E ARCHITECTURAL FORUM / MARCH 1967

FORUM

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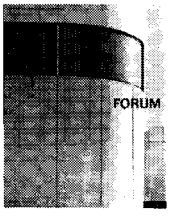

Cover: Sinuous wall of Estée Lauder cosmetics factory (pages 76-83). Photograph by Norman McGrath.

THE ARCHITECTURAL FORUM
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PUBLISHER'S NOTE

Starting with Abrams (Charles) and ending with Zevi (Bruno), FORUM's list of recent contributors includes writers who have taken us from a cathedral in Tokyo to an opera house in Sydney (Robin Boyd: 9/65, 9/66), across a ghetto in Johannesburg (Julian Beinart: 9/66), up to a shrine in Jerusalem (Kiesler: 9/65), thence on to Rome (Giancarlo DeCarlo: 5/66), and home to Rockefeller Center (Douglas Haskell: 1-2/66). We had soliloquies, such as Johansen on Johansen (1-2/66), Johnson (Philip) on Johnson (Philip) (10/66), and Kiesler on Kiesler (12/65).

A mathematician analyzed the city for us demonstrating it was not a tree and won a Kaufmann International Design Award in so doing (Christopher Alexander: 4-5/65). Edgar Kaufmann Jr. himself wrote on the sources of modern design (9/66). A former Time, Inc. vice-president laid the principal blame for slums and housing ills on current tax practice (Perry Prentice: 10/65).

Except for Walter McQuade, whose column is a regular feature, the most frequent contributor has been Charles Moore (five articles: 4/65, 6/65, 7-8/65, 11/65, 9/66). Donlyn Lyndon, who replaced Chuck as our West Coast correspondent, ties Roger Montgomery (1-2/66, 3/66, 9/66, 1-2/67) for second place with four pieces (12/65, 1-2/66, 3/66, 7-8/66).

We are very proud of all the distinguished people who add their thoughts to our pages. The list, which is scheduled to grow in numbers and variety, shows promise of becoming a sort of Burke's Peerage of Architecture and Planning. But even now, at this early stage of its development, there is not enough space to mention all the titled Lords and Ladies. For instance, we've omitted Neutra (Richard) and Goodman (Percival); Woods (Shadrach) and Moholy-Nagy (Sybil); Fitch (James M.) and Weidlinger (Paul); and many others. We can assure all of them that we intended no snub. We wish to compliment them all and hope for more of the same.—L.W.M.

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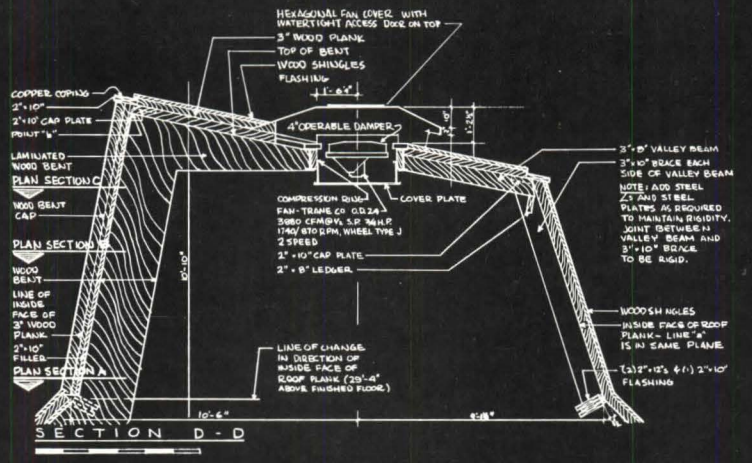

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Architects: Oppenheimer, Brady and Lehrecke, Architects
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No job is too difficult for us to tackle. In-stock or custom-made. No job is too big. If you'd like more information, get in touch with our commercial carpet department at 295 Fifth Avenue, New York and ask for one of our specialists.

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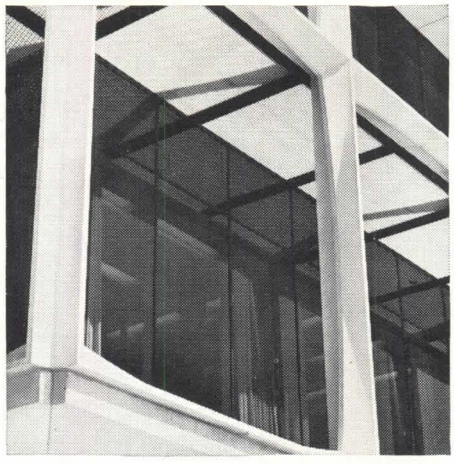
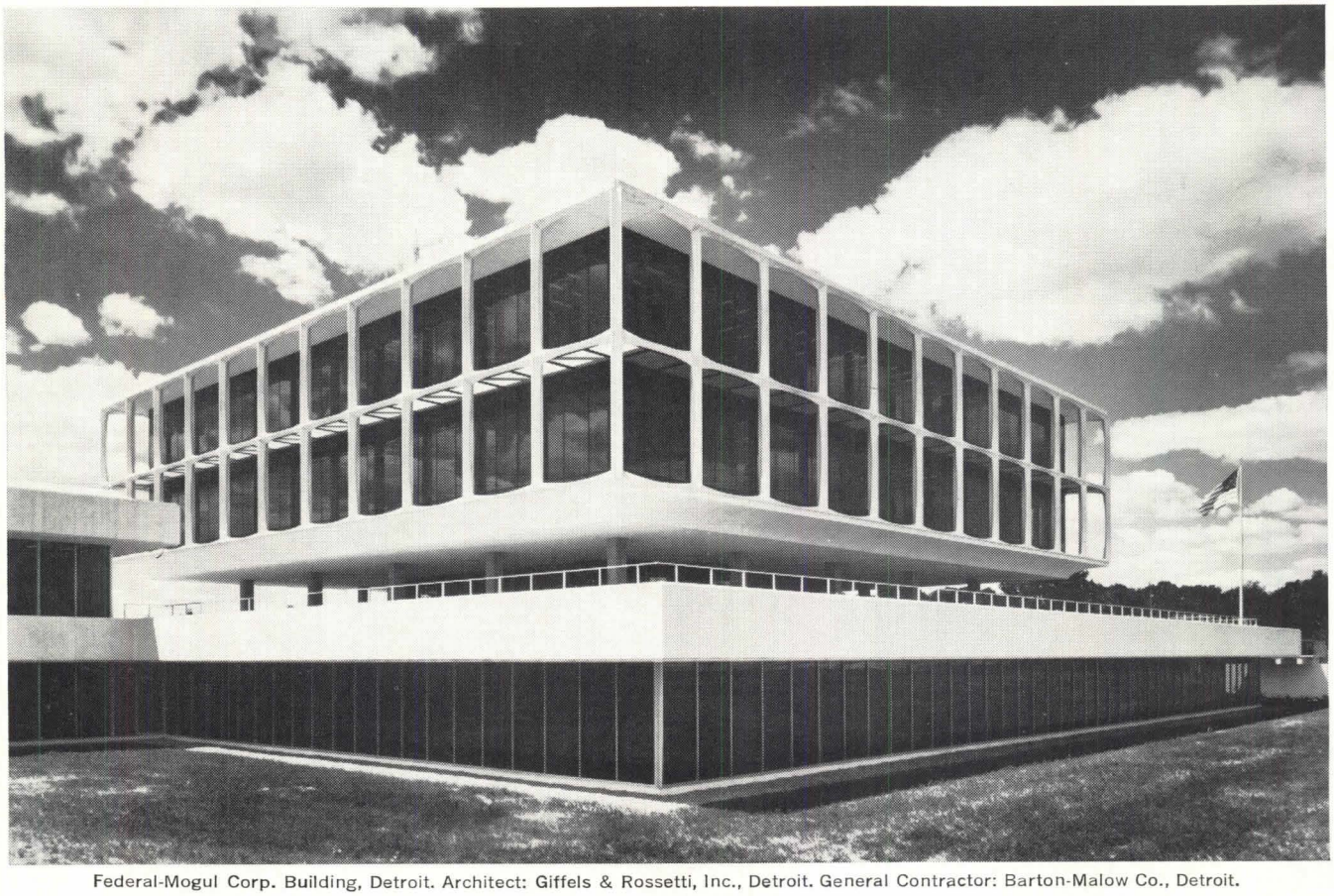
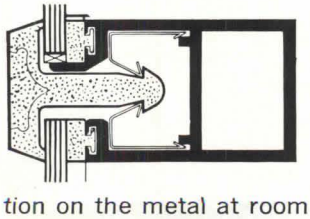




Federal-Mogul Corp. Building, Detroit. Architect: Giffels & Rossetti, Inc., Detroit. General Contractor: Barton-Malow Co., Detroit.



The new PITTCO T-WALL has a proven 0.6* U-value. There is absolutely no metal connection from inside to outside. (See section.)

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For more information on this new PITTCO framing system, write for our 4-page descriptive folder. Pittsburgh Plate Glass Company, Pittco Architectural Metals Department, Ohio Street, Kokomo, Indiana 46901.

*Performance test data, 3/1/65, Pennsylvania State University.

PITTCO ARCHITECTURAL METALS

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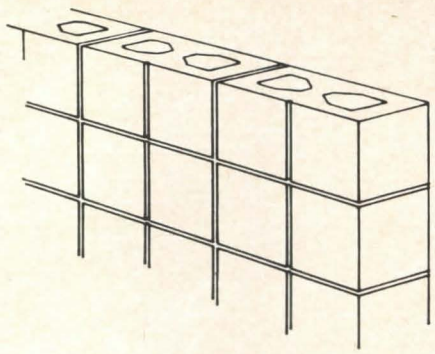
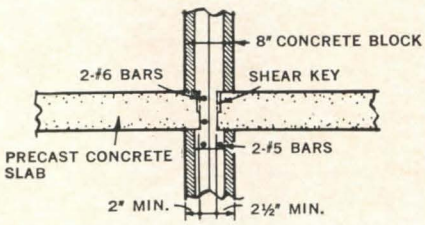
THE ACROPOLIS, ATHENS, GREECE—409 B.C. The building of the Erechtheum. This temple to Athena is the finest surviving example of Ionic architecture . . . and of the vigor, the spirit of innovation, the aesthetic versatility of design that typified classic Greek culture at its golden moment.

Today, the Celotex Corporation seeks to emulate these classic traditions through modern product design. For nearly half a century, Celotex has pioneered the design, development and production of new building products for safer, more beautiful, more comfortable structures.

(The painting: Cleophon, the elected leader of the Athenians, architect Philocles and sculptor Callimachus survey construction. The Parthenon is shown in the background.)





Concrete block is coming up in the world—and fast. These loadbearing walls of scored 8″ x 8″ x 16″ block were completed at a rate of one story per week over a four month period, enabling the owner to open for the summer season. Note how transverse wall system provides the amenity of balcony privacy. Integral scoring treatment in the modular unit evinces a more attractive wall network of 8″ squares. The loadbearing walls support concrete floor slabs that were precast at the site.

Architect: Hendrik & Mock

The Hanalei Hotel • San Diego

Modern masonry is reaching new heights with loadbearing concrete block

The high rise—Newest concept in concrete masonry construction.

The Hanalei Hotel is another recent example of the far—and high—reaching structural advantages of innovative concrete block. Today concrete block possesses more compressive strength than ever before—yet still provides more wall area for less material and labor costs. This, combined with the wide variety of shapes, sizes, colors and textures, helps to elevate the most creative designs; the most demanding loadbearing requirements to new highs. And with these structural advantages go the many traditional qualities of block always held in high regard: complete fire-safety, extremely high sound isolation (perfect for party walls) and impressive self-insulation head the list. Little wonder, concrete block is the building material more people are looking up to in high rises of every nature: hotels, condos and apartment buildings, college dorms, hospitals and office buildings.

NCMA

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LETTERS

NEW MECCA

Forum: The lessons one can learn from Cape Kennedy are terribly important to us at this time. Few architects have realized this and few have visited the Cape. Any architect worth his salt should make a trip himself. It is important that the Forum did pay a visit and reported on it to its readers [Jan./Feb. issue].

What impressed me most at Cape Kennedy was that great things were and are being done without any architectural effort or pretensions. We, the architects, must break out of our present state of mind—we are still "Beaux Arts," we are precious, we are interested in doing masterworks, and we are still burdened by the time-honored attitude that considers architecture as a fine art. To break out of this, we have to open ourselves to influences from advanced technology—from the sort of things that Cape Kennedy has to offer.

The structures for the space program are a direct, nonarchitectural statement. They deal in what I would call slang—direct, bold, concise, and possibly poetic statement, the language of common usage. Architecturally speaking, everything at Cape Kennedy would be out of common usage. As, in slang, the language moves ahead.

These are direct solutions, using the means, methods, and materials at hand. There is an immense change in concept. Cape Kennedy has nothing to do with composition; it has to do with the beauty of direct solution and organization. It is not merely the tasteful arrangement of compositional elements, it is an entirely new language.

JOHN M. JOHANSEN
New Canaan, Conn. *Architect*

LEGAL VIEW

Forum: I agree with you that the statement which I and other architects registered with the National Council of Architectural Registration Boards (NCARB) have been forced to sign is objectionable [Jan./Feb. issue]. In my own case, I signed the statement with the greatest reluctance after consulting my attorney, who happens to be a leading civil libertarian.

While he, too, found the statement objectionable, he pointed out that the form does have legal validity, although the NCARB is, obviously, bending over backwards to be protective of *its* rights rather than those of its members. This, too, is within legal limits, however.

My attorney indicated that the NCARB, being state affiliated in a loose sense, can ask questions of the sort suggested in Form 117-66 since it has a "legitimate interest" in knowing about the professional capabilities of potential members. The board can legitimately inquire as to an applicant's moral character etc., and the only way the NCARB might get into trouble would be if it asked for an applicant's political affiliations or political history (unrelated to his professional activities).

It is particularly distressing to find that within the legal profession itself one must sign even more objectionable statements for admittance to the bar. In other words, if there were any way to fight this sort of invasion of privacy, some lawyers would, undoubtedly, have done so. To date, few, if any, have tried.

NAME WITHHELD

HAPPY RETURNS

Forum: I find the Forum my only valid link with the architectural and urban planning world. Congratulations on what I consider to be the best architectural reportage in the Americas.

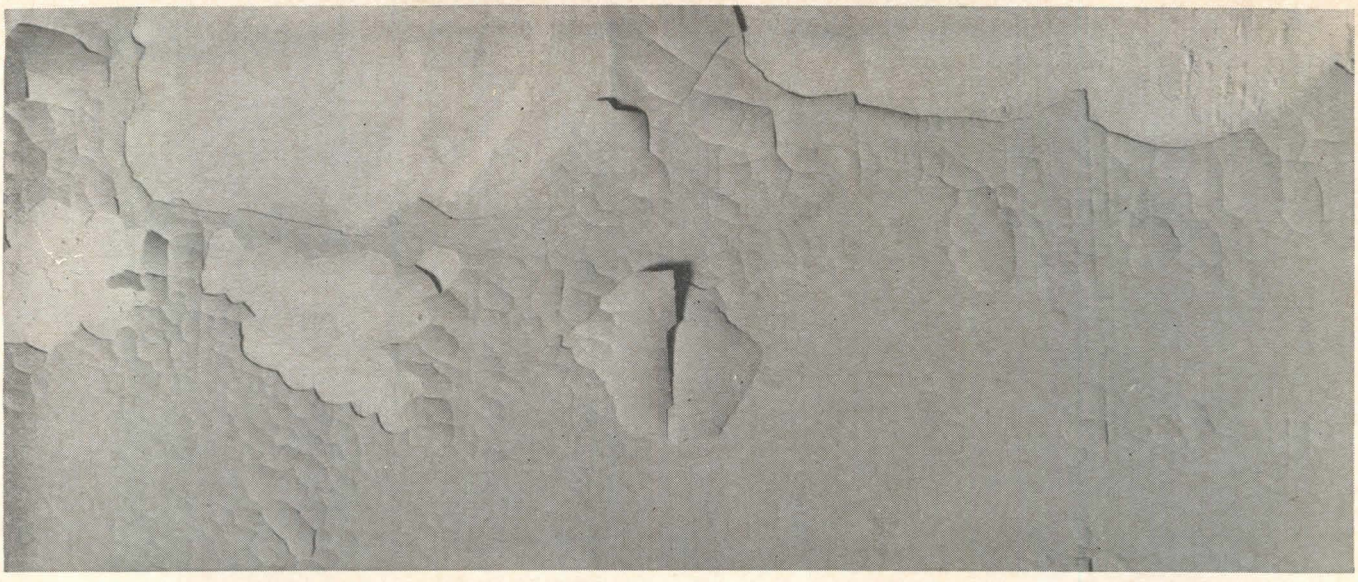
Putumayo, Colombia REX COPSEY

Forum: Throughout our course at Melbourne University School of Architecture, we have regularly read your magazine for we find your choice of material and forthrightness of comment most enlightening. From it we get a close-up view, and most important, a critical impression of these many great works.

TREVOR REES
Melbourne, Aus. *Architectural Student*

Forum: We are very pleased with the coverage of the Boston Architectural Center, [Dec. '66 issue], especially the editorial content, and find the layout of your usual high quality. We are impressed with the amount of effort you spent in gathering all the complicated data for this fine

(continued on page 18)



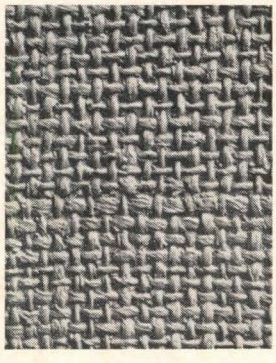
End bare wall blight.

Painting won't do it, but Koroseal vinyl wall covering will.

You can put new paint on a wall, but the blight always returns. Smudges. Scratches. Stains. Ruination.

Koroseal resists smudges, scratches, stains and all that. It's easy to wash. It doesn't chip, flake, yellow, fade, crumble.

Koroseal ends bare walls, too. Painted walls are bare walls. Dull walls. Koroseal dresses them up with textures that look like burlap, split cork bark, silk, linen, grass cloth, handwoven straw, tapestry, or others, plain or fancy.



It comes in 26 patterns, in 480 colors.

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And begin the end of bare wall blight.

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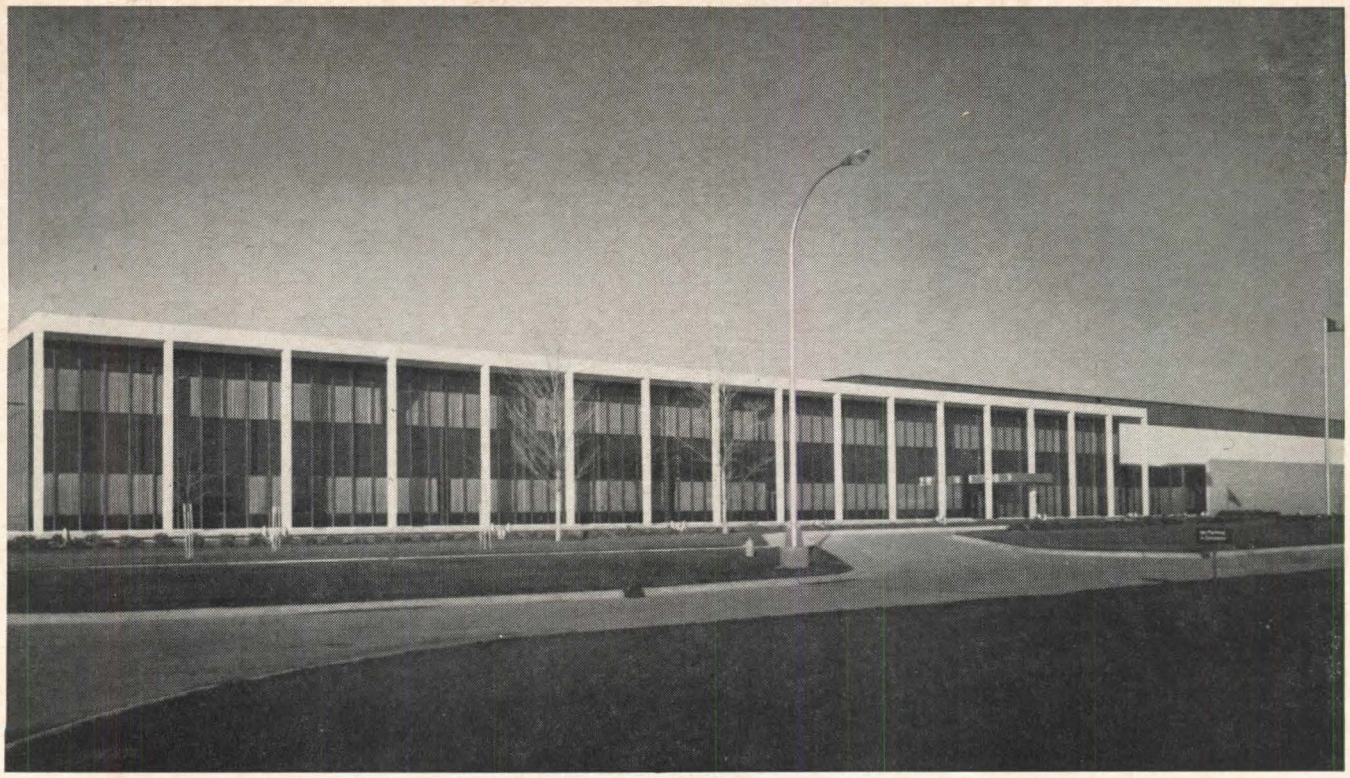
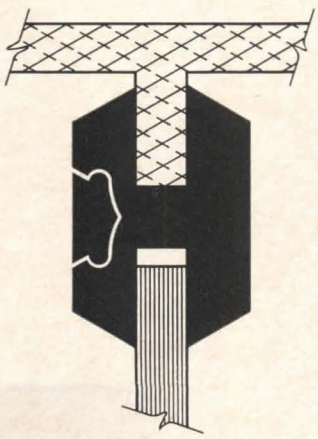


Sterling Stamping Plant, Chrysler Corporation. Architect-Engineer: Giffels & Rossetti, Inc., Detroit. Top Ten Plants Award by FACTORY magazine.

Award-winning Chrysler plant glazed with Du Pont Neoprene



Neoprene gaskets by
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This 68,000-square-foot office area in Chrysler's Sterling Stamping Plant is faced with curtain walls of gray plate glass set in aluminum. Preformed compression gaskets of Du Pont Neoprene guard against wind and water leakage.

Neoprene's resistance to industrial fumes, sun, rain, snow, heat and cold enables it to keep its glazing grip on glass year after year. Flame resistance adds to safety and security.

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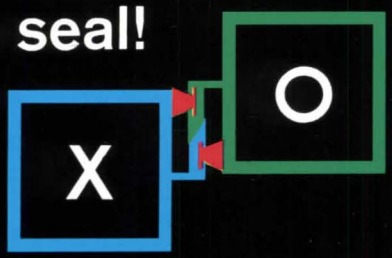
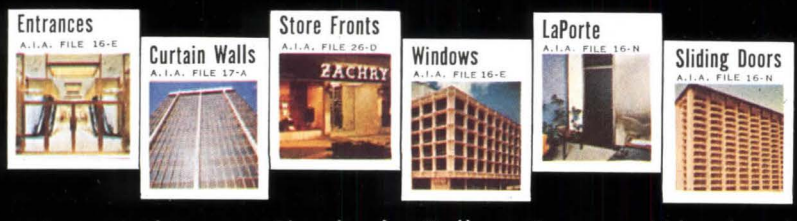


It's a bold new design . . . the fixed door is on the inside . . . the sliding door on the outside . . . and it's reversible . . . fixed door can be installed right or left. Internal or external air pressure forces the door tighter against the double polypile weatherstripping to create a functional weather wall! Deep-set jamb compensates for building settlement, less than perfect installation. Covered threshold . . . tubular and telescoped corner construction for strength . . . adjustable ball bearing rollers . . . new design features of SUBURBAN Mark II for basic construction . . . the METROPOLITAN Mark II for monumental jobs. See Sweet's, our representative, or write us.



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LETTERS

(continued from page 14)

presentation, and we as the architects, and also as members of the Boston architectural community, wish to compliment you and thank you for the results.

Our only criticism is that some of the photos still don't capture the interior spatial qualities, and the overall tone of the photographic printing appears too dark, thus losing detail and life; and that the stair tower connection gets lost in the binding between pages 64 and 65.

FLETCHER ASHLEY
Cambridge, Mass. *Architect*

DESIGN FORCE

Forum: I enjoyed very much your coverage of the Columbus School [Dec. '66 issue]. In general, I think it was interesting and validly critical.

The school is, as you indicated, the result of very careful attention to both programmatic and environmental requirements (i.e., the mechanical system which provides for summer air conditioning, using tunnels under the two main corridors as accessible mechanical streets, and the corridors themselves as return plenums, was as directly influential in the evolution of the plan as was the need for public access to the spine when the rest of the school was closed). At the same time I believe it emphasizes in the small teaching courts (the "fourth" or outside room to every cluster) the concern with nature, humane scale, calmness—indeed the quality of the educational process—which is a hallmark of Ed Barnes's architecture.

This brings up the only real objections I have to your coverage. That you did not talk with Ed Barnes, the architect, after talking with me means that many things which he thought important didn't get through in your article. And, by quoting me only, you gave the false impression that I was the principal designer.

Anyone who is familiar with Ed's office, or has worked with him, knows the very real and leading role he has in the design of all his projects. It is not an office where work is farmed out to associates only later to emerge under his name. At Columbus, his was the leading design force from the start, and nearly all the design decisions were his decisions. Indeed, it is precisely this basic involvement by the principal at all levels of design that gives to Ed Barnes's work its high and personal quality—*and which attracts young* architects from all over the world to work for him.

This aspect of your otherwise fine coverage is a disservice both to him and to his client, the Columbus School Board, with whom he worked so closely.

JAQUELIN T. ROBERTSON
Columbia University

McQUADE'S AALTO

Forum: Many thanks for Walter McQuade's very interesting article, "A Man Standing in the Center" [Jan./Feb. issue]. Aalto is a great architect, and I have been one of his many admirers for many years. I was so pleased to read your words—so thoughtful—about my friend.

JOHN N. RICHARDS
Toledo *Architect*

CHICAGO HOUSING

Forum: Thank you for your excellent story on Raymond M. Hilliard Center [Nov. '66 issue]. You have certainly given a very lucid explanation of the many problems which had to be solved in order to redevelop this site with good homes for some of the city's low-income residents.

ALVIN E. ROSE
Executive Director
Chicago Housing Authority

ANNIVERSARY

Forum: This is both to congratulate you on the attainment of your 75th birthday, and more important, to congratulate you on your 75th birthday issue. It is, beyond question, the most interesting and informative issue of any magazine which I have ever read.

STEPHEN D. MOSES
Vice-President and Secretary
Los Angeles *City Reconstruction Corp.*

WHEN COLOR?

Forum: I have enjoyed your magazine for years, and especially the new series since you have become independent. I think you have done an excellent job.

This letter is, however, a complaint to the effect that architectural projects in which color is not an essential part of the design are frequently reported in full color, and many projects where color is critical are only reported in black and white. I am sure there are notable exceptions to this.

LEE C. KNELL
Provo, Utah *Architect*

As stain-resistant as ceramic tile

(DuPONT'S TEDLAR*)

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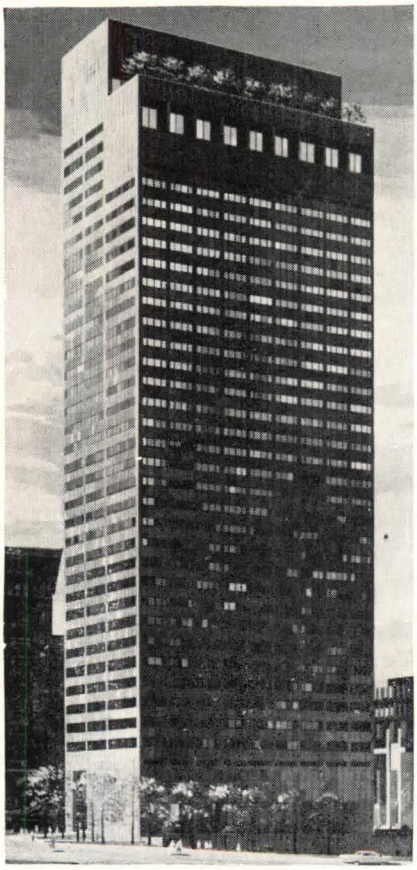
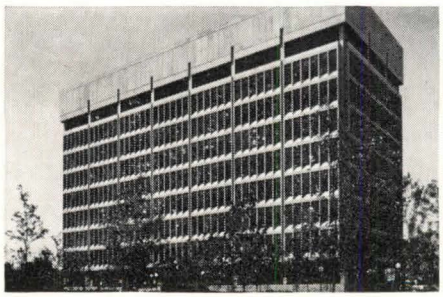
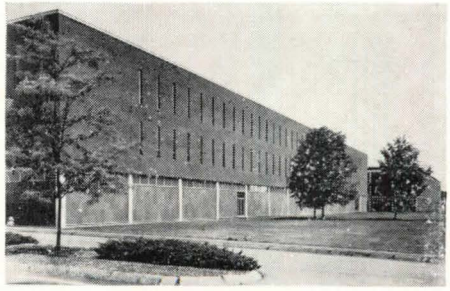


New England Merchants Bank Building / Edward Larrabee Barnes and Emery Roth & Sons, Architects



565 Technology Square / Pietro Belluschi and Eduardo F. Catalano, Architects



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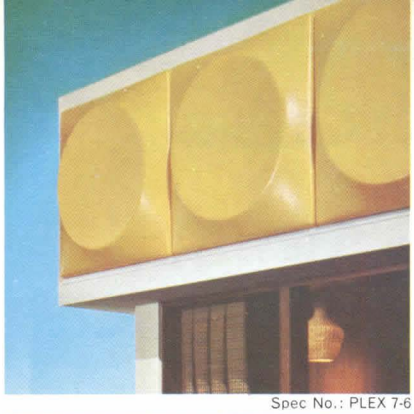

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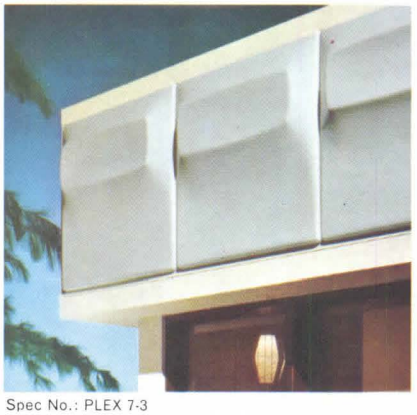

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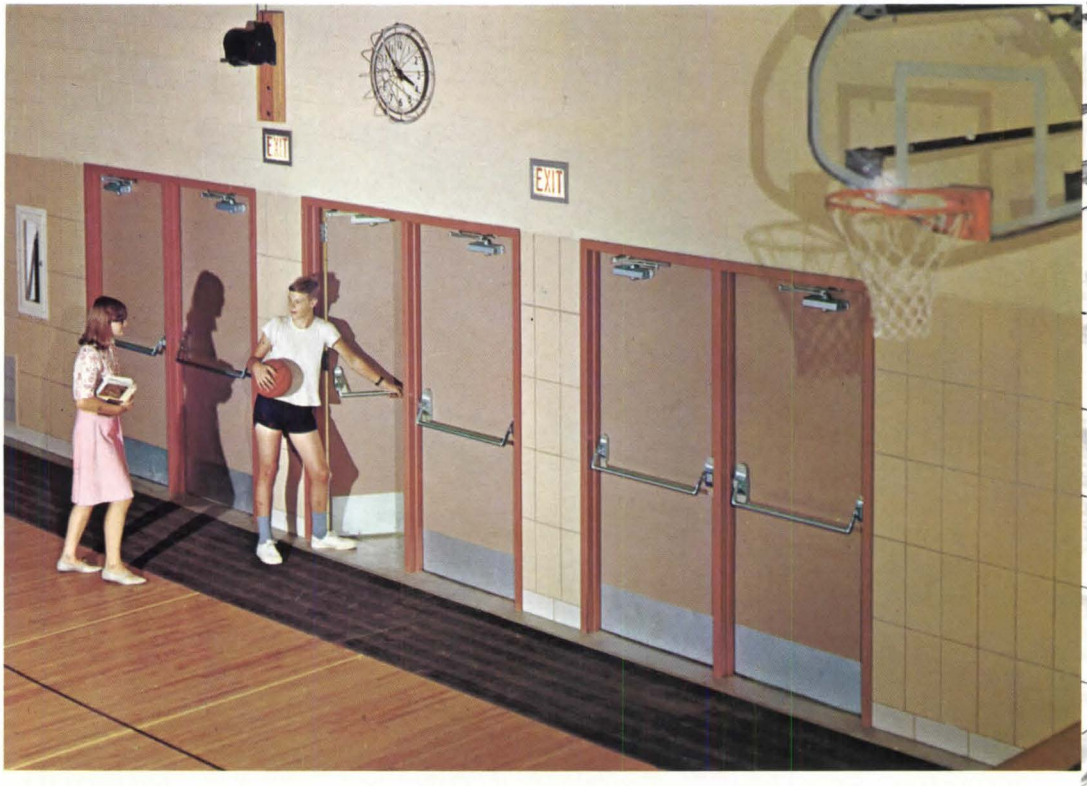
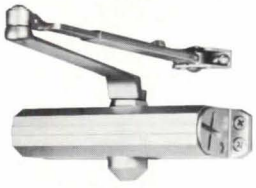
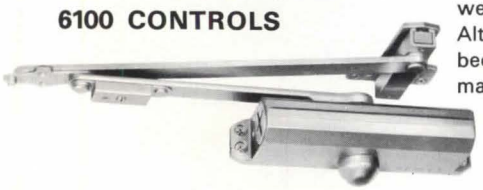


NORTON SERIES 1600 CLOSERS



Series 1600 closer provides door control for these busy gymnasium doors. Even here, where the closers were selected for their ability to withstand heavy traffic, installations are attractive; compatible with other door hardware.

NORTON SERIES 6100 CONTROLS



Series 6120 Uni-Trol controllers are used to control these main entrance doors as well as side exit doors. During off-peak traffic, units operate as regular door closers. Although traffic does not warrant it at the moment, the hold open mechanism has been engaged and the doors are being held open. Installation shown at right was made to correct a door control problem on an existing building.

and some abuse
NORTON® CLOSERS CONTROL DOORS—NOT DESIGN

Remember, the first impression received of your building is the contact made at the doors. This first contact is very important. At the same time, these doors must be properly controlled to assure the safety and convenience of the users of the building. Norton door controls have been designed with these dual purposes in mind—preservation of the esthetic appearance of the building while providing dependable door control.

This problem is particularly acute in school buildings where the volume of traffic and the exuberance of the children put all hardware to its ultimate test. On school buildings, especially, rugged dependability and efficient door control are a necessity. You can be sure of maximum safety and long life without disrupting the esthetic appearance of your building because all Norton door control products have been engineered to control doors—not design.

NORTON SERIES 1600 CLOSERS . . . . . .

Series 1600 Tri-Style door closers offer an almost unlimited degree of application flexibility. They can be installed anywhere and you're assured perfect door control. Norton Series 1600 closers are capable of withstanding the heaviest traffic year after year.

Choose the mounting best suited to your decor.

BACK MOUNTING: Closer is mounted to the door by means of thru bolts installed from the opposite side of the door.

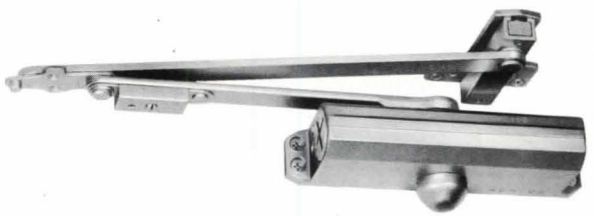
INVISIBLE MOUNTING: Perma-hold Plate is mounted to the door. Closer is then locked to the plate. No screws are visible.

EXPOSED MOUNTING: Closer is mounted to the door by means of exposed screws.

NORTON SERIES 6100 CONTROLS . . . . . .

Series 6100 Uni-Trol control is a combination door closer/door holder. Your door is under control at all times, regardless of the volume of traffic and door frame and controller is protected from the roughest use.

This unique door control has been designed to coordinate all door control functions.

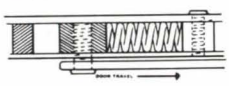


(1) Cushions the opening of the door

At almost full open, the arm engages a spring in the shock absorber mounted to the soffit plate. Opening momentum is absorbed.

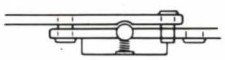
(2) Stops the door

As the spring in the shock absorber is compressed, the door is stopped. There's no shock to the door, hinges or Uni-trol.



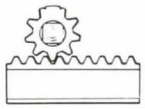
(3) Holds the door open

Spring loaded hardened steel ball in the holding mechanism is engaged by a recess in the Uni-trol fore-arm. The door is held open.



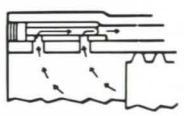
(4) Closes the door

When released a dependable Norton spring-loaded rack-and-pinion mechanism supplies power to close the door.



(5) Regulates closing and latch speeds

Dependable Norton hydraulic system provides key-operated control to regulate both closing speed and the latch speed.



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No geological accident could have produced the beauty of these "stone" walls

They're J-M Colorlith® and Colorvein® panels

Sullivan Asbestos Company, Philadelphia, Pa.

Alternating panels of Meerschaum White Colorlith and Brown-in-White Colorvein distinguish this modern interior. The desk top is Colorlith too. These remarkable materials have the same massive beauty as natural stone because they're made the same way. With one difference: Johns-Manville leaves nothing to accidents of nature.

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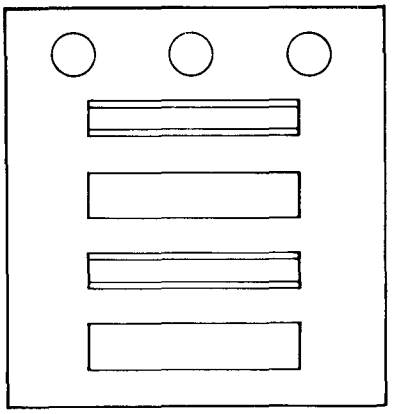
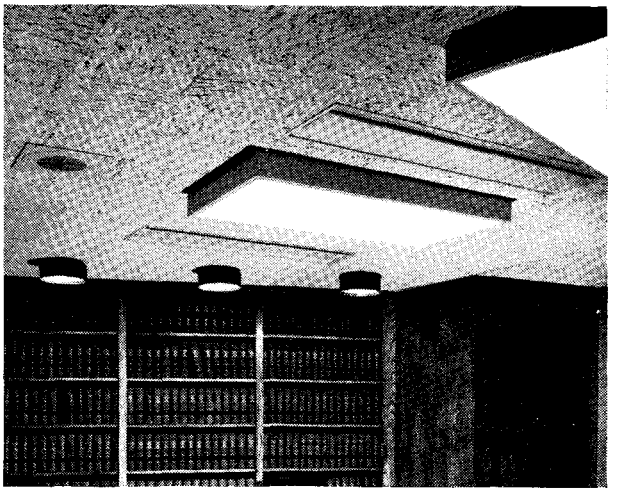
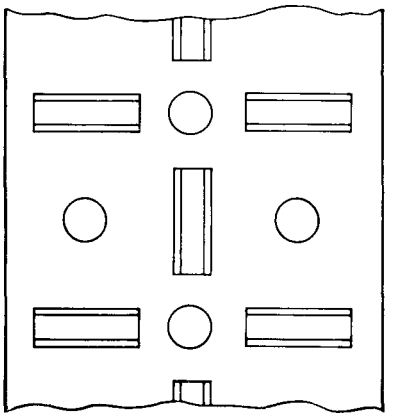


In this library and reception room, two Moduline units have been combined with circular surface-mounted light fixtures.





Moduline units in this school cafeteria are separated by incandescent lights, but can still be served by straight-line ductwork.

Adaptable Carrier Moduline air terminals have no "or equal"

You can get an idea from these examples how adaptable Moduline® units are.

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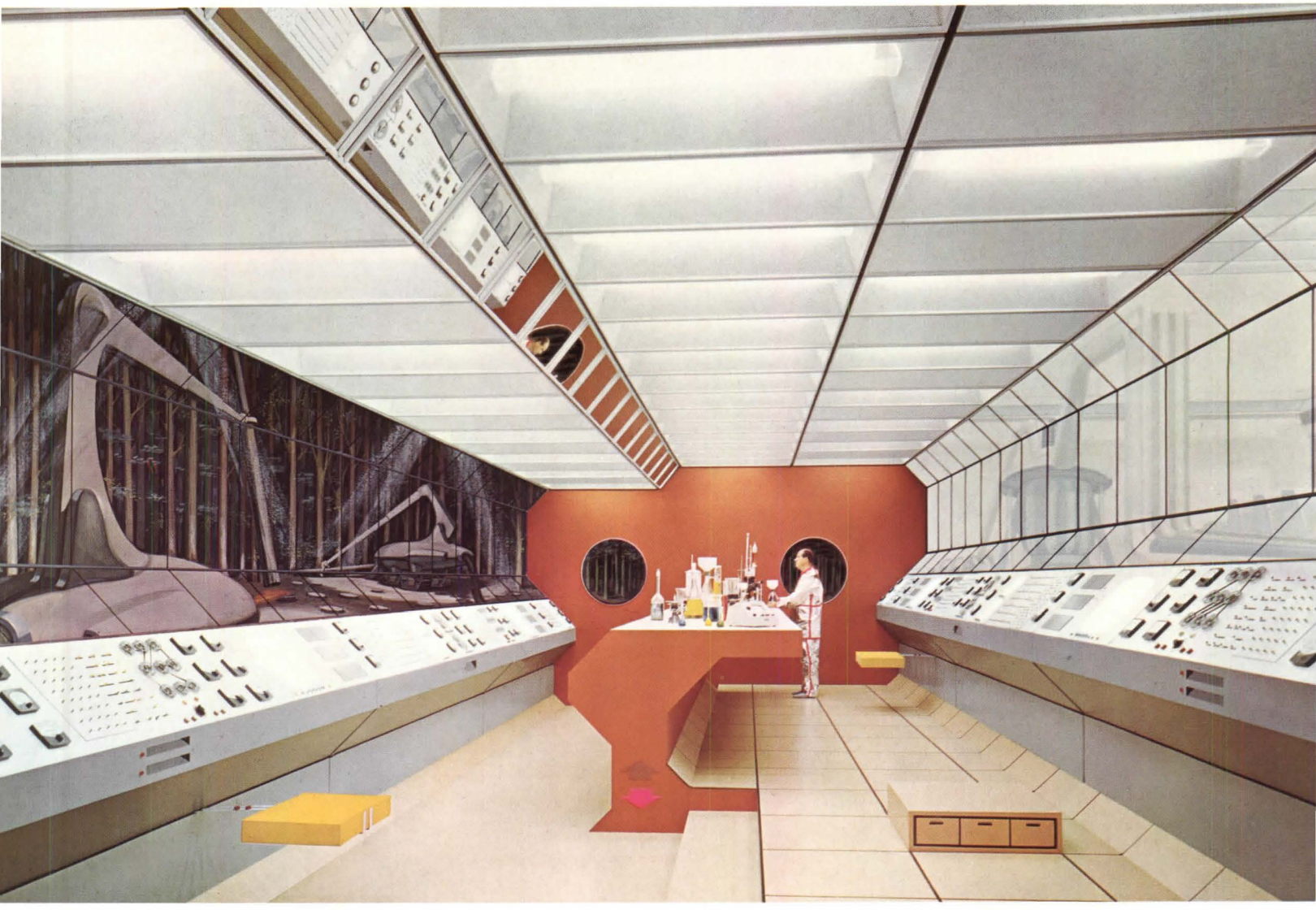

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FORUM

The tax sharing plans now before Congress emerged last month as the most pressing current threat to further progress in the rebuilding of American cities—more serious than Congress' chronic urban stinginess, or the competition of the Vietnam war and the moon program for the nation's resources.

