem like a frill, but not to Washington Attorney John A. Nevius, chief fund raiser for a new private organization that calls itself COIN (Community Organizations for Improvement of Neighborhoods.)

"We're not just joking about it," Nevius said. "Can you imagine the morale that would be created?"

With expected help from the Federal government, COIN hopes to spend \$10 million in the next year to rehabilitate some 600 housing units in the area surrounding Washington's Cardozo High School, in many ways the city's worst slum area. COIN's plans include provision of recreation facilities and social services to the residents.

The city's major church groups have given their strong support to the new organization—and some \$150,000 has been put up by a number of wealthy persons worried about the future of their city. In addition to fixing up property, COIN is also prepared to provide rent subsidies for poor families.

FOOTNOTE

ART AT THE PHILHARMONIC: opposite Lincoln Center, in Manhattan, on top of the Liberty Warehouse at 43 West 64th Street, stands a 50-foot copy of M. Bartholdi's somewhat taller work of art on Bedloe's Island. The copy was put up in 1901 for \$5,000 by the then owner of the warehouse, one William H. Flattau, in what one paper described as a "burst of patriotism." Like the original, Flattau's statue is of cast iron and has a circular staircase inside for taking visitors up for a view. The staircase is now badly rotted, but the statue itself (coated with aluminum paint) is doing fine—better, in fact, than in quite some time: for with much of the surroundings demolished to make a clearing for Lincoln Center, it now forms a dramatic (if unexpected) focal point to the Center's principal plaza. What's more, it is noncontroversial as a piece of sculpture (unlike some of the works of art recently placed in the Center). Emma Lazarus' ringing verse, oddly enough, is missing. What better slogan for a warehouse than "Give me . . . the wretched refuse of your teeming shore. . . ." And what nicer sentiment to come from Lincoln Center's unexpected neighbor than "I lift my lamp beside the golden door." Trouble is the torch won't light. Photo: George Cserna.

A MISS DE WOLFE WHO DECORATED

Elsie de Wolfe, Lady Mendl, was about 80 years old and weighed about 90 pounds without her jewels when Ludwig Bemelmans, the artist and writer, first met her. That was in Hollywood during World War II; both she and he were sitting out the hostilities away from their beloved Paris. She fascinated him, as she had fascinated so many of the forceful people of the world as well as the detached observers of force. He later recalled her as "A gallant soul who had borne the burden of an experiment in erosion and nothingness". But she was more triumphant than that. For one small indication, unmentioned by Bemelmans, Elsie was the lady most often credited with inventing the trick of running a blue rinse through hair gone white (when imitated she switched to pale green).

More important, a half century earlier she had invented a profession in New York City when Stanford White recommended that a Miss de Wolfe be retained to "decorate" the interiors of the Colony Club which McKim, Mead & White had designed. At that time Elsie was an actress grown somewhat tired of touring in stock



companies. She was charming, ruthless, shrewd and voraciously vivacious. Also, she had talent, as it turned out.

There are not many de Wolfe decorated rooms remaining in New York. The Frick Museum on upper Fifth Avenue does bear traces of Elsie's refinement in its furnishings; Henry Clay Frick was one of her more munificent clients.



Also there is a library on the second floor of the St. Regis Hotel (above) which has survived as she installed it.

What else? Mostly memories of the woman herself, some of which are in Bemelmans' book, *To the One I Love the Best*, published by Viking in 1955. It transmits some of the fierceness with which she invested the characterization of the interior decorator. "You and I, we live by the eye," she told the author, "... if I am ugly, and I am, I am going to make everything around me beautiful. That will be my life to create beauty! I could steal for beauty, I could kill for it."

Elsie did not tell it to Bemelmans, but in her earlier years in the trade she had applied a blander characterization to interior decoration, wrapping it in the phrase "the beauty of suitability." This was a line lifted from a contemporary writer who was also preoccupied with the way that things looked, seemed and became—but in perhaps a deeper way, Edith Wharton.

The reason Elsie de Wolfe properly deserves a moment of contemplation by today's professional architects and town planners is, of course, the increasing public interest in the general environment. Elsie was an example of a semi-professional environmentalist, in technical terms, at its most effective. I suppose she might be called a reverse Jane Jacobs.

Here is what Elsie said some 30 years ago about the city: "You know what can cure a depression overnight? I give you the answer. It is to make America beautiful. Take New York! If I were the Empress of America, I'd order all houses between First and Second Avenue taken down, and on the

other side of the city, all between Eighth and Ninth—and those would be the great avenues, planted like the Tuileries. And the Bronx I'd make into a Bois de Bologne. It takes large measures like that." The area between Eight and Ninth Avenues in Manhattan—wouldn't that include Jane's home hearth, the West Village, since Hudson Street is a downtown extension of Eighth? Perhaps another elegant Elsie will soon arise to oppose the Jacobean social emphasis with a return to the great dreams, to what Elsie herself called "the big sweep of the hand over little men's mean plans."

If so, watch out, architects, for Elsie was even more strenuous than Jane. Elsie included architects in the little-man, mean-planner category more or less. As a decorator, operating within buildings, she depended to some degree upon them. She liked some of them—but it was in the same proprietary way she was fond of her poodle. She could not do without the poodle either, but this did not mean she pampered it. It was, in fact, from one of the dogs that Bemelmans picked up the title to his book about Elsie.

The dog of his era, Bloops, died bravely in Hollywood, and Lady Mendl was bereft. But after a day or two of grief she stirred, ordered the chauffeur out, and invited Bemelmans to go with her to order a headstone for the animal's grave. They picked a neat granite slab. Lady Mendl held her chin, thought a moment, then told the stone cutter to engrave upon it, "To the One I Love the Best."

A wonderful line, Bemelmans reflected; and later, he found it was even more wonderful than he had realized. He discovered that there was another small gravestone on another continent, Europe, which said the same thing about another diseased poodle of Lady Mendl's,—and that the inscription had been suggested by a neighbor of Elsie's and a pretty good source for good lines, W. Somerset Maugham.

Neither Maugham nor Edith Wharton, however, originated Elsie de Wolfe's most telling line. It was hers alone. Visiting in Athens, Elsie was taken out to see the Parthenon, the March issue of *Fortune* magazine relates. There, upon first confronting the glory of ancient Greece, most people are struck with a moment of self-conscious silence. But not Elsie. She cried, "It's my color—beige!"

PHOTOGRAPHS Page 26: Frances Johnston—Library of Congress, Myron Wood—Photo Researchers, Page 27: Rudolph Burckhardt, Robert Perrot, Bill Engdahl-Hedrich-Blessing, Page 86: Dudley, Hardin & Yang, Inc. Page 87: Walton Tregaskis, Page 88: New York Public Library.



