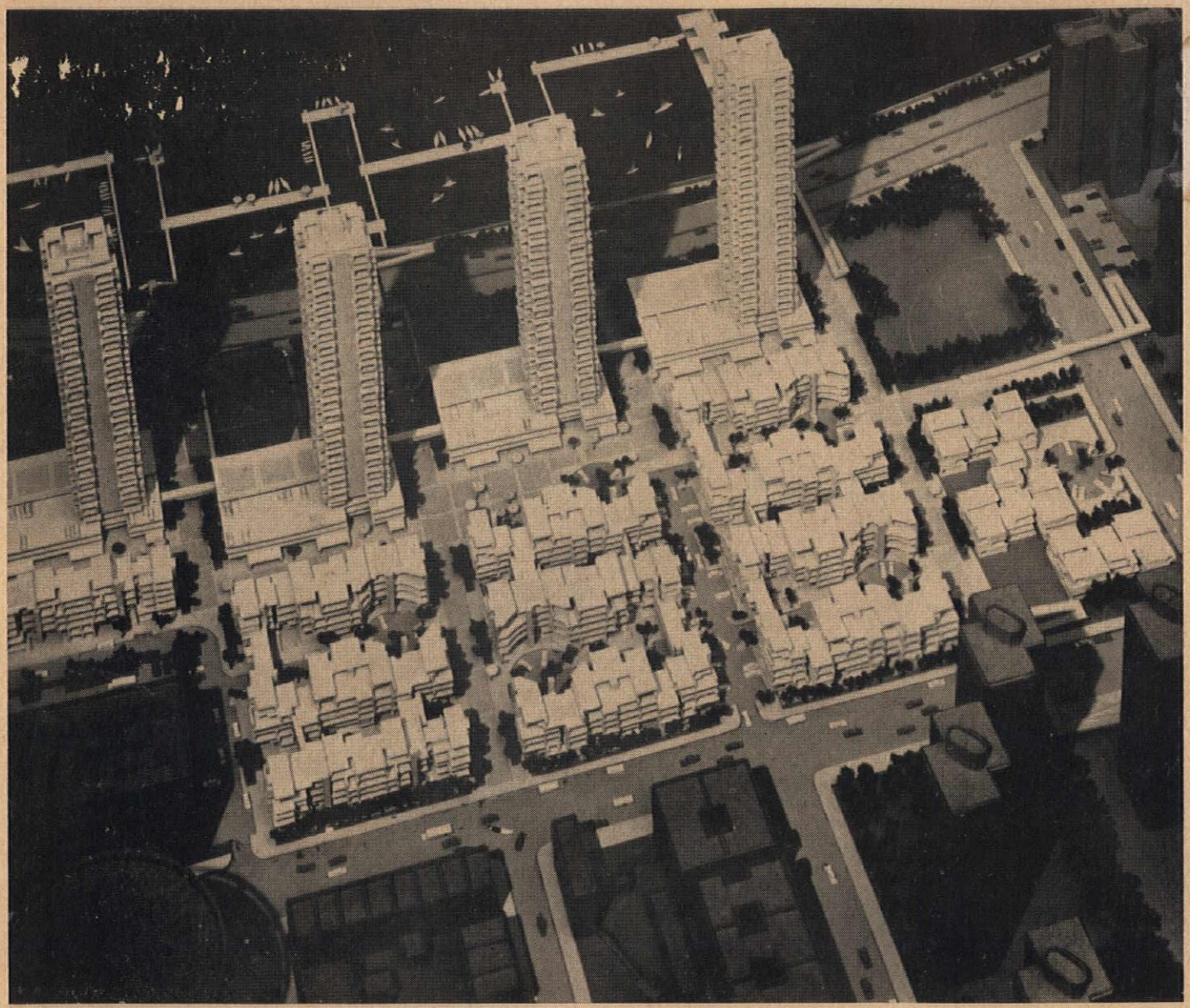
PROGRESSIVE ARCHITECTURE SEPTEMBER 1963

NEWS REPORT

Architecture's Monthly News Digest of Buildings and Projects, Personalities, New Products



Housing design for New York's East Harlem riverfront wins Ruberoid Competition first prize for Minneapolis team.