The progress that has been made in recent years has resulted largely from development of direct pipelines between increasingly sophisticated Federal agencies and increasingly skillful local governments in such cities as New Haven, Boston, and Detroit. The tax sharing proposals—which would return 1 to 2 per cent of gross Federal revenues to the states and thence, in theory, to local communities—would have the effect of placing a new valve on the pipelines, one that state governments could open or close at will. The past performance of state governments gives little hope of generosity to the cities.

In testimony before the Senate Intergovernmental Relations Subcommittee, Mayor John F. Collins of Boston called this interposition "the most dangerous idea that has been suggested in America in years." Four governors (including Rockefeller of New York) testified that the states might not survive without a share of the Federal tax money, which was not much of a tribute to the vitality of their regimes.

The mayors and others concerned with the future of cities have long advocated block grants, rather than aid tied to specific Federal programs. But if the money first has to pass through the statehouses on its way to the city halls, they rightly fear that the flow of Federal aid might be cut to a trickle.

INS & OUTS

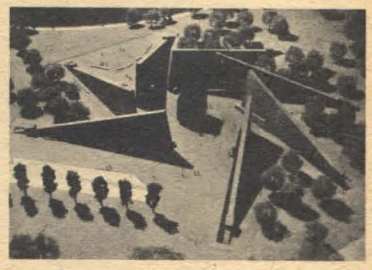
RELUCTANT NO

Late in January, the Fine Arts Commission in Washington announced that its members had voted unanimously to reject the new design for the FDR Memorial submitted by Architects Marcel Breuer and Herbert Beckhard (see last month's issue). The design had previously been accepted with enthusiasm by the FDR Memorial Commission and by several members of the Roosevelt family.

The Fine Arts Commission was rather blunt in its rejection: "After careful study and analysis and with great reluctance," it said, the members had decided that "such a memorial requires the highest standards of artistic achievement and significance, and the proposed design does not fulfill either criterion." The commission did not suggest any modifications that might make the design acceptable.

Although the manner in which the commission acted was intended to be as kind as possible (Breuer had recently been sick), the total rejection of the proposal appeared a bit unusual—especially since a majority of the same commission had approved of the earlier "Instant Stonehenge" design which, to most critics, seemed about equal (if not inferior) in quality to the latest proposal.

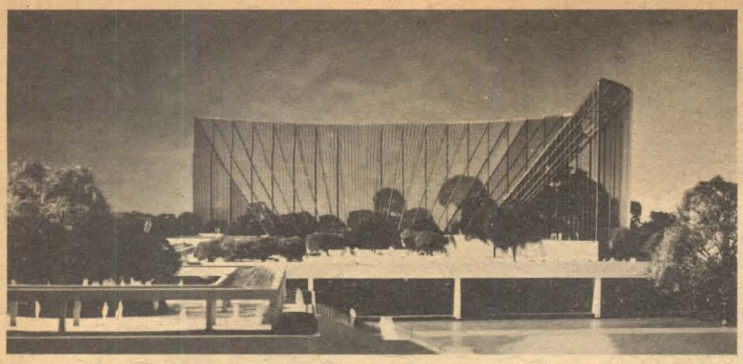
To protest the manner in which the Breuer-Beckhard design was rejected, and to affirm their continuing faith in Marcel Breuer, a group of prominent architects thereupon sent a telegram to both the FDR Memorial Commission and to the Fine Arts Commission suggesting a meeting of both with the architects to iron out difficulties. Those who signed the telegram included the heads of the schools of architecture at Harvard, University of Pennsylvania, Columbia, Princeton, Rice, and Washington University, St. Louis—as well as professors of architecture at MIT and elsewhere, former AIA President Morris Ketchum Jr., Architects Philip Johnson, I.M. Pei, Harry Weese, and several others.

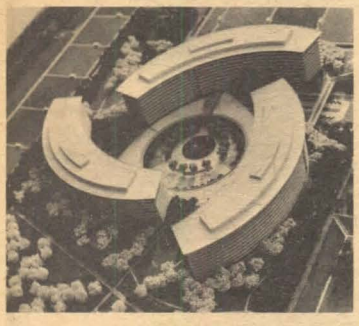


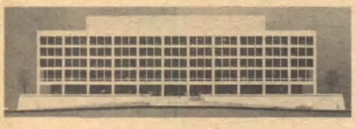
Unless the Fine Arts Commission reverses itself, or a compromise is achieved, this will be the second FDR Memorial to come a cropper. So that, 22 years after Roosevelt's death, the only physical, national memento of him remains the dime.

ENTHUSIASTIC YESES

The Fine Arts Commission does not, of course, reject everything







that comes before it, though it often seems that way. At recent sessions, for example, the commission approved two new designs —one by Victor Lundy for a new U.S. Tax Court building, the other by Kevin Roche, John Dinkeloo & Associates, with Charles Eames, for a National Fisheries Center and Aquarium.

Lundy's design, a simple cubic composition of gray granite and dark glass (below), was reportedly accepted with great enthusiasm by the commission. And the commission went so far as to call the Roche-Dinkeloo-Eames design, which includes a 114-ft.-*high semicircular* glass enclosure for a Florida Everglades display (above), "a deeply imaginative approach and eminently workable result."

In addition, the commission recently gave tentative "conceptual" approval to three other designs (pictured at left in the following order): Minoru Yamasaki's pinwheel scheme of three curved 10-story structures for the Defense Department which, when built, will be second in size only to the Pentagon; the six-story Labor Department building, designed by Brooks, Barr, Graeber & White and Pitts, Mebane, Phelps & White, which will occupy air rights over the tunneled center leg freeway near the U.S. Capitol; and an overlook garage structure for 1,050 cars, designed by Landscape Architect Dan Kiley, which will terminate the 10th Street Mall at the waterfront in Southwest Washington.

PROGRESS

BRAVE NEW CITY

The University of Minnesota, backed by grants totaling $248,000 from three Federal departments (HUD, HEW, and Commerce), is gearing up for the first stage of an experimental project that may result in the development of a self-contained urban center—not a "new town"—with a population of 250,000.

The project, which has the blessing of Vice-President Hubert Humphrey and a string of Minnesota companies, will test the theory that totally new cities, located at least 100 miles from existing metropolitan areas, can be an alternative to urban sprawl.

To guide development of the project, the university has appointed an all-star steering committee whose membership includes R. Buckminster Fuller; Walter W. Heller, former chairman of the Council of Economic Advisers and now professor of economics at the university; William L. C. Wheaton, director of the Institute of Urban and Regional Development at Berkeley; and Paul N. Ylvisaker, former director of public affairs for the Ford Foundation and now New Jersey's commissioner of community affairs.

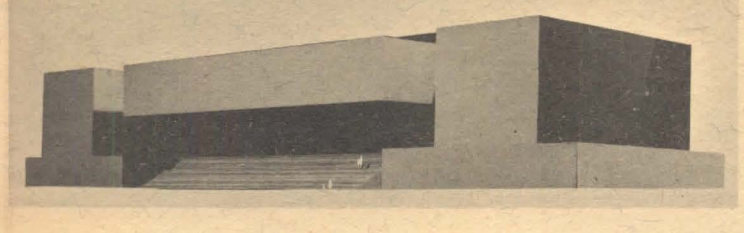
Staff director of the project is Walter N. Vivrett, professor of architecture and planning at the university, who said the Federal grants will go towards the estimated $330,000 cost of the initial "project definition phase." The estimated cost of building the new city, and the selection of a site, said Vivrett, are "a long way off."

ENTER THE TEAMSTERS

The teamsters union in St. Louis has formed a foundation with an ambitious title and an equally broad program of physical development and social planning.

The title is "America 2000—A Foundation for Man and His City." Harold J. Gibbons, who heads both the union and the foundation, said it would "go beyond the brick-and-mortar concept of urban rehabilitation and concern itself heavily with human values."

The foundation will have its own board of trustees, plus a panel of professional advisers including Architect Arthur F. Schwarz, Planner Eldridge Lovelace, and Charles L. Farris, president of Urban Programming Corp. of America.



POLLUTION

TOUGH ACT

President Johnson went out after air pollution last month. In a special message to Congress called "Protecting Our Natural Heritage," the President recalled the "mass of heavily polluted air" that settled on New York City last November, noted that many smaller communities have suffered similar attacks, and urged Congress to pass a tough Air Quality Act of 1967.

The President proposed that the law authorize the Secretary of Health, Education, and Welfare to single out interstate areas in need of massive air pollution control programs and to appoint regional air quality commissions. Each commission would be charged with setting clean air standards for its area, and with cracking down on violators.

The law would also authorize HEW to designate industries that are "nationally significant sources

"I said, 'We must (cough!) do something (wheeze!) about (snort!) air (gasp!) pollution!' "

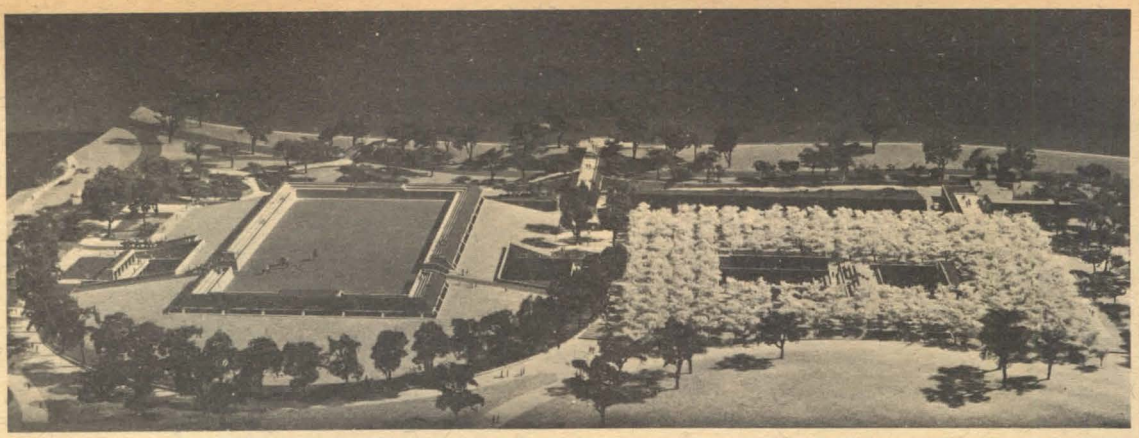
of air pollution," set emission levels for them, and apply the standards in states that fail to adopt equally strict regulations.

"Ten years from now," the President warned, "when industrial production and waste disposal have increased, and the number of automobiles on our streets and highways exceeds 110 million, we shall have lost the battle for clean air—unless we strengthen our regulatory and research efforts now."

COMPETITIONS

UP IN CENTRAL PARK

Last month, in a glazed eyrie overlooking the remains of the late, unlamented New York World's Fair, a nine-man jury met for two days to consider five entries to a closed competition for the design of a large new Central Park stable—a facility that would combine headquarters for mounted police, for regular Central Park police, and riding and other recreation activities for all New Yorkers. The competition had been the brainchild of the late Stephen R. Currier (who also financed it) and his friend, Parks Commissioner Tom Hoving, who will soon become director of New York's Metropolitan Museum.



There were five invited competitors: Edward L. Barnes, Marcel Breuer, Philip Johnson, Kelly & Gruzen, and Whittlesey, Conklin & Rossant. The proposed facility, a complex covering about 200,000 sq. ft. on an eight-acre site south of the Central Park Reservoir, was bound to encounter opposition from some of those who wish to keep Central Park precisely as it is (i.e. frequently empty and unsafe). Hoving, who managed within little more than a year to fill the park with plenty of activity and make it considerably safer, was all in favor of building a largely invisible complex—but, at the same time, one that would further increase recreation activities and public participation in the life of the park. The architect-dominated jury agreed.

Winners were Kelly & Gruzen, whose proposal was almost entirely underground, and turned the roof of the large, subterranean riding ring into an additional recreation area—for riding, games, or athletics (above). Second prize went to Whittlesey, Conklin & Rossant, whose entry also recognized the need for keeping the new complex subservient to Olmsted's overall concept; and the third prize went to Philip Johnson.

The competition was noteworthy in two respects: first, because a cost-estimating firm was retained to make certain that all competitors stayed within the city's budget allowance; and, second, because the result proved, by comparison with an earlier city-approved scheme, that competitions of this sort could, indeed, be used to improve the quality of public architecture.

The first organized opposition to the Kelly & Gruzen proposal came on February 12, when a group calling itself "Save Central Park" wired Mayor John V. Lindsay to protest against the construction of anything except the Central Park police precinct station. The protest was curious in that it came five days *before* the mayor had released plans and model photos of the winning design—i.e. the protestors could not possibly have known what they were protesting against. But whatever it was, they were agin' it!

PEOPLE

OCCURRENCE

Everyone knew that Thomas P. F. Hoving would be a difficult act to follow, and that his role as administrator of recreation and cultural affairs and commissioner of parks would be a difficult one to play. Yet, New York Mayor Lindsay succeeded in finding someone "who could wear the same size shoes as Mr. Hoving and also whose last name begins with H."

That someone is 53-year-old August Heckscher, cultural adviser to Presidents Dwight D. Eisenhower and John F. Kennedy, present director of the Twentieth Century Fund, and vice-chairman of the board of Urban America Inc. He will assume his new post on March 19 with Architect Arthur Rosenblatt, director of design for the parks department under Hoving, serving as his first deputy administrator.

At the press conference announcing his appointment, Heckscher (left in photo below, with Lindsay, Hoving, and Rosenblatt) was asked if he would follow his predecessor's example in staging happenings. His answer: "I won't do exactly what Tom did. We had Hoving Happenings and now we will have Heckscher Occurrences."

Hoving is leaving the job to become director of the Metropolitan Museum of Art.

WHEN, IN THE COURSE . . .

In the opinion of Architect Robert P. Darlington, the Spirit of '76 is not dead. He should know, since he recently led, and won, his own war of independence.

The skirmish started last November, when the board of directors of the Building Research Institute voted to recommend that the membership approve a merger of BRI with the Building Research Advisory Board, a unit of the National Academy of Sciences. Having made its decision, based partly on a chronic shortage of funds at BRI, the board expected no serious opposition from the membership.

But the board hadn't counted on Darlington, a former technical director of BRI who is now in private practice. Darlington thought the board's action was not "in the best democratic tradition," since the membership had not been given an opportunity to discuss the proposed merger nor offer alternatives. So he mailed an appeal to all voting members, asking for their proxy votes to save BRI. "If the merger is approved," said the letter, "not only will BRI lose its name, its identity, and its independent status, but you, currently a voting member, will be asked to continue your financial support as a nonvoting associate."

By the time the votes were

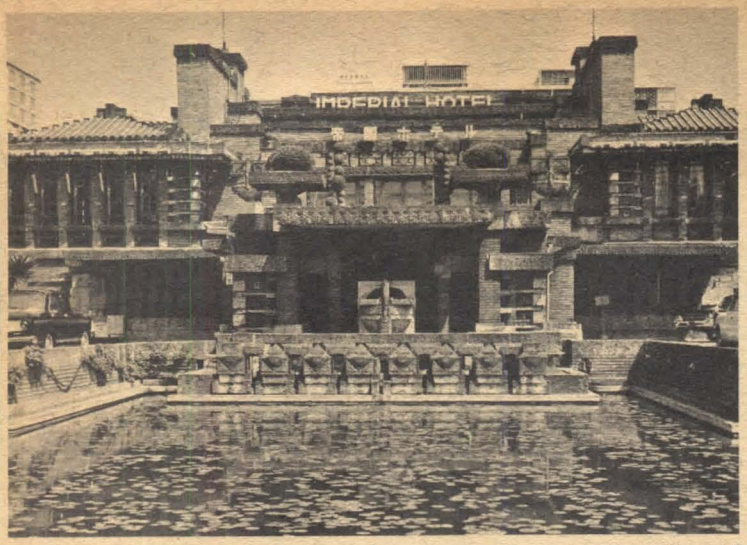
counted last month, Darlington's call to arms had brought in enough proxies to defeat the merger. "We can all recall that a small group reacted successfully this way in 1776," said Darlington after the smoke had cleared. "Another small group did so now."

LANDMARKS

IMPERIAL THREATS

Tokyo, it seems, is much like any other first-class metropolis in this age of cybernetic enlightenment. It is planning to tear down one of its principal monuments, Frank Lloyd Wright's Imperial Hotel; and to overshadow another, the Imperial Palace, with a 30-story office building. Meanwhile, it is drowning in traffic and air pollution.

The threat to the Imperial Hotel was reported by the *New York Times,* which said the operators had decided to start work on a larger building on the site of Wright's three-story structure in October. A spokesman had the not entirely comforting comment that "we are not yet at the stage of announcement but rather at the stage of denying." If the hotel were replaced, he said, an attempt



would be made to retain as much as possible of "the facade and other features" of the Wright design (above).

The threat to the Imperial Palace consists of a tower by Architect Kunio Maekawa, whose windows would peer down into the palace gardens. A spokesman for the Kaijo Insurance Co., the client, commented succintly, "Stop this and you block human progress."

Meanwhile, some of the fruits of human progress were reported by an official of the city planning bureau. In Tokyo, he said, more than 57 tons of soot and dust fall on each square mile of the city in an average month; more than 800,000 cars compete each day for 17,000 parking spaces; and the municipal debt has climbed from $312 million to $1.2 billion in just over four years.

BUTTERFINGERS!

When it comes to old buildings, the Russians have no sense of humor. It was reported last month that two Soviet officials had been sentenced to a year of hard labor for botching up a restoration job.

Scene of the crime was the 17th-century Ioanna Predtechi Cathedral in Yaroslavl, northeast of Moscow. It seems that the two officials allowed a beloved fresco to be destroyed in the process of replacing the cathedral roof and gilding its dome.

The conviction was widely publicized as a warning to others who might be tempted to tinker with old Russian monuments.

HISTORY UNDER GLASS

For years, Roman workmen have been finding fragments of columns and mosaics beneath the Via Frattina, a fancy commercial street at the bottom of the Spanish steps (below). The bits and pieces pinpointed the location of Lucius Licinius Lucullus' first-century villa, one of the most lavish establishments a Roman ever built.

Now a campaign is underway among nearby shopkeepers to put the villa on display. It would be restored, and the 942-ft. length of the Via Frattina would be paved in glass as a transparent pedestrian promenade.

CITIES

RE-ENTRY

In late January a delegation of mayors met with Administration officials to discuss the threat of a conservative Congress to urban programs. They came away grim-faced and girded for a largely defensive battle in the months ahead.

A few weeks earlier, in the bright sun of Las Vegas, Detroit's Mayor Jerome P. Cavanagh had led the National League of Cities in calling for an increase in urban aid to the level of the moon program (Jan./Feb. issue). After the Washington meetings, Cavanagh had this to say:

"We recognize the tremendous and complex pressures which the President has had to face in the formulation of his budget. We know he realizes this year is a critical one for the continuation of urban programs. They must at least be sustained at the levels which President Johnson has recommended in his budget message." This time there was no mention of shooting for the moon.

ALLIANCE

While in Washington, the mayors also met with officials of Urban America Inc. to formally launch a long range effort "to develop a better national understanding of the urgency of a greater commitment of U.S. resources to the needs of urban centers."

Urban America will work with a blue-ribbon steering committee of mayors to bring religious, business, labor, and civil rights organizations together in an "urban alliance." Members of the steering committee appointed at the Washington meeting were Mayors Cavanaugh of Detroit, Collins of Boston, Lindsay of New York, Daley of Chicago, and Allen of Atlanta.

All of the groups who will be called into the alliance have expressed concern with the problems of cities, Urban America Executive Vice-President William L. Slayton said. "But there has been no molding of such groups to obtain a strong, unified voice, urging a national commitment to meet the cities' needs."

As the first step in the alliance, Slayton said that Urban America would establish a high-level urban economic council. Consisting of three nationally known economists, the council will assess the impact of economic policies on cities, and the economic value of urban development programs.

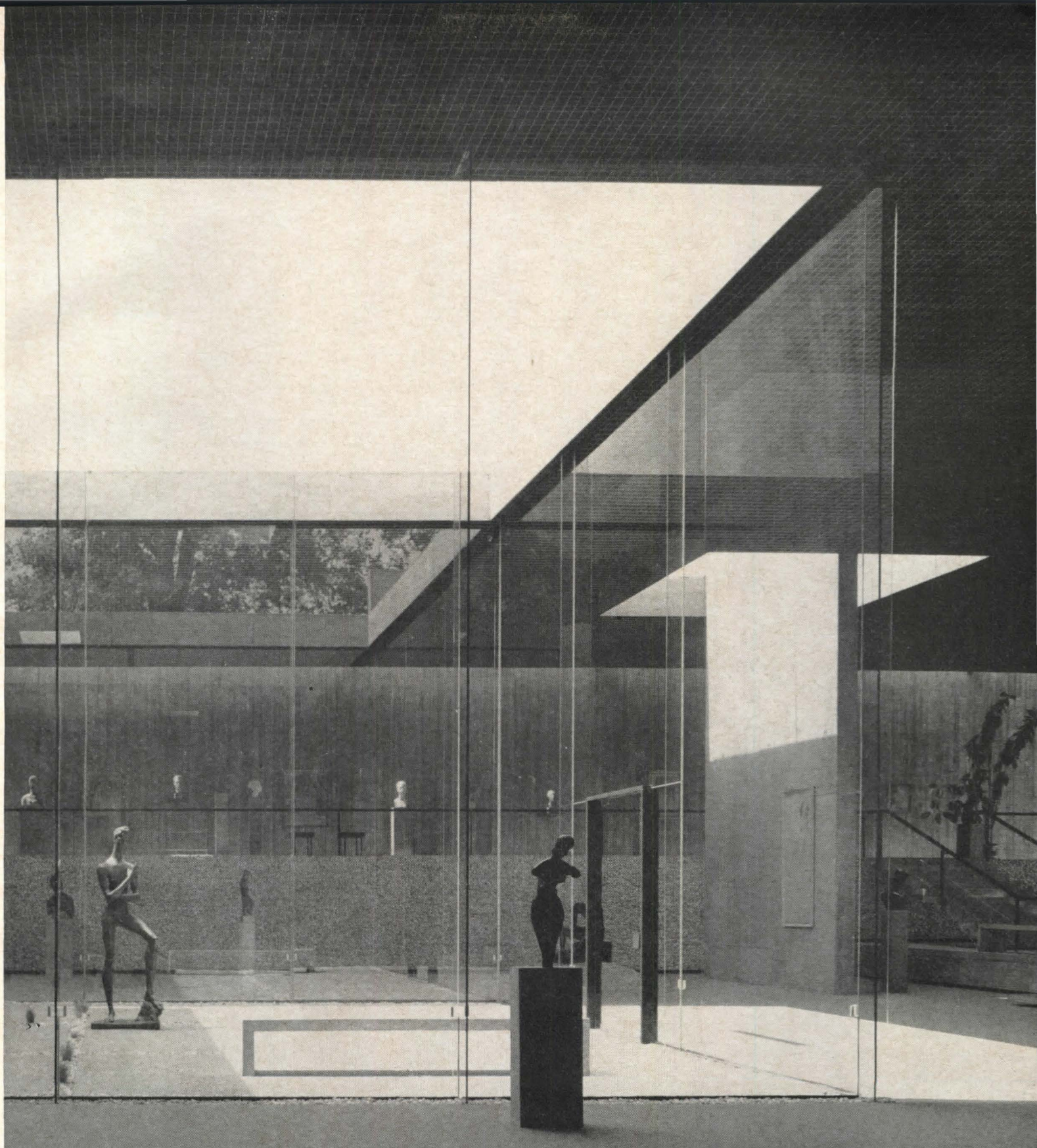
METRO VS. MICRO

The same week in Washington, the White House and an influential Senator offered opposing approaches to the solution of urban problems.

The President, in his annual economic message, called for a metropolitan approach. "The historical boundaries of the city government's jurisdiction have become increasingly inadequate for planning, financing, and executing efficient programs and policies," he said.

Senator Abraham Ribicoff, in the report from his urban crisis

(Continued on page 85)



SHOWCASE FOR SCULPTURE

The glass-walled museum built to house Lehmbruck's statues is a great kaleidoscope of light and shade

SHOWCASE FOR SCULPTURE

A BUILDING IN TWO PARTS

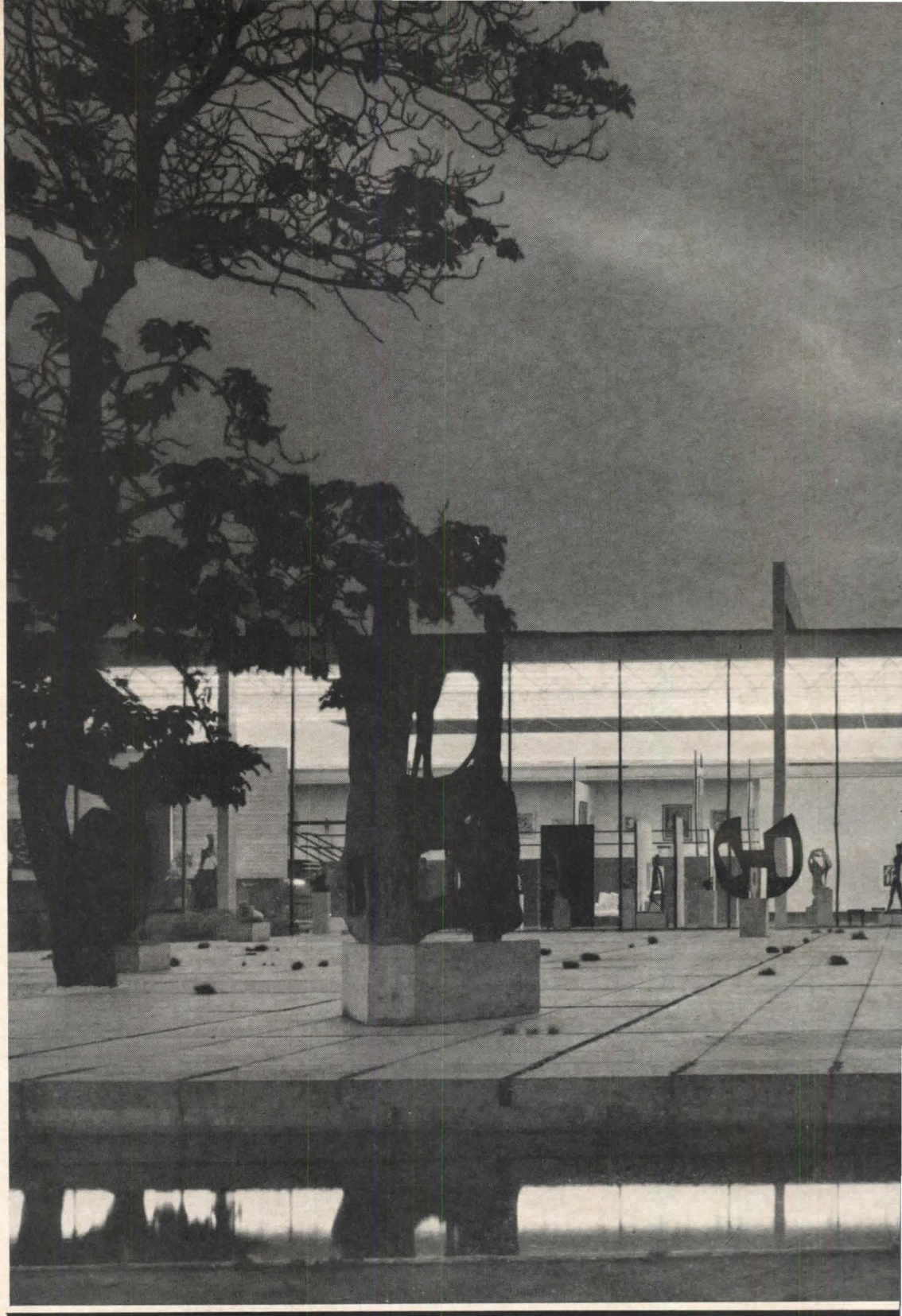
The Lehmbruck Museum in Duisburg, in the Rhineland, is an interesting structure for several reasons: first, because it was designed by one of the late sculptor's sons, the Stuttgart Architect Manfred Lehmbruck; and, second, because the completed museum is a convincing statement about exhibition technique.

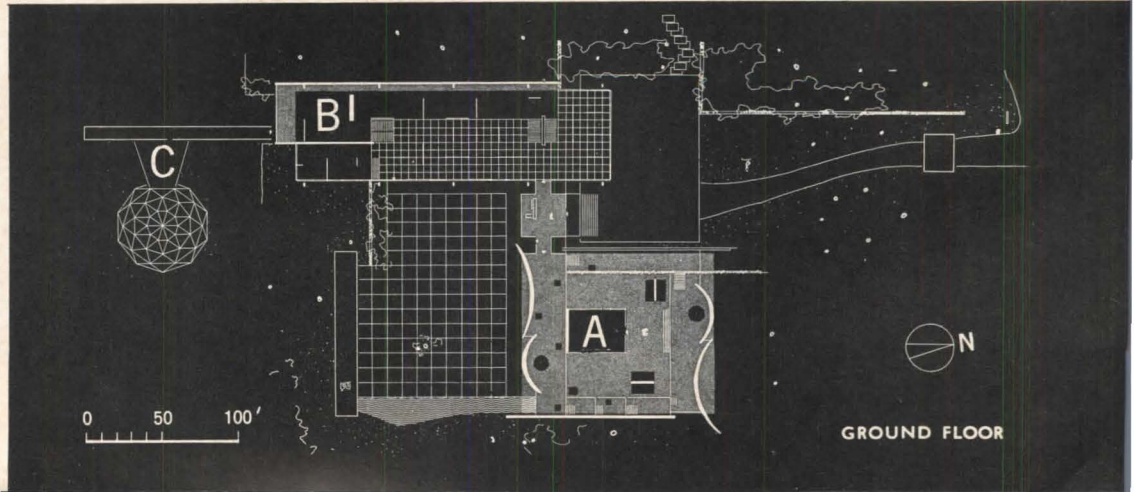
Wilhelm Lehmbruck (1881-1919) was born just outside Duisburg; and while his most significant work was done away from his hometown, the city of Duisburg was able to assemble a collection of almost the entire work of the great sculptor. So it was decided to build a Lehmbruck Museum, with a second wing for rotating exhibits. The whole complex was to be devoted to *sculpture* of the 20th Century.

Because of this latter stipulation, the architect was able to employ large areas of glass, both in walls and in skylights. If the museum had been designed to house paintings, the architect says, the colors of the landscaped surroundings and of the sky itself would have competed with those of the works of art; but in a sculpture museum, he feels, one should relate the exhibits to natural elements outdoors—and the changes in natural light become an asset.

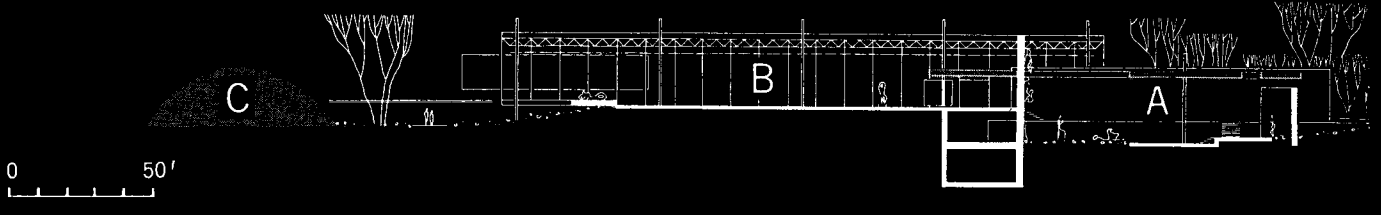
Because of basic differences in function between the wing housing the permanent Lehmbruck collection (A), and the one housing rotating exhibitions (B), the spaces of the former could be fairly rigid, whereas the latter had to be quite flexible.

So the permanent collection has some fixed walls; but the second wing has almost no permanent divisions and no interior columns: the floor and roof planes are hung from, or held between a freestanding, exterior framework (right).





Right: Night view from the east. Plan includes projected third element (C), a geodesic structure that will house an auditorium. Section shows sunken floor in the wing housing the permanent collection.



LONGITUDINAL SECTION

SHOWCASE FOR SCULPTURE

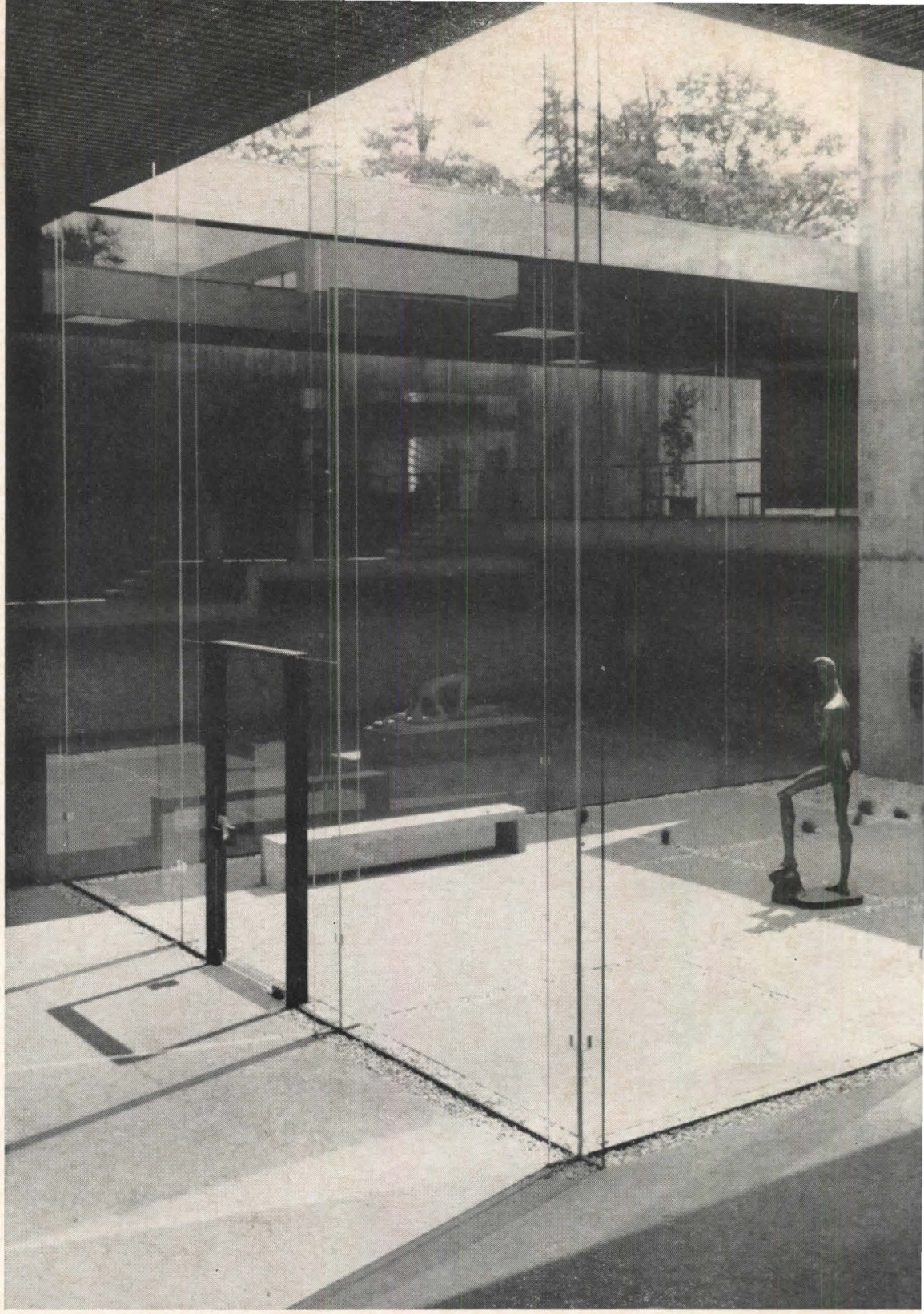
SUSPENDED GLASS, SOLID PLANES

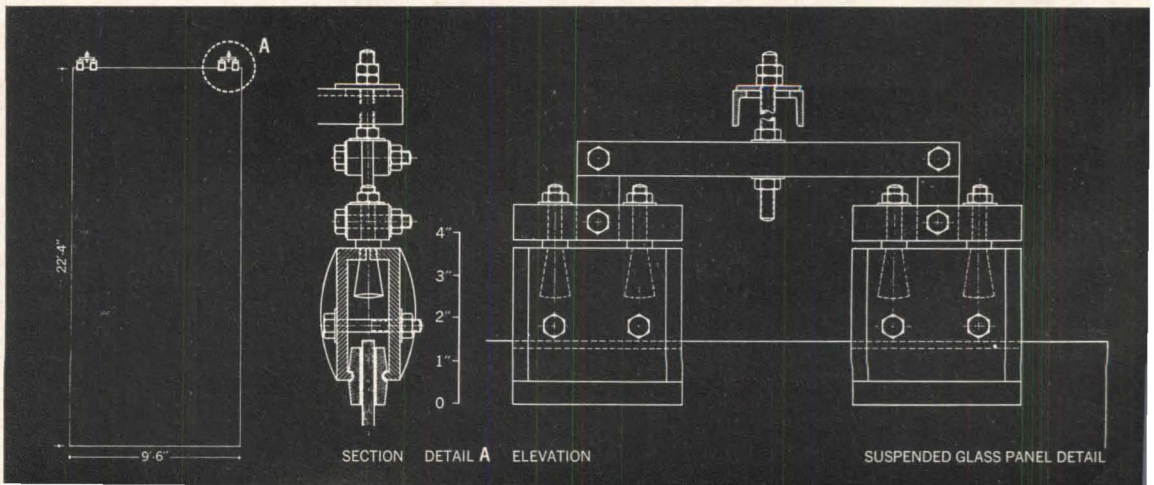
The permanent and comprehensive Lehmbruck collection assembled in the Duisburg museum is housed under a flat roof measuring about 120 ft. square. The roof appears to float above a series of freestanding walls of rough, exposed concrete. (It actually rests on or frames into these walls here and there, but the detailing is so subtle as to make these points of contact almost invisible.) Strips of glass —clerestories or skylights—separate the walls from the roof plane; and there are occasional, vertical sheets of glass that separate the various straight and curved planes from one another. But by and large the permanent Lehmbruck collection is contained within an enclosure of concrete walls. The sense of enclosure is further strengthened by the main floor level of this wing, which was lowered to remove the space from the noise of industrial Duisburg.

The principal sources of natural light are openings cut into the roof plane. The largest of these, which measures about 25 ft. by 40 ft., forms a glass-enclosed atrium slightly off-center in the space; the other openings in the roof have been turned into skylights. In almost every case these cutouts have been bisected with vertical slabs of concrete that help deflect the light into the room, and form backdrops for different pieces of sculpture.

There are virtually no frames to hold the glass. Great sheets of tempered glass are hung from within the roof plane (see details, right), and held loosely in place in channels set into the floor. All sheets are laterally braced with vertical glass stiffeners. And there are no visible stops where sheets of glass meet planes of concrete— the glass is set directly into the walls.

Top right: close-up of glass-enclosed atrium. Details show suspension of tempered glass. Far right: view toward south, with stepped-down platforms at left. Curved walls "embrace" statues placed against them.





SHOWCASE FOR SCULPTURE

ART AND PROPORTION

The sculptor Wilhelm Lehmbruck once said "all art is proportion." His almost Gothic figures suggest what he meant.

When Lehmbruck's son designed this museum, he tried not only to create a modest and anonymous backdrop for his father's sculpture; he also tried to create spaces of elegant proportions on different levels to harmonize with the spirit of his father's work. This view of the permanent collection (right) shows how well he succeeded.

The architect points out that, in trying to create an environment for the sculpture, he soon found that pieces made of plaster or of soft stone would not withstand the "aggressive air of this industrial town." Still, he did manage to place some of the more resistant pieces onto the sculpture terrace between the two wings of the building, (see p. 32; and he created an open air atrium for additional pieces within the confines of the principal wing (right). But most of the pieces had to be set into an enclosed space.

Much of the serenity of that space is due to the delicacy of detailing described earlier; and this is very much in keeping with the almost classic serenity of Lehmbruck's sculpture. Although the two artists have now been separated by close to 50 years, the space created by the son for his father's work seems one of the most sensitive collaborative efforts in architecture and sculpture in many years.

FACTS AND FIGURES

Wilhelm-Lehmbruck-Museum, Duisburg, Germany. Owner: City of Duisburg. Architect: Dr.-Ing. Manfred Lehmbruck, Stuttgart. Materials: steel, concrete, tempered glass, and stone. PHOTOGRAPHS: Jupp Falke, pages 31, 34, 36-37; Gottfried Planck, pages 32-33, 35.

View across permanent Lehmbruck collection from upper level of exhibition space. A cast of the "Kneeling Woman" seen at left has been installed in the new Metropolitan Opera House at Lincoln Center, New York.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THE MUSEUM OF MODERN ART DISCOVERS HARLEM

In its latest exhibition, "The New City: Architecture and Urban Renewal," Manhattan's avant garde institution has tried to offer new urban visions to New York's principal ghetto.