Gulf Oil Corporation, TBA Warehouse, Atlanta, Ga. Architect: Ralph E. Pettet, A.I.A., Atlanta, Ga. General Contractor: Sam N. Hodges, Jr., & Co., Atlanta, Ga.

SMITH WALLS in place...a single responsibility

We install our own product . . . that's why! From design through installation, Smith Walls are a single-responsibility project. That's the way we do business.

We design the walls to the architect's specifications . . . custom-fabricate the wall panels in our own plant . . . pack them carefully in Smith trucks for delivery to the building site . . . and erect them with our own

specialist crews. And all this is done on a rigidly-controlled schedule set up by our coordinating expeditor.

One supplier . . . one responsibility. And we're it. So we take extra care every step of the way to maintain our reputation for a quality product . . . properly installed . . . on schedule.

Smith Single Responsibility assures satisfied customers. The country's leading industrial firms, as

listed in Fortune's 500, specify Smith Walls in place. Over and over again. For new construction *and* remodeling.

So specify the Single Responsibility . . . Smith Walls in place . . . on your next project. You'll find the details in Sweet's Catalog Files 3b/Sm and 8b/Sm. Or better yet, write!



ELWIN G. SMITH & CO., INC. Pittsburgh, Pa. 15202/Detroit • Chicago
Cincinnati • Cleveland • New York • Atlanta • Toledo • Philadelphia





No army
can withstand
the strength of
an idea
whose time has come

—Victor Hugo



The **trus Joist** idea has now constructed
more than 4,000 schools, shopping centers and commercial buildings of every type

Trus Joist is the perfect blend of wood and steel for roof and floor structural systems... light in weight and yet provides clear spans up to 100 feet.

All this plus custom design and three week delivery.

Profiles? Parallel, tapered, pitched, curved, or almost any shape...and economy is still the byword.

Many other savings too — T J's light weight economizes on footings, foundations and bearing walls. Most sizes can be erected by two job carpenters. Nailable top and bottom

chords provide for easy attachment of low cost roofing, ceiling or flooring materials — open webs for duct work.

Deflection is minimal even in long spans while temperature change poses no problems.

More information? Load tables? Engineering data? Write for our free design manual.

Trus Joist is a money-saving, work-saving system that's balanced, precision engineered and custom made to the architect's specifications.

Good idea?

... an idea whose time has come.

SEE
US IN
SWEET'S



Pats. No. 3,137,899 & 3,019,491
Other Pats. Pending

trus Joist

GENERAL OFFICES
BOISE, IDAHO
RT. 1, HIWAY 20
83702

Plants at: BOISE, IDAHO ■ PORTLAND, ORE. ■ SAN FRANCISCO ■ PHOENIX, ARIZ. ■ DUBUQUE, IOWA ■ LOS ANGELES ■ Soon in: ATLANTA, GA. ■ CALGARY, CANADA

BOOKS

(continued from page 75)

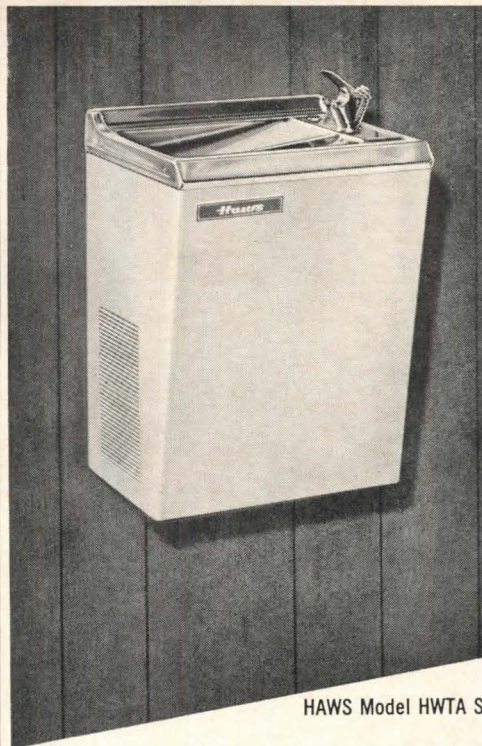
HELMUT JACOBY — ARCHITECTURAL DRAWINGS. Introduction by Claudius Coulin. Published by Frederick A. Praeger, Inc., New York, N.Y. 108 pp. Illustrated. 8½ in. by 11 in. \$13.75.

Helmut Jacoby is probably the most accomplished professional renderer of buildings practicing in the U.S. today. His meticulous presentation drawings of everything from Philip Johnson's polished work to Pei's and Rudolph's *béton brut* have appeared in this and other magazines for years, and wowed clients and fellow architects alike. These fine rendering have also succeeded, almost, in making all modern U.S. architecture look pretty much alike—an achievement almost impossible to contemplate. This book not only tells how Jacoby does it, it also proves that, all appearances to the contrary, he can actually draw exceedingly well, and with plenty of verve. For some of his quick pen-and-ink sketches, tossed off with deceptive ease, are absolutely first-rate. He should do more of them, and sell his airbrush.

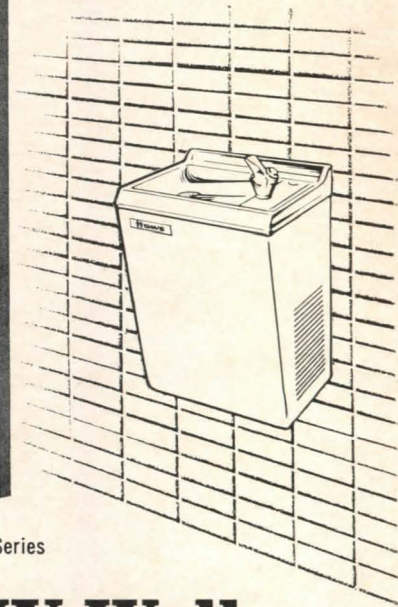
THE GALVESTON THAT WAS. By Howard Barnstone. Published by The MacMillan Company. New York, N.Y. 224 pp. Illustrated. 8½ in. by 11 in. \$12.95.

This is an intriguing book on several levels: first, as an appreciation, by a young, modern Houston architect — Howard Barnstone — of the romantic, 19th century eclecticism of what was once the biggest city in Texas; and, secondly, as a visual appreciation of that same city through the eyes (or lenses) of two great and very different photographers—Henri Cartier-Bresson, and Ezra Stoller. Because this is a rather fascinating view of the same object—in this case, a city, Galveston—from three entirely different vantage points, one hopes that the sale of this book will not be limited to hometown boosters in the old port. The book, its authors, and the subject itself deserve a more general and perceptive public.

ve: Two styles of rendering, both Helmut Jacoby. Below: Two photo-
hic styles, by Ezra Stoller and
ri Cartier-Bresson (bottom).



HAWS Model HWT Series

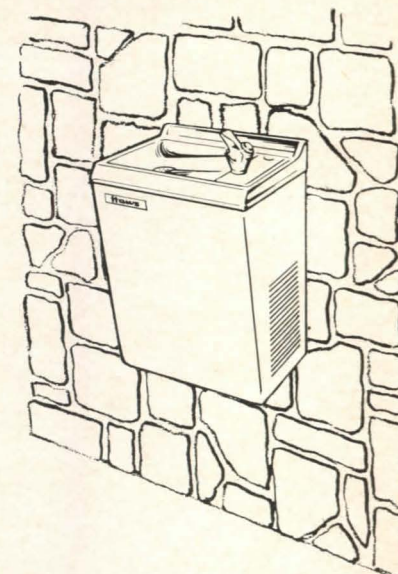


Mounts on ANY Wall...

Haws water cooler Model HWT Series mounts off-the-floor on any wall — be it stone, masonry, wood panel, or concrete. The Cool Mist Grey baked enamel finish and stainless steel receptor harmonize with any interior decor.

Because it's wall-mounted, there's space beneath for cleaning equipment—no exposed fittings. And installation height may be varied for children and/or adults.

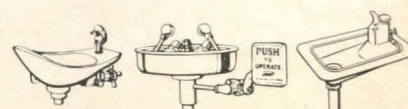
Compact Model HWT Series wall-hung coolers are available in eight different models with capacities from 6 to 17 gph. Write or call today:

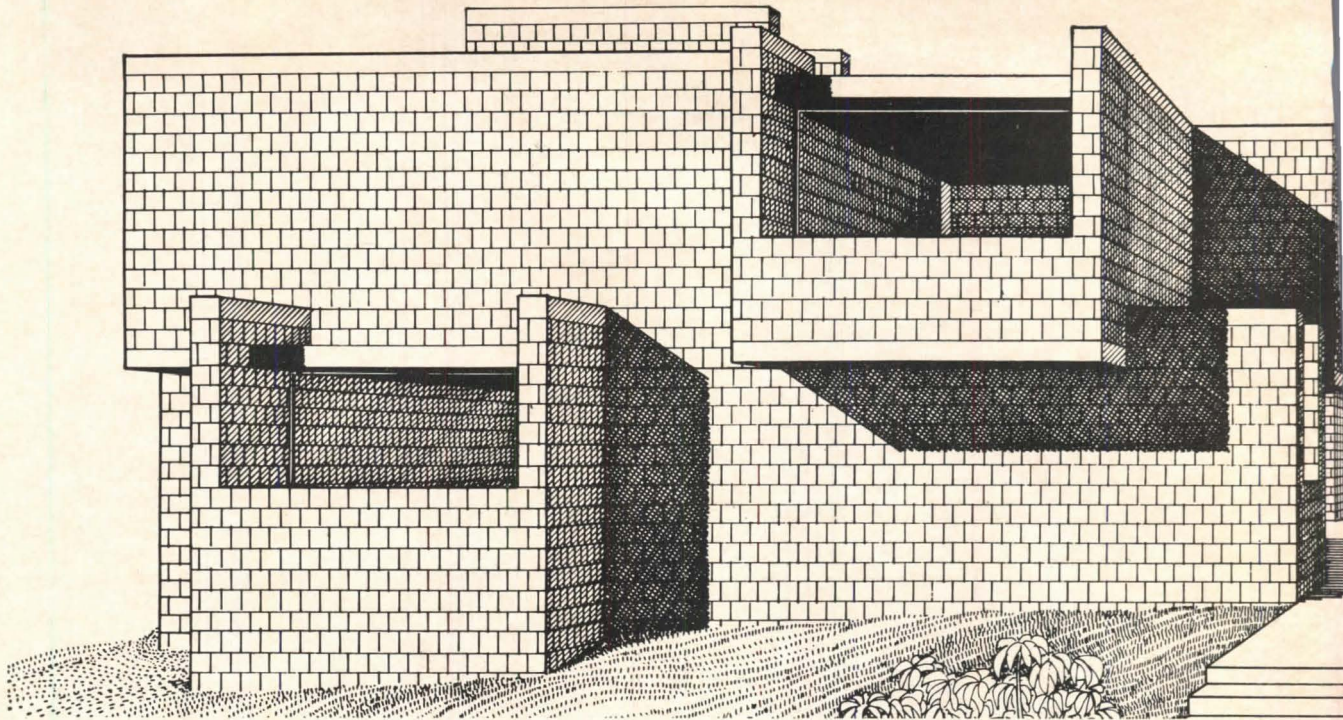


HAWS DRINKING FAUCET COMPANY

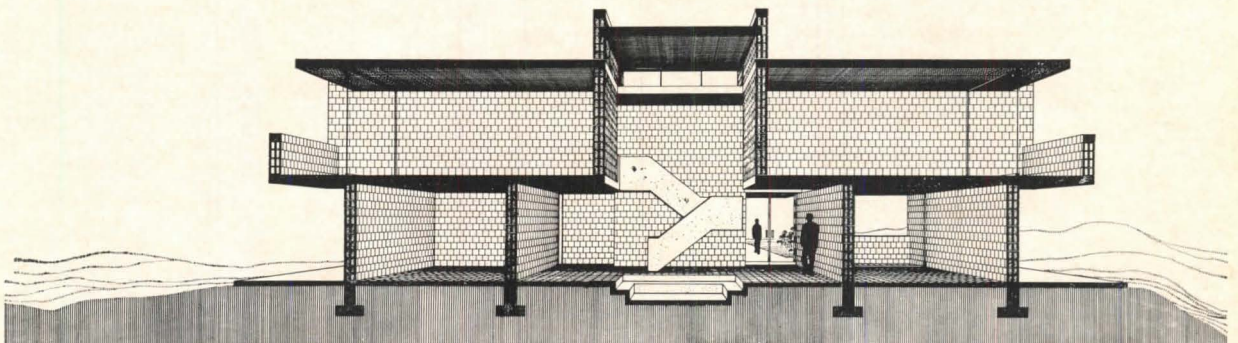
1441 Fourth Street • Berkeley, California 94710

For details and information on other Haws products—see your Haws catalogs on drinking fountains, emergency eye/face-wash fountains, drench showers and decontamination equipment; and dental fountain/cuspidor units.