BY C. RICHARD HATCH

Airview of Manhattan, with Harlem in the middle ground. Area (1) was chosen by the Princeton Team, area (2) by Cornell, area (3) by Columbia, and area (4) by MIT. For details of the four proposals, and comments on those proposals, turn the page.
Photo: Port of New York Authority

A generation or so ago, when our cities entered a period of unprecedented growth following the First World War, the men who led the struggle for human values in city building and the fight for adequate housing for the poor were practicing architects: men like Clarence Stein and Henry Wright. They had conviction, great organizational ability and deep insight into social structure, to which they gave life in their plans. They eschewed powerful, personal architecture in favor of finding solutions to broader economic and site design problems, and in so doing achieved the highest goal: the creation of community.

A loss of credibility

City problems—or our perception of them—have grown increasingly complex since those days, and architects, now replaced by planners and lawyers at the decision centers, have shown a ready willingness to be irrelevant to pressing urban problems and either to pander to corporate power or, effetely, to re-evoke historical forms. This inability to adapt to the new roles and skills required to renew our chaotic urban society may yet prove the undoing of a once noble trade—which still, like some mad figure in epic tragedy, harbors delusions about its central role as the mirror of society and fails to grasp those social realities which cannot be read from physical forms.

Certainly the profession has lost its credibility at present both with the social scientist-planners and with the public.

In wise conformity with the trend, the New York City Planning Commission has now announced that it will abandon the 30-year-old effort to create a master *physical* plan for the five boroughs. Designers have been declared unnecessary and we are to embark on a new era of "process planning," making maximum use of cost-benefit programming and computer simulation techniques.

Probably in despair at the further downgrading of the design professions, but also with the sound perception that no decision matrix has "the power to stir men's blood," the Museum of Modern Art commissioned four teams of university-based architects to prepare design solutions for the Harlem ghetto.

Unfortunately, the profession's honor is still largely unredeemed.

Arthur Drexler, the museum's director of architecture, and Mayor John Lindsay, who cosponsored the show, are surely to be commended for flying in the face of modernity and bringing architects back into the fray. It was Drexler who selected the teams from Princeton **(1)**, Cornell **(2)**, Columbia **(3)**, and MIT **(4)** and set their problems: opening the city grid, designing new land, building the waterfront, and providing new housing without prior relocation—and it is in the vagueness of the mandate to the designers that the present exhibit's problems lie.

An absence of strong ideas

The four projects were explicitly not intended as a master plan for redevelopment—and indeed one is immediately struck by the fact that the teams, although working on adjacent areas, have made no attempt to bring their work together in a coherent whole. Worse, it is not clear whether these proposals, like Howard's Garden City or the Goodmans' paradigmatic communities, are intended to crystallize wholly new alternatives for the public or simply to demonstrate the present state of the art of urban design. God knows we need to be shaken out of our apathy in the face of increasing urban decay, but the present group of projects will not do it because they do not contain the important elements of utopian plans—a strong idea about the function of a place in the total fabric, and about the way men might live together—or the strength of detail required by practical proposals.

Mr. Hatch is a practicing architect and the executive director of the Architects' Renewal Committee in Harlem (ARCH), whose objectives were described in our December '65 issue. He has recently joined the Forum's Board of Contributors.

1. THE PRINCETON TEAM

This group was given the Hudson River waterfront just north of Columbia University, and what curious things they have done with it!

The area, although not properly a part of Harlem, is extremely important to its future development. Moving westward through Harlem one encounters two great rock outcrops, Morningside Heights to the south and Hamilton Heights to the north, each dominated by a major university (respectively, Columbia and City College). Across the bluffs lies the Hudson River, cut off from use by arterial roads and railroads. There is only one important pass—125th Street—which cuts the two bluffs and continues down to the water's edge, where all the roads and the railroad are carried on viaducts.

This was recognized by the Princeton group which placed its major activity center, a diagonal square that contains an outdoor theater, cafes, and restaurants at the confluence of the three communities. From there on, things make considerably less sense.

A potential destroyed

For reasons best known to themselves, the designers, having reached the river, have chosen to turn their backs on it. They have also chosen to house nearly all possible uses in nearly every building, carrying the communication — interaction — as — the — basis — for — urban — form thesis to its illogical conclusion. In so doing they have destroyed the all-important public recreation potential of the waterfront.

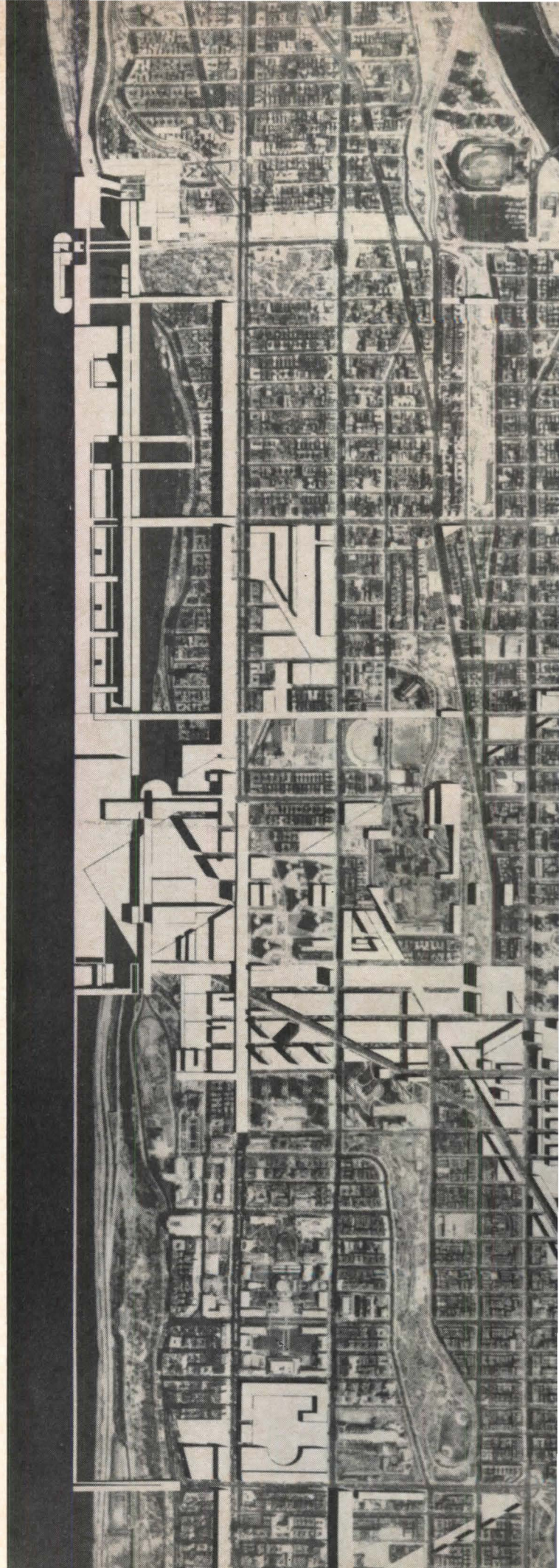
At the heart of the scheme is a riverside megastructure containing shops, housing, offices, and light industry. Anchored at the north by an aquarium and extending south for 30 blocks, it gives a deliberate hard edge to the city, which surely can be important only to architects who view us from New Jersey. In order to service this complex, the architects have been forced to do the unforgivable—they have rerouted the presently elevated Henry Hudson Parkway at the water's edge under their new building. Having taken the Hudson River away from the public and given it to a few high-rent tenants, they offer in its place a (probably stagnant) lagoon, a few acres of undifferentiated park, steeply pitched in its southern section, and a fifteen block promenade to the south over the water along which nothing happens.

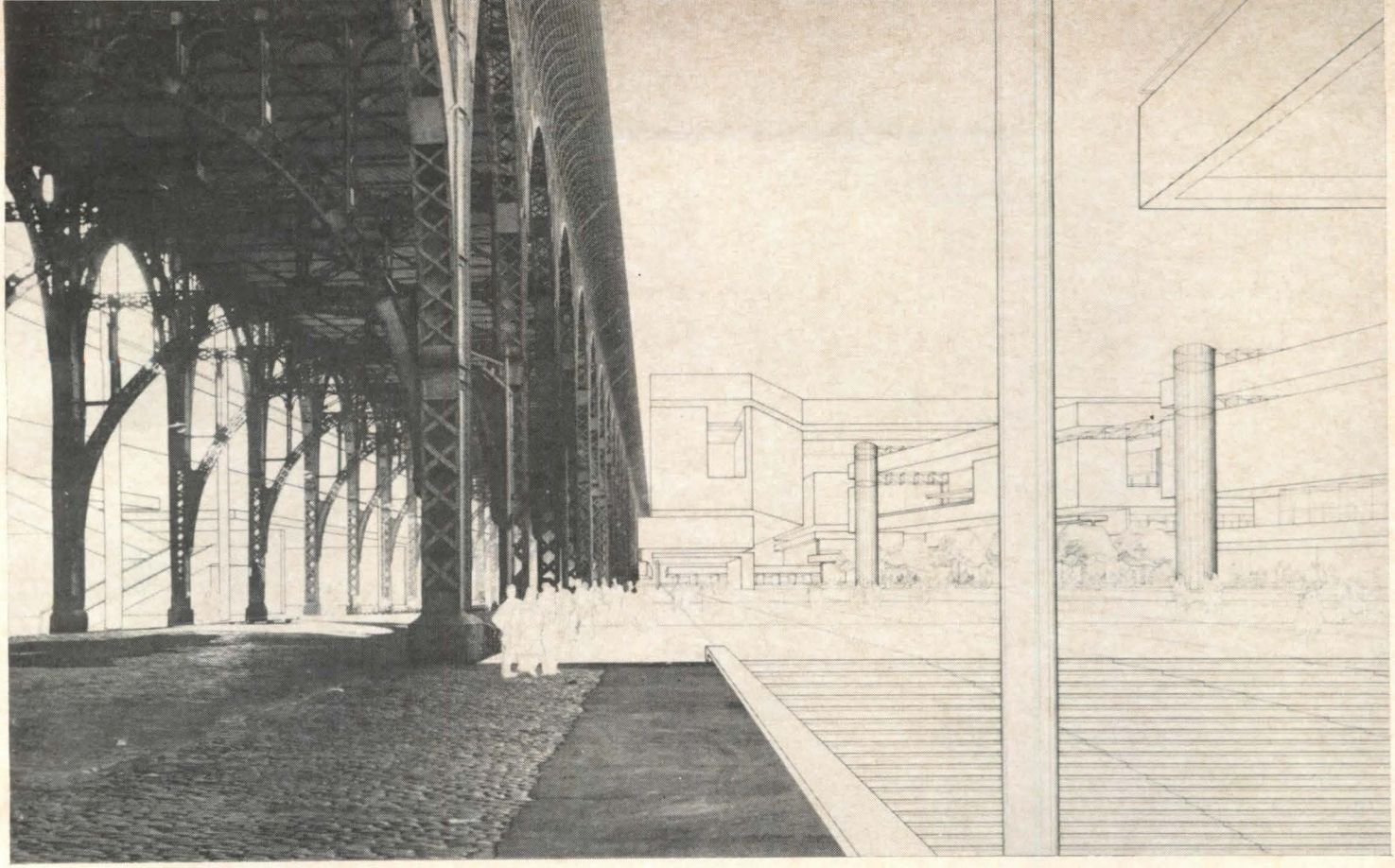
An excessive will to form

Stranger things have happened to the rest of the transportation network: the freight line which serves the present wholesale meat industry on this site, and which might attract the manufacturers whom the designers wish to locate here, has disappeared; Riverside Drive which carries substantial north-south traffic has been allowed to march solemnly across the major plaza and is then gobbled up entirely by a semicylindrical parking garage, lest it intrude on the new nonwaterfront park to the north; the diagonal of St. Nicholas Avenue to the southeast has been emphasized although it never reaches the new development. In like fashion, a new diagonal road is driven through to the northeast, but it cannot cross the precipitous park below City College and cannot serve the new traffic generated by the proposed construction.

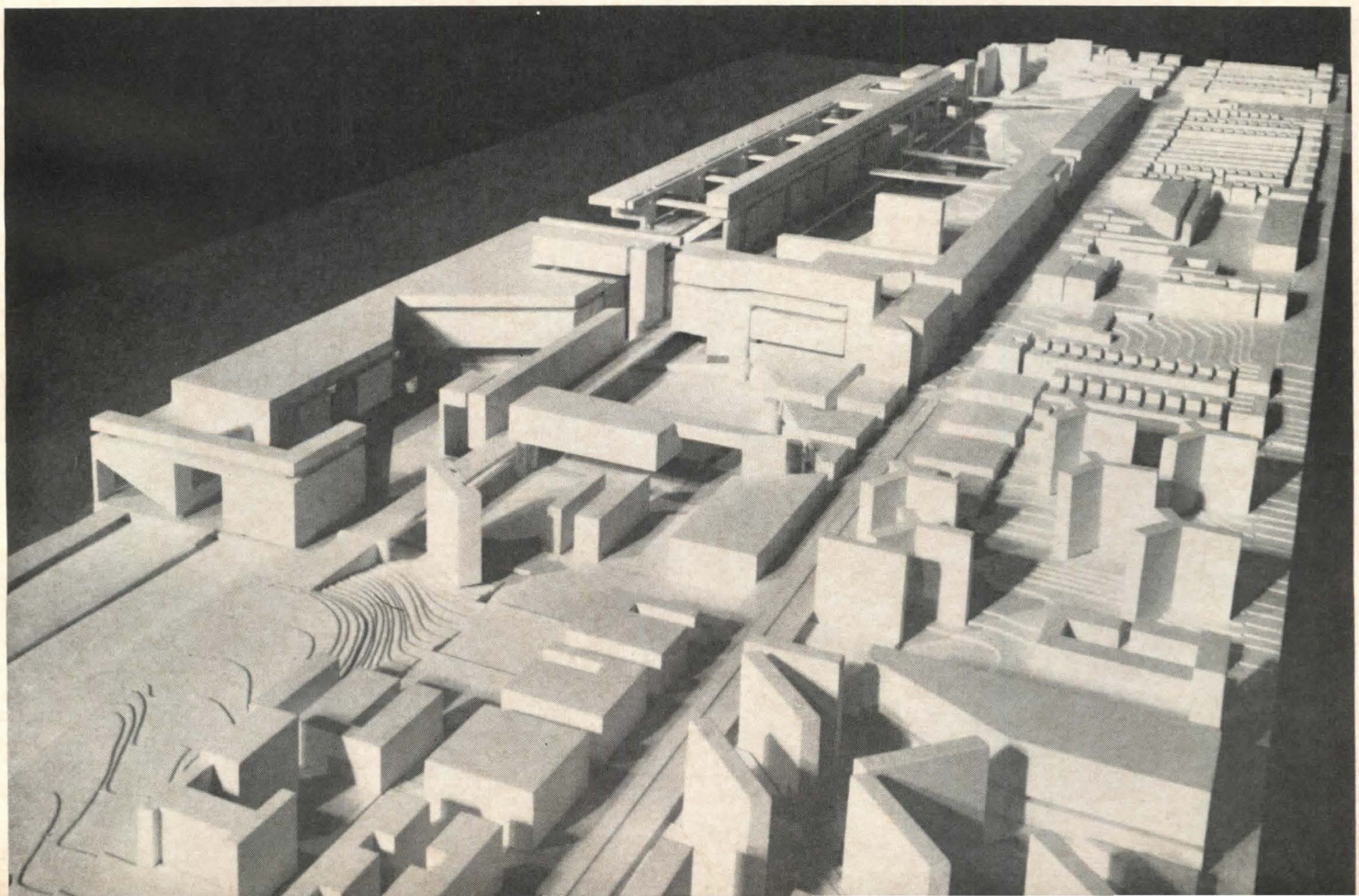
One further word: much of this waterfront area is presently used by the food, printing, and transport industries (of 5,400 on-site jobs, more than half are held by Harlemites). Blue collar employment opportunities are daily becoming rarer in New York City—with disastrous consequences. Yet the architects have replaced these "noxious" uses with polite laboratories and research facilities, i.e. with jobs for other people.

The will to form has taken precedence over the necessity to give form to life. It is as if the designers believe there is nothing worth preserving in the local scene.





Above: view looking north in the proposed pub'ic square. Existing viaduct is at left, outdoor theater at right. Below: model of major portion of project. The 30-block-long megastructure along the Hudson River gives a new "hard edge" to the island.



2. THE CORNELL TEAM

The Museum handed the Cornell group the problem of how to modify the grid plan to improve circulation, encourage the development of parks and new neighborhoods, and clarify the order implied by the terrain itself. And, unfortunately, the Cornellians (like Le Corbusier in his dealings with Paris), have overlooked the accretive nature of growth and replacement in the city and have given us a static and overly simple final-stage diagram, which, according to their statement, is meant to reconcile two theories of city design: the traditional city of solid mass with spaces cut out, and the city in a park.

In fact, the attempted reconciliation seems to have been abandoned for a more easily achieved nonaggression pact. Rather than integrating the two formal design concepts, the Cornell designers have used them so as to divide Harlem into three equal north-south belts: the two-block-wide center belt retains its present character, while the western strip becomes almost entirely park. Only the development to the east has the character of a city in a park and that character comes directly from the *Ville Radieuse*.

A separation of activities

A nearly pure, traditional separation of activities by zone has been adopted: park to the west, rehabilitated housing in the center, and a monumental zone of shops, offices, and light industry to the east. One suspects that, with midtown only ten minutes away by subway, the area cannot and need not support such a concentration of nonresidential uses.

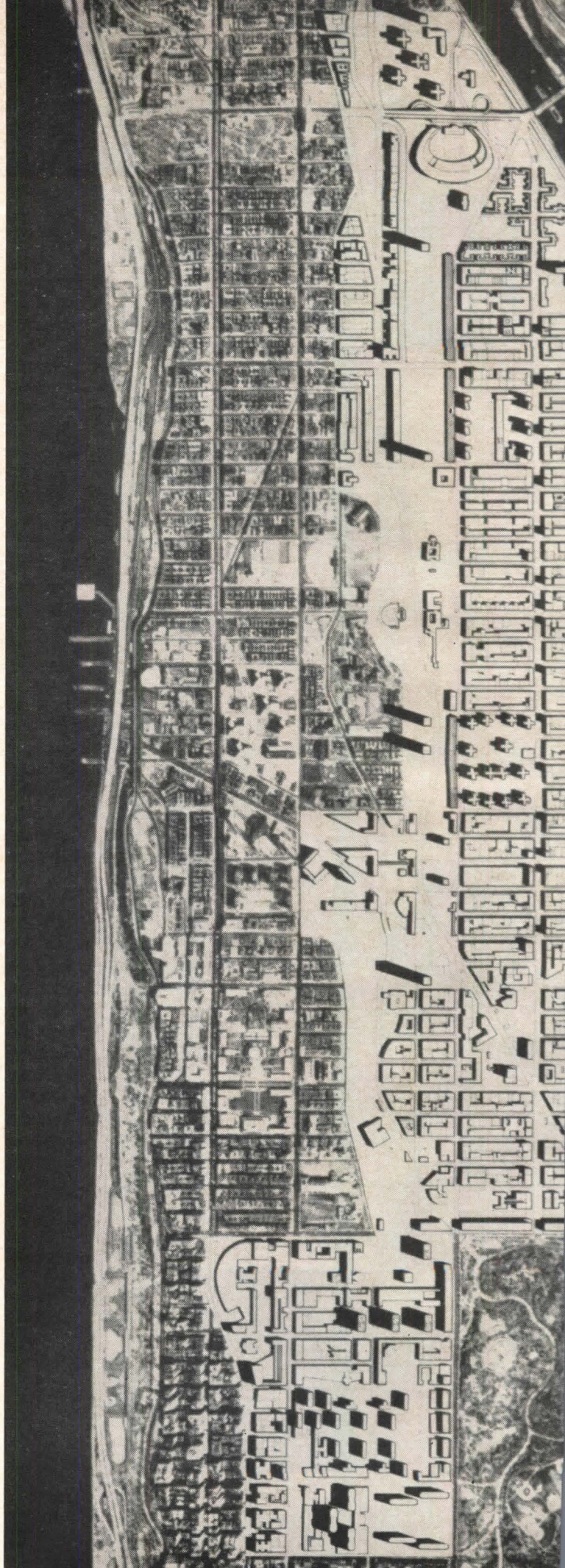
One gets the feeling that the *team was* very uncertain about the optimal relationship of enclosed to open space in the city and has hedged all its bets—even suggesting the need for developing backyard spaces and vest pocket parks in the remaining narrow strip of dense housing.

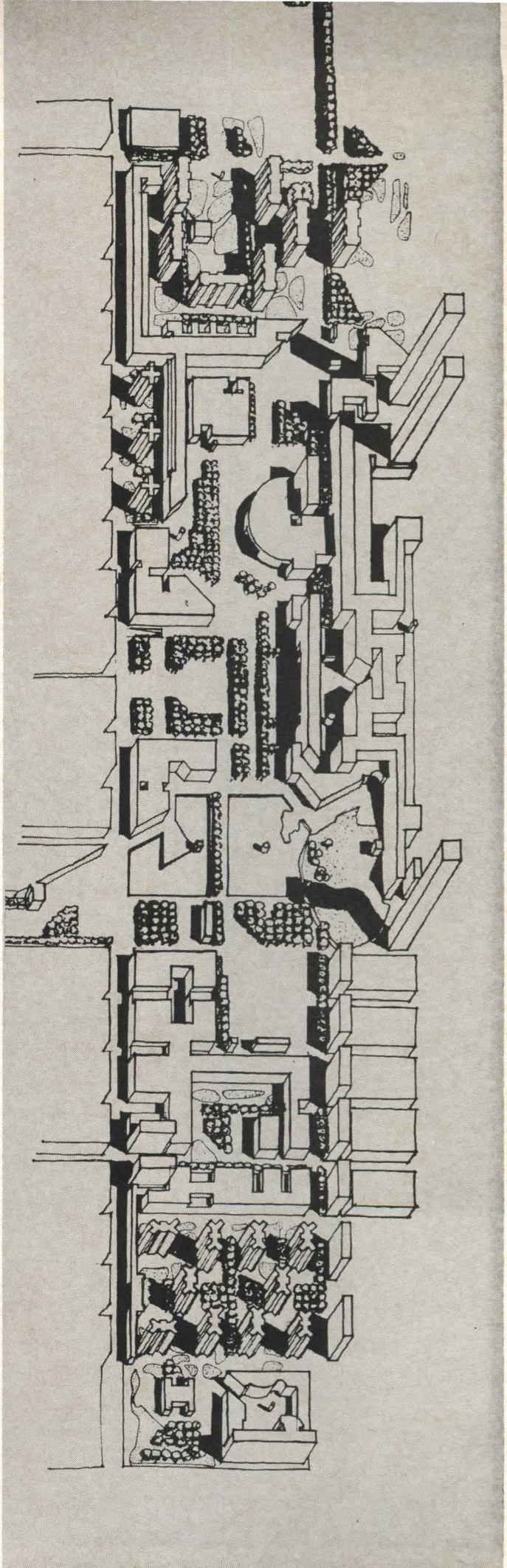
In its rush to provide green vistas and tot lots, the Cornell group has neglected the fact that the old grid system has its good features: legibility and accessibility; and to be justified, a new road system must demonstrate superior efficiency, economy, and contribution to the general welfare. However, the new road scheme proffered here makes no special accommodation for present heavy through-traffic from the Bronx, and discourages almost all crosstown movement, even dead-ending 125th Street—Harlem's main street, and the main artery between Queens and New Jersey—into a proposed 10-block-long commercial facility at the eastern edge of their development.

A semisuburb through removal

Further, the proposal has achieved the opening of the grid and the introduction of green space into Harlem through the simple expedient of removing half of the present residents. Apart from the fact that this is morally and politically unacceptable at this time, there are serious reasons why it may not ever be desirable: such a general reduction in density would enormously aggravate intra-city transportation problems and would greatly increase the cost of living and doing business in the city—which would remove most of the other half of the area's present residents and small shopkeepers. I am sure this is not what the architects intended, but they have drawn an upper-middle class semisuburb—a pleasant, high-rent district inhabited by people who are not afraid to walk in sparsely protected parks.

The real failure of the plan, however, lies in its lack of comprehension of growth in time, and, hence, its inability to guide us in the incremental activities which would produce a loosening of the grid at a socially permissible cost. Any plan that does not include a satisfactory explanation of the intermediate steps in its achievement must, today, be *prima facie* suspect.





3. THE COLUMBIA TEAM

With visions of Sant'Elia and a desire to provide housing in the heart of Harlem without the necessity of prior clearance and relocation, Columbia University's architects have proposed turning a blighting, elevated railroad into a community benefit.

The tracks of the New York Central Railroad rise out of the ground at 96th Street, 54 blocks north of Grand Central Station and proceed north on a viaduct, first of cyclopean masonry and then of steel, passing by the controversial, windowless school, I.S. 201 (see Nov. '66 issue) on their way to cross the Harlem River at 134th Street. The southern half of Park Avenue is the very name of elegance and corporate power; but north of 96th Street the presence of the tracks has precluded development of speculative luxury housing. Only families with extremely limited choice seek housing there: generally Negroes and Puerto Ricans.

A building over the tracks

A variety of technological problems makes it impossible to depress the railroad on its way through Harlem where it divides the area east and west into two distinct and separate communities. Both of the Harlem communities are poor (median income is around $4,000, compared to $6,500 for the city as a whole) and both desperately need housing (about half requires major rehabilitation or replacement); so the possibilities of the Columbia scheme are intriguing, since the last National Housing Act allows the Federal Government to write down the cost of air-rights development.

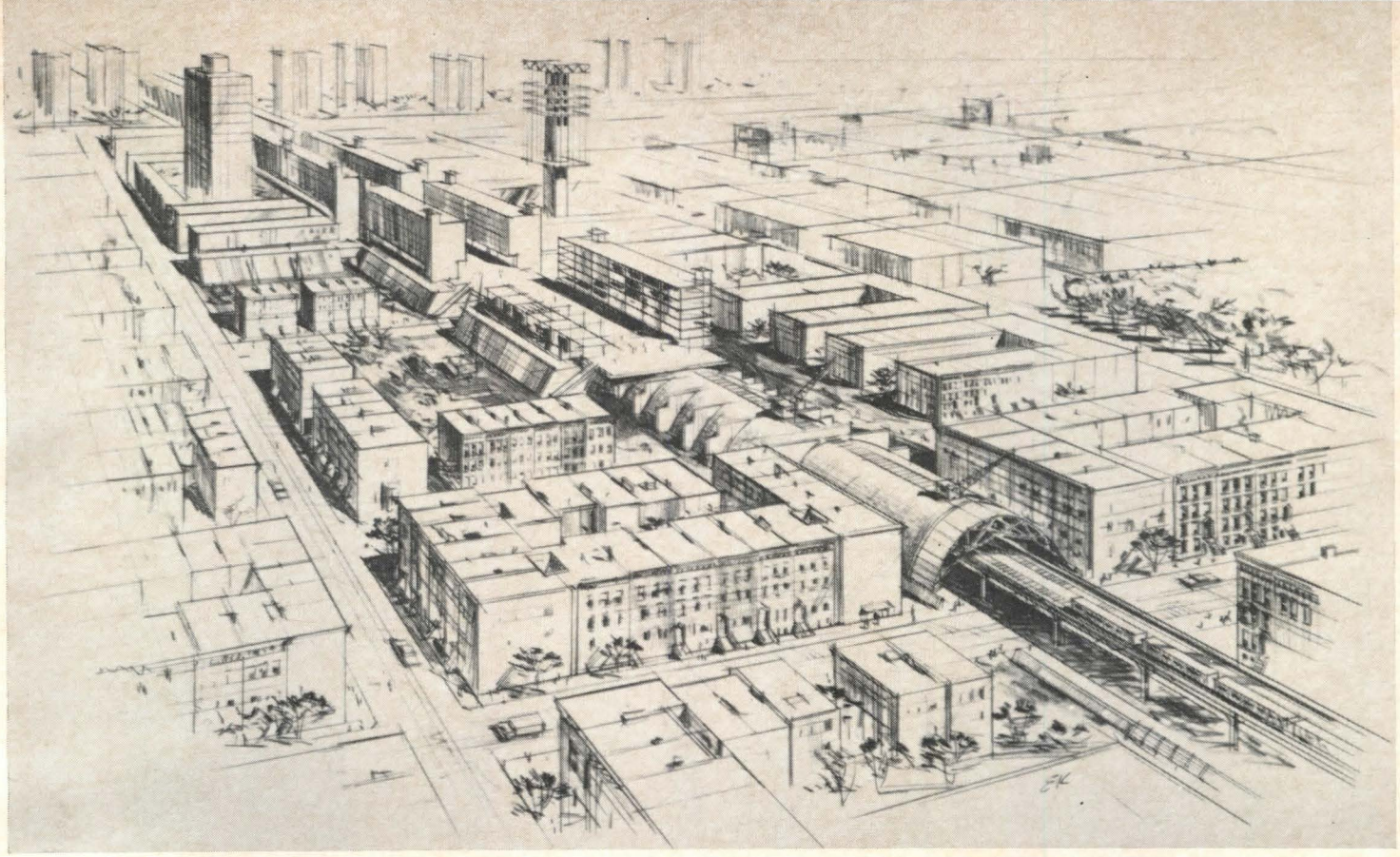
The architects have covered the tracks with a continuous concrete vault cast on movable *shuttering* which would roll up Park Avenue, presumably at a speed dictated by the rate of new residential and related construction which flanks it for its ultimate 37-block length. Vehicular traffic continues to run beneath it, although the danger from the closely placed columns supporting the tracks and the blind east-west intersections probably indicates that even less traffic would use it than at present, and that the space might better be given over to shops and community areas. This would obviate the necessity of relocating the public market, which now uses some of this under-track space, into the proposed new structure in which the economic rents would surely alter the market's popular character.

On top of the vault is a continuous — and, unfortunately, dull and undifferentiated—pedestrian walk. Electric buses run the full length one level below.

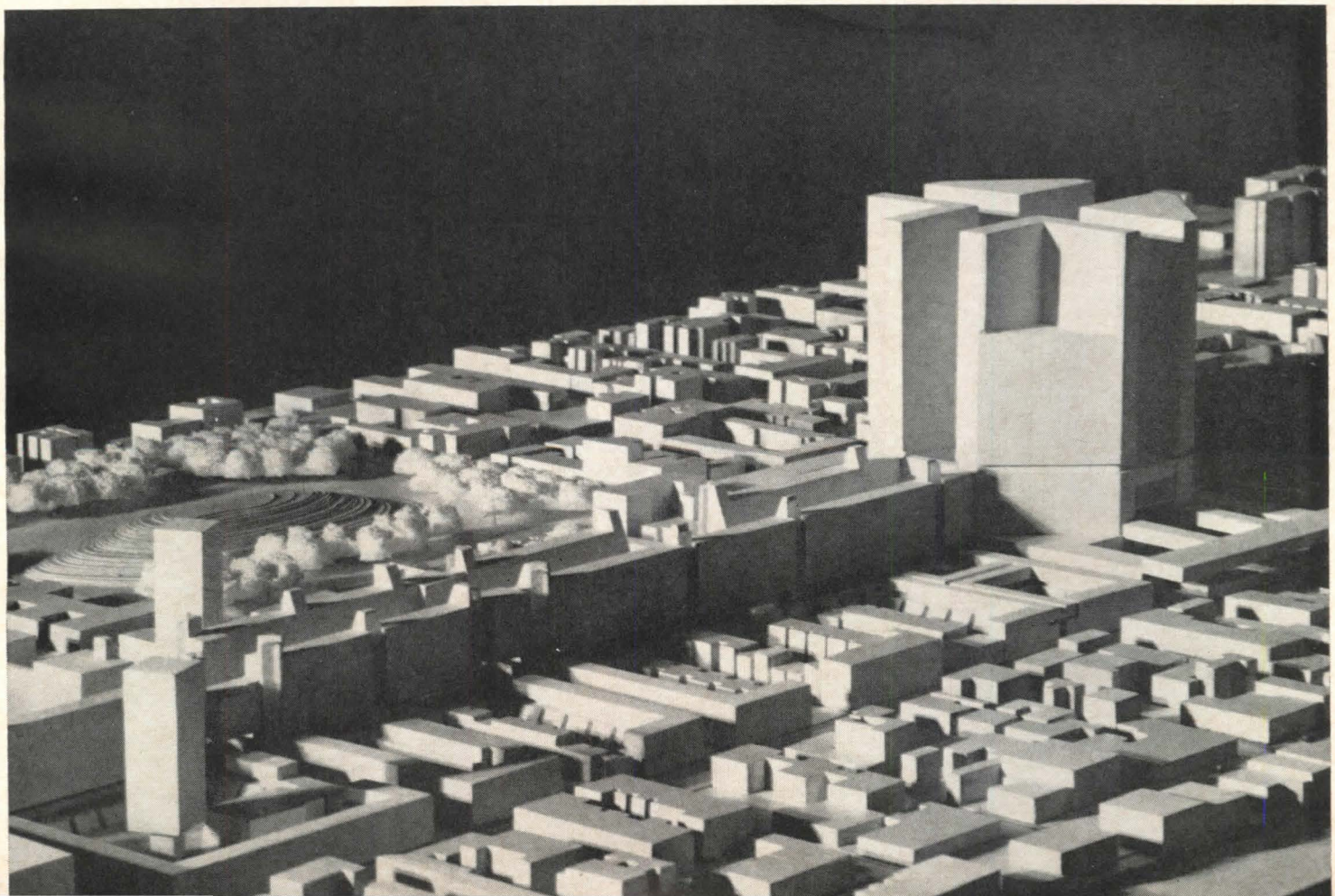
Demolition after construction

As construction proceeds northward from the entrance funnel and local residents are swept into the new air-rights housing, dilapidated structures are to be demolished and new low-rise housing, schools, shops, theaters, and stores will rise to flank the vault, culminating in a massive gate structure containing everything architects like but Harlem probably doesn't need —department store, convention hall, bus terminal, hotel, offices, etc. After that the whole thing quiets down, terminating a few blocks later in a small building which houses project management. Neat, and in broad outline perhaps the only significant way to deal with the railroad tracks.

Like most projects this one is selective about the problems it chooses to resolve. Other, tougher ones will have to be faced before this juggernaut should be released—not the least of which is that the elevated pedestrian promenade will not attract many shops and therefore promises to be every bit as dull and lifeless as the rest of Park Avenue. More importantly, the architects have chosen to emphasize the connection to White Manhattan at the south to the detriment of east-west movement. New development in this area should serve to bring the two Harlem communities together but this design sugests a fortified wall and emphasizes their separateness.



Above: over-the-tracks building shown under construction. Below: massive gate structure proposed for Park Avenue at 125th Street.



4. THE M. I. T. TEAM

While the Cornell group was busily opening up the grid and thus losing much of the ready orientation inherent in an orthodox street system, a few scale blocks to the east their MIT counterparts were—a bit peripherally to their main theme—walling Harlem's large, haphazardly site-planned public housing projects with shops, offices, and rowhouses to reinforce the street as the place where things happen and along which one is connected to the rest of the city.

New land from the river

MIT's architects seem to share the contemporary-medieval view of urbanity: that richness and diversity of human activity become the *raison d'être* of the city and intensified human contact becomes the designer's goal. Building coverage and population density per acre, central concerns of the planners of the early modern era, are not considered independent variables. Density is measured in terms of the accessibility and quality of services. Thus a sound transit system which links home to park will usually be more desirable than the reduction in potential group activity and communication which the provision of substantial local public space would require.

The main thrust of the MIT proposal is the creation of 270 acres of new land, obtained by connecting two islands in the East River, Ward's and Randall's, to Upper Manhattan with earth dams and relocating the existing railroad yards at the southern tip of the Bronx. The entire development would encompass some 510 acres, not including 187 acres of purified water in three new lakes.

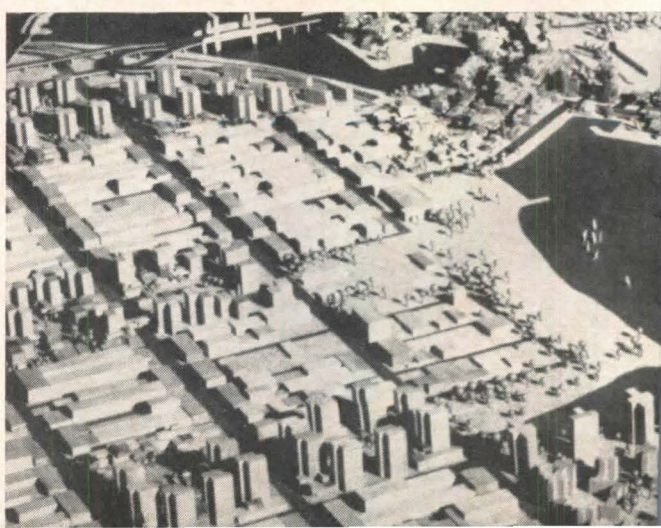
It is easy to find the roots of this proposal: the MIT campus faces onto the Charles River Basin where, for a small fee, one can rent a sailing dinghy, like the ones indicated in the project model, right in the heart of the city. Further, the MIT School of Architecture has been working with Visiting Professor Kenzo Tange for a number of years on housing schemes for Boston harbor.

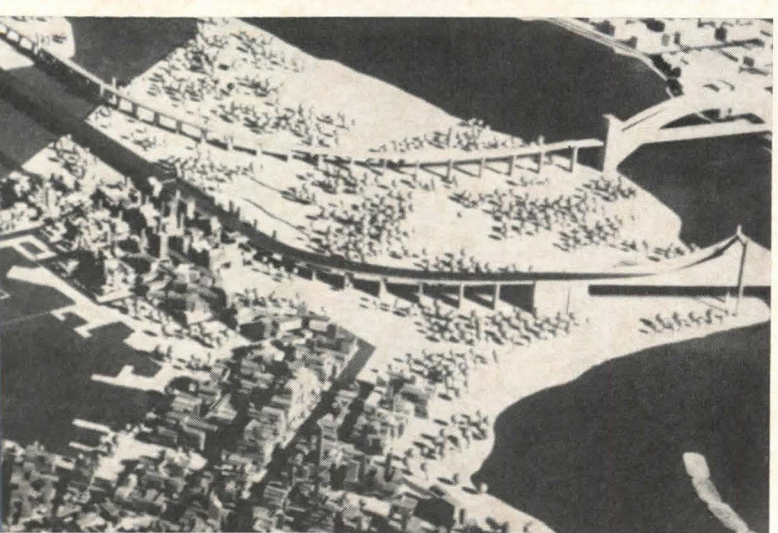
This one for the East River deserves serious attention for two reasons: it would permit (under strict controls) the decanting of large areas of Harlem which cannot now be touched because of the impossibility of finding relocation housing, and it would make Robert Moses' recreation areas under and around the Triboro Bridge suddenly accessible to those who most need them. If the little rowing pond in Central Park is an indicator of demand, the new lakes will also be heavily used.

Growth and variation

The architects, in their own description of the project, wrote that it could be realized for the equivalent of six days of warfare ($150 million) in Vietnam. Engineers familiar with New York's waterfront suggest that the estimate is low—it might take as much as 10 days' expenditures—but land could be prepared for housing construction at approximately $20 per ft., no more, certainly, than the cost of land purchase, clearance, and family relocation in the slums of New York City.

At a smaller scale the design quality of the proposed development is not well defined; but it is clear that the architecture is meant to allow incremental growth and infinite variation of form in response to use and to time. In consistent manner, the new construction is linear and focused on the new roads which link it to established centers at 96th and 116th Streets. It is a bit surprising, however, to find that the designers have proposed so few housing units (14,000, or 60 per net residential acre). This is probably the least useful part of the baggage they brought with them from Boston—economic considerations as well as a greater familiarity with the scale of New York might well lead them to double these figures to Harlem's gain and no one's loss.





These are the members of the four teams commissioned by the Museum of Modern Art:

1. PRINCETON TEAM: Peter D. Eisenman, Michael Graves. Assistants: G. Daniel Perry, Stephen Levine, Jay Turnbull, Thomas Pritchard, Russell Swanson

2. CORNELL TEAM: Colin Rowe and Thomas Schumacher; Jerry A. Wells and Alfred H. Koetter. Assistants: Franz G. Oswald, Steven Potters, Michael Schwarting, Carl Stearns

3. COLUMBIA TEAM: Jaquelin T. Robertson, Richard Weinstein, Giovanni Pasanella, AIA; Jonathan Barnett, Myles Weintraub. Assistants: Benjamin Mendelsund, George Terrien, Paul Wang. Structural consultant: David Geiger. Mechanical and electrical systems consultant: Bernard P. Spring. Acoustics consultant: Michael Kodaras. Construction consultant: Edward Friedman

4. MIT TEAM: Stanford Anderson, Robert Goodman, Henry A. Millon

THE FOUR PROJECTS: NOT UTOPIAN ENOUGH

The MIT proposal aside, the projects tend to treat Harlem as if it were simply an ugly place, a blemish to be repaired by cosmetic surgery. Instead it is home to 364,000 people of diverse background, education, and ambition. They occupy 130,000 apartments of which half are in need of major repair or replacement—but these apartments are, for the most part, cheaper than public housing and available to nonwhites. Until the public and its Congress find the will to appropriate adequate funds for rent supplements and public housing we dare not encourage the kind of redevelopment suggested by these projects, none of which would guarantee adequate housing for the poor and all of which raise the danger of speculation and dislocation of the poor. Harlem occupies a desirable place at the heart of the New York region—it wouldn't take much to bid up prices so that only the well-to-do could be housed there. Then where are the poor to go?

If the project architects by and large have no feeling for Harlem as a community and an important low-rent housing area, they have less comprehension of its special character: the four proposals would be at home in almost any city, inhabited by any group of mid-1960, middle class families.

Not specific enough to qualify as serious contenders for construction, the proposals all lack the vision of social place and purpose which would qualify them as utopian—and utopian they should have been, opening our eyes to new, more desirable ways of life and subtly creating public demand for an adequate governmental response to the grave problems of the inner city.