Architect Marvin Hatami designs a college dormitory



At -10° , indoor wall surface temperature is increased from 50° to 62° by insulating the block walls with Zonolite Masonry Fill Insulation.

The project consists of the first section of a dormitory complex, located on a hilly meadow site, accommodating fifty-two single rooms.

It was designed by Marvin Hatami and engineered by Cator, Ruma & Associates, both of Denver, Colorado.

The rooms are composed around a two story central lounge and every three rooms share common bathroom facilities. Developed modularly,

the second floor is superimposed over the ground floor in a way to express each individual room in an interwoven and interlocking manner.

The structure is composed of 12" x 8" x 8" reinforced lightweight concrete block bearing walls, insulated against thermal and sound transmission with Zonolite Masonry Fill Insulation.

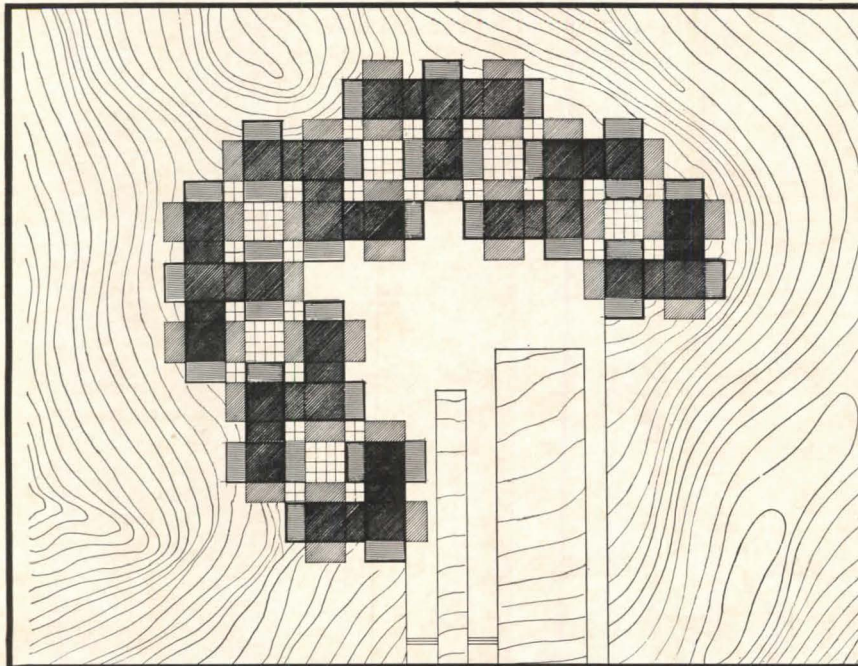
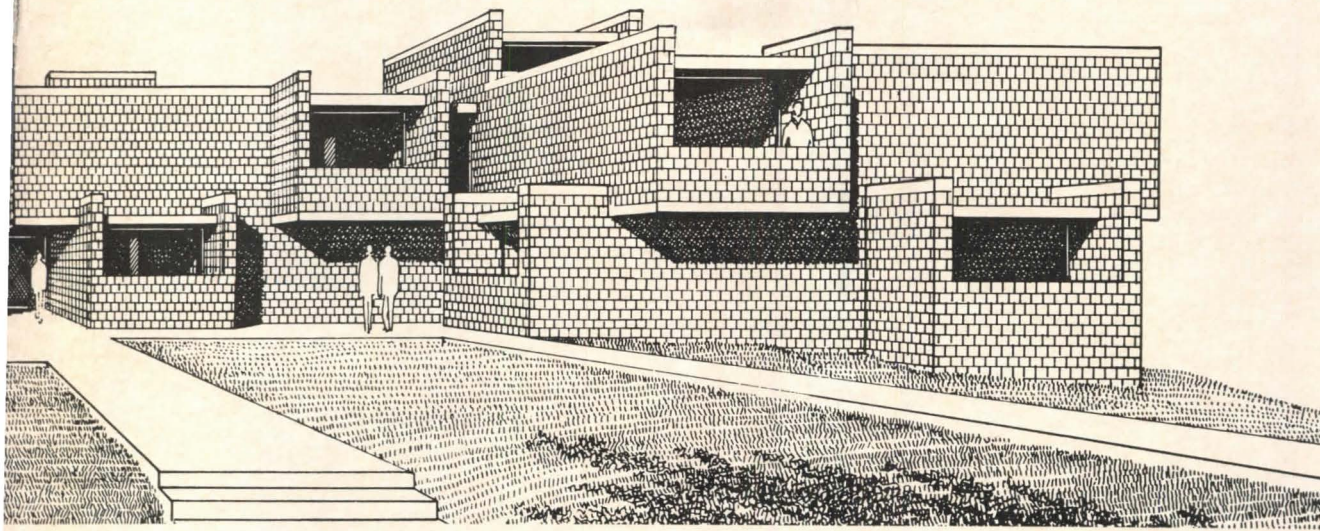
It cuts thermal transmission

through the walls by 50% (see chart), raises the interior wall surface temperature from a miserable 50° to a comfortable 62° , thus reducing heat transfer and convection currents in the rooms.

This cut the operating costs 9.2%, or about \$90 a year.

The savings more than pay for the cost of the thermal insulation over the 20 year mortgage period.

Zonolite® prototype building #10: a college dormitory



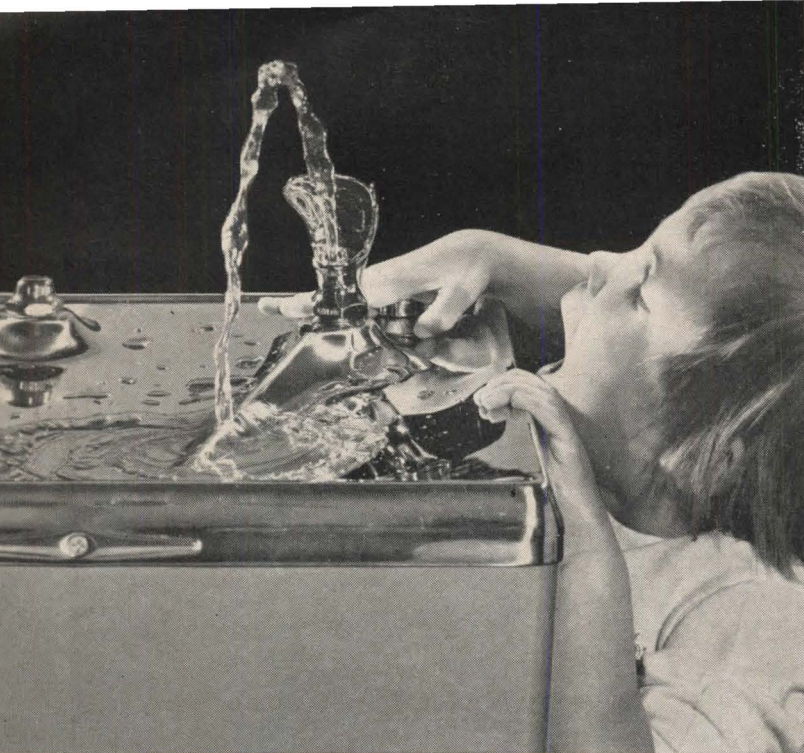
BLOCK PLAN SHOWING THE SUPERIMPOSITION OF SECOND FLOOR ON GROUND FLOOR

For complete information about Zonolite Masonry Fill Insulation, write for our Bulletins MF-79 and MF-80, Dept. AF-36, 135 South LaSalle Street, Chicago, Illinois 60603.

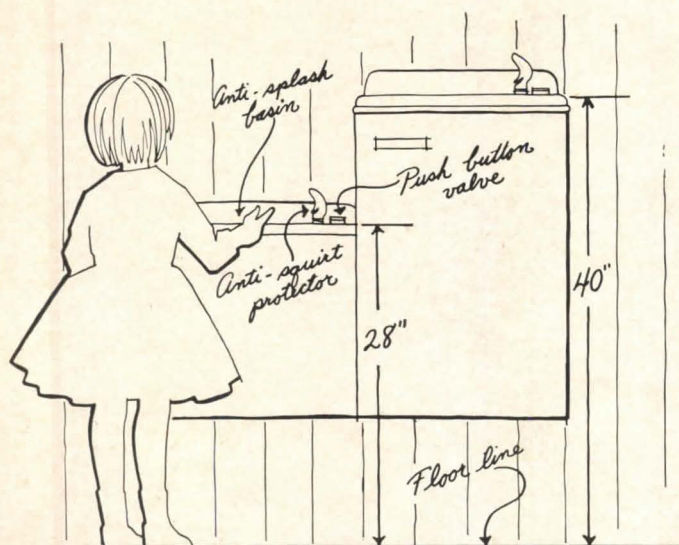
ZONOLITE
W. R. GRACE & CO.
135 SOUTH LA SALLE ST., CHICAGO, ILL.

DESIGN CONDITIONS		Winter Heat Loss in BTU/HR. Assuming 70° F Indoor —10° F Outdoor	
	Without Masonry Fill	With Masonry Fill	
Walls	12" x 8" x 8" Lightweight Concrete Block	12" x 8" x 8" Lightweight Concrete Block (Cells Filled)	
			142,000
			71,000
Roof	Roofing, 8" Concrete 2" Insulation		98,000
Floor	4" Concrete on Grade		26,000
Glass	1" Insulated Glass		242,000
Ventilation	3600 CFM		260,000
Totals			768,000
% Savings with Masonry Fill		$\frac{768,000 - 697,000}{768,000} \times 100 = 9.2\%$	

1. Increased wall attenuation characteristics reduces sound transmission considerably.
2. Raised indoor wall surface temperature from 50° F to 62° F provides added comfort.
3. 14,100 sq. ft. of walls (includes 8200 sq. ft. of interior walls) @ 18¢ sq. ft. = \$2,538 installed.
4. Additionally the operating costs are reduced by over \$90 per year based on 5673 degree days \$.053 per therm gas boiler.



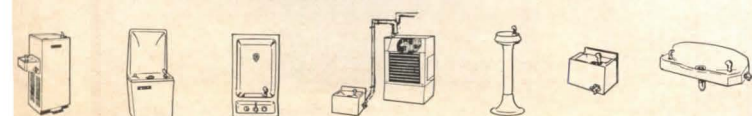
For thirsty kids less than 42" tall



Wall mounted water cooler with low-level accessory fountain — designed with kids in mind. Available in stainless steel cabinet, baked enamel in choice of colors, or vinyl-laminated steel in silver spice, or mocha brown. Write for NEW 1966 Catalog or look us up in SWEET'S FILE or YELLOW PAGES.

Halsey Taylor®

THE HALSEY W. TAYLOR COMPANY
1564 THOMAS ROAD • WARREN, OHIO



Complete line of electric water coolers and drinking fountains

LETTERS

CITY CORES

Forum: I have just read Douglas Haskell's "Unity and Harmony at Rockefeller Center" [Jan./Feb. issue] and wanted you to know how much I enjoyed it.

His analysis of the Center's role in the urban scheme, both architecturally and socially, is one of the most absorbing and perceptive I've seen.

GUSTAV EYSELLE
President
New York City Rockefeller Center, Inc.

Forum: As Head of the Department of Art History and as an active architectural historian, I was much interested to see your most recent issue of Forum. I believe it constitutes a significant contribution to the history of architecture, and I hope that it will be possible to continue the present direction. I was especially interested in your piece on arcades which I have been doing research on for some years, and to notice Mr. Haskell's reference to my research on Rockefeller Center.

WINSTON WEISMAN
Head, Department of Art History
Pennsylvania State University
University Park, Pa.

Forum: The article "Shopping Streets Under Roofs of Glass" appearing in your Jan./Feb. issue, is a most marvelous collection, as are the vast majority of articles appearing in your excellent publication.

GEORGE ROLFE
Planner
Louisville

COMMENDATIONS

Forum: The School of Architecture faculty wishes to take this opportunity to commend the staff of the Forum for the new and more meaningful directions the magazine has taken.

May I add my congratulations to the many for the added depth that Forum has shown.

JOSEPH J. MCGRAW
Director
Urban and Regional Planning Program
Texas A&M University
College Station, Tex.

Forum: My function as Director of Renewal Planning for the New Haven Redevelopment Agency is predominantly an architectural one, as is my background. The fact that the new Forum is today perhaps the most significant and pertinent architectural magazine in the United States, makes its presence on my desk a necessity.

As you know, New Haven's re-

newal program is strongly committed to the production of a good architectural result. The city is perhaps today one of the country's foremost sponsors of meaningful architecture. In addition, we are constantly striving to improve and intensify the architectural aspects of our general planning. Your magazine has a place in this job.

JOHN L. MCGUERTY
Director of Renewal Planning
New Haven

FLORIDA CLIMATE

Forum: I would like to congratulate you on your new format for the Forum and want you to know it is the only architectural magazine that I read from cover to cover. You seem to put architecture on the plane where it belongs as a business serving others and not as a high blown art form for art's sake.