THE HOUSEBOATS OF SAUSALITO

BY ALBERT GARVEY

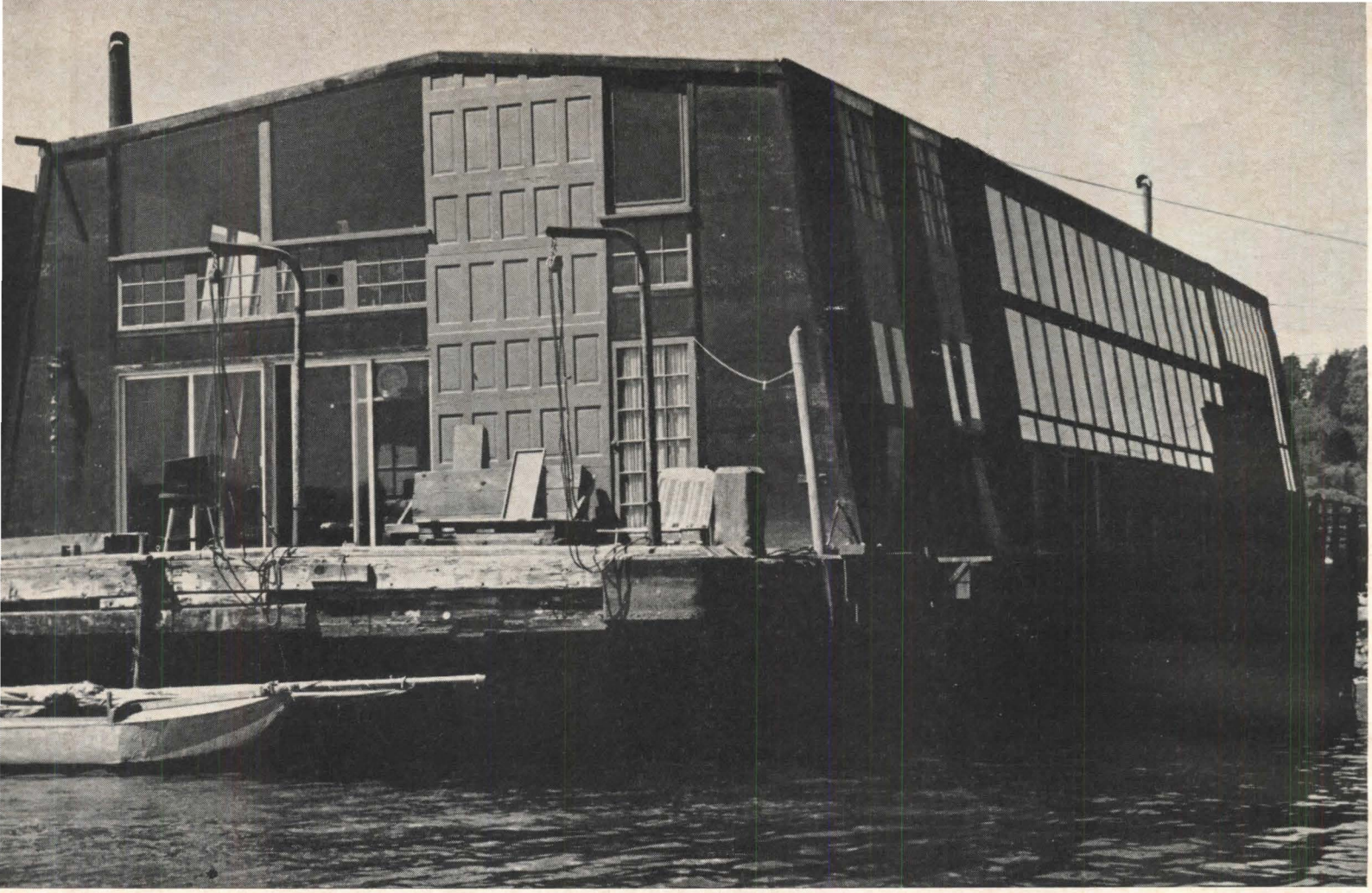
The view at left shows a corner of the houseboat community on the Sausalito waterfront, just north of San Francisco. Mount Tamalpais is in the distance. The big houseboat in the foreground is the work of Jerry Walters. Before he became interested in the waterfront, he occupied himself with making furniture, hauling piano harps up into treetops so he could hear the wind sing through them, or just hunting for orange mushrooms.

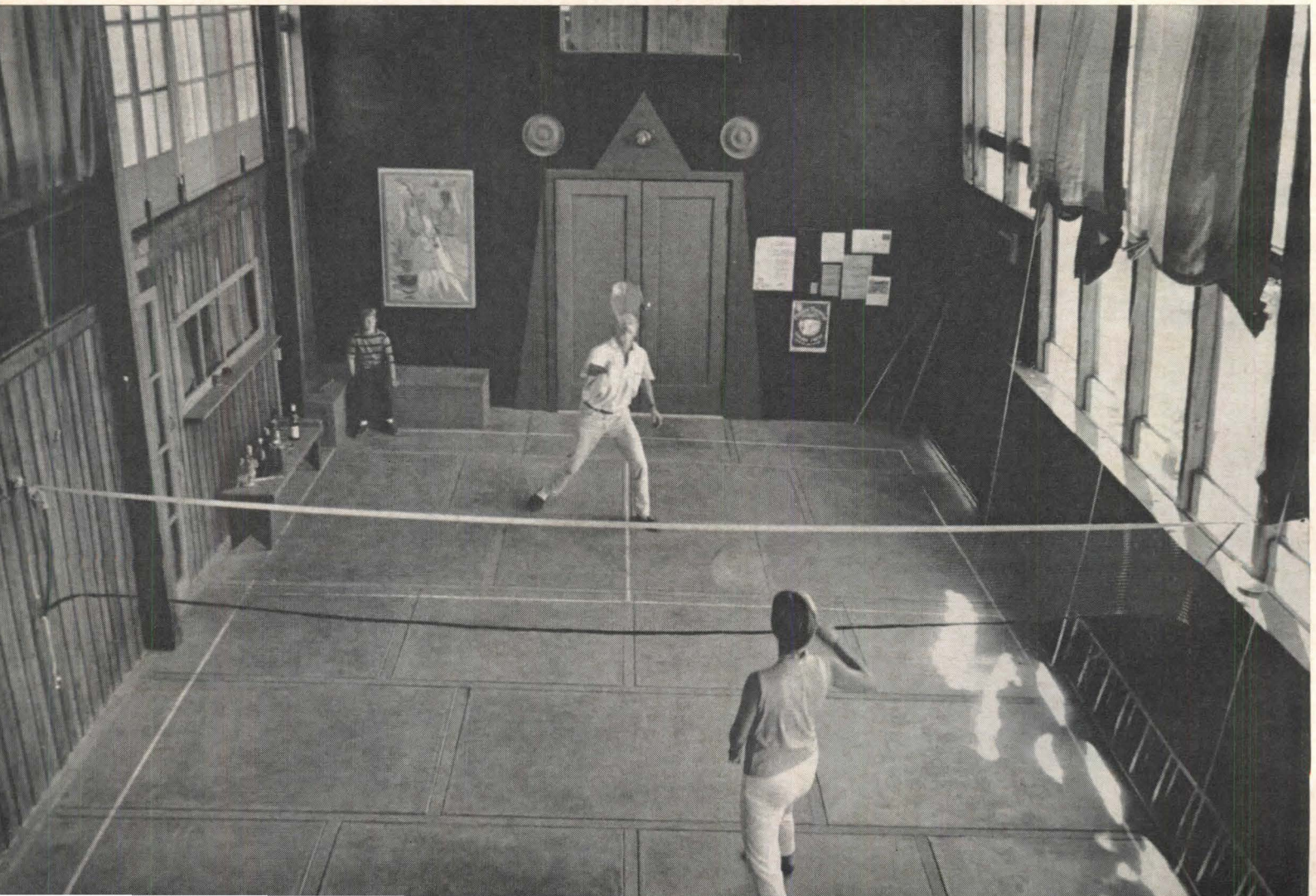
There are now some 100 houseboats on the Sausalito waterfront. Very few of them are finished, and it is probable that very few ever will be. Each of the houseboats seems to have at least one unfinished end to it, to permit some addition. This unfinished quality is one of the secrets of the vitality of Sausalito's houseboat community.

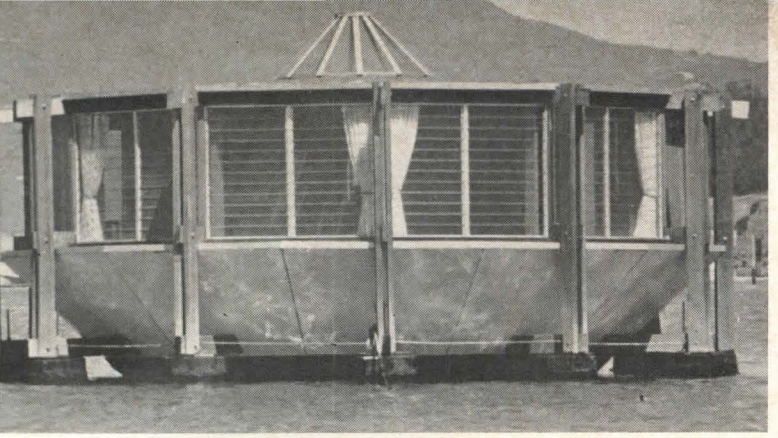
Every hour someone, somewhere, somehow is experimenting with a new engineering principle, or trying to figure out how he can fit a Greek amphitheater onto his 40-ft. hull, or pondering the design of his next boat.

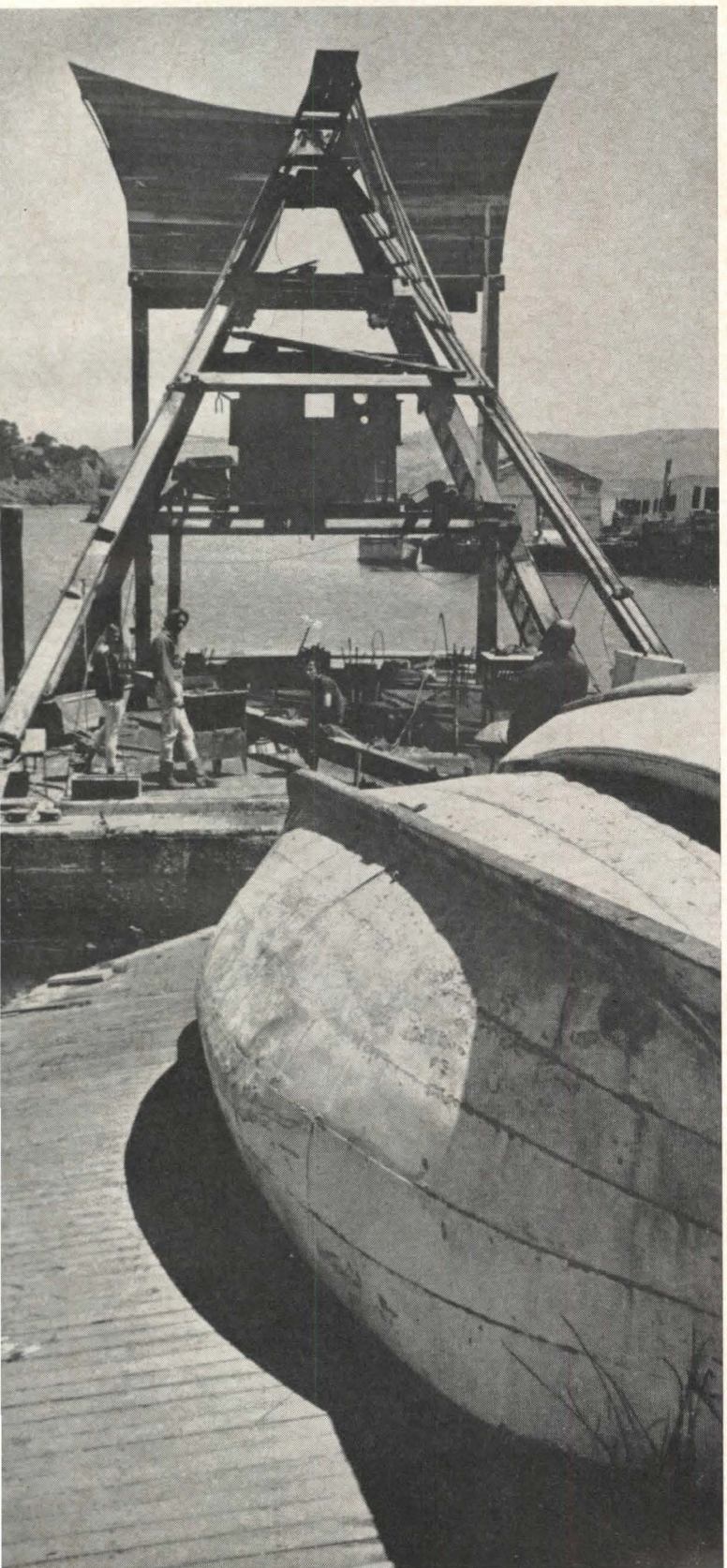
Jerry Walters is a case in point. Once he got caught up in the excitement of building one houseboat, there was no stopping him. Today, in almost every corner of the Sausalito waterfront, you can find one that he has built. The one shown here, with the arched French doors, was built on top of the hull of a surplus landing craft.

Mr. Garvey is a sculptor and painter whose specialty is modern serigraphy. He designed and built his own houseboat in Sausalito, but recently he and his family moved to dry land nearby. **Michael E. Bry** is the photographer.









A floating badminton court, a portable roundhouse, and a bird sitting on a crane

In 1962, shortly after I finished building my houseboat, a lady called Virginia Barclay knocked at my door looking for a carpenter. She said she could never deal with a builder who was not also an artist, and would I be interested? Why not! So off we went—building, rebuilding, tearing down, and building again.

The barge was an old, old wooden job originally used to carry rocks to the building site of the Bay Bridge—110 ft. by 35 ft. by 12 ft. of stanchions, X-members, rotten decks, and holey bottom. Virginia had a tug push it as high up onto the mud as possible at Waldo Point, where it commanded a spectacular view of the whole of Richardson Bay.

Within a few weeks the most unlikely looking crew of carpenters was swarming all over the mud, constructing what began to look like a dirigible hangar (see opposite page). This shell, two stories high, covering the full width of the barge and extending to a point about 20 ft. aft of the rake, was to be the outer frame of the first apartment, where Virginia would camp and direct her artist-carpenters in the creation of what would, in time, become the *Omphale*.

Most of the materials were scrounged, picked up at wrecking yards, or just washed up on some convenient shore. The materials were important because they dictated a good part of the design.

At the beginning, the only concrete notion we had was that there must be a space in the center large enough for a badminton court. This would also serve as a ballroom. The rest of the barge must have income-producing apartments to pay for the whole, as there was no financing available for so mad a project. After the badminton court was finished, there was enough room left over for a 10-ft.-wide apartment on one end and another apartment on the shore end, similar to Virginia's but more elegant.

Spaces created themselves as the by-product of a new room or a wall or a deck; and these spaces were in turn molded to suit the needs of the whole. There were never any drawings. The houseboat grew and developed like a piece of sculpture, each addition pointing the way towards a new direction.

We lived in Spain for a time, and when we returned we found a new addition to the houseboat community: the round houseboat (top left), permanently moored about 300 yards from any dock, right out in the middle of Richardson Bay. Its occupants commuted by skiff.

This houseboat has a conical hull formed by 12 sheets of steel. Twelve black octagonal blocks at the bottom of the 2x6's are made of styrofoam and help to stabilize the boat. Bob Roth, the owner, built the entire house around a central pillar under the conical skylight.

By hooking a cable onto a ring set on the top of the pillar, a crane could lift the entire structure out of the water for repairs or yearly maintenance.

The rather open-air, unfinished houseboat at left is the work of Chris Roberts, who had never built anything in his life before he moved out to Sausalito and became intrigued with the idea of creating his own floating paradise. He bought an old surplus barge for barrage balloons, welded patches over the holes, and started building.

Like many others who live in this area, once Chris Roberts tasted the delights of building, all the horizons opened and the ideas wouldn't quit. Chris found another barge—this one an old crane barge—and started all over again. His first vision was of a big bird sitting on top of the crane. So he began building it from the top down.

I am very anxious to see where this form will lead him. So is Chris.

An A-frame with stained glass windows, and an expanding community

Dave Roberts, an IBM computer programmer, made several scale models of this A-frame houseboat before he began. The original barge that supported the structure was found abandoned on one of the tributaries of the Sacramento River.

Unfortunately, no amount of persuasion would keep the barge afloat once the A-frame had been erected on it, so the house was moved onto another, larger barge, and consequently expanded itself to fill the added space.

Dave, like most barge owners, hammered every nail into this houseboat himself, in his spare time. His job left him only weekends to hammer and to scrounge.

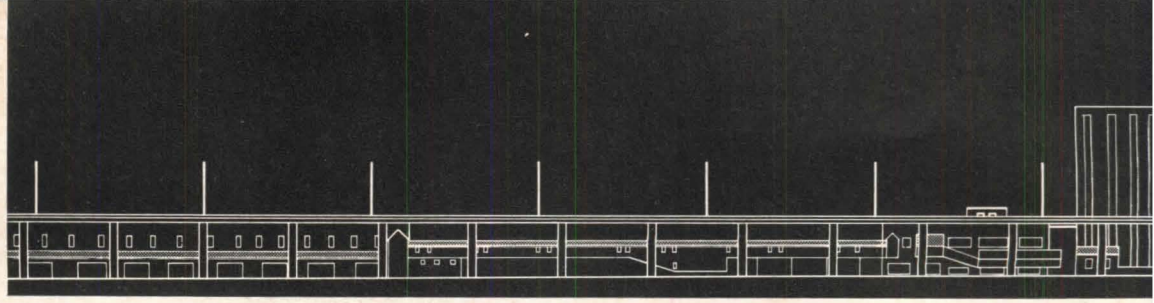
The daughter of the couple who now rent the barge lives in the loft bedroom (below). The stained glass windows here and on the main floor are from various wrecking yards.

A few weeks ago, I stopped by Virginia Barclay's barge (the one with the badminton court inside) and found a carpenter named Leon nailing up a wall on the very last foot of the original 110-ft.-long deck. "Leon," I said, "what's going to happen, now that you've run out of deck?"

"Don't worry—I'm sure Miss Barclay will figure something out," he answered with complete confidence. He was right.

An expressway named destruction

BY PRISCILLA DUNHILL



Ask John W. Lawrence, the dean of Tulane's School of Architecture, what he thinks of New Orleans' proposed expressway across the Vieux Carré and he tells you, "We are not talking about an expressway, we are talking about an act of barbarism. . . . Most tragic of all, it is simply a rehash of a plan foisted upon us by Robert Moses 20 years ago."

Ask Stuart H. Brehm Jr., director-secretary of the New Orleans City Planning Commission, and he says, "Auto registration topped one million last year. The expressway is simply completion of an outer-belt system planned since 1957. The outer belt will move traffic crosstown, and the inner belt in from the suburbs."

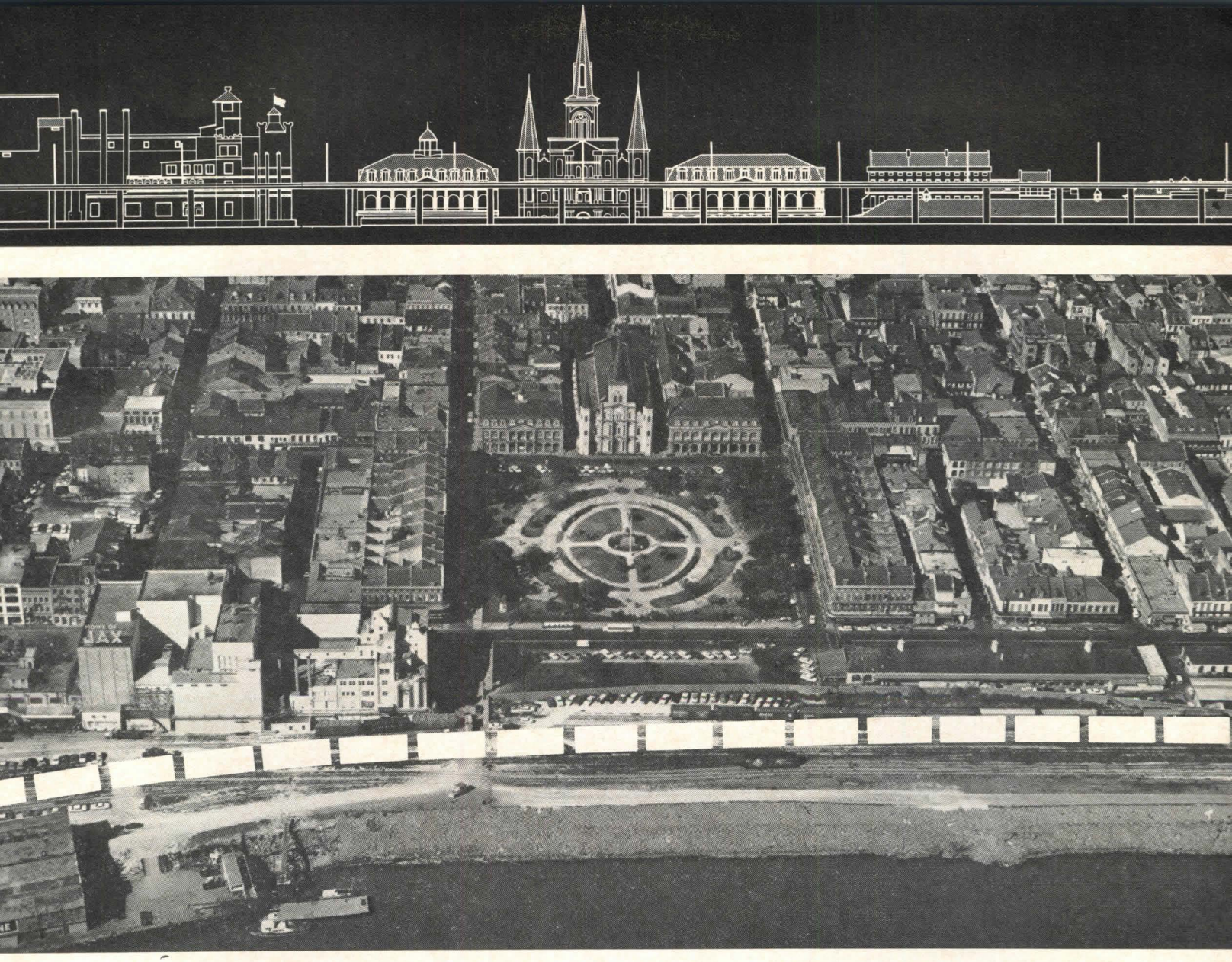
John Corporon, former news director of WDSU-TV, New Orleans, says, "What is cheapest, what is most expedient, that is the contemporary history of New Orleans. The expressway is only part of that general pattern. . . ."

George Stevensen, director of urban design for the Louisiana Department of Highways, says, "How can you tell whether the expressway will be incompatible until it is built?"

Louis O. Brown, executive director of the Central Area Committee of the Chamber of Commerce, says, "There are two urgent reasons for the immediate completion of the expressway. One, we are getting a professional football team next year, and there is a strong likelihood that the new domed stadium will be located in the central business district. We need an expressway to get people to the games, and we will need one to hook up with the two additional Mississippi River crossings to be built."

Planner George Marcou, whose firm's new study of the expressway's impact finally has aroused New Orleans' tightly knit power structure, says, "The size and prominence of the expressway will seriously hinder long-range possibilities for the redevelopment of the riverfront area in a *coherent* manner."

Finally, Louis E. Newman, executive director of the Bureau of Governmental Research, a nonprofit civic group financed by the city and private foundations, says, "Perhaps at the heart there is a need for reevaluation of our entire highway planning procedures in ur-



New Orleans' proposed riverfront expressway would pass across the pie-shaped business district (shaded in map opposite) and the Vieux Carre. It would dip underground in front of the new International Trade Mart (indicated by hatched line on map)—but would be elevated in front of the Vieux carre and its historic Jackson Square (above), severing both from the Mississippi.

Mrs. Dunhill is a former **Newsweek** writer and managing editor of **Interiors.** She has now returned to Pratt Institute to study architecture, and is a contributor to this magazine and others in the field of architecture and design.

ban areas."

Counterparts of the above heroes and antiheroes of New Orleans' proposed expressway could be found wrangling in the city halls of Boston, San Francisco, San Antonio, Philadelphia, as an increasingly familiar conflict begins to emerge in American cities: on the one hand, the U.S. Bureau of Public Roads aligns with the state department of highways; on the other, city hall is splintered by political factions and plagued with indifference.

The decision of the closely knit power structure of New Orleans is a particularly sentimental and agonizing one. The six-lane elevated expressway will bring cars to Canal Street, a seedy downtown getting seedier, but it will also slice past the Vieux Carré, a 100-block area which roughly coincides with the original French settlement of the city (see map).

Threatened ensemble

While the expressway might save downtown, it might also sacrifice the *tout ensemble* of the Vieux Carré, that special combination of mossy courtyards and narrow streets cobwebbed with time, and of mod discotheques, saloons, antique and art galleries. It is the *tout ensemble* that brought $170 million in tourist currency into New Orleans last year, making it the city's second major industry.

To be sure, this current threat to *tout ensemble* has historical precedents. In the 1870s, in an attempt to boost declining river trade, the city completed trackage and wharfs on landfill along the Mississippi, and thus severed the Vieux Carré from the river that gave it birth.

The first modern assault on the Vieux Carré was the seven-story Royal Orleans, built in 1959 by the Hotel Corporation of America. Although every effort was made to keep it compatible with The Quarter in style, detailing, and materials, cosmetics could not mask the grossness of its scale.

The latest *pièce de résistance* is Chateau Louisianne, a Hollywood set of such preciosity that it is almost high camp. It will have 501 rooms and a subterranean garage for 1,000 cars. Already the garage has had disastrous effects on *tout ensemble.*

During excavation, the entire block along Royal Street sagged adjacent to the foundation hole, and houses cracked or settled dangerously.

While hotels have become traffic generators, they have been accompanied by an almost imperceptible shift from individual to corporate ownership within the Vieux Carré. One real estate syndicate may own as many as 700 apartment units, and syndicate pressure *on zoning and* other ordinances is keenly felt at city hall. As John Lawrence commented, "We are learning that there are worse things than decay in the Vieux Carré, and one is being trampled to death."

City fathers have done an admirable job in protecting *tout ensemble* through the years. In 1937, a pioneer piece of municipal legislation prohibited impairment of "the quaint and distinctive character" of the Vieux Carré, and the following year the protective Vieux Carré Commission was founded. In his traffic plan of 1927, and again in 1951, Planner Harland Batholomew, hired by the city, urged sensitive handling of the Vieux Carré in making any major street or traffic changes.

Enter Robert Moses

It took New York's Robert Moses to be the first to recommend, unequivocably, an elevated riverfront expressway. Even then, everyone agreed that his report was based solely on traffic considerations and someone else would have to be hired to work on esthetics. And yet Mr. Moses' pencil line drawn along the Mississippi in 1946 remained on the maps and minds of New Orleans. Little by little, more by default than direction, the elevated expressway edged into reality. Report followed city report, all based on the original Moses concept.

Most incredible of all, never in the intervening 20 years did the city undertake a serious, comprehensive or impartial study of alternate routes or design. Into the breach stepped the Chamber of Commerce, which over the years commissioned four different studies, each corroborating the previous one.

Last year the state highway department completed its expressway plans. The U.S. Bureau of Public Roads approved them and then brandished the dread interstate highway system completion deadline of 1972. The last official gasp of resistance came in June when the city council voted in a stormy 11-hour session *not* to delay for further study. This was a particularly bitter blow to highway opponents, since Rex Whitton had sent a telegram granting a six- to nine-month reprieve. Governor John J. McKeithen had said the state would come up with the money, and Arthur D. Little Associates had told the city council a study could be done in six months for $125,000.

The final twist of irony followed in July, when Walt Disney announced that he was building a three-quarter scale model of the Vieux Carré for $15 million—just half the cost of burying the expressway where *it*

In their report on the expressway's impact, Planners Marcou and O'Leary made the above constructions of how it would look from the center of Jackson Square (opposite), and from its ornamental gates. Said the report, "A massive barrier, but you can learn to live with it."

passes in front of Jackson Square.

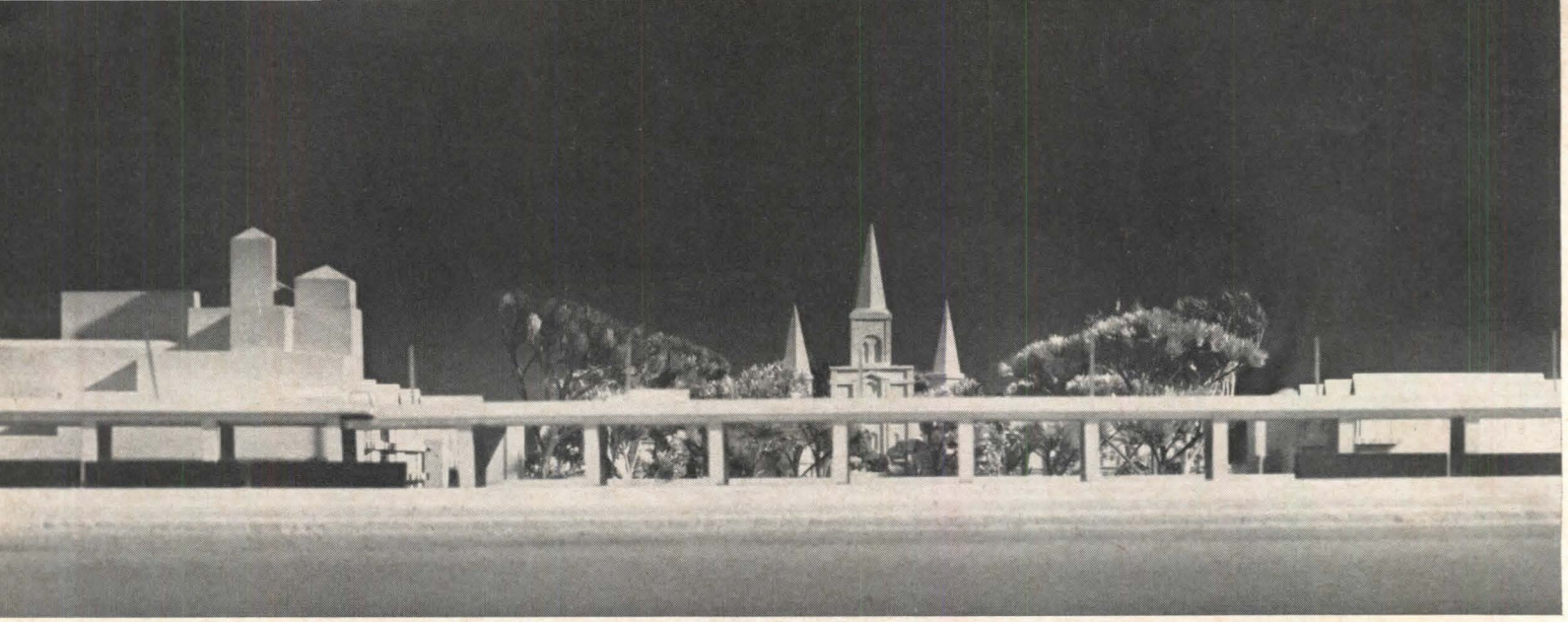
The city council's decision, or nondecision, rallied Tulane's School of Architecture into doing a 120-day study of its own. The major basis of the Tulane report—and this was to be its fatal flaw—was traffic considerations. Accurately, it assessed that interstate traffic between Texas and the Gulf States would bypass to the north. The expressway would simply shuttle local traffic eastward to the new industrial areas, and north and west to new residential areas.

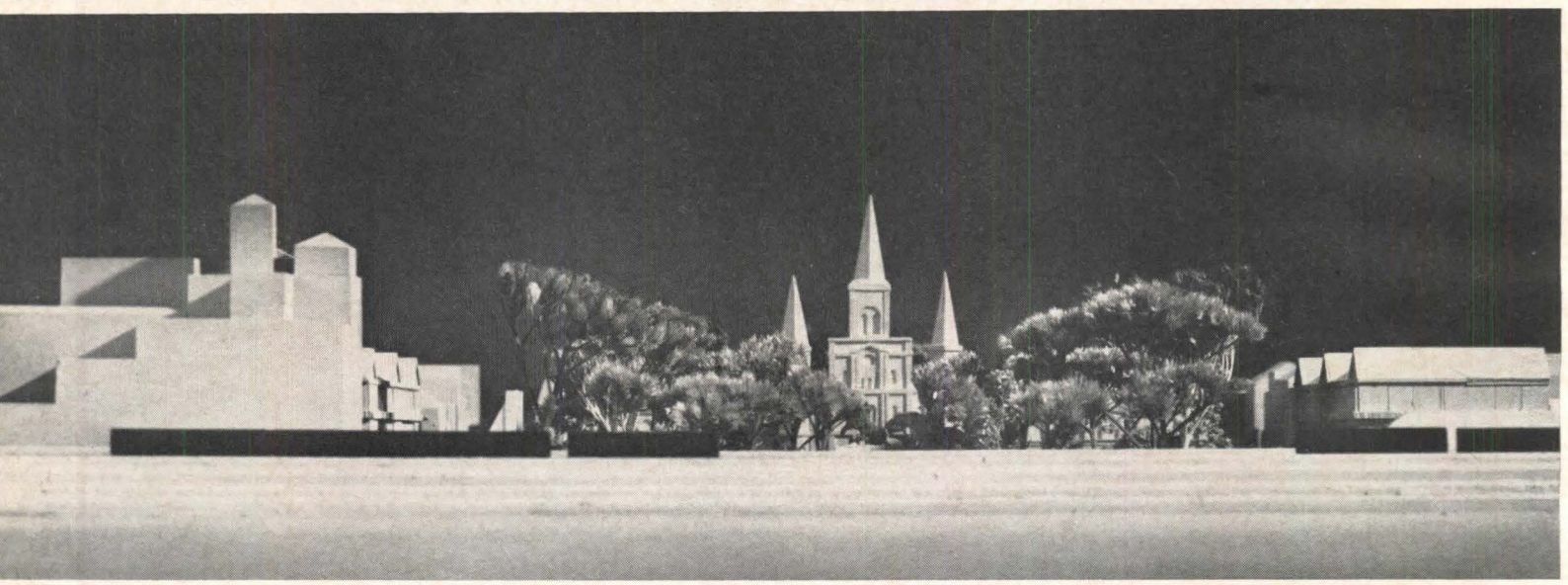
But, the report continued, this outer-belt theory would not apply to New Orleans. Traffic follows a north-south axis between Lake Ponchartrain and the Mississippi, where it dead ends. "And you can't wrap a radial plan around a dead end," said James Lamantia of Tulane.

Instead of a radial expressway plan, the report advocated two elevated spurs which would bring traffic into town from the north and west and disperse it through existing city streets by a combination of municipaliy owned parking garages at crucial points; short-run bus shuttles between garages, the Vieux Carré, and the downtown business district; and a system of one-way streets with the right-of-way running north and south in the Vieux Carré (the present pattern is east-west).

The Tulane report could not have squashed more political toes at one time if that had been its sole aim. Municipal parking is a touchy subject with lucrative, powerful, private parking interests. The board of directors of New Orleans Public Service Inc., one of the few public utility monopolies in the U.S. (gas and electricity subsidizes the dime transit fare) did not want to expand its mass transit services, nor take any action that might attract the gaze of the Securities and Exchange Commission. Canal Street businessmen were appalled at a traffic pattern which would not funnel cars onto Canal Street.

The Tulane report was torn to shreds by the morning *Times-Picayune* and the evening *States-Item*, both owned by New Yorker Sam Newhouse, who never interferes editorially with his properties as long as they make money. If anything, the Tulane report stiffened the support of the Chamber of Commerce and city hall for a freeway, elevated





or not. It was the more sober Bureau of Governmental Research, concerned with the wrangling and impasse, that requested an emergency study.

For that study the bureau turned to the knowledgeable and politically astute planners, Marcou, O'Leary & Associates of Washington, D.C., already busy on a larger study of the Vieux Carré, due in June. With two-thirds financing provided by HUD, the bureau commissioned *Marcou-O'Leary* to study the impact of an elevated expressway on the Vieux Carré, but *not* to question its design or location.

In January, Marcou-O'Leary submitted their report—a last ditch solution which churned the New Orleans Establishment, realigning traditional allies and enemies. Not that it said anything about the expressway which had not been alluded to before in many earlier, now moribund city plans. The expressway was still there, massive and solid, ribboning past the Vieux Carré, 35 ft. in the air.

Covering new ground

Essentially, in fact, the political astuteness of their report lay in its respect for the client's mandate. It did not rehash pros and cons of the proposed expressway route. Instead, it advanced a dramatic new land use proposal which would make an elevated expressway folly.

The report proposed to incorporate the expressway corridor into a garden strip of plazas, multilevel hotels, small-scale residences, and shops on a 55-acre riverfront which parallels both the Vieux Carré and the central business district. At Jackson Square, the heart of the French Quarter, a pedestrian plaza would extend to the river's edge.

The proposal strikes at three problems plaguing New Orleans:

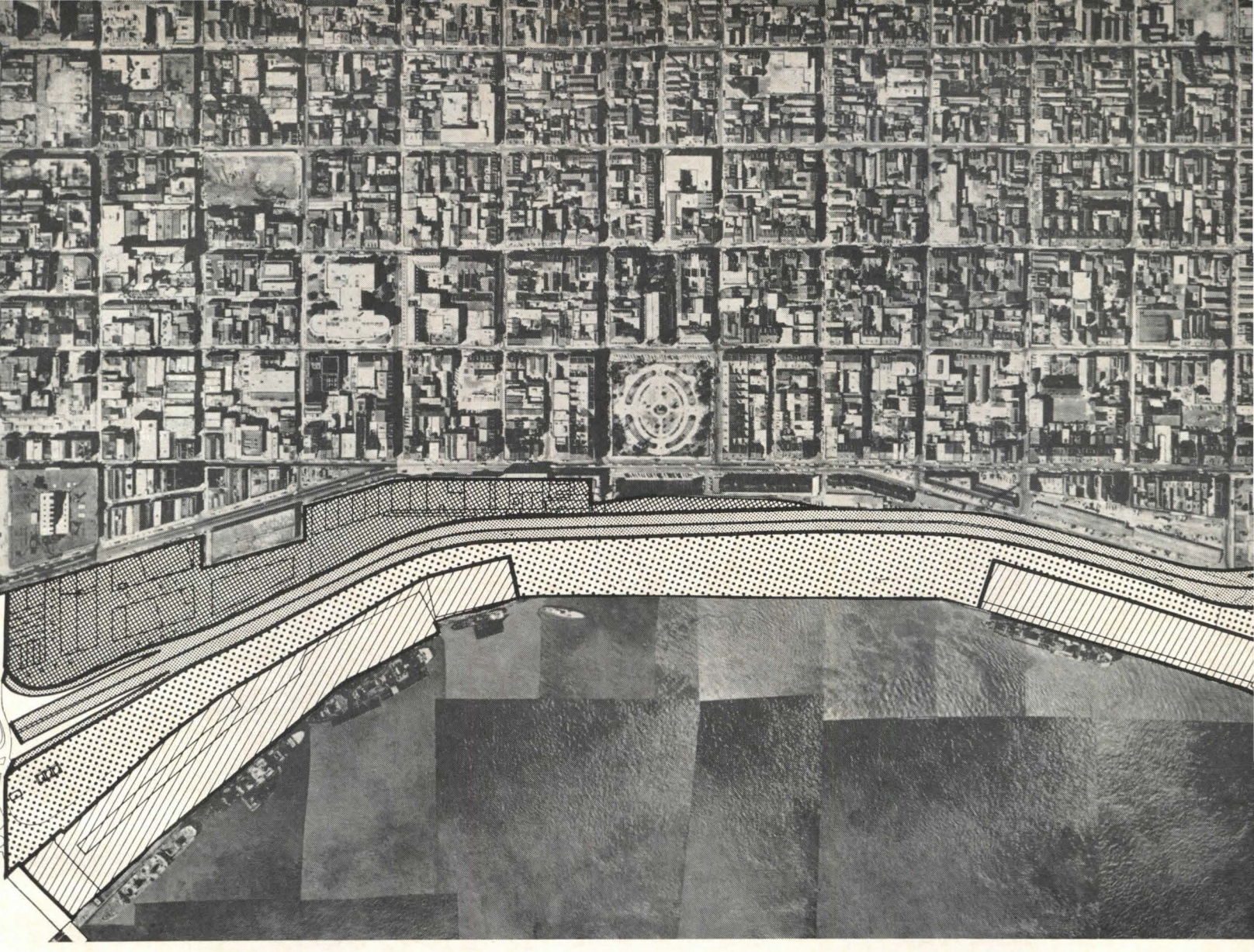
1. It would take the pressure off the Vieux Carré for additional land;

2. It would utilize land already in public ownership, crucial in this city prohibited by the state constitution from accepting Federal renewal funds;

3. By 1985, city real estate taxes on the 55-acre tract would increase from the present $52,500 to $490,000.

A fourth point, more implied than stated, was that an elevated freeway was economically unthinkable if that 55-acre strip was ever to be developed. An elevated freeway would severely limit the desirability of property adjacent to it—a concept to which city hall had already given tacit endorsement when it agreed to contribute $1 million to depress the expressway near the newly completed International Trade Mart tower.

What was most encouraging about the Marcou-O'Leary report was its reception. Seemingly it broke through the Magnolia Curtain, that curious combination of indolence and political self-interest which has settled so charmingly over the First Families of New Orleans. The conservative and cautious Bureau of Governmental Research, which commissioned the overall Vieux Carré study in the first place, announced after it came out that an elevated



The heart of the Marcou-O'Leary proposal is the multiuse redevelopment of a 55-acre riverfront strip, shown superimposed on the aerial view above, that would depend on keeping the expressway at grade level. The dark shading would be the first stage, the dots represent railroad property, and the hatching, docks. Instead of being cut off from the river, Jackson Square would be joined to it by a landscaped plaza (opposite photos).

PHOTOGRAPHS: Pages 55 and 59, Industrial Photographic Service. Page 58, Allen Photographic Service.

expressway was now untenable, and too threatening to *tout ensemble*.

The bureau countered with its own proposal: wouldn't a surface road be better, at least at Jackson Square? Paradoxically, the bureau slapped out at Marcou-O'Leary on their broader riverfront proposal as exceeding the limits of the study.

A dialogue begins

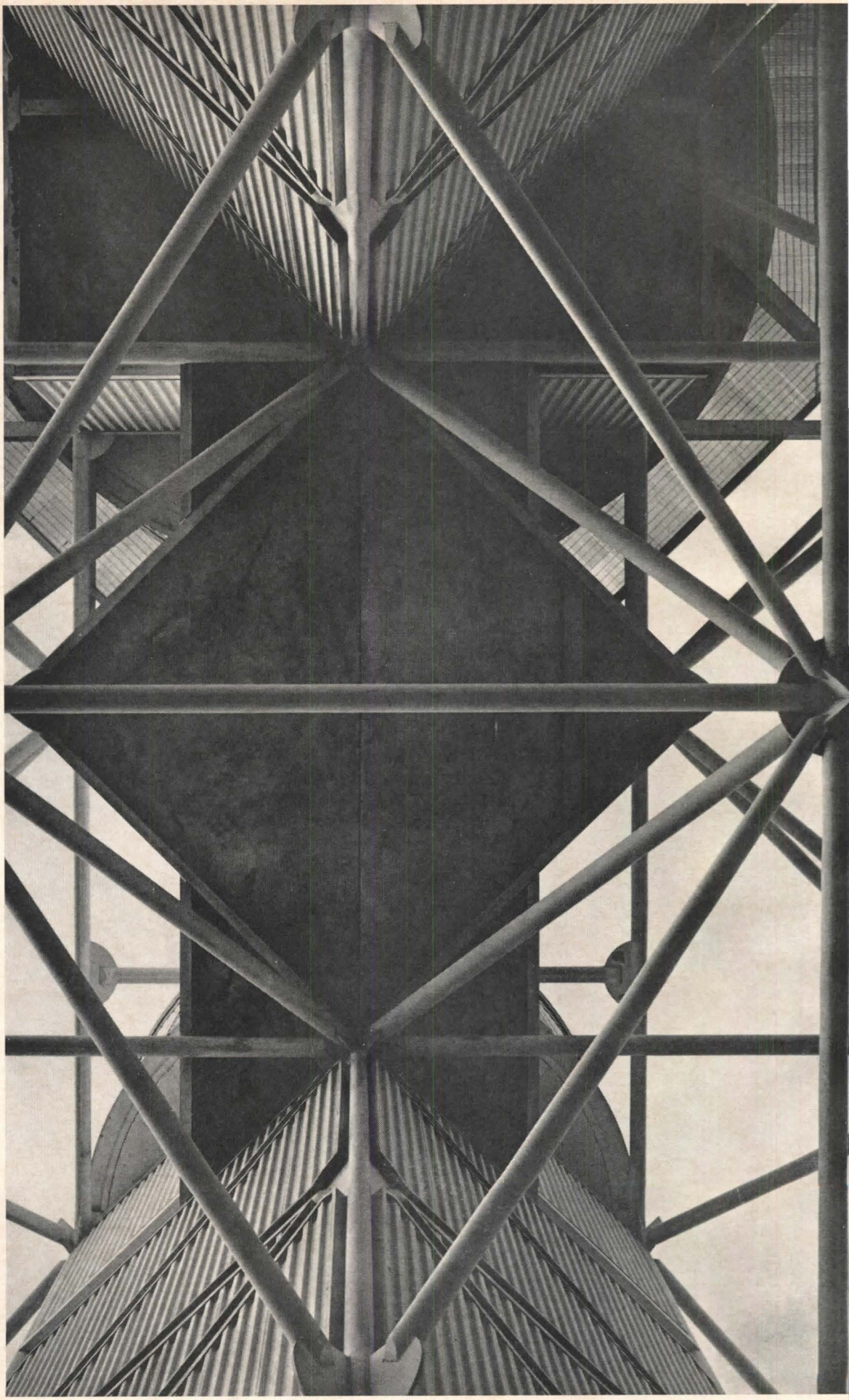
While there is little hope for immediate action on the riverfront proposal, Marcou-O'Leary have wrought the impossible in New Orleans: consideration from within the Establishment of an alternative, even if it is only that portion of the expressway which runs in front of Jackson Square.

Traditional antagonists to the expressway—the local and national AIA, the National Trust for Historic Preservation, the Louisiana Landmarks Society, and the Louisiana Council for the Vieux Carré—are generally, though not officially, pleased with Marcou-O'Leary's riverfront proposals and the bureau's suggestion for a surface route. True, it gives the Vieux Carré only half a loaf, which the Vieux Carré Property Owners' Association maintains is not enough. It has filed a declarative judgment against the Bureau of Public Roads, the acting secretary of commerce, the Louisiana Department of Highways, the governor, and the City of New Orleans, as illegally intruding upon "the quaint and distinctive character" of The Quarter. Whether the 1937 protective mandate of *tout ensemble* includes roads as well as buildings, the courts will decide.

The report has failed to alter the commitment of both the City Planning Commission and Louisiana Department of Highways to the elevated expressway.

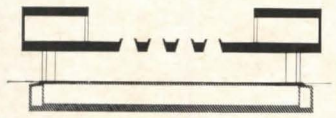
Perhaps the biggest boost for the report came from an unexpected quarter. Last month the Port Authority of New Orleans announced the route of another bridge across the Mississippi with ramps coming down onto Napoleon Avenue, a showplace boulevard of stately homes. The threat brought gentility and lace stampeding from the drawing rooms of the Garden District to a mass meeting of 800 people, more than any Vieux Carré meeting ever brought out. Perhaps an informed community dialogue is now beginning.

FOCUS



DOUBLE DOMES

An airy framework of steel pipe tetrahedrons (left) supports the double domes of Northwestern's new observatory, the first structure of the university's Linheimer Astronomical Research Center and the first building to go up on the 75-acre lakefill addition to its Evanston, Ill., campus. Skidmore, Owings & Merrill has designed the tetrahedral truss system to carry the two domed observation rooms (36 and 24 ft. in diameter, each housing a telescope), the control room joining them, and three working areas immediately below (all clad in corrugated steel). The completely independent exposed concrete framing of the lower level has buff Indiana limestone infilling.



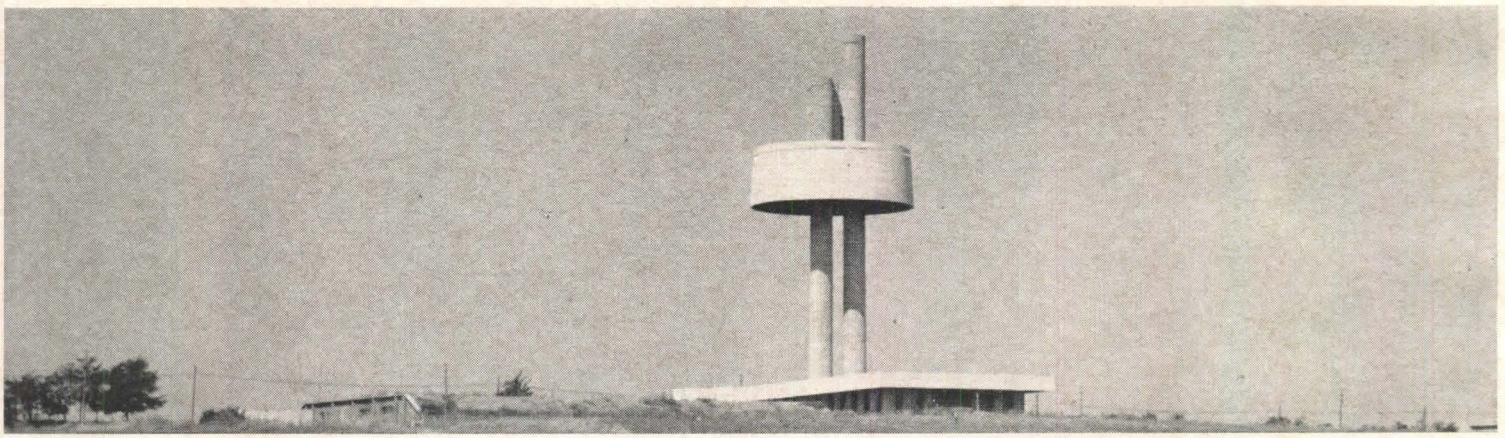
FOUR-FOLD FACADE

Except for the BIBLIOTEK sign on the front, Architect Erik Uluots' square library in Växjö, Sweden, presents identical white marble and glass facades on each of its sides. The ground floor, glazed from floor to ceiling, is a single 7,524-sq.-ft. space divided only by movable elements, furniture and partitions which are kept below ceiling level to maintain the transparency. The equally flexible floor above is windowless on the exterior and opens on a central outdoor court (section above) used for warm weather reading, and dotted with skylights serving the main level.

PHOTOGRAPHS: Page 60, page 61 (top), Orlando R. Cabanban. Page 61, Erik Uluots. Page 62, Dickey & Harleen Studios (top), Archivio Fotografico (bottom). Page 63, Balthazar Korab, Metro News Photos.

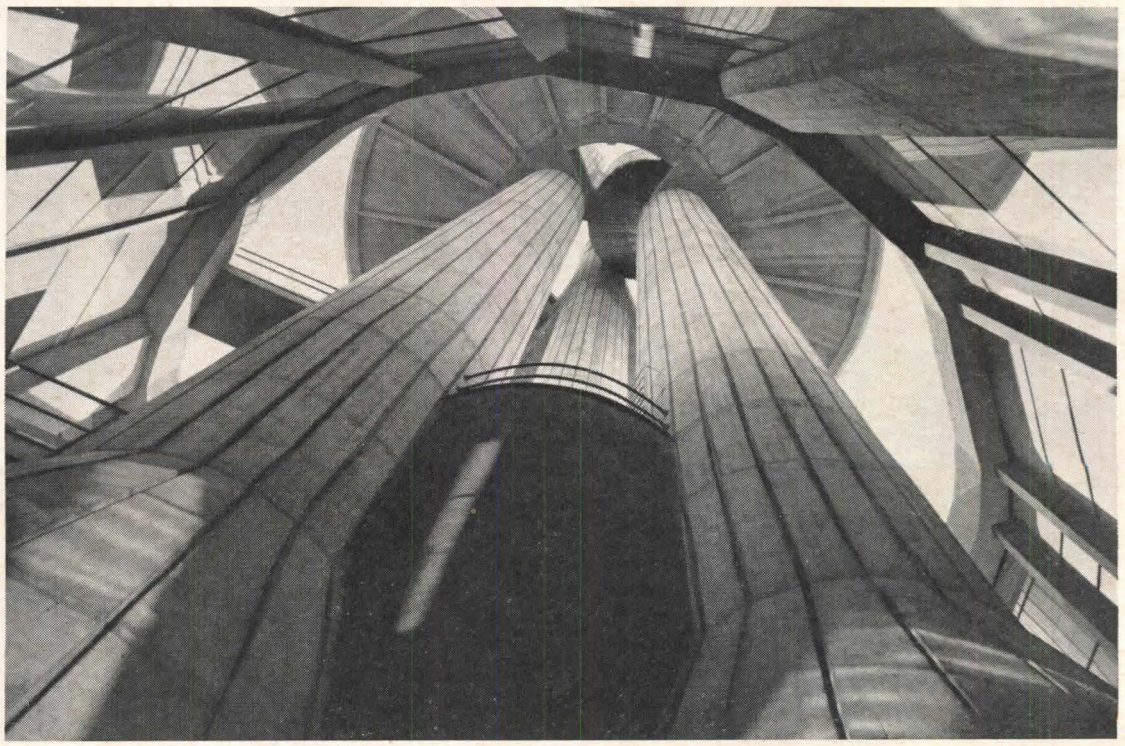
BAREFACED BRACING

Adding muscle to San Francisco's Golden Gateway Center (see July/Aug. '65 issue), the bold Alcoa office building by Architects Skidmore, Owings & Merrill looms 24 stories above a two-story, block-square plaza. The 589,578-sq.-ft. structure, soon to be completed, is steel framed with an enormous diagonal grid of exterior bracing standing 18 in. away from the aluminum and glass window wall. Beneath the plaza are three levels of parking for 1,300 cars, and on top are two claw-shaped structures—a bank (left) and a restaurant (right)—and landscaped malls.



TRICOLUMNED WATERWORKS

Three sturdy, hollow columns shoot skyward, emanating from the control room foundation and passing through the doughnut-shaped reservoir (bottom photo) of the Cecchina water distributing plant located on the northern outskirts of Rome. All three support the reservoir: one also houses an elevator, one conducts water, and one widens to become a piezometer to measure the water pressure. Architect Francesco Palpacelli's sculptural concrete *landmark seems* to say that all utilities need not look "utilitarian."



PARK-LIKE PLANT

It was opposed as a potential eyesore but now, after completion, Chicago's Central District Filtration Plant is considered a visual and recreational asset by lakefront owners. The unobtrusive 51-acre complex is graced by 10½ acres of well manicured park land. A network of walkways crisscrosses the public oasis; five circular fountains boast electronically programmed displays of water and steam; and a deck cantilevered over Lake Michigan (right) provides what is probably the best view of the Windy City's skyline. Designed by Stan Gladych of C. F. Murphy Associates, the low, symetrically sited structures shelter the world's largest water treatment plant.

PHILADELPHIA RENEWS RENEWAL

A sweeping report, four years in the making, calls for a new kind of urban strategy —a coordinated, citywide attack striking at the roots of the city's problems

As the nation's acknowledged leader in the field, Philadelphia is in a unique position to know that urban renewal is not a panacea. After 15 years as the pacesetter in U.S. renewal and urban design, Philadelphia, by its own recent admission, has revitalized only 12 per cent of its areas most in need of help.

The admission was contained in a remarkable document released January 31 which lays the battle plan for a new kind of attack on Philadelphia's ills —a plan that would strike at the city's social, economic, educational, and physical weaknesses in one coordinated effort. If the city moves forward along the lines suggested in the document, it may well become a national pacesetter in a new kind of urban strategy.

The 90-page document, entitled "Community Renewal Program, Major Policies and Proposals," is the summation of four years of intensive research incorporating some 19 CRP technical reports, scores of studies by city departments and consultants, and the views and recommendations of numerous public and private organizations. The effort was led and coordinated by a CRP committee chaired by William L. Rafsky, Philadelphia's former development coordinator, and composed of the heads of the city's five major departments involved in renewal, including Planning Director Edmund N. Bacon.

"If the CRP differs markedly from earlier attempts to analyze renewal requirements and processes," states the report, "it differs in its greater emphasis on social and economic implications of renewal, and in the use of sophisticated methodology both for analysis and for the recommended ongoing renewal program. Although the report fully covers physical renewal—the starting point for the [Federal] Community Renewal Program grant—the concept of renewal in this report includes job training as well as land for industry, family counseling service as well as neighborhood parks, expanded educational programs as well as new school buildings, equal opportunity and mobility in housing choice as well as public housing."

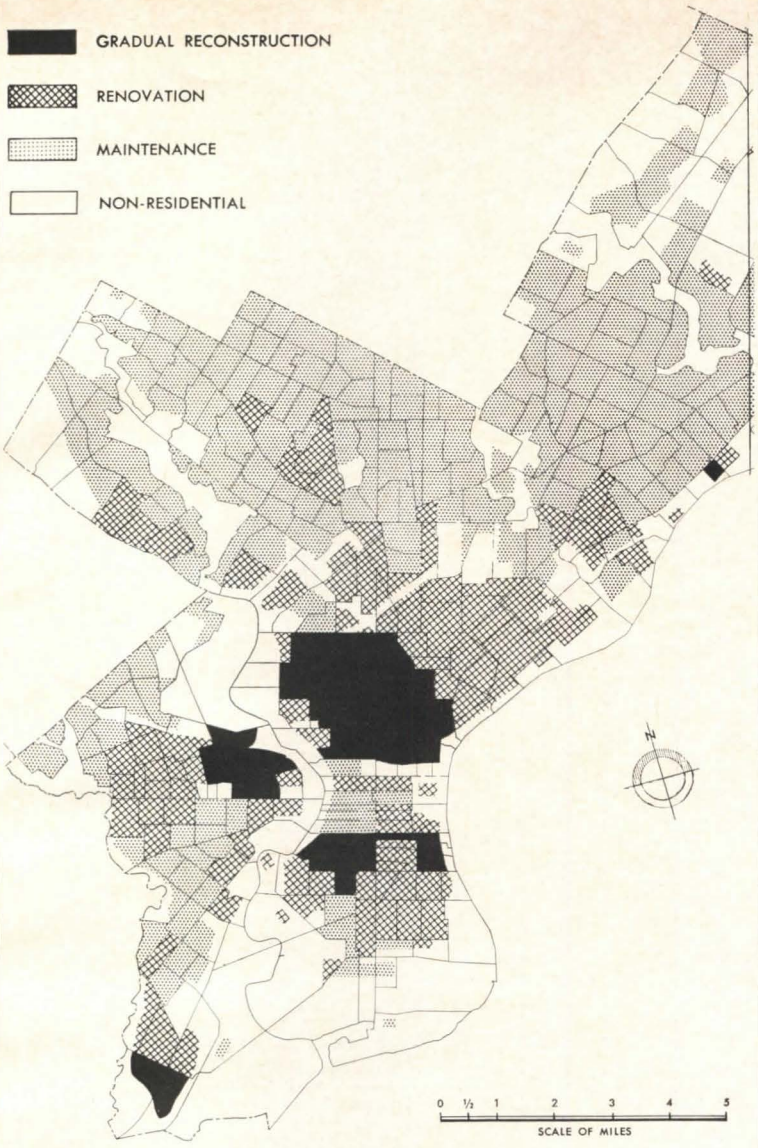
To underscore the essential necessity for such an interrelated, broad-gauged approach, the report contains the "Need for Renewal" map reproduced at right and the statistical data that have been translated into the bar graphs. A quick comparison makes it readily apparent that employment, income, educational, and racial problems go hand and hand with housing conditions and needs.

Under the CRP plan, the programs of all civic agencies would be aimed toward a single, comprehensive set of urban policies and goals.

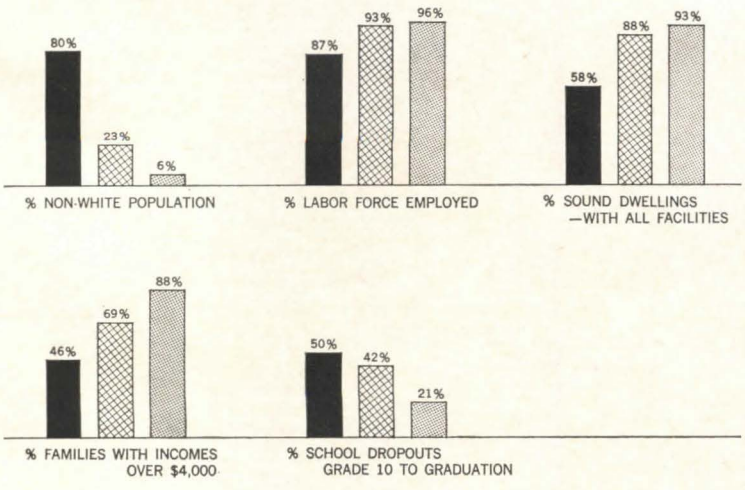
"Although much has been accomplished to renew the face and spirit of the city," notes the report, "the Community Renewal Program recommends another major change in policy to express a broader concept of renewal." That change, as put forth in the report, would have two important elements: a "development program," which would draw together the work of all city agencies in a systematic, coordinated plan to meet specific citywide objectives and priorities; and a "distributed approach," which would allow a high degree of flexibility for attacking problems where and as they exist in the city.

Not only would the new development program coordinate the work of the city's diverse agencies, it would also bring into the picture the once grandly autonomous board of education which historically made it a practice to run counter to whatever was proposed at city hall. This bottleneck was broken last year after the state legislature made the mayor, rather than a group of judges, the appointer of board members. Under the CRP program, the school district would join with the city in adopting the same set of objectives.

Primary responsibility for the development program would be



The broad-scaled plan of action for Philadelphia's proposed Community Renewal Program is based on the premise that housing needs are inextricably related to social, economic, and educational problems, and that all must be dealt with as a whole. The premise is substantiated in the CRP report by a comparison of the map above, showing housing conditions throughout the city, and the statistics represented in the bar graphs below. In each case, a comparison tells the same story: the degrees of human problems in areas other than housing are in direct proportion to the condition of the housing stock in every sector of the city.



placed under the city's director of finance, who would set up a "program budgeting system" patterned after the sophisticated techniques introduced by the Defense Department and recently adopted by all agencies of the Federal Government.

This system, employing complex data processing and analysis, would incorporate all the basic elements of the development program (including the roles and interactions of all government and private forces involved), evaluate them against official policies and goals, and automatically convert decisions into operating budget terms.

This single system of analysis and review, claims the report, would add "a new dimension" to the city's efforts: "The objective of raising income, for example, may require different priorities in different places. One area may need a school building with job training facilities; another may need vigorous extension of public assistance coverage to eligible persons not receiving aid; a third may need a neighborhood action center through the anti-poverty program; a forth may need housing rehabilitation to stabilize a transient community which is too fluid to accomplish any useful improvement."

The distributed approach envisioned in the report would be a dramatic departure from previous practice—for Philadelphia as well as other cities. Instead of concentrating intensive, painfully slow renewal processes on small, designated sections of the city, leaving other troubled areas to shift for themselves while they await their turn, the distributed approach would carve out a large, single "theater of operations" covering under one blanket all the city's areas most in need of renewal treatment (see map page 67).

This "theater" would be Philadelphia's only "community improvement area," and renewal powers and programs would be applied to any part of it, wherever the need demanded.

As the report makes clear, the current approach simply has not been adequate. If renewal were to continue at the current rate, the report glumly predicts, "conservation and clearance projects could not be extended throughout the problem areas in less than 100 years."

Through the distributed approach, states the report, "action will take place in many neighborhoods, giving each the particular kind of assistance needed and appropriate, focused directly on areas which are likely to be readily responsive or in which public or private market forces are clearly favorable."

Moreover, the distributed approach should serve to encourage greater involvement of local residents. "It is essential," states the report, "that the people affected by deprivation have a strong voice in planning renewal programs which will involve them, and an equally strong role in carrying out renewal programs. The flexibility of the distributed approach permits adaptability in fitting programs to needs.

"In one area people may regard housing rehabilitation as their greatest need; in another area the same kind of people may give priority to education and job training. If each receives the program emphasis it wants most, area residents are likely to participate and cooperate. . . . The application of programs most desired by the community greatly increases the likelihood of success."

A "housing package," one of three program components, would deal with the related problems of people, as well as with shelter itself.

Under the new development program, the possibilities of mixing various kinds of projects in different combinations to meet specific needs (but always with the overall citywide objectives in mind) are almost limitless. To assure the necessary coordination, the plan is broken down into a trilogy of "program packages"—one package for housing, another for income, and a third for education. Each package deals primarily with its own field, of course, but also borrows

PHILADELPHIA RENEWS RENEWAL

freely from the others in areas that affect it.

The housing package, for example, does not stop with programs for increasing and improving the city's housing stock. It also attacks the barriers that keep minority families from moving into white-dominated areas where better housing is available; the burdens placed upon low-income families who are forced to spend a disproportionate share of their incomes for housing; the personal suffering and breakdown of neighborhoods caused by relocation; and the shortage of community facilities and social services in the poorer sections of the city.

The housing package, in fact, pays as much attention to the problems of housing cost as it does to housing condition. Although some 80,000 substandard units still exist in the city, Philadelphia's past programs have gradually improved the housing stock, notes the report, but "the problem of housing cost is growing worse with time because housing prices and rents are rising faster than income for low-income households." If current trends were allowed to continue, the report predicts, by 1970 there would be a shortage of some 45,400 decent housing units priced for sale or rent within the means of poor families.

Philadelphia would employ a variety of devices to more than double its present stock of housing for low-income families in five years.

The report puts forth "three ways to close the gap": raise income through employment and business development programs; provide low-cost public housing; and reduce the cost of private housing.

The report proposes that no less than 21,500 public housing units be added to the city's current stock of 14,300 within the next five years. Of this total, 4,000 would be conventional public housing units, but with the emphasis on small, scattered projects. Another 5,000 units would be made available under the 1965 Federal housing amendment that permits cities to lease units in private apartment structures to low-income families, using public funds to make up the difference between the market rent and the amount families can afford.

The report's forecast counts heavily on a heretofore small but promising city program of salvaging thousands of used houses for the poor.

But the bulk of the increased stock of low-income units would come from the city's experimental but highly successful "used-house program," under which the housing authority buys dwellings on the open market, renovates them if necessary, and then leases them to tenants who are eligible for public housing. "After several years' experience with this program on a modest scale," states the report, "the city is moving into mass production in order to attract large, skilled contractors for renovation, and to gain important economies of scale." Thus the report estimates that 12,500 units could be gained under this program during the next five years.

The used-house program offers a number of unique advantages that contribute to the overall CRP goals. It distributes low-income families throughout established neighborhoods, which helps to break down economic and racial barriers. It introduces renovation and maintenance to deteriorating neighborhoods, encouraging other residents to upgrade their property. It is a quick and relatively cheap way of gaining critically needed housing spacious enough to accommodate large families comfortably. And now, under another 1965 Federal housing amendment, tenants whose incomes rise above the limit for public housing are given the right to buy the homes.

Still another promising device for producing low-income housing is being used by the quasi-public Philadelphia Housing Development Corp. Working with a $2 million revolving fund from the city, PHDC is concentrating on rehabilitation in the city's older, inner areas bypassed in conventional financing practice.

PHDC is offering mortgage insurance at low rates to owners, corporations, and nonprofit groups for whom FHA insurance is not available, or as a supplement to FHA. Sponsors are required to ally themselves with neighborhood organizations capable of coordinating social services with the projects. The report estimates that PHDC programs would add about 2,250 low-cost units within five years. An additional 2,100 units would become available through use of Federal rent supplements.

The report puts forth programs for overcoming the special housing problems of Negroes, but it stops at the borders of the city.

Significantly, the CRP report recognizes that the programs put forth in the housing package will not, in themselves, counter the social forces that work specifically against the city's 535,000 Negroes in obtaining decent housing. The report calls for extending both city and state fair-housing laws to cover the sale of owner-occupied single family houses, coupled with "a clear, firm assertion of the principle of equal opportunity by public authorities." These two approaches, asserts the report, "can lead most citizens to acceptance, if not support, of the principle."

Beyond these, the report proposes a variety of other programs aimed at breaking down barriers against Negroes: a yearly test check of every real estate firm in the city to assure compliance with fair housing laws; favoring with city business those real estate firms and builders who "show the strongest response to both the spirit and the letter of the law"; forming cadres of volunteers in white communities to build a climate of acceptance in advance of attempts by Negroes to move in;

and giving intensive city support and assistance to Negroes willing to pioneer at integrating all-white neighborhoods.

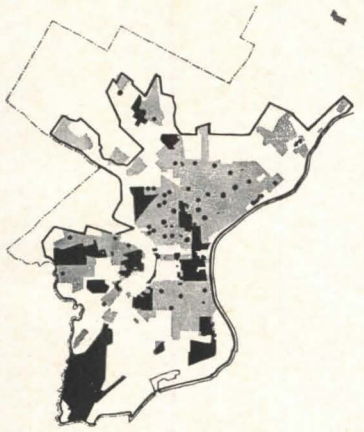
The report's section on the Negro housing problem borrows freely from one of the 19 technical reports, a six-month study conducted for the CRP last year by housing expert Charles Abrams. But it stops short of one of Abrams' key proposals: a program, operated by the Philadelphia Housing Development Corp., to build, buy, or lease housing in the suburbs for Negro and low-income families.

"The PHDC is uniquely poised to make a demonstration of nationwide significance in Philadelphia's suburbs," states Abrams in his report to the CRP. Though PHDC operates from public funds, he points out, it is essentially a private corporation not limited by the city's charter requirements.

"If PHDC can establish its right to build or finance building in the suburbs," Abrams asserts, "it will have broken one of the great housing bottlenecks and demonstrated in the United States what England, Sweden, Canada, and other progressive countries have been doing for years." There is no direct precedent for such a program, but Abrams points out that it is common for cities to purchase property outside their limits for reservoirs, sewage disposal plants, and the like. The courts, Abrams feels, "might well see a parallel between the older established extraterritorial functions and housing, particularly where the housing is built by an independent corporation."

But apparently the CRP committee does not share Abrams' optimism. Its report acknowledges that the suburbs represent a barrier to Negro progress, but it offers no programs aimed at opening up suburban housing. The only suggestion put forth in the report is one that "the state establish a new housing agency with authority to build low-rent public housing in suburban communities"—a field in which the state heretofore has not shown the slightest interest.

The future course of Philadelphia's urban renewal program can go one of two ways, notes the CRP report. The first, represented by the map above, would continue present practice by designating specific sections for intensive renewal (crosshatched areas), while other sections in need of renewal (shown in gray) are ignored until their turn comes up.



The alternative (map above), strongly recommended in the report, would be to declare the entire area contained within the solid black lines a single "community improvement area" and apply renewal, in an almost limitless combination of approaches, wherever, and in whatever way, it is most needed. On both maps, the city's urban renewal projects completed, underway, or budgeted are shown in black.

Public debate of the complex CRP report has focused on one recommendation: a "development czar" over three of the city's key agencies.

Prominently displayed on the cover of the report are the words "For Discussion." But so far only one recommendation, contained in a single paragraph of the report, has received the kind of scrutiny and debate that the CRP committee hoped would be given to the entire program. That recommendation calls for the appointment of a single executive over three separate but interrelated agencies that deal with physical development: the housing authority, the redevelopment authority, and the department of licenses and inspections.

The addition of such an executive, quickly dubbed a "development czar" by the Philadelphia press, was opposed in varying degrees by all three of the agencies affected. The redevelopment authority let it be known that it had voted against the proposal; the housing authority called it impractical; and the commissioner of licenses and inspections said he liked the idea in principal, but thought its "form and scope" should be changed. "If the proposal is a good one," said Joseph W. Brown, chairman of the housing authority's board, "why not include the city planning commission and the Philadelphia Housing Development Corp.? They are as much a part of redevelopment as we are."

The Citizens Council on City Planning, terming the proposal "the single most important development decision facing the city in years to come," announced it would seek to make it an issue in Philadelphia's upcoming mayoralty campaign. Mayor James H. J. Tate, who supports the change, will be a candidate for reelection.

Anticipating the ruckus, CRP Chairman Rafsky issued with the report a statement rebutting what he called "misleading reports" published about the proposal. First of all, he noted, the powers and functions of the housing and redevelopment authorities, both established under state statutes, would remain unchanged—"and there is no possibility of loss of 'life' or becoming a 'puppet'." (The "czar," however, would take the job of the license commissioner.)

Moreover, he said, the executive directors of the two authorities would not lose their positions, nor would the staffs be changed—"but there would be greater efficiency because duplication would be eliminated." Rafsky, who now serves as executive vice-president of the Old Philadelphia Development Corp., ruled himself out as a candidate for the job. "At no time," he said, "have I expressed an interest in the position proposed, nor am I available for it."

The Philadelphia program needs strong leadership—and a "full public discussion" of all the report's proposals, said Rafsky.

"The future effectiveness of Philadelphia's programs in housing, renewal, and development depends on strong leadership," Rafsky asserted. "Throughout the country, city after city is strengthening its administrative mechanism to bring these operations closer to the elected officials. This is reflected most strongly in the Federal program of model cities, where clear-cut and unified direction of physical and social renewal programs is essential if a city is to qualify."

Rafsky concluded: "Philadelphia citizens should face up to this issue without 'red herring' allegations of forcing agencies to merge or become puppets. We welcome—indeed we insist upon—full public discussion."

In essence, if not in all of its details, Philadelphia's new CRP program has the kind of breadth and responsiveness to human need that our cities must adopt if they are ever to overcome the urban crisis. But first there needs to be a full public airing of the entire program, rather than just the segment that threatens the municipal balance of power.

—James Bailey

NERVI'S GILDED GATEWAY

The FORUM recently conducted a poll of the first three New York architects it met on West 57th Street. The questions were:

1. Where is Pier Luigi Nervi's first U. S. building?
2. Have you been inside?

Two out of three answered the first question (the third was quite rude about it, actually) but none said yes to the second. The building, of course, is the George Washington Bridge Bus Terminal, between 175th and 176th Streets on the very same island of Manhattan.

It is true that the poll could not be called scientific. It must be acknowledged also that few New York architects venture that far uptown, and fewer still go to New Jersey, which is where the George Washington Bridge inescapably leads. Still, the results do indicate that the terminal enjoys a surprising obscurity for the work of such a celebrated figure. A search of professional literature substantiates the findings: the magazines greeted Nervi's design with illustrated enthusiasm, but let the building's completion in late 1962 go by without mention.

Scholars who seek to solve this intriguing riddle are advised to start by taking an east-bound bus from Fort Lee, N. J., admittedly a sacrifice. You will pass, first of all, beneath the great latticework towers of the bridge which Le Corbusier reportedly called New York's greatest work of architecture. Ahead is the terminal itself, looking like some great hydra-winged bird at rest. The man in the next seat will be reading the *New York Daily News*.

At the end of the bridge, some autos will curl off to the riverside expressways; others will swoop under first the terminal, then a series of four air-rights apartment towers—the complex is, in fact, one of the boldest amalgams of buildings and transport yet built in the U. S. The bus will turn onto an upward ramp, stop beneath Nervi's mighty trussed roof, and you will go down the stairs and into the building. Then you will understand why so few architectural pilgrims are to be found here.

The Nervi terminal is part of a remarkable spine of buildings and transportation arteries that cuts across the northern end of Manhattan (opposite): first the bridge; then the terminal (above), taking off bus traffic as autos pass beneath it and four apartment towers (below); and finally the staggering tangle of the Harlem River bridges and highways.

THE arriving passenger's first experience of the terminal is all Nervi, or very nearly so. The bus deck, topmost of the terminal's three levels, is a dramatic display of virtuosity in the architectural uses of exposed concrete.

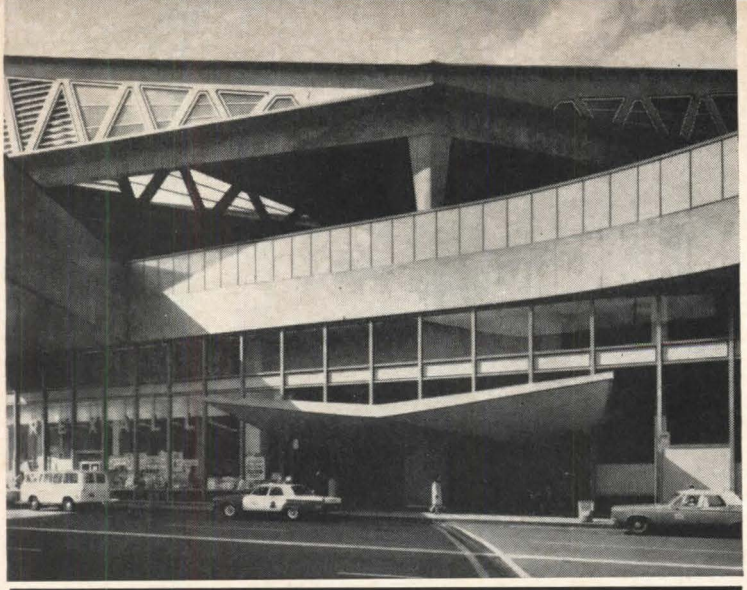
Downstairs, the experience is all Port of New York Authority, Nervi's client and design collaborator. The Port Authority's approach to the decoration of the enclosed spaces was to cover every inch—notably including the sculpted columns—with the brightest and shiniest materials it could find (lower right). As a result, the interiors have all the charm of a public restroom in a Miami Beach resort.

This gaudy show is the more peculiar because it was the Port Authority's engineers who called upon Nervi in the first place. The terminal was their first exposed concrete building, and they decided to go to the top. The idea, as Chief Engineer John M. Kyle and Resident Engineer P. G. Nicholson wrote during construction, was to "complement the esthetic beauty" of Othmar Ammann's masterful bridge.

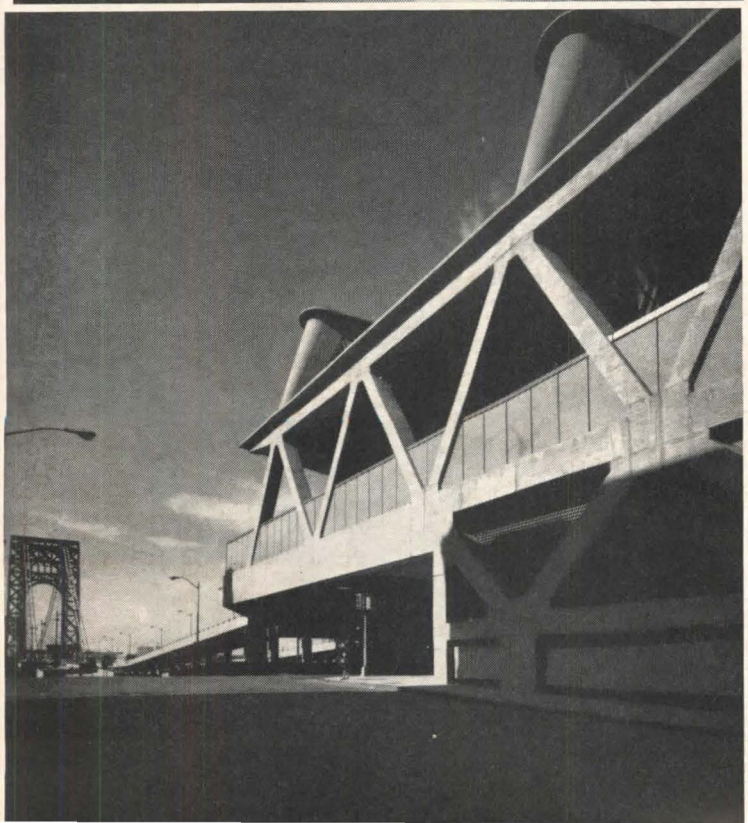
Nervi's response was to abandon the delicate filigree stamp of his famous Italian constructions in favor of burly trusswork. He designed the roof of 26 giant slices of cast-in-place concrete pie, each 92 by 66 ft. Fourteen of the slices are raised on angular bents to let fresh air blow through the fumey bus deck, giving the roof its winged aspect. The columns, sculpted by the loads they carry, rise 17½ ft. from slender, space-saving base to wide bearing top.

Most of the craftsmanship put into the soaring roof structure escaped the Port Authority's cosmetizing hand, but there were a few post-Nervi improvements even on the upper deck. The natural ventilation that was so large a part of the original program proved, in the first winter of the terminal's use, to consist mainly of freezing winds off the Hudson. The Port Authority found it necessary to glaze some of the triangular openings and to erect windbreaks. They were, of course, fashioned of baby blue enamel with plastic canopies.

Nervi's sturdy trusswork dominates the terminal's open bus deck (opposite and above), despite such intrusions as the windbreaks (left in photo above) that protect waiting passengers at the river-facing west end. Downstairs (below), Nervi virtually disappears in the glare of blue and yellow mosaic tile and highlighted Venetian travertine flooring.



Another contrast marks the terminal's encounter with the city. At its Broadway entrance (above), the fundamental strength of the structure is negated in terms of both shapes and materials. But it emerges clearly on the side streets (below), where Nervi's angular framework c rries on its intended dialogue with the lattice towers of the bridge.



THE terminal's presence in the city, amidst the low brick monotony of Washington Heights, is that of a bristling warship moored among tugboats. Where the prow meets upper Broadway, the Port Authority has once again sought to make its building cheerier, this time by filling in between the concrete with glass and metal storefront and Rexall signs. An upswept canopy issues a chic welcome at the entry.

But on the narrow side streets, Nervi resumes command. Along these block-long walls, muscular concrete diagonals engage in a bravura balancing act that ends in support of the wingtips of the roof high overhead. There has been some unfortunate infilling here too, but the strength of Nervi's structure easily prevails.

Some spectators at this display, in fact, have questioned whether Nervi's structure is flexing more muscles than it really needs for the task at hand. Conventional plate girders might have served as well as the elaborate trusses that roof the bus deck, and at a somewhat lower cost (just how much of the terminal's $15 million cost is Nervi concrete and how much Port Authority mosaic and terrazzo is impossible to determine).

Seen against the towers of the bridge, however, the Nervi roof dispels any regrets that it is not a more strictly utilitarian structure. Nervi has fulfilled his mandate to bring the drama of the bridge into the city, thus giving New York its only symbolic gateway at a major point of entry. The Port Authority engineers can be forgiven most of their shiny tilework (but not quite all) in gratitude for bringing this talent to an American city's shores.—DONALD CANTY

FACTS AND FIGURES

George Washington Bridge Bus Terminal 178th Street and Broadway, New York, N.Y. Owner: Port of New York Authority. Architect: Pier Luigi Nervi. Engineers: Port of New York Authority. General Contractor: W. J. Barney Corp. and William L. Crow Co. Building area: 287,000 sq. ft. Cost: $15,000,000.

PHOTOGRAPHS: Pages 68, 73, Port of New York Authority. All others, J. Alex Langley

BOOKS

SIGN, IMAGE, SYMBOL / THE MAN-MADE OBJECT / MODULE, PRODUCTION, SYMMETRY, RHYTHM. "Vision + Value" series. Edited by Gyorgy Kepes. Published by George Braziller, New York, N.Y. 1966. 282 pp., 232 pp., 232 pp., resp. Illustrated. 9 by 11 in. $12.50 ea.

REVIEWED BY JAMES MARSTON FITCH

It would be impossible to review these three volumes in any conventional fashion. They include 53 articles, with a total of some 750 pages. Each volume weighs over 3 lbs., with dimensions of 9 in. by 11 in.; which means it is too large for pure text though suitable for many illustrations; hard to handle, even with both hands; and hence difficult to read unless laid flat on a desk or reading stand. But entirely aside from physical configuration, on the basis of subject matter alone, this series (there are three more just out!) strikes me as a preposterous enterprise. It is preposterous because it purports to "illuminate" all sorts of disparate phenomena, covering a range of enormously divergent concepts, through the single "unifying" channel of vision. The result is a metaphysical abstraction of real relationships, a consistent distortion of scale and magnitude that is authentically stupifying. The only unity here is the fact that all words and all pictures can ultimately be grouped together on a printed page. Books like these make one question the value of the printed page and the photographic facsimile—if not, indeed, the uses of literacy itself.

This accomplishment is all the more remarkable because the editor is one of our most distinguished teachers and practitioners of visual design; and the papers he has collected are by a galaxy of—for the most part—established scientists, artists, critics, and architects. The authors seem all to have written especially for this series—that is, they have agreed to analyze their respective fields from the "unitary" perspective of visual perception. Yet it is typical that not one of them finds it necessary to remind the reader (or himself) that the pictorial material presented is but a two-dimensional *facsimile* of the objects, processes or phenomena described; that they lack the other visual attributes—color, movement, size—of the original; or, finally, that their visible aspect represents at best only one facet of their multidimensional reality. The result of this approach seems to me to be not a widened but a frighteningly narrowed-down, two-dimensional, keyhole view of the interrelations of objective reality.