I have only one comment on the statement made on page 63 of the December issue, regarding the Cape Kennedy winner: "Strong-yet-inviting concrete structure will contrast with the warm, solar bronze glass to present a crisp, clean profile against the Florida sky." As a Florida resident of many years standing, what a building in Florida doesn't need is "warm, solar bronze glass." If anything, at Cape Kennedy you need the "cool solar gray glass" as, believe me, Florida is plenty warm enough without inviting more."

CARL GERKEN
Architect
Daytona Beach, Fla.

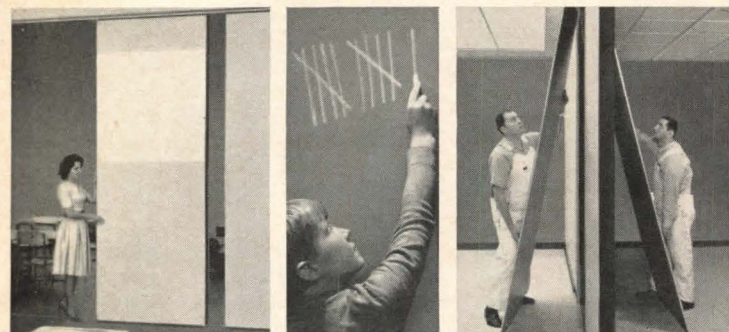
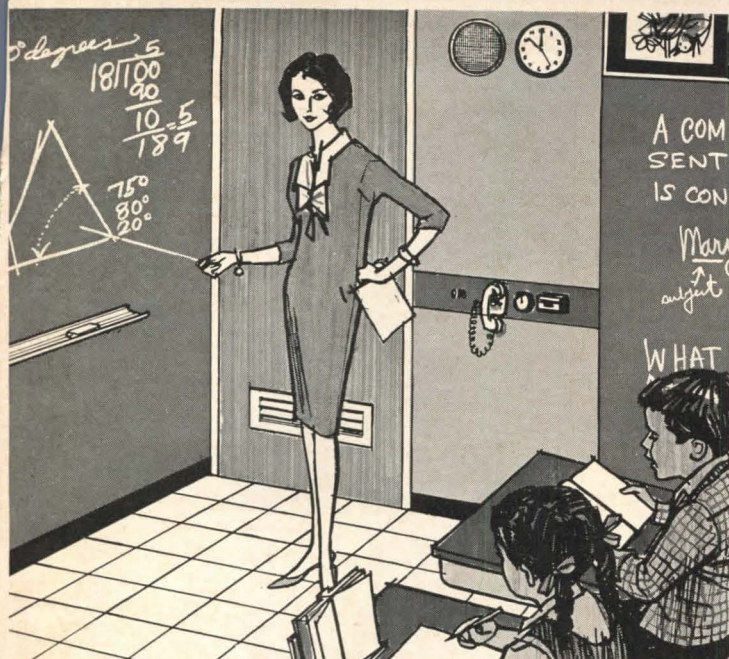
PENNSYLVANIA MANSION

Forum: With reference to your article concerning the new governor's home for Commonwealth of Pennsylvania, your comments may or may not be in order concerning the architecture but certainly your comments about Governor Scranton are completely out of order.

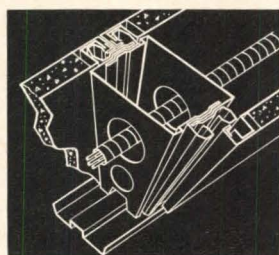
In contrast to what you state, Governor Scranton will not live in the new home. It has always been intended for the next governor, and will not be completed until he has been in office for some time. Also, as for the style of architecture, of the twelve state officials who are members of the Board (six Republicans and six Democrats), Governor Scranton was the only one who suggested that a more "progressive" style would be in order. He was outvoted.

JOHN W. INGRAM
Secretary of Administration
Commonwealth of Pennsylvania
Harrisburg, Pa.

(continued on page 96)



Movable Component Classrooms



Hauserman Double-Wall is the basic element of a new concept in school space design — Movable Component Classrooms.

Demountable Double-Wall in chalk panels, projection screen panels and functional service panels combine with conventional interior panels to make the wall itself a flexible educational tool. A wide range of classroom aids — including magnetic chalk trays, map rails, tack strips and other accessories — complete the MCC system.

Double-Wall provides true semester flexibility. Instant flexibility is available with Operable Wall, the soundproof sliding partition. MCC means total flexibility and function at costs competitive with concrete block. Write for the Hauserman Movable Component Classrooms brochure before planning your next school.

The E. F. Hauserman Co.,
5773 Grant Ave., Cleveland, Ohio 44105
Canada: Hauserman Ltd., Mallard Rd., Don Mills, Ontario

HAUSERMAN

“When we think of
Le Corbusier
he is standing
stiffly amidst his
enemies and
his worshippers...”

So begins the FORUM's Le Corbusier Memorial — a commemorative issue that is more than just a tribute since it is interlaced with the great architect's own words.

THE ARCHITECTURAL FORUM / OCTOBER 1965

LeCOR
FORUM

This handsome fifty page special is available at \$1 each—as long as the supply lasts. Merely send the coupon below.

The Architectural FORUM, 111 W. 57th St., New York, N.Y. 10019

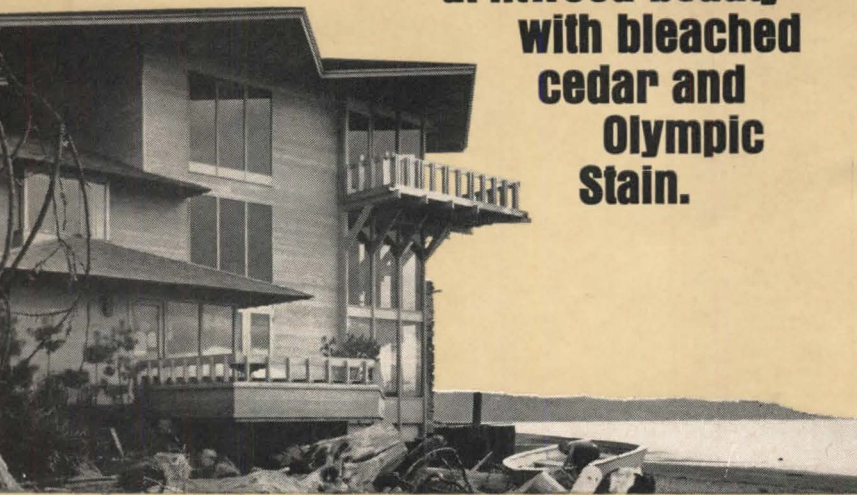
Send me _____ copy(s) of the FORUM's Le Corbusier Memorial issue. I've enclosed \$1 for each copy. (Include sales tax if applicable).