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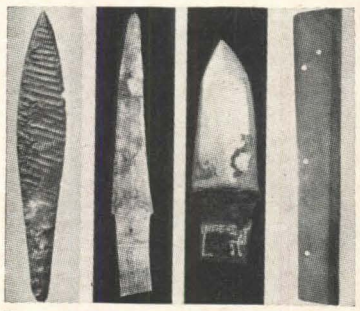

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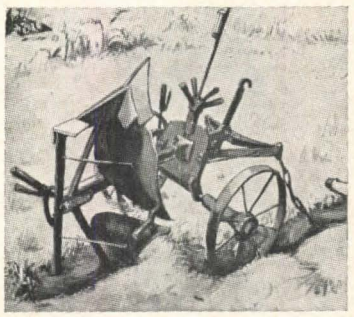

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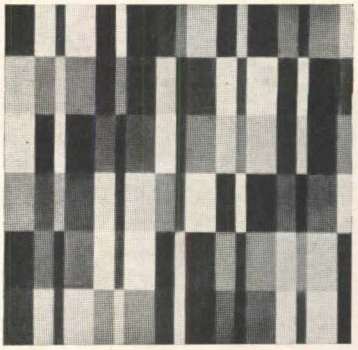

5.

The very format chosen by Professor Kepes permits—if it does not actually encourage—verbal and (if one may say so) visual semantics. Many of the papers posit analogies (1 & 2) whose only validity rests upon superficial or accidental similarities between *photographs* of objects, not between the objects themselves. Many of the papers are permeated with semantical propositions, as when Gillo Dorfles, the Milanese critic, says that "certainly, among the prime impulses of man is the impulse *to create objects.*" Does it really illuminate matters thus to lump together primitive man and avant-garde artist, flint knife (3) and electric refrigerator, wooden plow and Cellini bronze? It is simple nonsense to argue that the main motivation of the Milanese has ever been to create "objects." In prehistory they created the weapons and *graffiti* of Val Canonica; today they produce the autos, skyscrapers, and opera for which the town is famous. It does not help our grasp of history to recast it in a form so obviously designed to buttress the position of a miniscule group of "advanced" artists.

Philip Morrison, the famous atomic physicist, and C. H. Waddington, the great English biologist, contribute two excellent papers—precise, elegant, and disciplined—on "The Modularity of Knowing" (19 pages) and "Modular Principle and Biological Form" (18 pages). But the French painter, Jean Hélion, is

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James Marston Fitch is Professor of Architecture at Columbia University. He has authored several books, including **Architecture and the Esthetics of Plenty.**

alloted 24 pages to defend and explain the black-and-white facsimiles of his paintings **(4)** which indicate an only moderate talent, pleasant but derivative. The pages of his text are full of apothegms, pretentious and empty. It might have been more illuminating simply to have given us one or two of his paintings in full color prints. Sir Herbert Read contributes a magisterial paper (22 pages) on "The Origins of Form in Art." The Swiss painter, Lohse, is allowed 35 pages for a verbose, self-indulgent verbal defense of his own painting, ending with such "theoretical remarks" as these: "Only open secrets are efficacious . . . elements are shorn of their individuality and become objective . . . the tectonic areas must be developed in such a way that they can contain what does not yet exist . . . color shapes form . . . form is anonymous." Since (to judge by the black and white reproductions) his painting **(5)** derives almost wholly from Mondrian, this ornate rationale seems entirely irrelevant. And much the same thing must be said of the English constructivist Anthony Hill, whose simplistic compositions are too apparent to require any explication at all.

Erno Lendvai, a Hungarian musicologist, gives us a serious, principled analysis of the music of Bela Bartok. But he is immediately followed by the American composer, John Cage, with 12 pages of elliptical nonsense like this:

the copperhead strikes only one hunter. The others go on about their business. Again last night, the bird, was it blinded? Was that my purpose in killing it?

Ad Reinhardt (who is no buffoon at all) is here with a familiar piece of his buffoonery called "Art in Art is Art as Art." Frederick S. Wight (museum director turned painter) closes his piece "The Object as Self-Image" by confiding that he is at present:

concerned with moons and suns because they conveniently hang in the canvas, and are simply there, with some radiation of their own. Given a chance, they distort themselves into stand-ins for heads . . . .

6.

7.

Exposed to such radiation, a solid art-historical piece like that by Theodore M. Brown on Rietveld **(6)** cannot escape distortion. How can he *not* be diminished by juxtaposition to such rampant frivolity?

Despite reams of such self-indulgent exposure, many of Professor Kepes' contributors have turned in papers which range from the informative to the fascinating. Why, then, is the total impact of this series so much less than the sum of its parts? One of the contributors, Painter Frances Molnar, perhaps unwittingly gives us a clue:

A canvas on which someone has poured a bucket of paint may be hung at the same time as a canvas without a drop on it. Everything, therefore, can be considered as a work of art. If this is so, then there is no longer such a thing as a work of art. If everybody is Peter, then Peter does not exist.

This is one of the keys to Kepes' dilemma: if everything included in these volumes is to be considered as equally significant—Morrison's molecules and Cage's copperheads, Hill's constructions and Waddington's single-celled organisms, Dorfles' "objects" and Henry Dreyfuss' symbols for industrial use—then nothing will be significant. If we are to accept the fact that Sir Herbert's opinions are exactly as important as those of the black-jacketed motorcyclist Henry S. Stone, Jr. ("I wanted the funkiest, superdoopiest, out-of-sightest motorcycle **(7)** in the world because I had become ensnared in the mechanical, emotional, god-knows-what-else-all-bag . . .)—then Kepes runs the risk of dooming his whole series to stunning triviality.

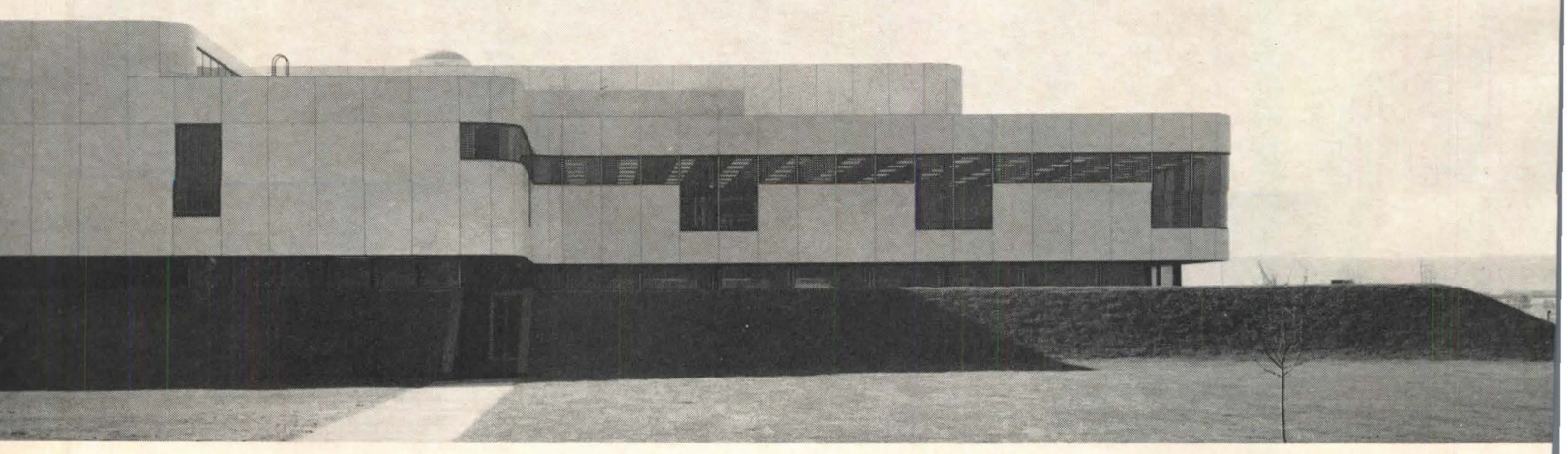
But it seems to me that the ultimate source of Kepes' error lies far deeper than his civil-libertarian position as editor. By his use of words and pictures to divorce the visual aspects of the world from their complex, multi-dimensional matrix of sensual reality, he ends by violating the perceptual continuity of existence. In experiential reality, motorcyclists and copperheads, molecules and musical notations, paintings and city plans are *not at all comparable phenomena, only their photographic facsimiles are.* Such a conceptual device as that employed by Kepes and most of his authors seems to me hazardous for the ordinary literate layman, dangerous for the artist and absolutely disastrous for the architect or designer of Dorfles' "objects." For it tends to place them all, conceptually, in the role of spectator. It implies that man exists in some metaphysical dimension quite separate and apart from his artifacts; that his only relationship with them is of passive exposure; that this occurs largely or exclusively along the narrow channel of vision; and that the whole experience is quite unaffected by the environmental circumstances in which it occurs.

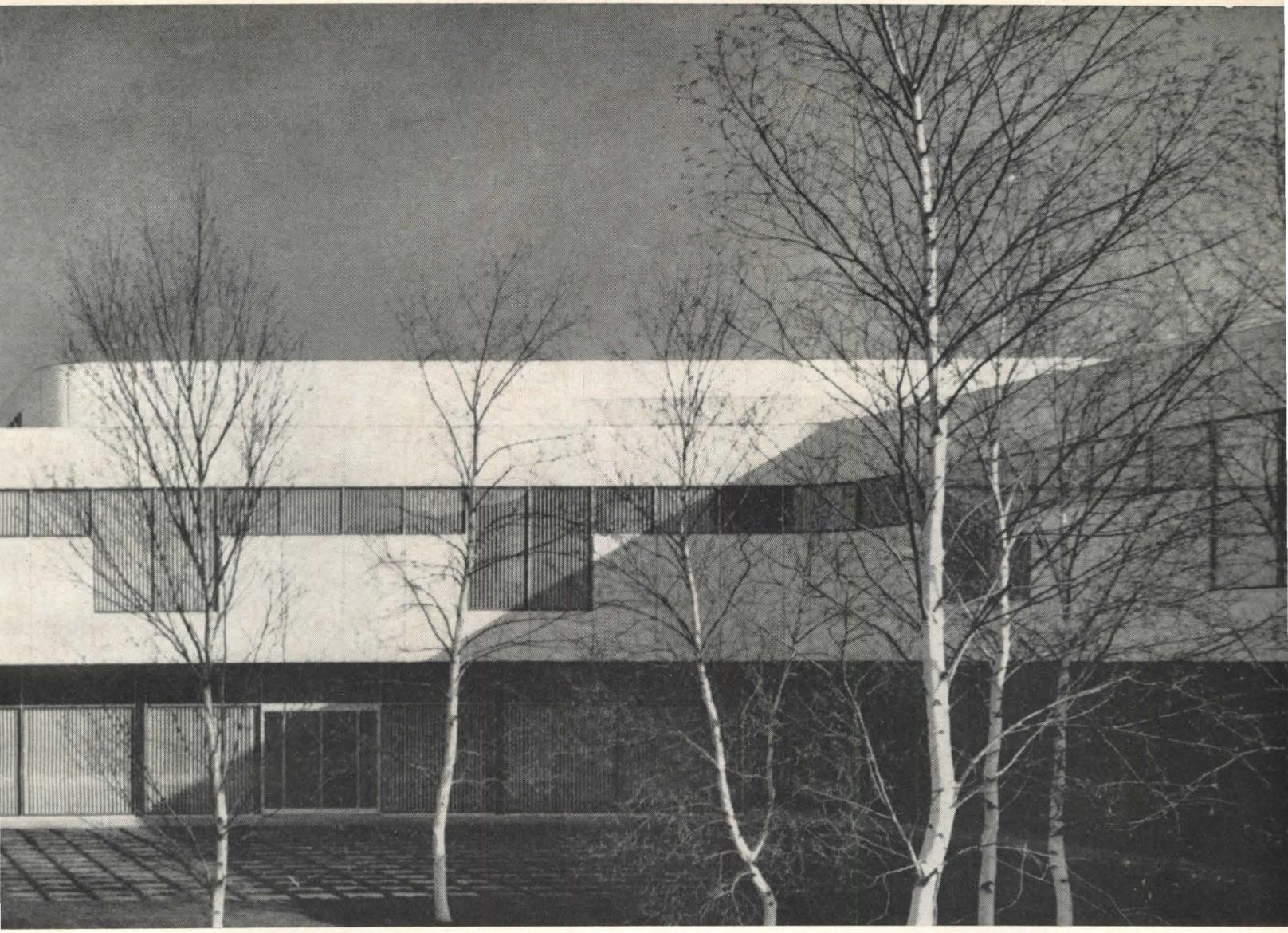
The facts, of course, are quite otherwise and our modes of thought must be revised to correspond to them. All of man's artifacts, like man himself, are continuously submerged in the same multidimensional environment. None of them can be felt, seen, heard, experienced, or perceived in anything less than experiential totality. In what sense, then, do two-dimensional, small-scaled, black-and-white facsimiles of objects as disparate as tobacco virus and Melanesian batik illuminate underlying relationships, real or putative? In what sense, in fact, viewed from this narrow slot of visual criteria, do they prove that any except accidental similarities exist at all? It is not that visual data necessarily bring us *inaccurate* information about objective reality: it is that visual data alone bring us information so *incomplete* as to be actually misleading.

The danger of such an approach is very real for all of man's constructs but it seems to me gravest for architecture. For, far from being narrowly based upon any single sense of perception like vision, our response to architecture derives from our body's total response to and perception of the environmental conditions in which that building submerges us. There is no other possibility. In architecture there are no spectators; there are only protagonists, participants. The body of critical literature which pretends otherwise is based upon photographs of buildings and not actual exposure to architecture at all. (We forget that ordinarily we study the photographs of *one* building while protected by the controlled environment of *another.* We seldom stop to wonder why art exhibitions are not held in open meadows or concerts on the open sea. Most esthetic experience in modern life subsumes the specialized intervention of architecture to make it possible.)

Obviously, the visual aspect of architecture is important to its enjoyment just as vision is absolutely essential to its creation—a blind architect is a contradiction in terms. In the same sense, a literate society can hardly manage without the printed word and pictorial facsimile. But precisely because it gives us such a limited view of reality, we ought to be always aware of the grave dangers, as well as the great advantages, of literacy. Professor Kepes' series, it seems to me, shows no awareness of this problem at all.

STREAMLINED FACTORY:





WHITE STREAK ALONG THE OPEN ROAD

Thirty-three miles due east of Manhattan, the Long Island Expressway flashes by the village of Melville like a jet runway. Lined up along the south side of this one-minute mile is a growing row of low commercial-industrial buildings, seeking attention with cedar-shingled parapets and Federal Revival porticos. At the end of the row their pretentions are vanquished with one long streak of white.

The new Estée Lauder cosmetics plant by Davis, Brody & Associates and Richard Dattner is long, low, and—yes—streamlined. At 60 miles an hour the eye sweeps over its smooth forms with pleasurable ease.

To architects on seasonal pilgrimages to the Hamptons, the building must immediately recall the International Style of the '20s. But its precise porcelain enamel skin remained an unrealized dream in those years.

The architects disclaim any nostalgic objective of reviving the early modern look. The sleek forms, they say, grew without forcing out of the intricate needs of the plant; and their preliminary studies prove it.

The highway site, however, was a strong influence on their design. They wanted a very visible, "readable" form, raised above the surrounding clutter of cars and buildings. And the internal needs of the plant played right into their hands.

Estée Lauder, Inc., is a fast-growing cosmetics company that has just reached 21 years of age. Its headquarters and sales office is on Fifth Avenue in Manhattan, but all of its other U.S. operations, including research and bookkeeping, will be concentrated in this building.

The architects' first inclination was to build several distinct blocks: office, factory, warehouse, etc. But then there were transitional spaces, such as the laboratories, and crisscrossing lines of movement that called for broad interfaces.

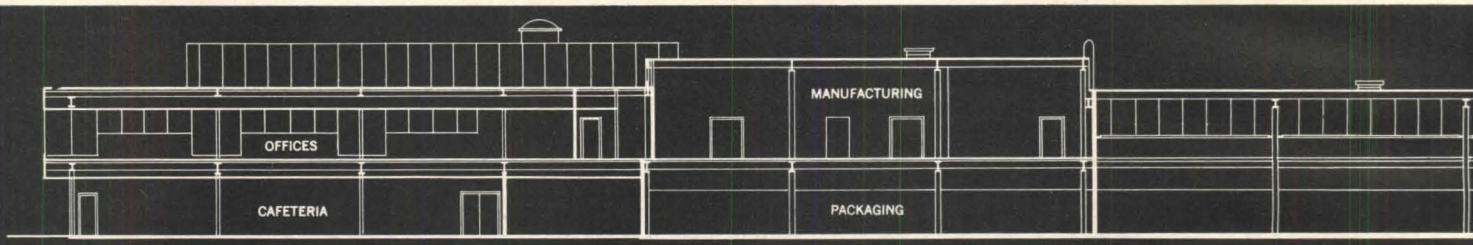
It turned out also that the enclosures required for these diverse functions were not so different after all. The factory had to be two stories high so that products could flow down into packaging areas by gravity (since pumping damages most of them). Once manufacturing was one flight up, it made sense to have laboratories and offices there too. The warehouse required a 24-ft. ceiling to allow stacked storage on pallets.

The result is a series of forms that flow smoothly together. Slight variations in roof height are related to what goes on below. The high manufacturing spaces have clerestories looking out over the laboratories so that both catch north light for color matching. The highest plateau is the mechanical penthouse over the office block.

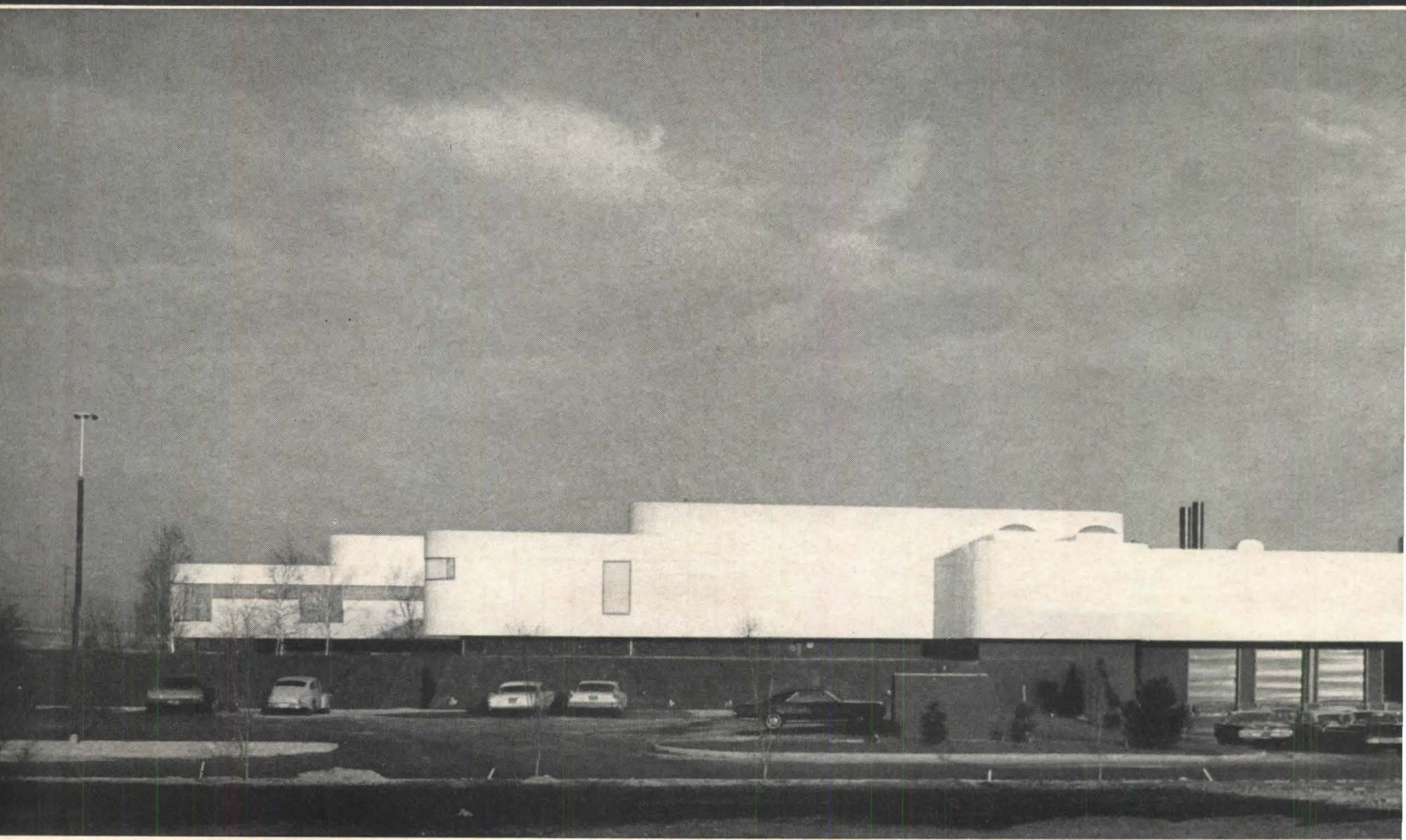
The functions of the plant are arranged in bands running east-west across the building. The broadest band is the storage space at the center, between the packaging area (where products go into jars, tubes, etc.) and the picking and packing area (where these items are combined in boxes for shipping).

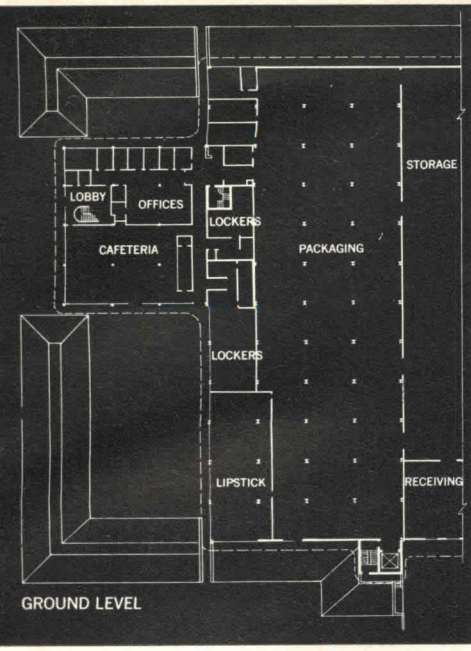
Employees enter from parking areas on the east and west through a corridor behind the office wing, in which all movement in or out—or between offices, factory, and lockers—can be observed by a single guard.

Any or all of the plant's functional bands can be expanded as much as 120 ft. to the east to meet future needs. The off-center locations of offices and shipping dock are based partly on this probable expansion.

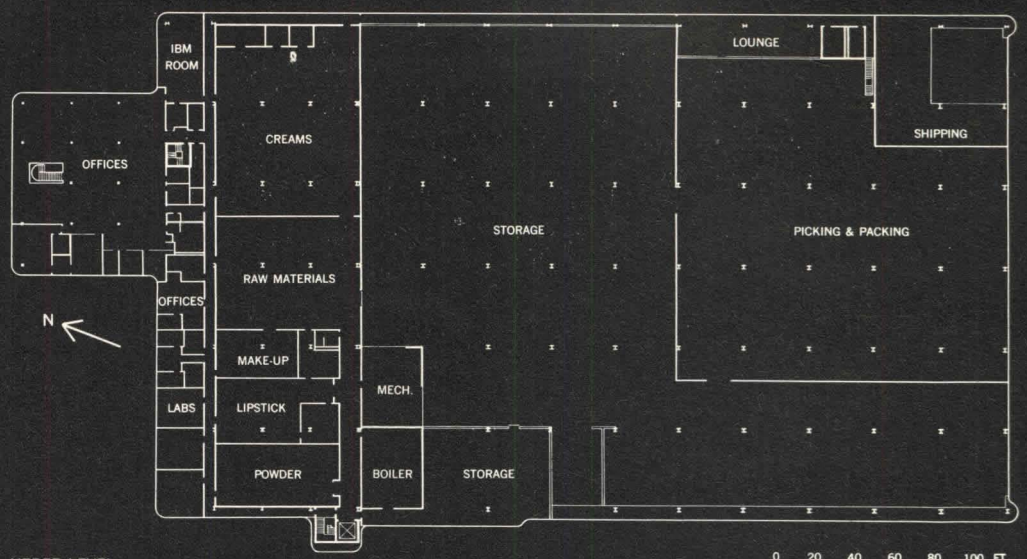


LONGITUDINAL SECTION

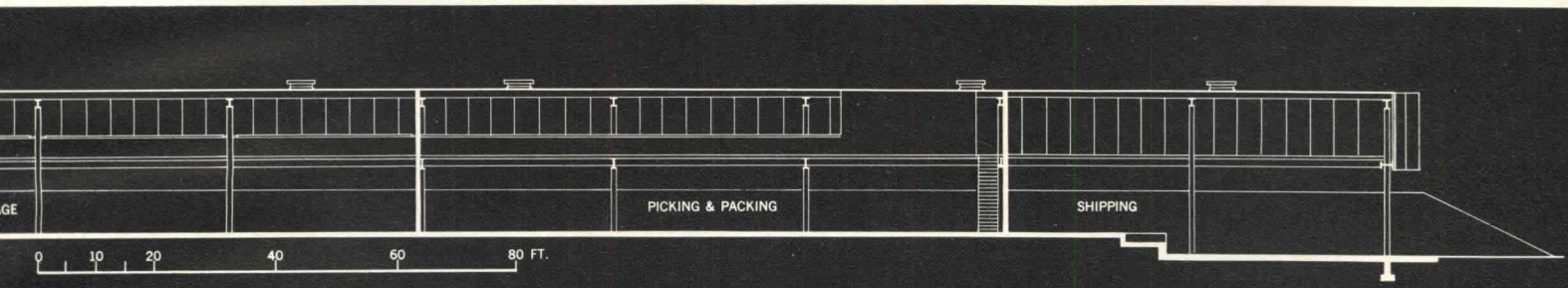


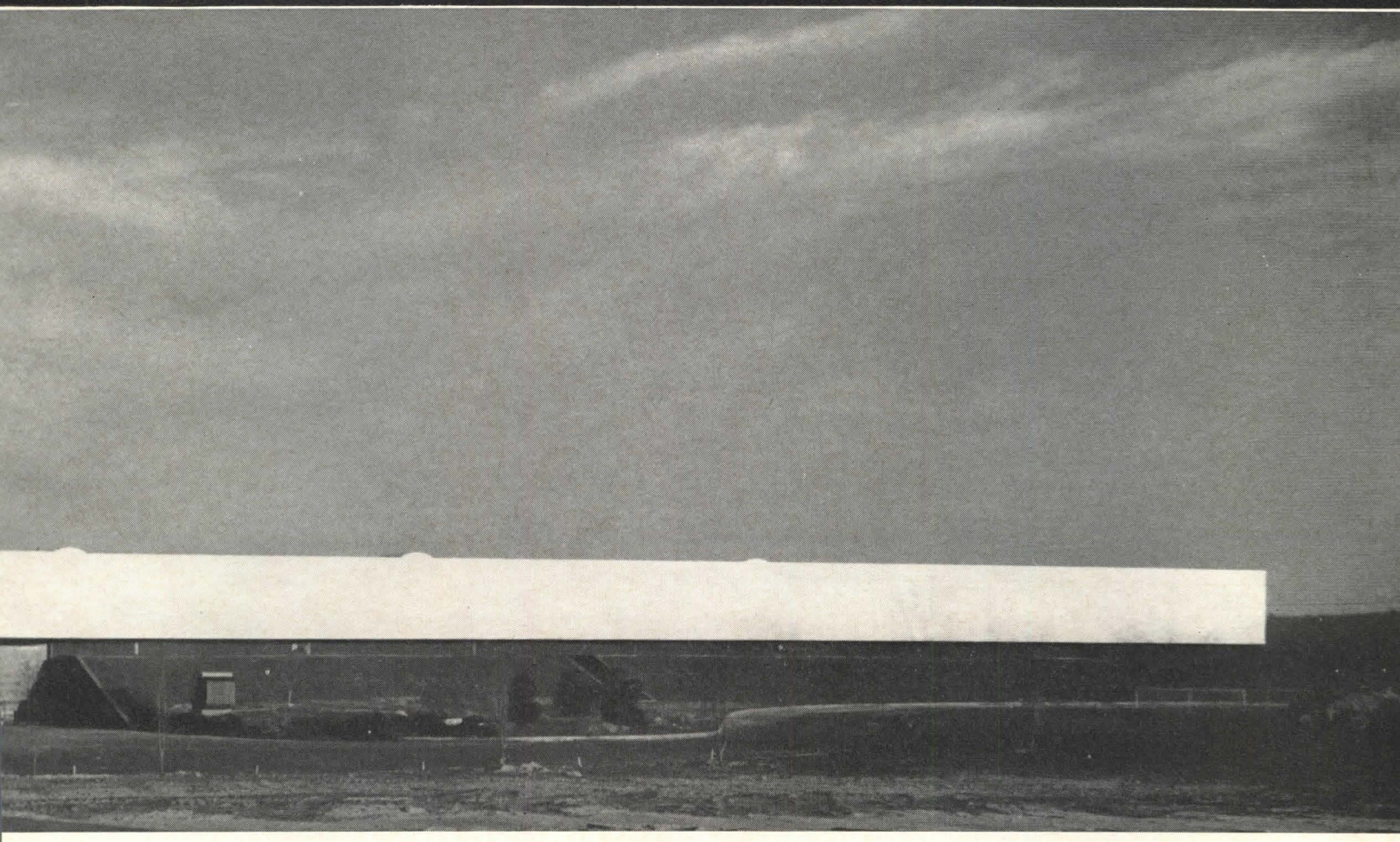


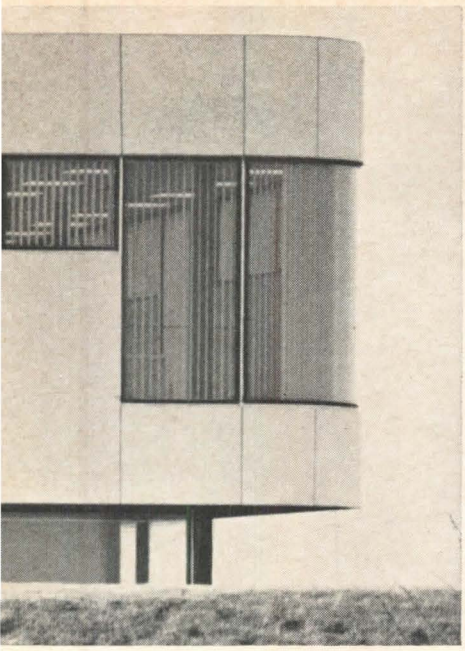
GROUND LEVEL

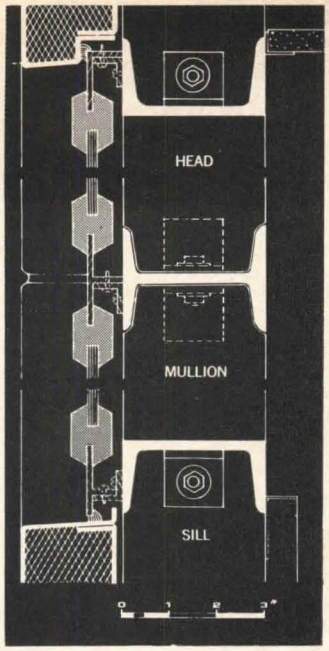


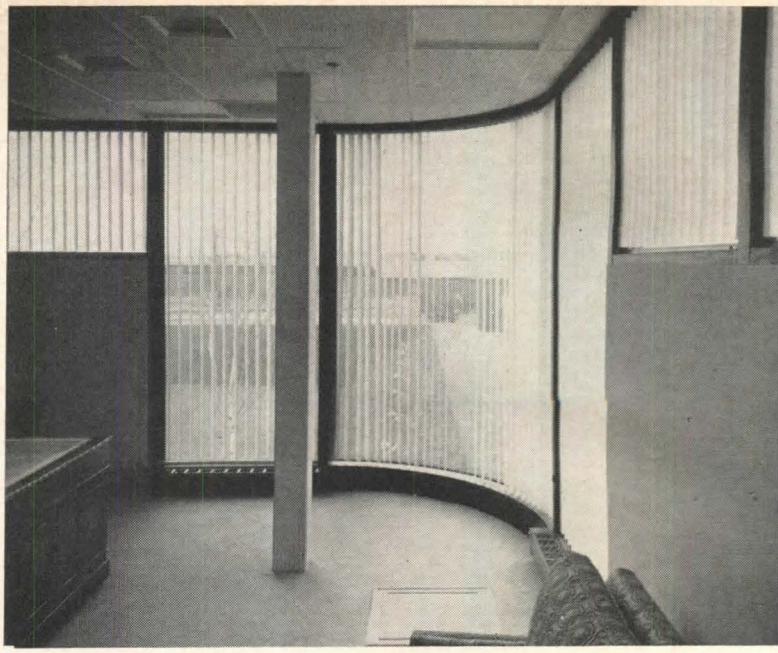
UPPER LEVEL

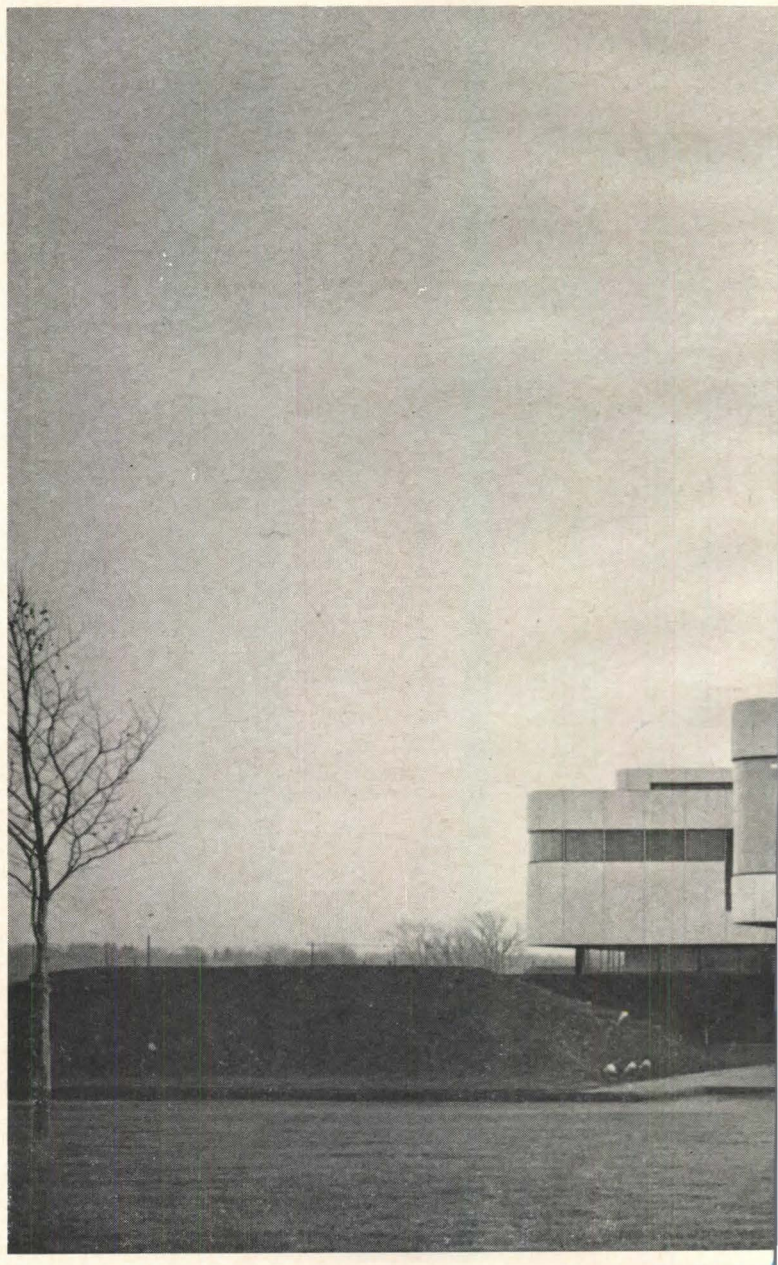












The sinuous white porcelain-enameled steel wall encloses only the projecting second story, which appears to float above a sodded berm. At the front of the building the berms diverge from the walls to enclose two courtyards outside ground-floor offices and cafeteria, at the same time reducing views of parking lots from the highway.

Porcelain-enameled panels have long been common along the roadside—on service stations and hamburger drive-ins—but the panels used here are larger and more refined than these prototypes. They are composed of two sheets of steel bonded to foamed plastic; the outer sheet is 16-gauge stretcher-leveled prime enameling steel, coated with a semimatte finish to make any residual "oil-canning" less noticeable.

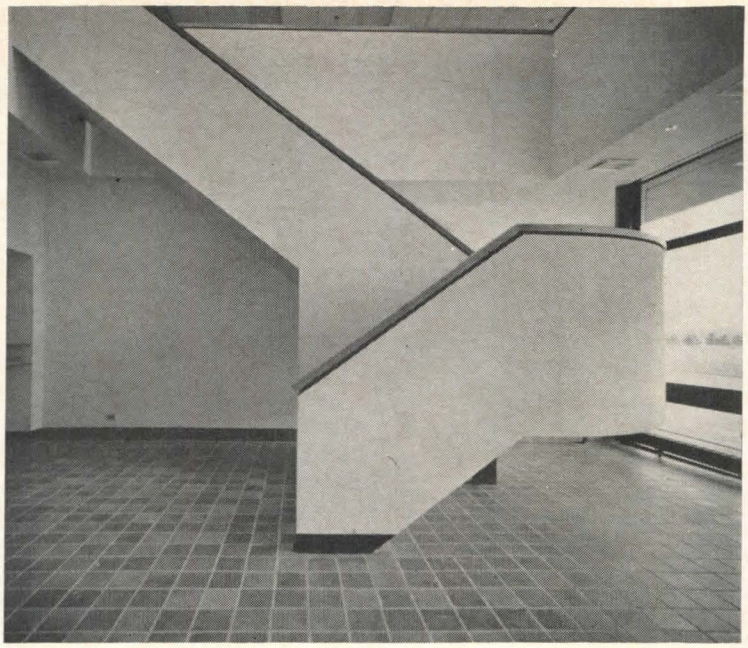
It was only after they began to detail the panels that the architects decided to curve the corners. They found it was easier, instead of working out a special corner joint, to bend the panels themselves and keep the joints uniform.

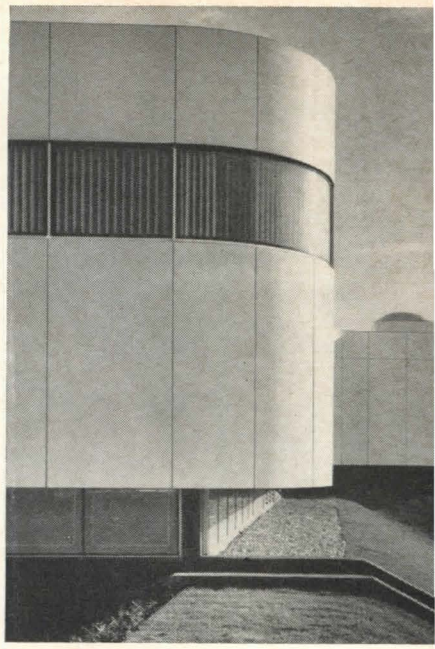
All of the windows are one panel wide, with full-height windows inserted in the high-window bands in an arbitrary pattern that reflects the unpredictable layout of the spaces behind. Placing full-height curved windows at the corners of the office block deftly establishes its dominance over the long facade behind it, where high windows round the corners toward the windowless spaces beyond.

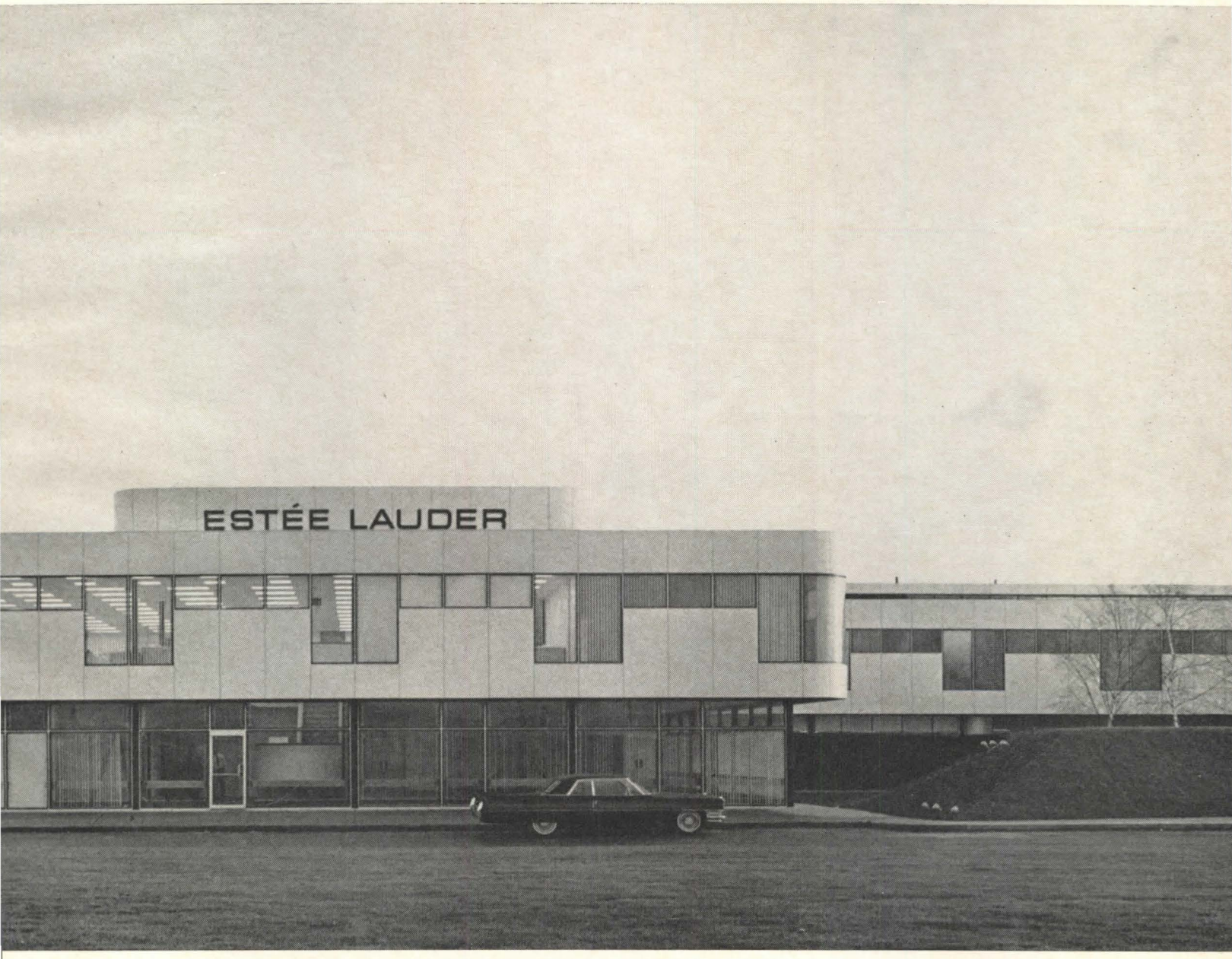
Upper-story wall panels and windows are supported on steel girts spaced four feet apart. Aluminum window frames are clipped to the girts and to channels at the heads and sills. The gray glass is inserted with black neoprene gaskets, creating a border of alternating color bands that is carried one step further by carefully placed burglar-alarm tape.