Name (print) _____

Address _____

City _____ State _____ Zip Code _____

Ralph Anderson's home— driftwood beauty with bleached cedar and Olympic Stain.



The use of local wood and stain is no innovation for Ralph Anderson. It is characteristic of him, and of the Northwest tradition in architecture his work has helped create. "Most of the structures produced by the office during my twelve years of practice have featured the same combination," he says.

The design of his home embodies another of Anderson's principles—his refusal to allow functionalism to hamper the fulfillment of a family's need for continuing aesthetic satisfaction. His home expresses both a natural and a human harmony.

The lucidity—almost austerity—of the home's basically vertical thrust is modulated by Anderson's use of natural wood. He chose Western Red Cedar siding for both exterior and



interior. The effect he wanted was a matching of the building's wood with the wood washed up on the adjacent beach.

"Wood surfaces were finished with Olympic's Semi-transparent Stain and Bleachtox," which, Anderson reports, achieved the silver-gray look of a piece of old driftwood. The coloring of the wood surfacing only increases the harmonic

relationship with its land and sea surroundings."

Olympic's reliability as a preservative is an especially significant factor in surroundings like the Puget Sound site of Anderson's home. High tides rise to within a few feet of the house, sometimes, he says, even splash against the windows. He needed a



wood finish durable enough to withstand this kind of climate. He chose Olympic.

Ralph Anderson has achieved an enduring beauty in his home: a beauty Olympic Stain helped create, and will help to preserve.



For color samples on wood and new A.I.A. Information Manual, write Olympic Stained Products Co., 1118 N.W. Leary Way, Seattle.

LETTERS

(continued from page 94)

HALF ARCHITECTS

Forum: I welcome the renaissance of your magazine, and would particularly like to congratulate your increased emphasis on architecture rather than architects. However, I cannot help having a misgiving concerning your editorial policy, the sense of which is this:

Today the architect is very rapidly increasing the extent of his responsibilities in the social sciences. He is undertaking, with your encouragement, a great many noble and needful duties. I daresay that social awareness is an important element in the education of the architect, but it has been my personal experience that grand and difficult projects contain within themselves the rationalization for later failure. Thus in school I most often failed because of the fear of failure.

Le Corbusier has said that we must first state the problem of architecture. Now it seems that we are avoiding this primary responsibility and have substituted a colossal program of socio-economic, etc., interrelationships which by altering the emphasis of architecture has decreased the individual responsibility. . . .

Without a sense of individuality and aloofness, based on an understanding of the principles of architecture, we will develop men who are half-architect and half-sociologist, half trained in each, which seems an unhappy and dangerous compromise.

WILLIAM McCULLAM
Newbury, Ohio
Draftsman

CONFIDENCE IN TECHNOLOGY

Forum: The concrete tower 400 meters high, as shown in your December 1965 Preview, was envisioned, I suppose, with full confidence in technology; that is, in electrical power. Any blackout similar to that we witnessed last November would trap some people at the higher points of the triangular shafts, completely free standing, without chance of escape. I do see, of course, a mechanical possibility of the elevator's release to its safety position, if such measure is provided by Signor Roselli and his associates.

But Gentlemen Engineers: Why not build elevators with a motorizing system attached to the car

itself or perhaps, inspired by bold artistic considerations of Piotr Kowalski, design an air powering device to move the vator under guiding press smoothly and efficiently in vertical travels?

ADAM MILCZYNSKI KA
New Haven
Architect

PROPAGANDA

Forum: In its April 1964 issue Architectural Forum publishes Communist propaganda entitled "The New Architecture of Castro Cuba," by Diana Rowntree.

The article was ridiculous and tragic. Ridiculous because all Mr. Rowntree could present as Castro architecture was a series of African-like huts of an indefinite type of construction that they call the School of Plastic Arts in suburban Havana. The article was tragic because it was a tangible proof of how architecture, like everything else in Cuba, has been degraded under the Communist rule.

Now the Communists come one more to the pages of the new Forum with an anonymous article entitled "Cluster of Bubbles" [Jan./Feb. issue]. The bubbles are the same rudimentary huts built on the golf courses of the Havana Country Club, which were stolen from their owners.

I suggest that the Architectural Forum, in its new life, be more selective

ANGEL CANNON
New York City
Architect

The Forum does not publish propaganda; it publishes news (and other material) in its chosen fields. The April 1964 article by Diana Rowntree (who is not a Communist, though she is a highly respected editor of the radical British magazine, Architectural Design) was a news story that fascinated many of our readers. It was prefaced by a note stating that "Mrs. Rowntree's conclusions like her judgments, are her own."

Our article on Havana's new School of Plastic Arts was not "anonymous;" it was unsigned for the obvious reason that it was a resumé of observations by Ricardo Porro, the architect, plus a few somewhat caustic remarks by our own editors, all of whom are Republican. Nor was the article "propaganda;" it was a legitimate report of some interest, we believe, to our readers. We reserve the right to publish legitimate news such as this in our chosen fields, regardless of who makes it.—Castro, Mao or Batman—ED.