Even in the executive offices (left) the dark-brown-painted steel framing is exposed; only the backs of the wall panels are concealed with gypsum board. The plastic blinds can be pivoted but never drawn back to interrupt the visual continuity of the windows.

The stairway that dominates the main lobby (right) recalls, in plaster and oak, the curved projections of the exterior and the angles of the berms.







In the warehouse block at the core of the plant, the steel structural system becomes apparent. It is designed on the continuity principle, with heavy cantilevered beams in alternate bays supporting smaller beams between them.

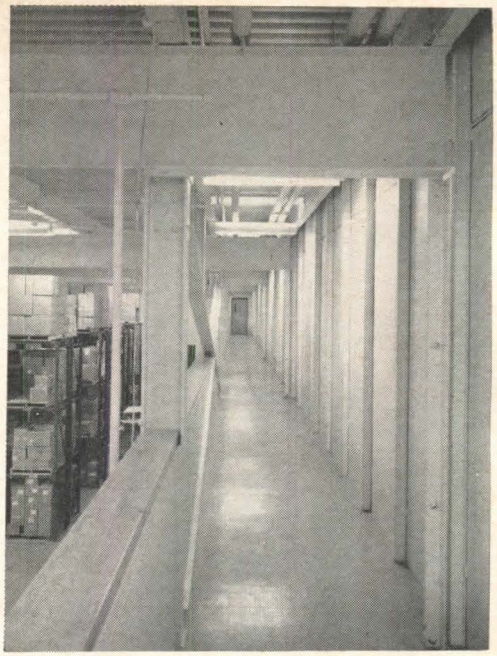
At the sides of the plant, the last bays of cantilevered beams support the projecting upper story. Around much of the warehouse, this suspended projection houses a security walk (right) that does double duty as a quick route to the rear of the plant, safely removed from fork-lift trucks and conveyors. At some points it widens, forming mezzanines for storage, mechanical equipment, and a workers' lounge.

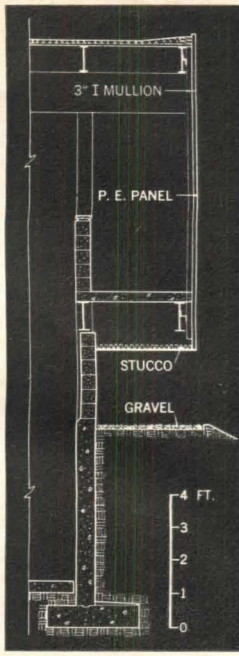
At the rear of the building, where the projection had no foreseeable use, it ends in cylindrical terminations (below) that are obviously forms for form's sake, but very appealing ones.

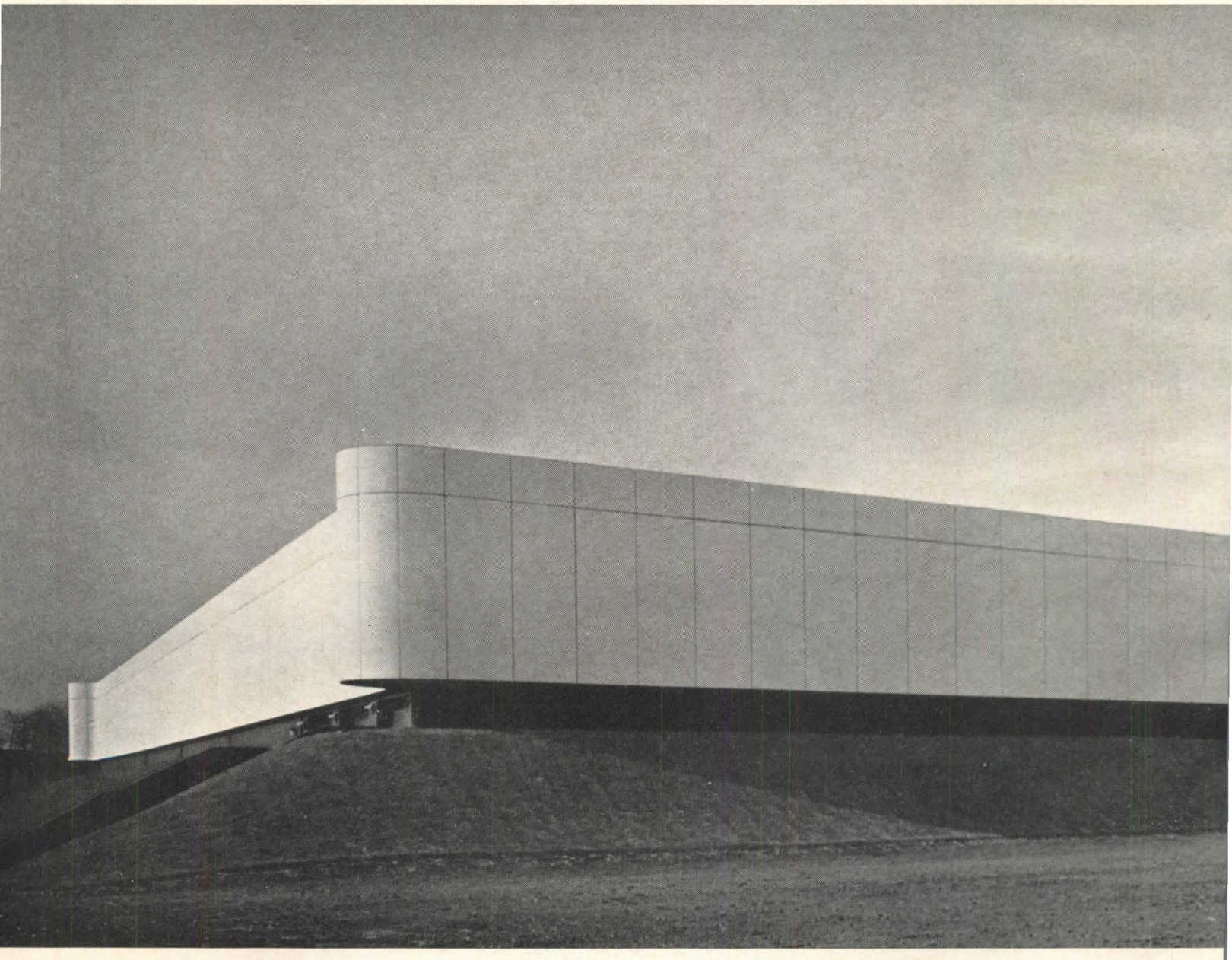
Outside, the smooth, white projecting story is separated from the sodded berm by a band of dark windows or near-black painted concrete wall. The long, straight stretches lead dramatically to curves at both ends.

There is no doubt that these photogenic curves are reminiscent of earlier 20th-century visions. But the similarity stems more from a return to early modern obectives than from conscious repetition of forms.

—John Morris Dixon

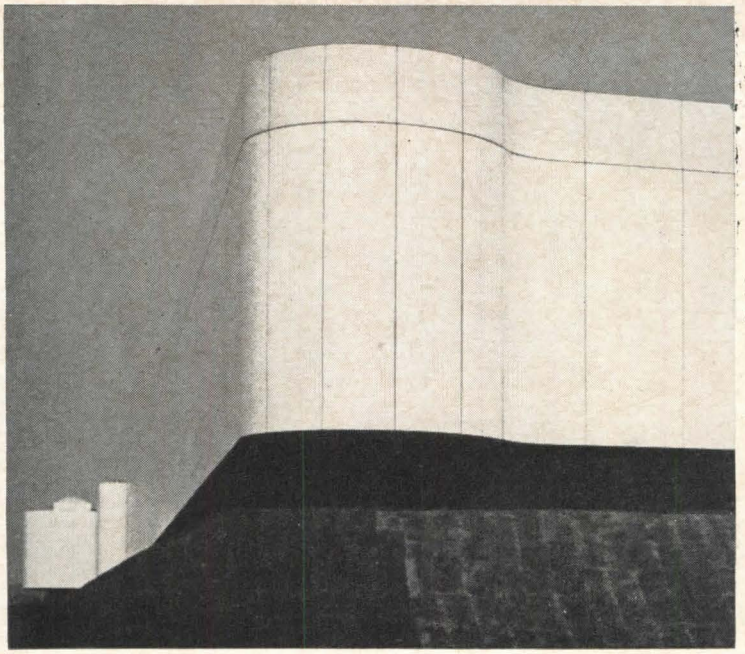






Structural details of the porcelain-enameled panel wall are visible on the interior of the security walk (left) above the storage area. Panels are fastened to steel girts suspended from the roof beams at four-foot intervals. They were erected in sequence, each one fastened to the last one put in place with interlocking tabs, then welded to the steel girt at its leading edge, and so on. Joints were then caulked with a black acrylic compound. On the east wall, the last panel in each bay was bolted to speed removal for plant expansion.

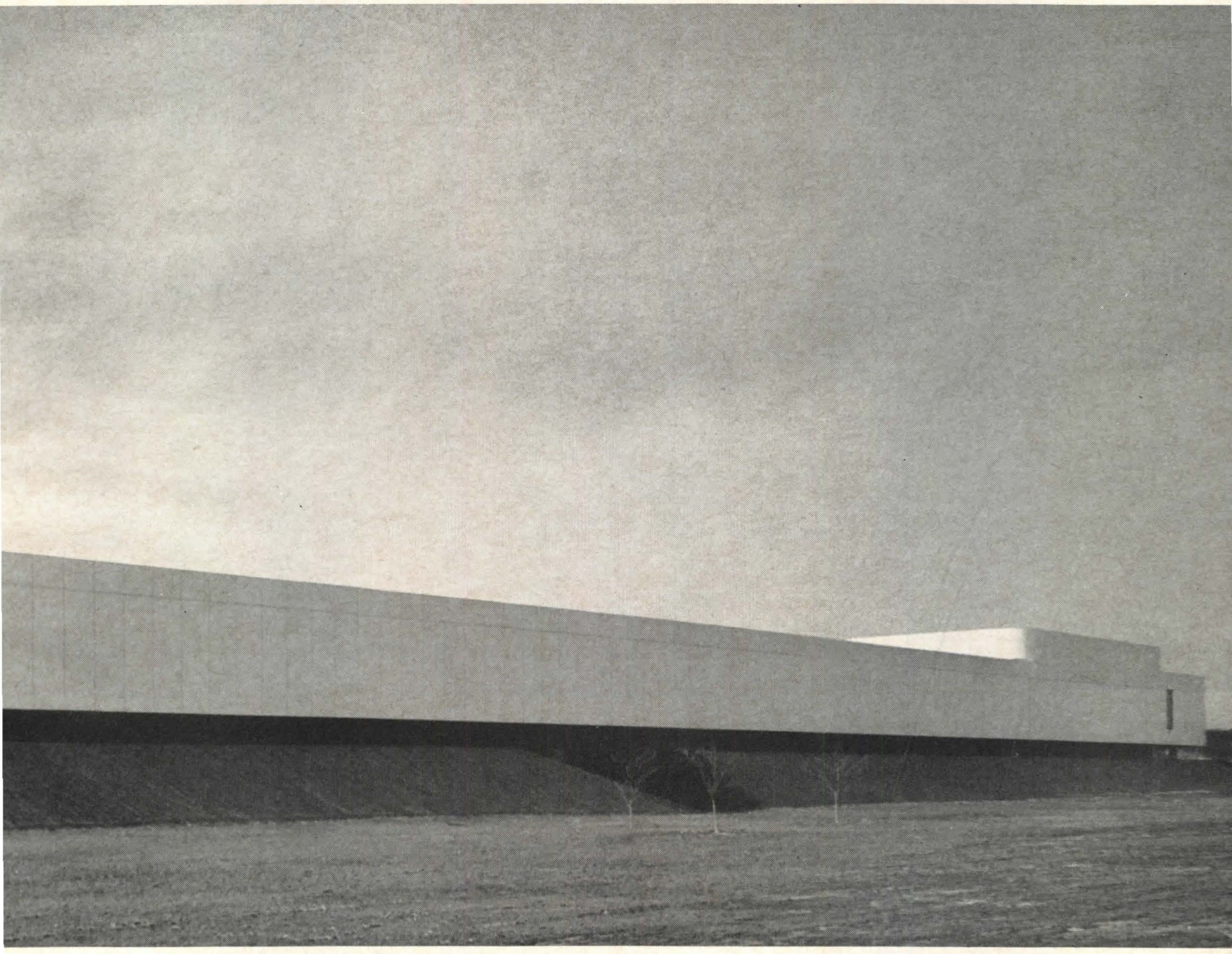
The recessed strip between the poured concrete lower wall and the projecting upper floor can be filled in with either concrete block or windows, but windows have been limited to the front because of the risk of burglary.



FACTS AND FIGURES

Estée Lauder Laboratories, Melville, N.Y. Architects: Davis, Brody & Associates and Richard Dattner. Landscape architects: A. E. Bye & Associates. Engineers: Goldreich, Page & Thropp (structural); Wald & Zigas (mechanical). General contractor: W. J. Barney, Inc. Building area: 152,000 sq. ft. Construction cost: $2,000,000 ($13.15 per sq. ft.), excluding site work, landscaping, fees, furnishings, and process equipment.

PHOTOGRAPHS: Norman McGrath




1875


1901
HOTEL
UTE
CHIEF


1967
UTE

hearings, called for a neighborhood approach. "The city is getting to be so huge that the individual becomes a nothing, a zero, a blank," he said in an interview.

The Senator's remedy would be to make the neighborhood—25,000 to 50,000 people—the basic unit of decision making and development. He proposed gearing up for a $50 billion "model neighborhoods" program in the 1970s, similar in concept but wider in reach than the Administration's model cities program, to be carried out largely by neighborhood corporations.

HOUSING

BUILDING GHETTOS

The National Committee Against Discrimination in Housing (NCDH) last month placed a bomb at the door of HUD. It took the form of a booklet bluntly entitled *How the Federal Government Builds Ghettos,* containing 17 instances in which the committee said Federal housing and renewal policies failed to encourage integration or fostered segregation.

The most explosive charge was that public housing still was being built in ghetto areas across the country. HUD, the committee said, should announce site selection criteria that will lead to racial integration of all projects.

To the charge that urban renewal programs violated the rights of minority groups by forcing their relocation in segregated areas, the committee attached the recommendation that an eighth element be added to the Workable Program for Community Improvement. It would require communities seeking urban renewal grants to develop plans for desegregation of their entire housing supplies.

The most succinct advice was that given in response to the charge that some of HUD's officials are out of sympathy with the nondiscrimination policy of the Administration. NCDH's recommendation: "Fire them."

HUD Secretary Weaver's first reaction to the booklet was that its charges were "both inaccurate and unfair." Later, the *New York Times* reported, he ordered HUD's operating heads to either implement the Administration's nondiscrimination regulations or furnish full explanations of why they couldn't be carried out.

GOOD START

A pleasant 10-story brick building that was designed for high-rent apartments, and looks it, was opened in Washington last month as the nation's first "turnkey" public housing.

Called Claridge Towers, the 343-unit building—258 efficiencies and 58 one-bedroom apartments, all for elderly low-income tenants—was constructed by the Whiting-Turner Contracting Co. of Baltimore, then sold to the National Capital Housing Authority.

Construction took ten months. At the dedication, HUD Secretary Weaver estimated that under normal procedures, with the Housing Authority acting as the building client, it would have taken three to four years from conception to occupancy.

Dr. Weaver said that in the year since the turnkey approach was instituted, applications for 14,000 units had been received, nearly 1,000 were under construction, and another 1,500 were under contract. He called it "creative federalism at its finest."

Architects of Claridge Towers were Bucher-Meyers & Associates. The building has a ramp in the lobby for wheelchairs, a laundry room on each floor, a recreation room, a solarium, a rooftop sundeck, and a geriatrics clinic to be operated by the Public Health Department.

OUTCRIES

ALMOST NOT TO WEEP

"The subject is quality," states the report of the mayor's task force on urban design in New York, "the quality of living in the sometimes overpowering environment of the world's greatest city."

Environmental quality is something the task force, headed by William L. Paley of CBS, finds precious little of. "The dreary monotony of our physical city environment has deadened us, training us not to see architecture really and not to be fully aware of many other things: not to feel when jostled, not to anger when stepped upon, almost not to weep when dirt gets into our eyes—yet finally to explode into senseless tabloid violence at the wrong provocation," the report says sadly.

The task force offers specific examples: the subway (above), which "probably adds up to the most squalid public environment of the United States—dark, dingily lit, fetid, raucous with screeching clatter, one of the world's meanest transit facilities"; the new Third Avenue (below), "a dull symbol . . . economics in the raw, a missed opportunity"; the Bed-

FOOTNOTE

The Sugar Rush—These three views were taken on Pikes Peak Avenue, Colorado Springs, on three more-or-less recent dates. What happened in 1875 was clear enough: nothing; what happened in 1901 was that they built the very "Ludwig-of-Bavaria" Antlers Hotel at the end of the Avenue—a felicitous centerpiece, not in competition with the Peak; and what's happened very recently is that the Antlers got knocked down to be replaced by the 12-story, ribbon-window "Antlers Plaza Hotel" and other things got knocked down to be replaced by the 16-story Holly Sugar Building (right). The whole project, when completed, will be known as Chase Stone Center; it will cost $21 million; it will be surfaced with mosaic, bronze-anodized aluminum, and bronze-tinted glass; and it will give Pikes Peak quite a run for its money. PHOTOGRAPHS: (top) unknown; (others) Stewarts Commercial Photographers Inc.

ford Stuyvesant area in Brooklyn, "the city's central agony, the racial stockade" where "the fear of progress is nowhere more evident."

The report, entitled "The Threatened City" and presented to Mayor John V. Lindsay in early February, is incisive in its diagnosis, even eloquent. The task force membership included Architects Philip C. Johnson, I. M. Pei, Jacquelin Robertson, and Robert A. M. Stern; Walter McQuade, *Fortune* editor and FORUM columnist; and prominent businessmen.

Its recommendations, however, fall short of the complexity of the problems it describes. The task force proposes that the mayor use the prestige of office in behalf of design; that he appoint a five-man council on urban design to advise him; that the planning commission complete its long-promised master plan, as a grand design for the city; that a 60-man department be created in the planning commission to carry out area design within the master plan.

What is missing (but was present in the earlier reports to the mayor by Edward J. Logue and David Crane) is attention to the structural, social, and economic context of design—how design goals could be made central to the city's development processes, how the process of design itself could be made responsive to the city's poor and their problems. Without this, design tends to be an isolated, and therefore extremely vulnerable, concern.

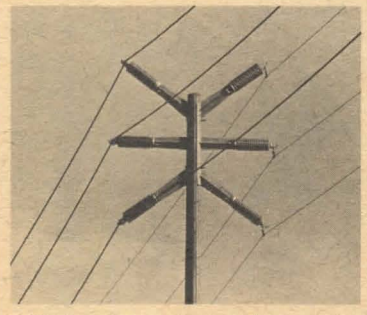
APOLOGIA

SELF-PRESERVATION

The American Wood Preservers Institute has launched a defense of utility poles that makes those who advocate burying wires seem a subversive underground. The opening barrage is a 20-page presentation stoutly titled "Wood Utility Poles: A Key National Asset."

In "exhibits" marked A to L for submission to the court of public opinion, the institute presses its case for the role that poles—properly preserved—have played in Making This Country Great. It points out, for example, that the 100 million poles that adorn the American landscape carry 90 per cent of the nation's electricity. To sneak lines underground, it claims, "would force an approximate doubling of the average monthly electric bill."

The institute likes to think of the sight of those 100 million poles (samples above) as "the overhead Architecture of Energy." Utilities employ thousands of "appearance engineers" to develop pole designs like the one below, it claims.



Perhaps the most ambitious argument is contained in Exhibit F, to the effect that preserved poles aid forest conservation. Longer pole life through chemical treatment has saved enough timber since 1909 to build 55 million seven-room houses "or a replacement for every dwelling in the United States today," as the institute puts it.

By the same arithmetic, how many times could the timber used in our priceless 100 million poles have multiplied the nation's housing stock? Mark the answer Exhibit M.

SPANS

BRIDGE IN TENSION

Lev Zetlin & Associates, consulting engineers, have proposed the design below for a bridge to carry Interstate 95 and the Key Highway over Baltimore's inner harbor. Some city officials were delighted and others simply stunned.

The generators of Zetlin's design were (1) the need to accommodate three different roadways, two of five lanes each for 95 and one of four lanes for the Key Highway; and (2) the desire for maximum vertical clearance for vessels passing underneath. To Zetlin, the second requirement indicated that the roadways should be at roughly the same level, rather than stacked, and that the bridge deck should be as shallow as possible.

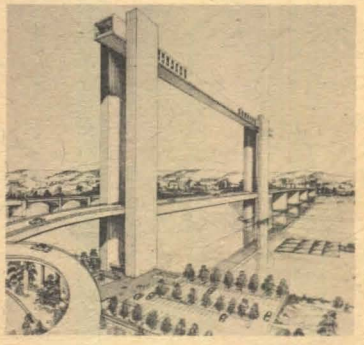
The design employs looming, Y-shaped abutments straddling the center five-lane roadway, with the others to the sides. Between these abutments is a "basket" of rigid cables. Some are hung from the high points, acting in the manner of cables in typical suspension bridges, but others arch upwards from anchors in the ground. The pull of the lower cables on the upper ones provides a rigidity which eliminates the need for stiffening trusses, and permits the deck to be only 4 ft. deep, Zetlin said.

Baltimore Mayor Theodore McKeldin took one look and said, "This is it." Public Works Director Bernard L. Werner said that, well, it was "different, anyway."

CULTURED CROSSING

Culture is, of course, uplifting. It would be positively elevating in this combined bridge-museum (below) proposed for Little Rock, Ark., by its Metropolitan Area Planning Commission.

The museum would be in the raised crossbar, reached by glass-walled elevators shooting up the 300-ft. piers. Visitors would enjoy exhibits on the history and ecology of the Arkansas River Basin, perhaps a restaurant—and certainly a dramatic view up and down the river.

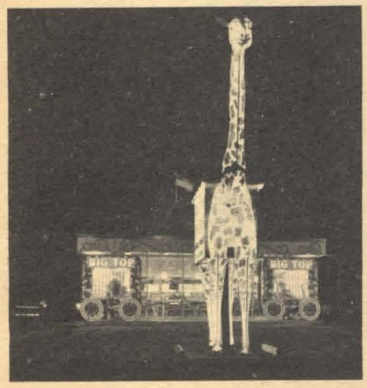


UPS & DOWNS

BIG TOP POP

"Big Top restaurants," the press release reads, "blend the appeal of the circus with the fast food items most popular in America." The "appeal of the circus" is reflected in the design of Big Top's standard highway facilities (below), some of which are about to begin operation in Pennsylvania, parts of New Jersey, and parts of New York.

Each facility, it will be seen, is guarded by a bigger-than-life-

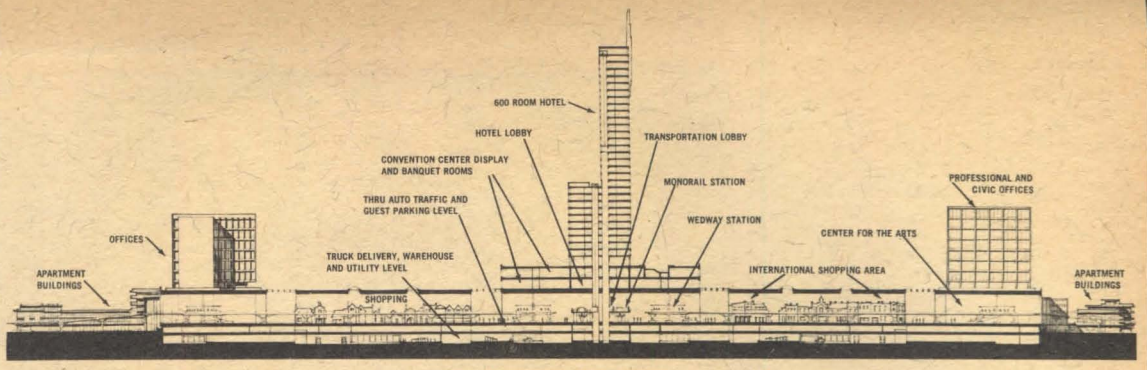


size replica of a giraffe—a rather puzzling feature, since giraffes do not, normally, appear in circuses. Nor (unlike Llamas) do giraffes spit (at passing motorists, for example).

Giraffes do, however, tend to drool when excited by food and other desirables, according to the director of one of the nation's biggest zoos. It is not clear whether Big Top's giraffes actually drool, but there is no reason they couldn't be made to salivate in a genteel way—technology having expanded architectural horizons, etc.

AQUEOUS ROCKETRY

Proving once again how slim the line between beautification and camouflage, this space-age standpipe-observation tower (below) has



been erected by the Peoria Heights, Ill., Water Co. It looks for all the world as if it might blow its oversize lid and blast off.

The 120-ft. steel plate structure, with a glass elevator shooting up its side, is the work of Architects Richard L. Doyle & Associates. It will stand in a reflecting pool with fountains, and the Forest Park Foundation will convert the surrounding area into a small park.

ARTS

ECLECTRICISM

The lights and sights of Las Vegas flashed fitfully but fearlessly on 57th Street for the New York art world last month. Gamma rays irradiating plastics, phosphors with controlled rates of decay,

and laser beams are just a few of the effects bouncing off the darkened walls of the Howard Wise gallery from 9 a.m. to 5 p.m., creating the excitement of a giant pinball machine happily stuck on "tilt."

The fun takes many forms—180 glow lamps for an "electric rose" programmed in three stages, color television sets running amok, light projected onto a glass screen for a 42-hour composition. When eyes can focus again, the catalog of "Lights in Orbit" offers tricky instructions ("Superpose your impression in Time") and an artist's roster—chemists, industrial designers, and rocket experts—reading like a NASA Who's Who.

STREET CORNER CULTURE

There are some way-out fringe benefits for commuters in Philadelphia this month. They take the form of a dozen different sculptures dropped into some widely disparate structural settings—the Municipal Services Building, Society Hill Towers, Penn Center, even the subway station at 15th and Market Streets.

Sam Green, the 26-year-old director of the Philadelphia Institute of Contemporary Art, assembled it all to convince city officials and commuters "that there are other things beyond the safe old Henry Moores, Alexander Calders and Leonard Baskins that most cities buy."

BIG PLANS

GRAND FINALE

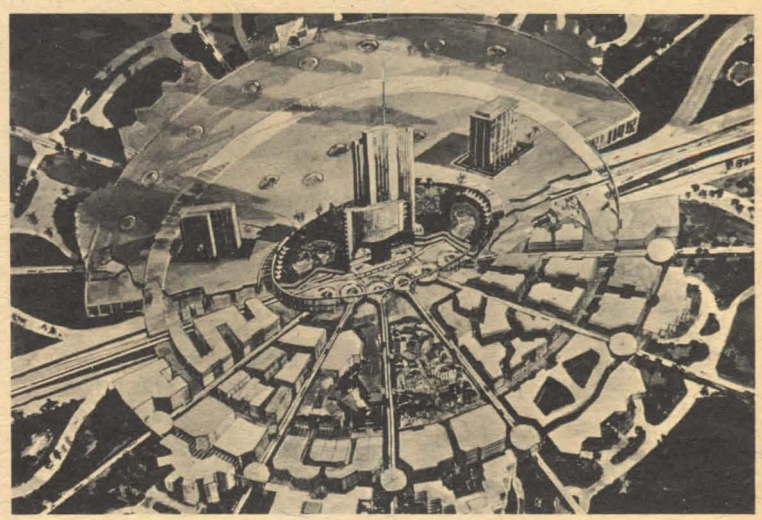
The late Walt Disney made an immensely successful career of topping himself. Last month his final production was announced, posthumously, and it was a whopper: a $600-million Disney World on 27,400 acres near Orlando, Florida, containing a real live city of the future for full-scale people.

The city is called EPCOT—Experimental Prototype Community of Tomorrow—and will have a population of 20,000. It will share the World, whose acreage is twice the size of Manhattan, with an amusement park five times as big as California's Disneyland, a jetport, and a 1,000-acre industrial park.

EPCOT (below) is a curious blend of rigid 19th-century planning, fantasy, and some surprisingly advanced urban design concepts developed by what the Disney organization calls its "imagineers." At the center will be a 600-room hotel, complete with a seven-acre roof deck and waterfalls. Ringing the hotel will be 50 acres of offices, "international shops," and streets—all under glass (section above). EPCOT will have "the first noise-free, pollution-free city center in America," the imagineers claim.

Pedestrians and vehicles will be completely separated, each on its own level. Circulation between the glazed center and the outer-ring residential areas will be by monorail and the WEDway People Mover, a continuous series of little elephant trains shuttling back and forth electrically.

"In its endless task of depicting urban life 25 years into the future," the imagineers pledge, "EPCOT will never be completed. It will always be introducing, testing, and demonstrating new ideas and new technologies."



Walter McQuade

MASS AND CLASS

Certain man-designed objects rise to the top of an era to symbolize its wealth, its taste, its ambition—or sometimes all three qualities at once. Most of these are quite heavy objects: a Pharaoh's tomb, a Greek temple, a cathedral, a clipper ship. These are the bookends of history.

In its day the Pullman car was as good a symbol of luxury, and as heavy a one per cu. in. as any we've yet produced in this country. Like a Cadillac, it was factory made. Yet, like a suit of custom-tailored armor — another considerable piece of status materialism in its time—the Pullman car was lovingly decorated by hand. It came out of the factory wearing a heraldic richness of applied patterning.

Here are two rare old photographs of how this was done: a pair of the Scottish artisans employed at the Pullman plant in Chicago before the turn of the century are shown rendering the big beasts elegant. The pictures were called to my attention by a friend, Alison Kallman, who came across them in the files of the Chicago Historical Society recently. I have no particular point in showing them to you, apart from simple pleasure. I'll bet the pleasure extended to the craftsmen too, in this case. They made the big Pullman cars into man-signed as well as man-designed objects.

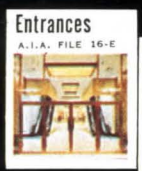
The Pullmans, however hacked and worn, still retain some of that grandeur. I traveled on a real relic one hot Friday afternoon last summer, when the prospect of the weekend rush of passengers out to the seashores of eastern Long Island made me put up the extra fare for a chair car. It turned out to be so old that its splendor was almost gone. Most of the nap was worn off the felt seats, which smelled somewhat as if they were stuffed with old cigar butts. The air conditioning consisted of blocks of ice loaded into compartments underneath—which kept the parlor car nowhere near as cool as the new stainless steel coaches towed behind it. Yet the old Pullman had something as we lumbered rapidly along, peering out the window, half expecting to see herds of buffalo on the Long Island plain. It had class.

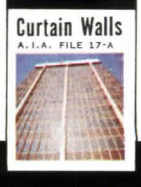
PHOTOGRAPHS: Page 27, Ben Schnall. Page 28, Bill Maris (top); The Washington Star *(left center); cartoon by Haynie in the* Louisville Courier-Journal. *Page 29, Louis Checkman (top); Lucile Dandelet (center); UPI (bottom). Page 30, Japan National Tourist Organization (top); Italian Government Travel Office (center). Page 87, Walt Disney via UPI Telephoto (bottom). Page 88, Chicago Historical Society.*

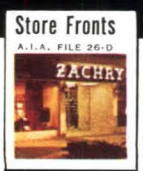
AMARLITE VAULT ACTION WINDOWS

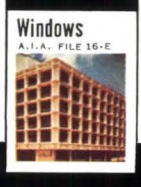
Smooth sloped sill defies the weather

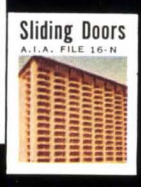
NEW Amarlite Vault Action Windows feature a bank-vault style smooth sloped sill and frame . . . creates a self-wedging seal that defies the weather. New sill design eliminates weep holes . . . water dams . . . and minimizes dust and dirt accumulation. Heavy duty, adjustable friction hinge holds window firmly open . . . glass easily replaced from the inside. Fast delivery to the job site on a complete variety of standard sizes. See Sweet's, our representative, or write us.











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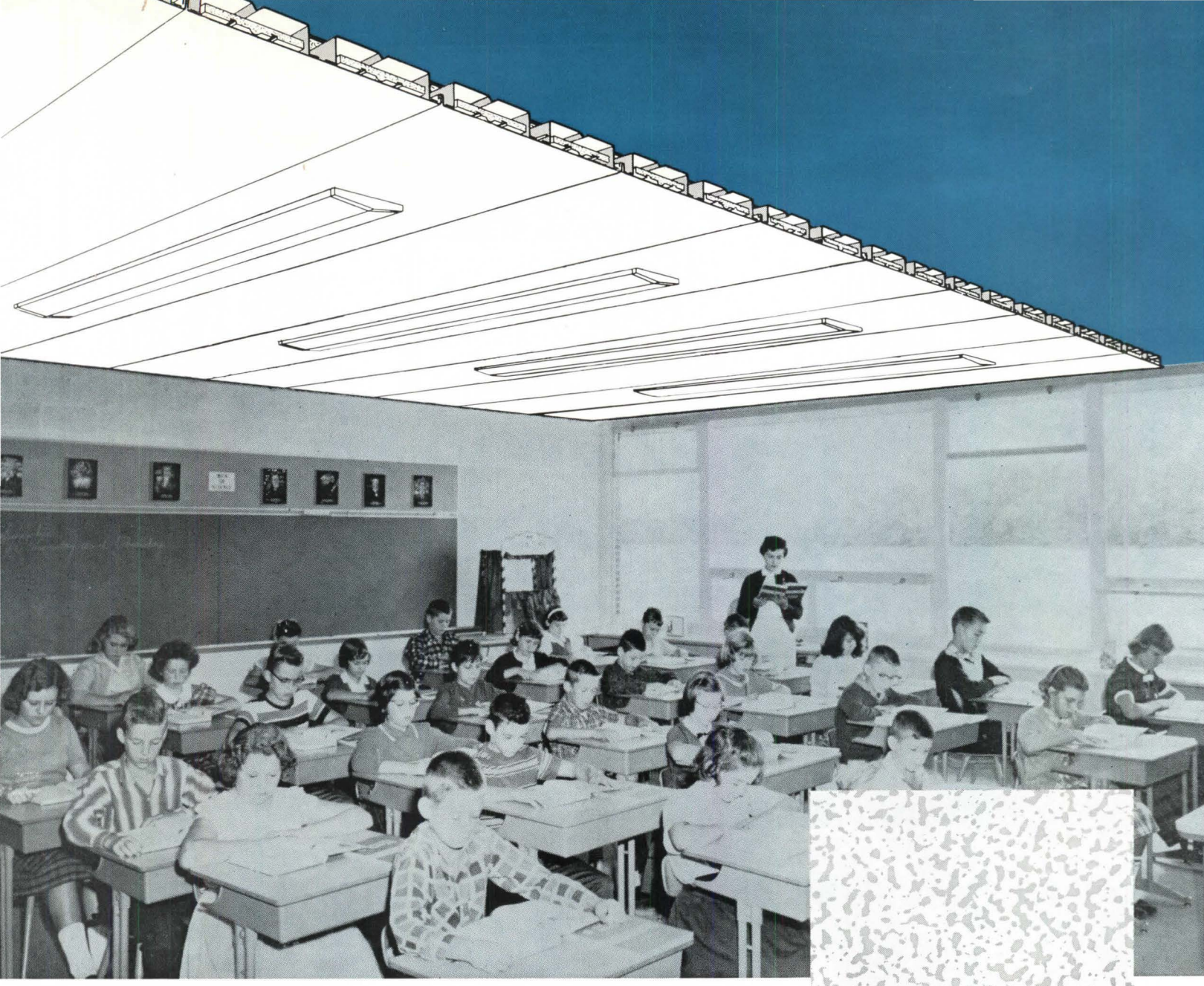

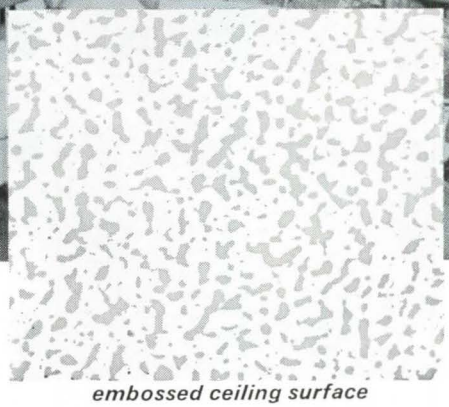

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You get an attractive embossed ceiling with Robertson Long-Span acoustical roof deck

Pictured above is true construction economy without sacrifice. In one unit you get an excellent long-span structural roof deck and an attractive, effective acoustical ceiling ready for field paint. Its embossed surface effectively reduces glare and reflections. The glass fiber sound absorbing material is protected against damage by the perforated steel. Moreover, no fire hazard is present since there are no combustibles involved.

Robertson Acoustical Decks are available in two styles and eleven types for varying load and span requirements. One style involves the flat perforated ceiling shown here. The other features a fluted ceiling with the perforations in the vertical webs. Troffer lighting can be installed easily in all types.

Write to H. H. Robertson Company for acoustical deck literature and specifications.

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PREVIEW

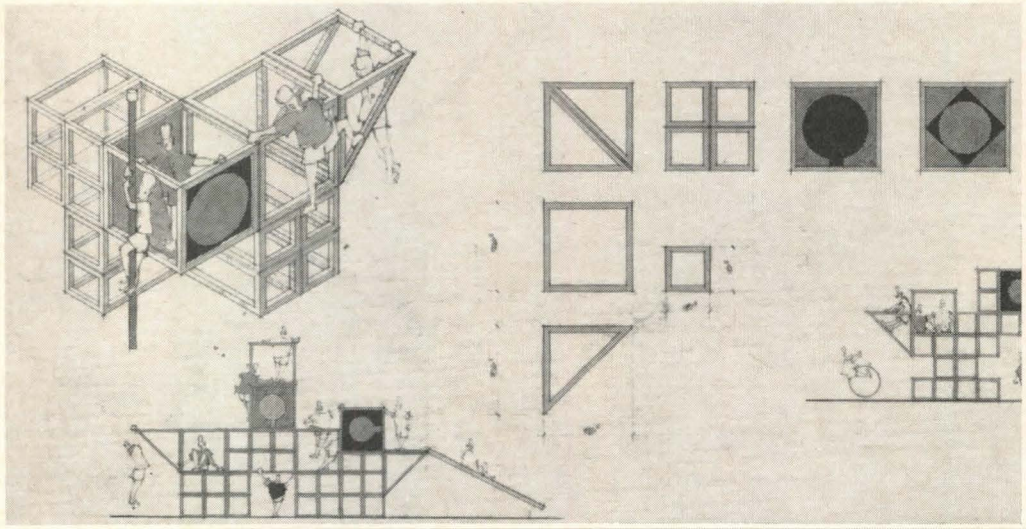
PLAYGROUNDS ON THE MOVE

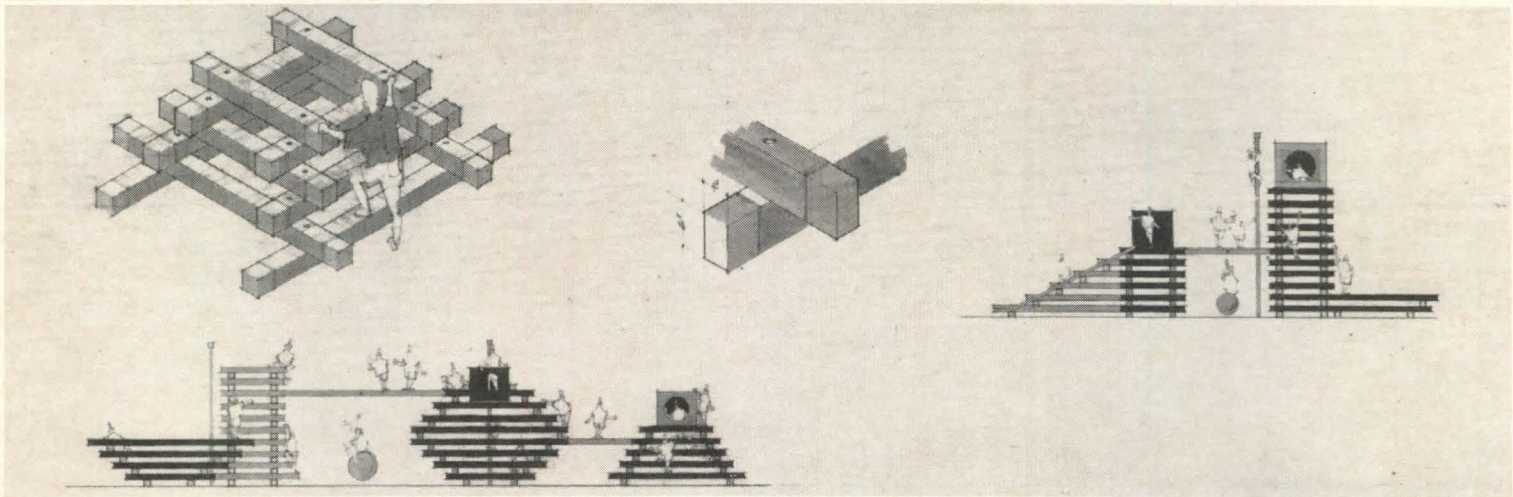
Vacant lots all over New York City may soon be turning into playgrounds overnight. With a $400,000 urban beautification demonstration grant from HUD, the city parks department is about to start building a dozen prototype playgrounds using units designed by M. Paul Friedberg & Associates, landscape architects.