ADVERTISING INDEX

Allied Chemical Corp. (Barrett Division) 2, 3 <i>McCann-Erickson, Inc.</i>	Janitrol Division, Midland-Ross Corporation 16, 17 <i>Ketchum, MacLeod & Grove, Inc.</i>
American-Standard, Plumbing and Heating Division 14 <i>Batten, Barton, Durstine & Osborn, Inc.</i>	Kentile Floors, Inc. Cover II <i>Benton & Bowles, Inc.</i>
Art Metal Inc 12 <i>The Zlowe Company, Inc.</i>	Library of Urban Affairs 19 <i>Smith, Henderson & Berey, Inc.</i>
Barrett Division, Allied Chemical Corp. 2, 3 <i>McCann-Erickson, Inc.</i>	Macomber Division of Sharon Steel Corporation 8 <i>Watts, Lee & Kenyon, Inc.</i>
Bayley, The William Co. 15 <i>Odiome Industrial Advertising, Inc.</i>	Malta Manufacturing Company .. 22 <i>David Burnap Advertising Agency, Inc.</i>
Carlisle Corp., Carlisle Tire & Rubber Divn., Special Products Dept. 18 <i>William H. Robson Advertising Consultant</i>	Mosaic Tile Company 13 <i>Carr Liggett Advertising, Inc.</i>
Carrier Air Conditioning Company 4 <i>N. W. Ayer & Son, Inc.</i>	National Electrical Contractors Assn. 20, 21 <i>Henry J. Kaufman & Associates</i>
Day-Brite Lighting—a division of Emerson Electric Cover IV <i>D'Arcy Advertising Co.</i>	Norton Door Closer Division, Yale & Towne, Inc. 8B <i>Connor-Sager Associates, Inc.</i>
Dearborn Glass Company 18 <i>Geren Advertising, Inc.</i>	Olympic Stained Products Company 96 <i>Kraft, Smith & Ehrig, Inc.</i>
Fenestra, Inc., Architectural Products Divn. 10, 11 <i>Alan Spitzer Inc.</i>	RCA Service Company 97 <i>Al Paul Lefton Company</i>
Gotham Lighting Corporation ... 8A <i>Carter Winter</i>	Republic Steel Corporation, Manufacturing Division Cover III <i>Meldrum & Fewsmith, Inc.</i>
Grace & Co., The W. R. (Zonolite Division) 92, 93 <i>Fuller & Smith & Ross, Inc.</i>	Smith, Elwin G. & Co. 89 <i>Dan Frye Advertising, Inc.</i>
Hauserman Company, The E. F. 95 <i>Seery & Company Marketing</i>	Structural Clay Products Institute 6, 7 <i>Henry J. Kaufman & Associates</i>
Haws Drinking Faucet Co. 91 <i>Pacific Advertising Staff</i>	Tay'or, The Halsey W. Co. 94 <i>The Bayless-Kerr Co.</i>
Homasote Company 9 <i>Richard La Fond Advertising, Inc.</i>	Thiokol Chemical Corporation .. 24 <i>MacManus, John & Adams, Inc.</i>
Hope's Windows, Inc. 5 <i>Addison-Busch, Moss-Chase Inc.</i>	Trus Joist Corporation 90 <i>Cline Advertising Service</i>
Inland Steel Products Co. 23 <i>Hoffman-York, Inc.</i>	Zonolite Division (W. R. Grace & Co.) 92, 93 <i>Fuller & Smith & Ross, Inc.</i>

ADVERTISING SALES OFFICES

HAROLD D. MACK, JR., Advertising Manager

NEW YORK
111 West 57th Street, New York, 10019
WILLIAM B. REMINGTON N. Y. Manager

CLEVELAND
32 W. Orange St., Chagrin Falls, Ohio
CHARLES S. GLASS Cleveland Manager

CHICAGO
2. N. Riverside Plaza, Chicago, Ill.
JOSEPH H. LAJOIE Chicago Manager

LOS ANGELES
McDonald-Thompson, Inc.
1313 W. 8th St., Los Angeles, Calif.
JEFFREY KAUFMAN

SAN FRANCISCO
McDonald-Thompson, Inc.
625 Market St., San Francisco, Calif.
LESLIE MEEK

PORTLAND
McDonald-Thompson, Inc.
2035 S.W. 58th Ave., Portland, Ore.
FRANK EATON

HOUSTON
McDonald-Thompson, Inc.
3130 Southwest Freeway, Houston, Tex.
FRANK N. VICKREY

DENVER
McDonald-Thompson, Inc.
846 Lincoln St., Denver, Colo. 80203
ROBERT H. HEIDERSBACH

TULSA
McDonald-Thompson, Inc.
2570 S. Harvard Ave., Tulsa, Okla.
MAX C. NELSON

MIAMI
The Dawson Company
5995 S.W. 71st St., Miami, Fla. 33143
HAROLD L. DAWSON

ATLANTA
The Dawson Company
1776 Peachtree Rd., N. W. Atlanta, Ga.
DON L. UHLENHOPP

You Design for Today and Tomorrow when you specify RCA TV Antenna Systems

RCA TV Antenna Systems answer fully today's needs—and future needs—of hotels, motels, hospitals, nursing homes, schools, convention halls, large retailing and manufacturing operations.

That means RCA is your ONE complete signal distribution system to receive and distribute standard TV broadcasts, and to originate and distribute closed circuit telecasts including audio portions... a system so flexible it can answer future requirements without extensive alterations or basic changes.

Clients appreciate this kind of foresight. They also appreciate RCA quality, durability, and design—with proven reliability time and again.

Have the specifications of RCA's TV Antenna Systems and accessories at your fingertips. We'll be glad to rush them to you without cost or obligation. Simply mail this coupon.



RCA SERVICE COMPANY

Commercial Products Sales Dept. D-94
Bldg. 203-3, Camden, N. J. 08101

Please furnish specifications on RCA Antenna Systems.

Name _____ Title _____

Company _____ Phone _____

Address _____

City _____ State _____ Zip Code _____



HOSPITALS



SCHOOLS



HOTELS, MOTELS

Sometimes progress amounts to a hill of beans



How do you fight starvation in the hungry parts of the world? Start with a couple of farmers . . . that's how . . . or a couple of dozen in one of the 46 countries where the Peace Corps works. Start with a small plot of land and help build it up from scratch. Start with one scrawny chicken and fatten it up with a proper diet. Start with a handful of people and teach them all you know about farming.

Start with a letter of application to the Peace Corps. The progress you make *in the eyes* of the world may seem to amount to nothing more than a hill of beans . . . but what you'll accomplish for people may mean the difference between starvation and being well fed.

For more information, write: THE PEACE CORPS,
Washington, D.C. 20525.



Published as a public service in cooperation with the Advertising Council.



Now you can specify rugged Republic School Lockers in a variety of types and decorator color styling at no extra cost.

Choose from nineteen high-spirited, student-proof colors in single, double, and multiple tier lockers. Wide range of dimensions to meet your needs.

Plus Republic's famous extra steel tough construction.

You're a winner every time with this combination of quality and color. Ask your Republic MAN FROM MANUFACTURING about "decor 19" lockers, or send today for complete information.

Please send "decor 19" lockers, the folder that tells how to be a big wheel with color at no extra cost.

NAME _____ TITLE _____

SCHOOL OR COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____



MANUFACTURING DIVISION
REPUBLIC STEEL CORPORATION
 Youngstown, Ohio 44505



CALL THE MAN FROM
 MANUFACTURING!



This STEELMARK of the American Steel Industry on a product assures you it is modern, versatile, economical Steel. Look for it on products you buy.

Meet CLYMATRON II, son of Clymatron. Better than its pa. Puts out more footcandles of cooler light. Better looking, too. Has extruded aluminum trim, regressed splay, frameless or framed enclosures. Besides lighting, Clymatron II handles air...lots more of it in fact, with a new adjustable baffle controlling its direction from vertical to horizontal...transfers heat...even provides total heating. In fact, it does so many things, it takes a brochure to explain the whole story. Better write for it!



DAY-BRITE LIGHTING • 5411 BULWER • ST. LOUIS, MO. 63147
A DIVISION OF EMERSON ELECTRIC CO.