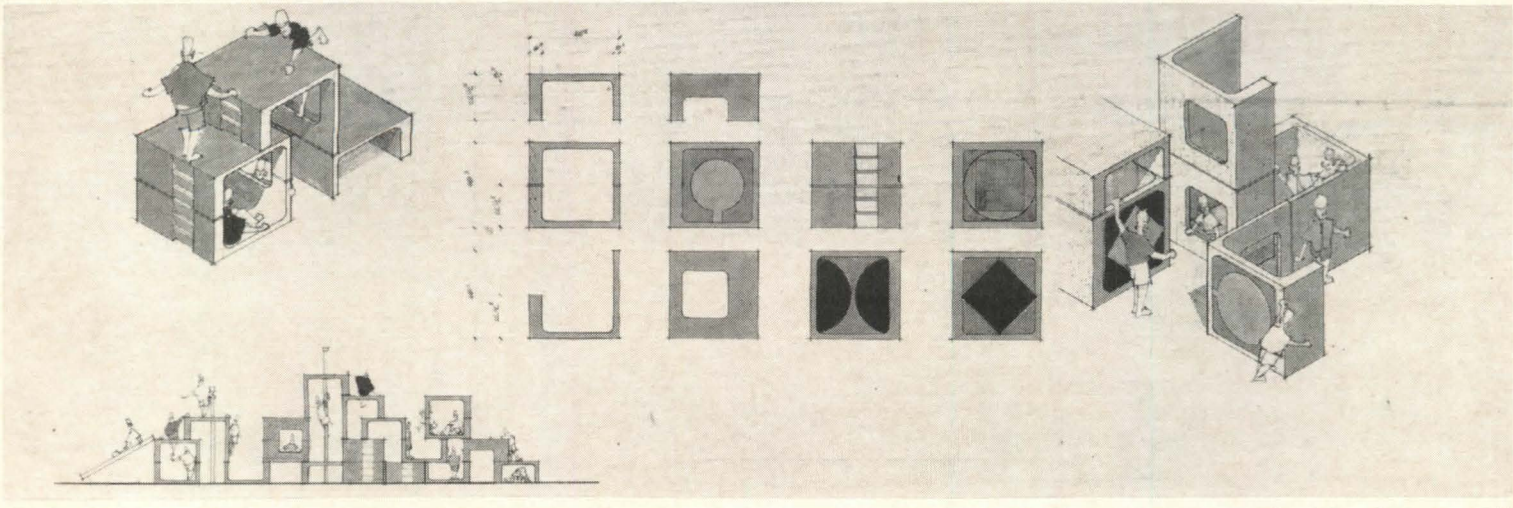
Friedberg has proposed units of four basic types: steel tubing frames (top), stackable timbers (middle), concrete channels (bottom), and steel tubing with cable-suspended platforms (not shown). All of them are basically rectangular, so that continuous play structures assembled from them will fit into typical sites (below).

With these units, playgrounds can be assembled quickly on land that may be only temporarily vacant. What is more, arrangements can be revised to meet unforeseen (or changing) patterns of use, or just to provide new experiences.

But until the city decides to move them, the units will stay put without foundations. In the traditional playground, massive foundations often cost several times as much as the equipment itself. While these playgrounds will be only slightly lower in overall cost, all of the construction—and all of the investment—will be above ground, where it will be both usable and retrievable.







(continued on page 94)

If it's flat or pitched, vertical or curved— roof it with single-ply HYPALON*

This lightweight material will install easily on most nonresidential roofs constructed today. Use it on flat, pitched, vertical or simple-curved surfaces. And use it for reroofing, too.

One-ply roofing is made with Du Pont HYPALON® synthetic rubber bonded to a Neoprene-bound asbestos felt. It is highly resistant to sunlight, weather, ozone, abrasion and industrial atmospheres. It is also flame-resistant. Consider these advantages on your next roofing job . . . and the next . . .

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*Reg. U. S. Pat. Off. for Du Pont Synthetic Rubber

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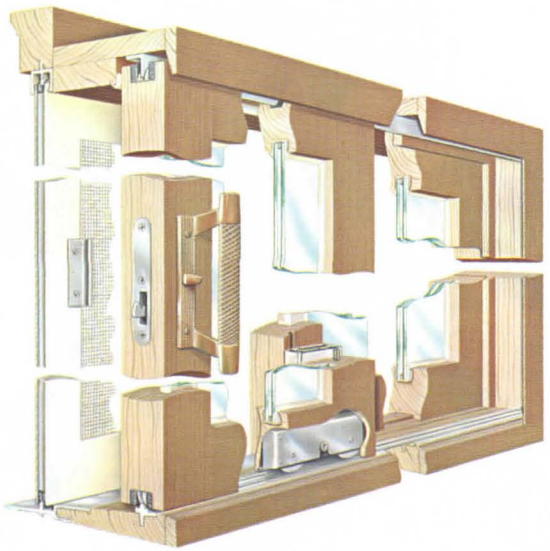
HYPALON

NEW

Malta's wood rolling patio door

Velvet-smooth, rolling action; traditional Malta quality.

Many of the hidden values of the Malta Patio Door are revealed in this sectional drawing. Wood is an excellent insulator; two panels of glass with dead air space, hermetically sealed, stops thermal transfer; vinyl weatherstripping adds to the total value.



This is perhaps the finest, fully insulated wood rolling door unit on the market today. One look at its many design innovations will substantiate this claim: Quality wood construction of hand selected Ponderosa Pine; fully Woodlife treated; insulating glass hermetically sealed to prevent thermal transfer; a low silhouette solid oak sill with heavy extruded aluminum nosing; dual durometer vinyl weatherstripping and meeting rail interlock; tandem rollers, four to each door, are a few of the quality features incorporated in the design. It's a door you can specify with confidence for the finest apartments, residential and commercial applications. It meets the most critical requirements for rolling patio or terrace doors. And they are backed by Malta's highly regarded 10 Year Performance Warranty — best in the business.

The many outstanding details of this new door unit are described in detail on the reverse side of this catalog sheet. If you have further questions, call your nearest Malta representative, your building materials supplier or write Malta at the address below.

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WOOD FRAMED FOR WARMTH. Carefully selected, preservative treated Ponderosa Pine is used throughout. Finest detailing available. A quality door for the most critical applications.

DUAL DUROMETER WEATHERSTRIPPING. Both doors are weatherstripped with a combination of rigid and flexible vinyl. All friction surfaces are rigid vinyl bonded to flexible tubular vinyl.

POSITIVE MEETING RAIL INTERLOCK. When doors are closed, meeting rails are interlocked with a dual durometer positive seal. Schlegal wool pile weatherstripping at the head and sill insulates against moisture or thermal transfer.

LOW SILHOUETTE SOLID OAK SILL. The threshold sill is durable oak with extruded aluminum nosing. No metal to air thermal transfer from exterior to interior. Minimum heat and air-conditioning loss.

INSULATING GLASS. Choice of 3/16" crystal or tempered glass.

VINYL BOOT GLAZING. Insulated glass panels are glazed with flexible vinyl boot glazing: Will not harden or crack due to climate extremes. Proved best in use for insulated windows of all types.

DURABLE METAL TRACK. Both wood door and screen door glide smoothly on metal tracks. The extruded aluminum wood door track has a special stainless steel cap for resistance to scuffing and wear.

REVERSIBLE RIGHT OR LEFT DESIGN. Fixed and rolling doors are reversible for either right or left hand installation. Door latch assembly easily reversed.

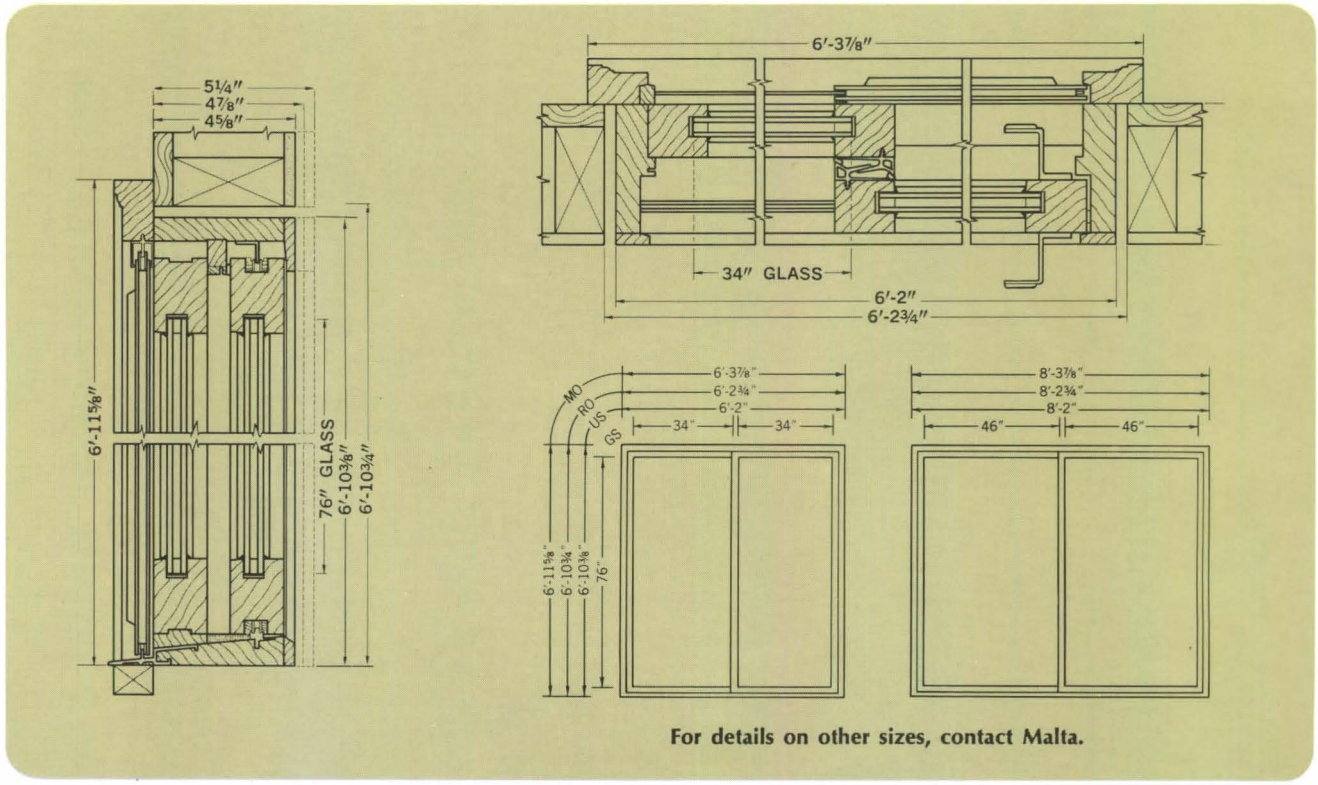
TANDEM BALL BEARING ROLLERS. The rolling door is supported by tandem rollers, four rollers to the door. Weight is evenly distributed and smooth, quiet action is assured. Won't jump the track.

CONTEMPORARY DOOR HANDLE. The look of quality with gleaming Goldtone finish. Reversible latching mechanism retracts on contact with jamb — can't accidentally lock you out.

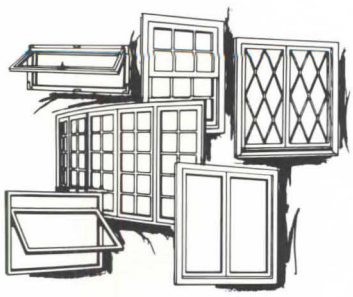
REVERSIBLE HEAVY DUTY SCREEN AND WHITE FRAME. The screen door has a heavy duty extruded frame and extra heavy aluminum wire screening. Adjustment leveling screws are recessed. No uneven, unsightly screws protruding below frame. Screw adjustment is inside screen — discourages removal from exterior and keeps screen door on track.

CHOICE OF SNAP-IN DIVIDED LIGHT GRIDS. Removable grids available in rectangular patterns. Add a traditional or contemporary effect as desired. Easily removed for cleaning.

MALTA GUARANTEED QUALITY. The new Malta Patio Door is covered by the well known Malta 10-Year Performance Warranty — so important to the home or apartment owner through the critical years. Built for a lifetime of good service.



For details on other sizes, contact Malta.



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Specifications include curved walls of Velvetone 164 Chocolate ceramic mosaics with accents of Faientex 1691 Autumn Haze. Floors are of Quarry Tile 140 Greytone (145 Hacienda in western states).

Of course, we could show you scores of equally compatible Mosaic color families. But to appreciate our product, you really ought to see it for yourself.

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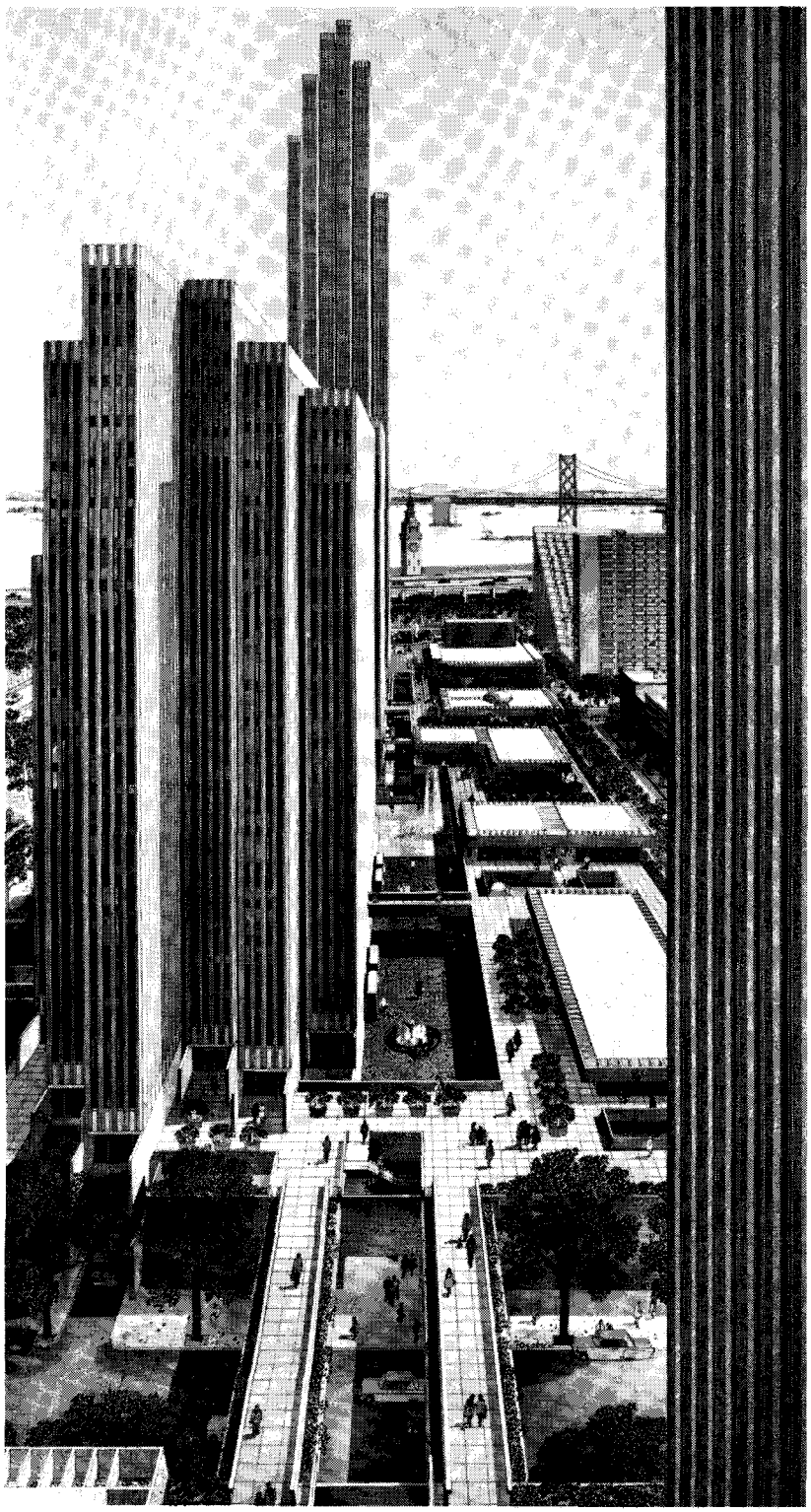
PREVIEW

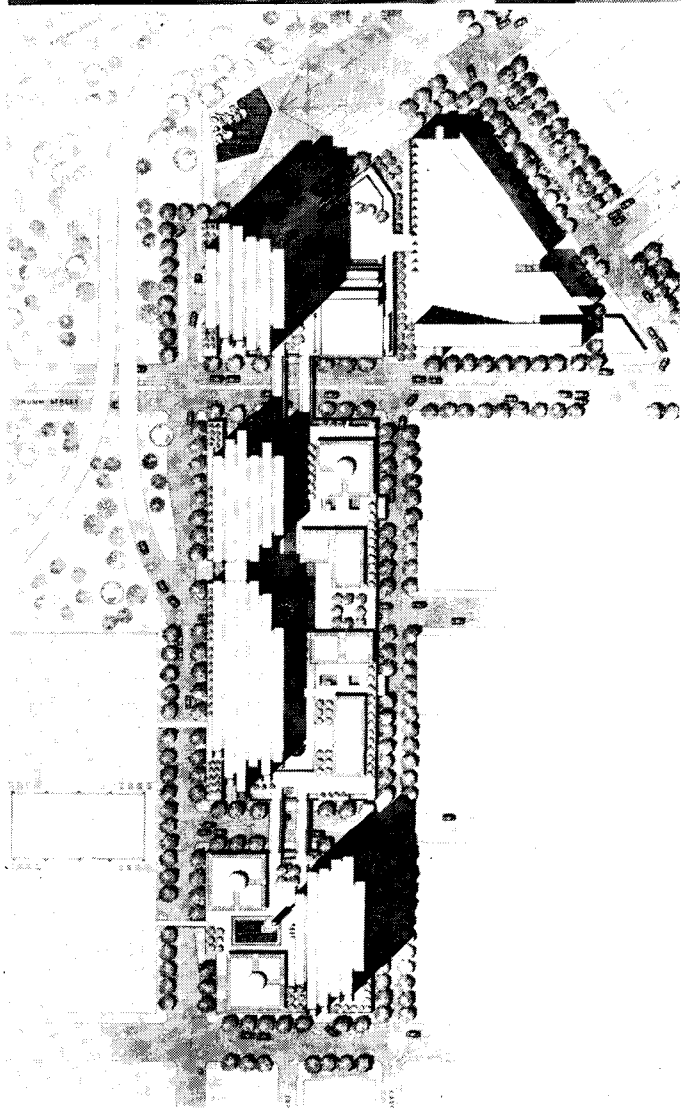
TO SAN FRANCISCO WITH LOVE

On Valentine's Day the San Francisco Redevelopment Authority's gift was a plan by Architect John Portman for Embarcadero Center, a strategic 8½-acre tract at the foot of Market Street. Last spring the authority awarded the site, without competition (May '66, p. 27), to a group led by Portman, Trammell Crow, Cloyce K. Box, and David Rockefeller.

The overall view shows how the project will look completed in six to eight years), as seen from a 45-story office slab at the west end (bottom on plan), the first building to go up. Running east along California Street, facing the Alcoa tower (left in plan and p. 62), is a ridge of office buildings ending with a 60-story shaft, the tallest yet proposed for the city. To the south is a low row of shops, theaters, and garages, with walkways two stories above the street. The 800-room hotel at the east end (below right) will have a rooftop restaurant and a glassed-in elevator rising through its 16-story-high bay-side lobby.

The sponsors call the $125-million project "a Rockefeller Center in scope," but the resemblance is more than scope deep. The huge fins at the bases of the slabs, however, are strictly Portman's. In the triangular hotel, the stratified forms of the '30s give way to the terraced visions of Lubicz-Nycz.





Specify *something* to insulate cavity and block walls.

Even if it's peanut butter.

The so-called "dead" air space in cavity and block walls is very much alive. With problems and pitfalls.

Whenever the temperature differs on the inside and outside of a wall (that's only always) convection currents blow up a storm in the cavities. Therms busily shuttle from the side where you want them to the side where you don't.

The net result: misery of the occupants and misery of the heating and air conditioning bills.

In truth, peanut butter in the cavities of these otherwise perfectly fine walls actually would slow down these convection currents and cut the fuel bills somewhat.

Better than peanut butter: Zonolite® Masonry Fill Insulation

Zonolite Masonry Fill Insulation was developed specifically for these kinds of walls. It doubles their insulation value. Naturally this keeps inside wall temperatures comfortable and cuts heating and air conditioning bills, which is a blessing.

It pours right into the voids, fills them completely and never settles. It is water repellent; any moisture that gets into the wall drains down through it and out. Cost: as low as 10¢ per sq. ft. of wall, installed. That's a blessing, too. Next time, use Zonolite Masonry Fill Insulation. In your wall, you know it's right.

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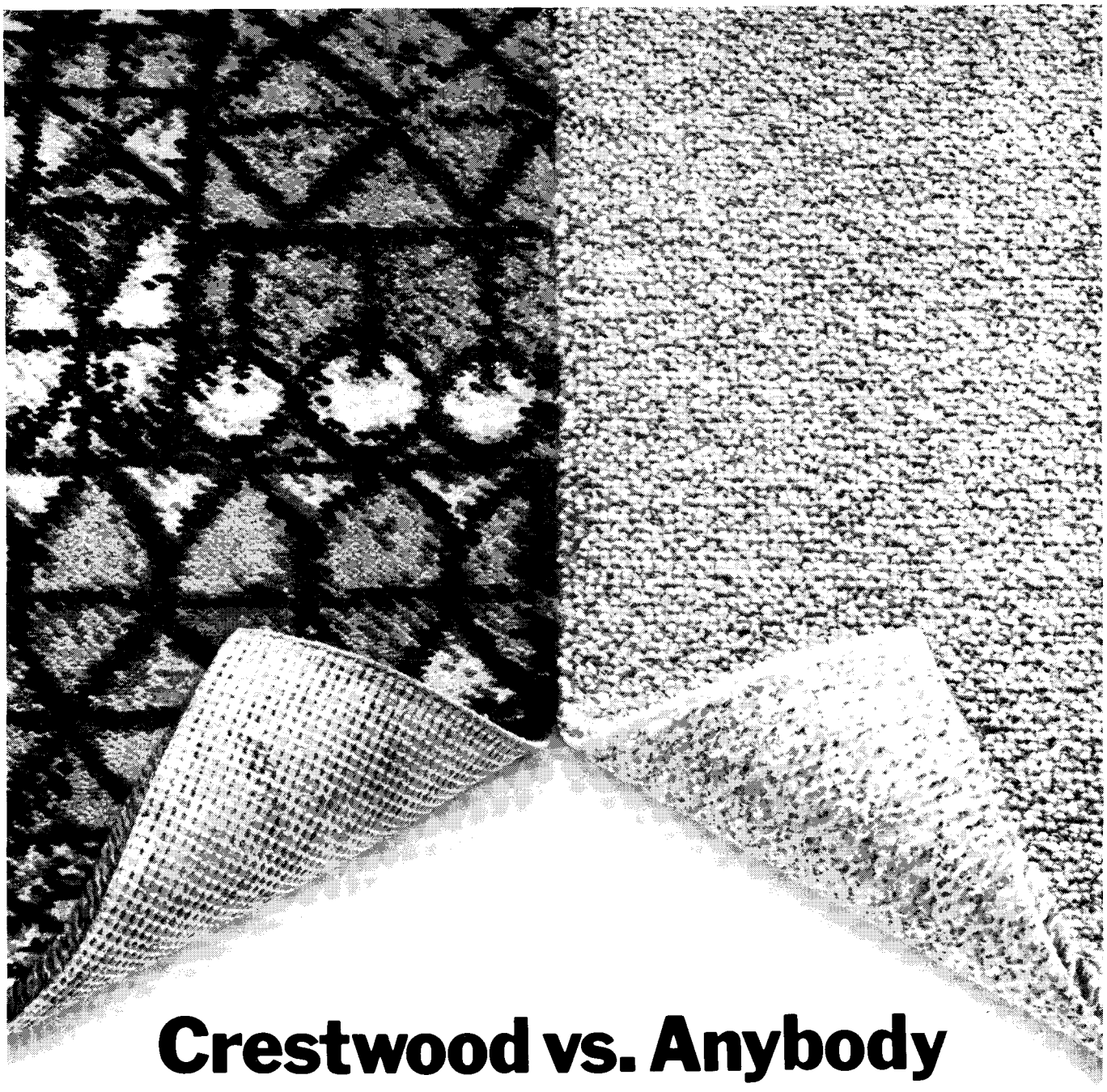

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Performance and Construction. Crestwood will outwear any other public space carpet in its price class. Dollar for dollar, no other carpet stands up to Crestwood. Anybody can offer you long wear or pattern or even low price. But the combination of all three makes Crestwood your number one choice in commercial carpets.

Crestwood's popularity is based on its strength and beauty. The tight, intricate weave enables us to "lock in" the carpet fiber for added strength. Our backing is exceptionally strong and durable. And we put more individual tufts into our carpet than any other of the same price.

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1. Only Crestwood offers you a selection of 14 in-stock patterns. With no minimum yardage requirement.

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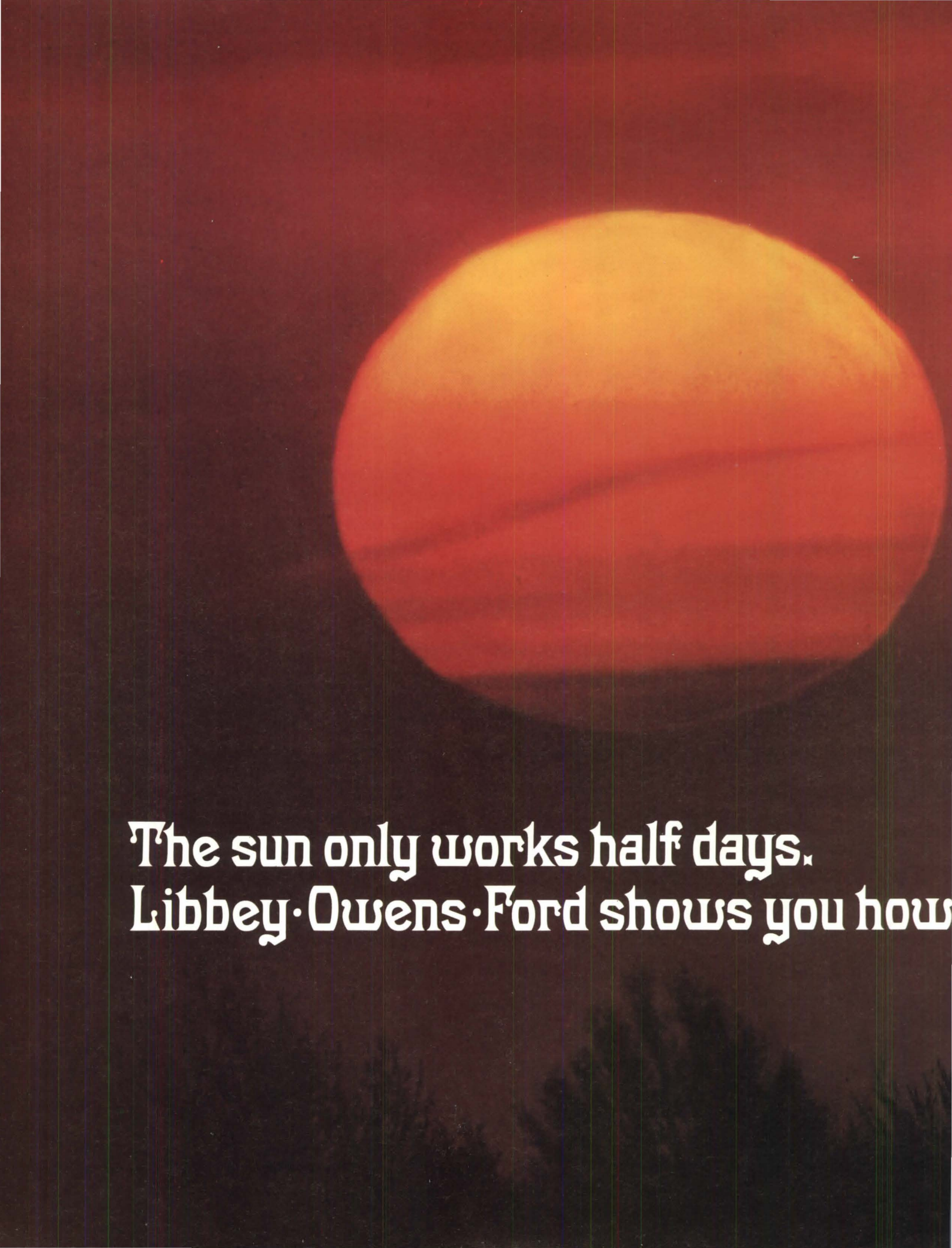
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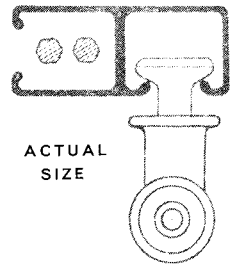

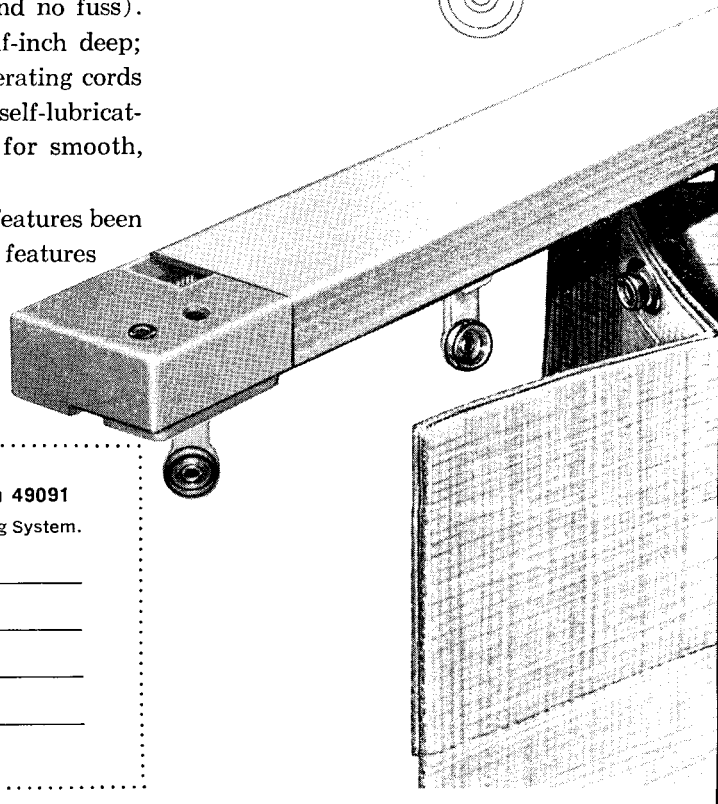

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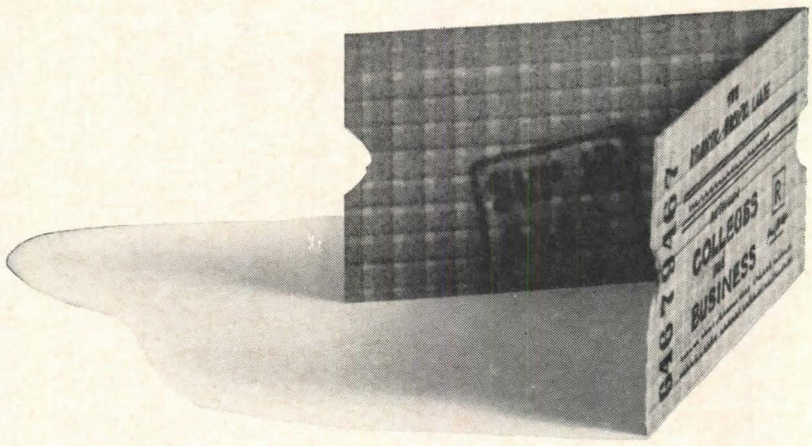

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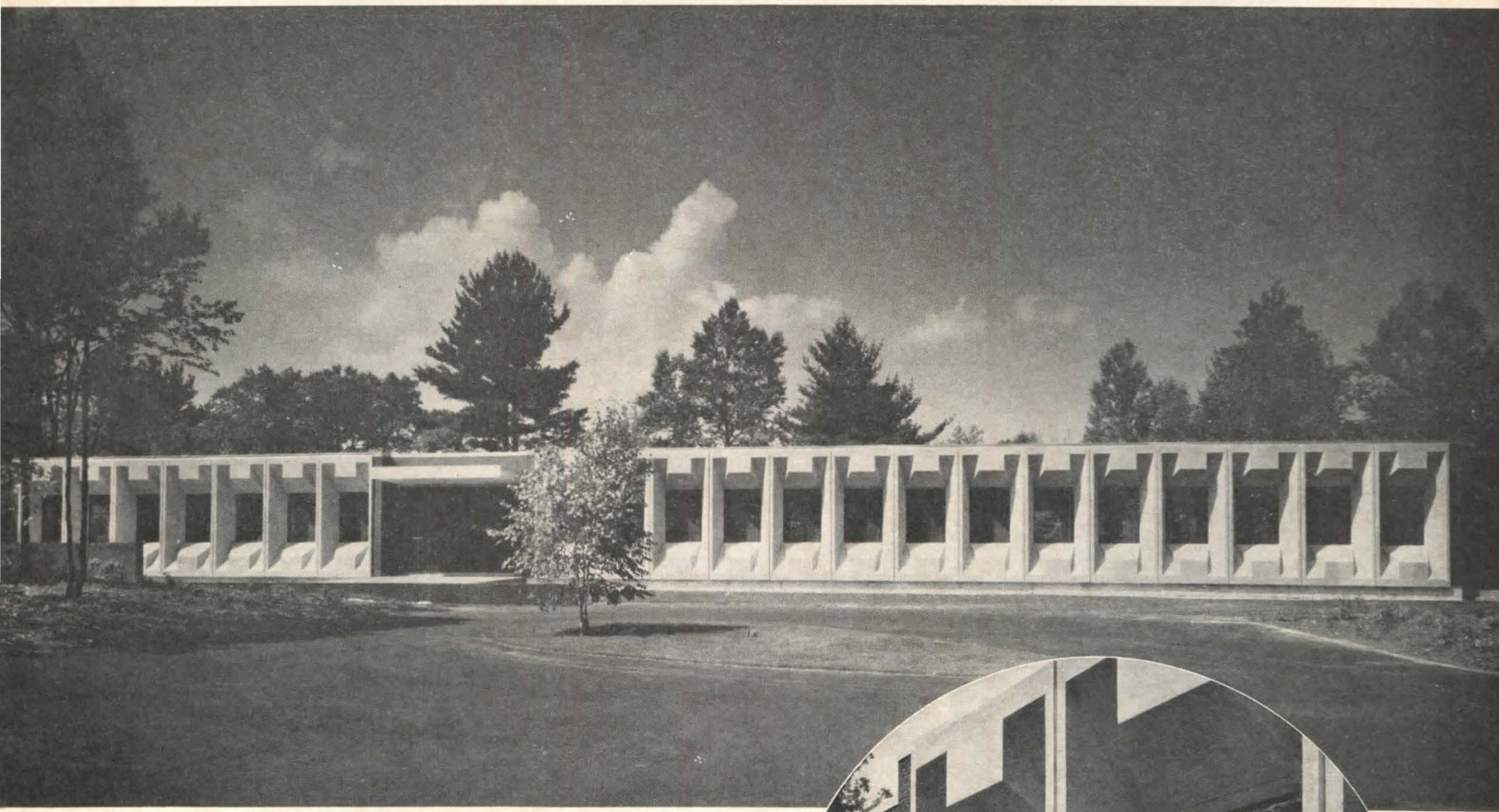

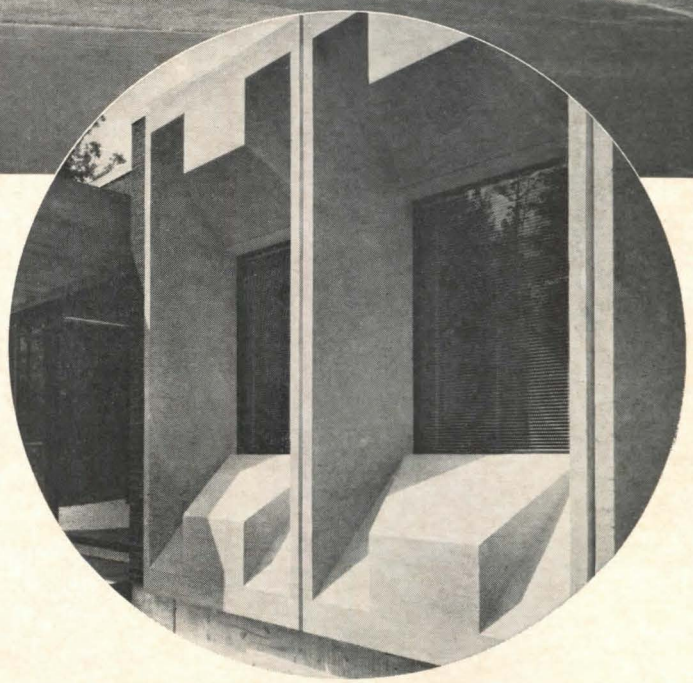

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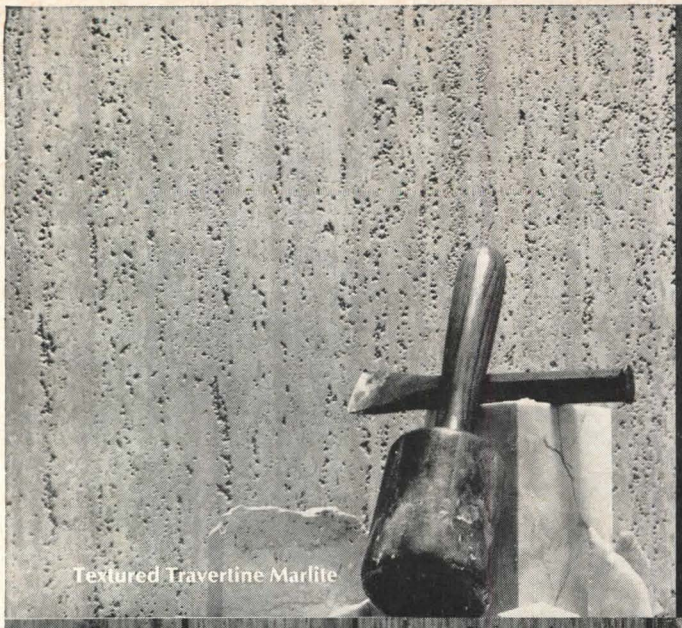

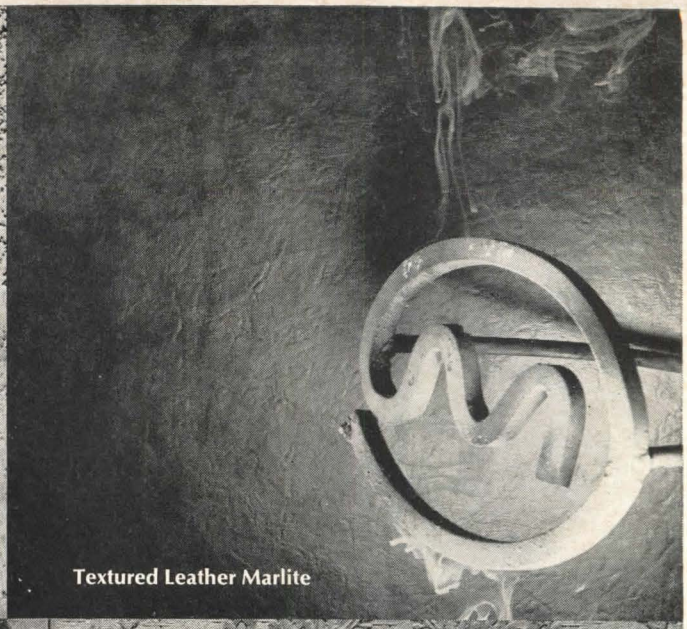

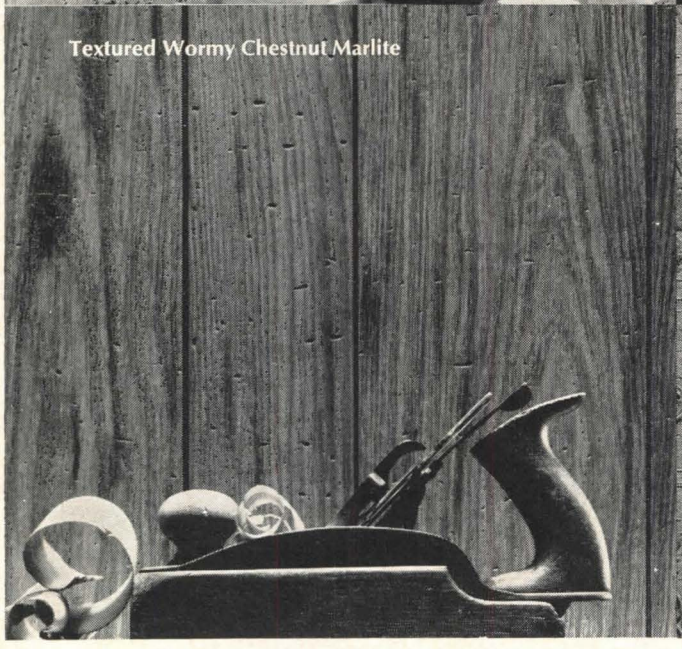

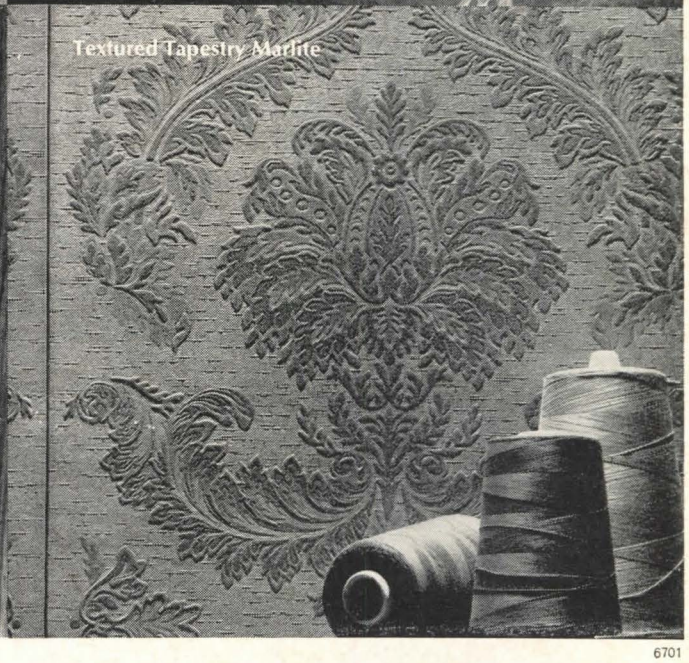

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