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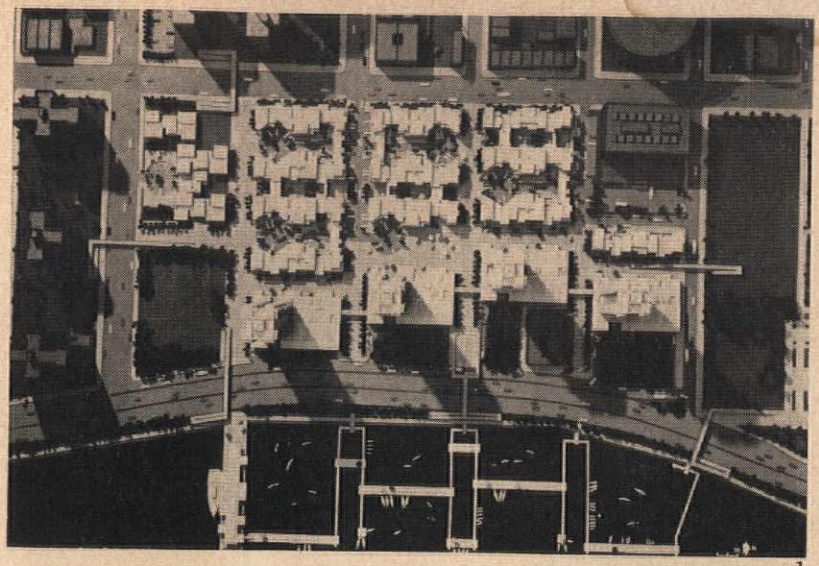

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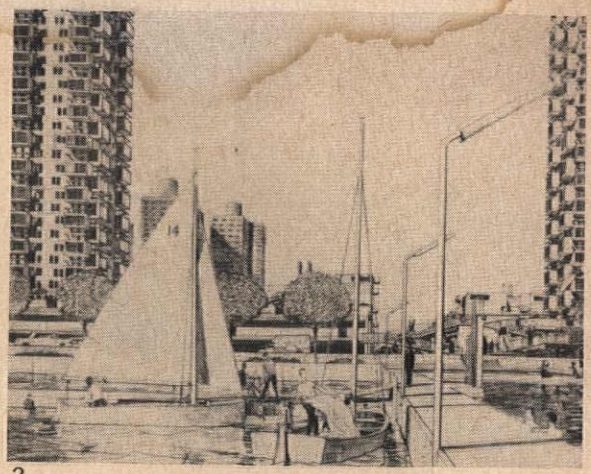

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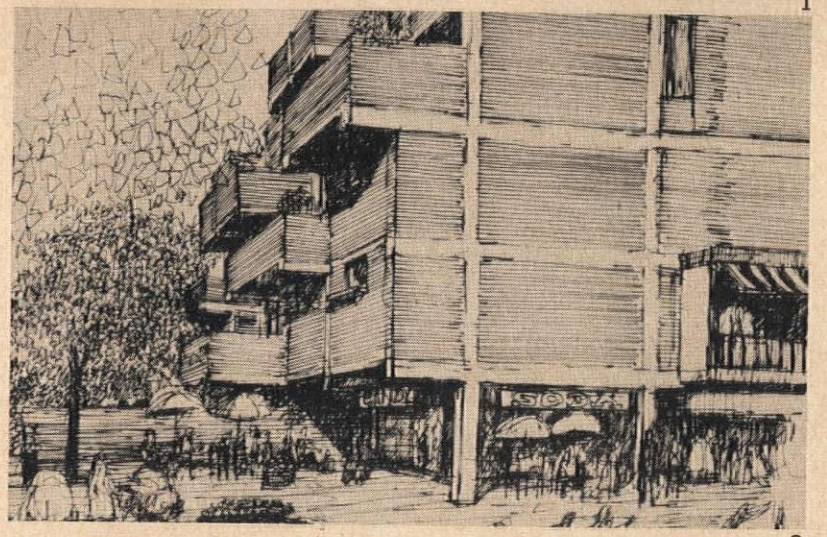

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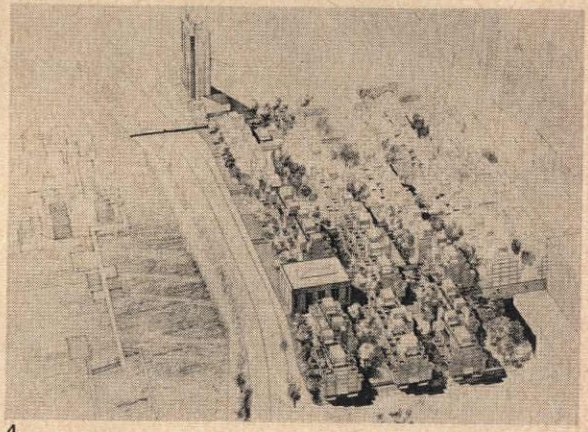

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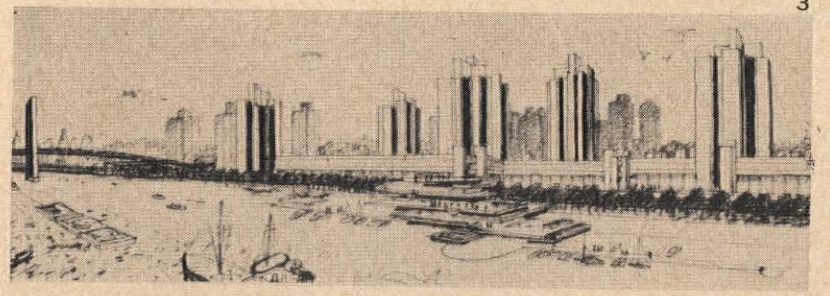

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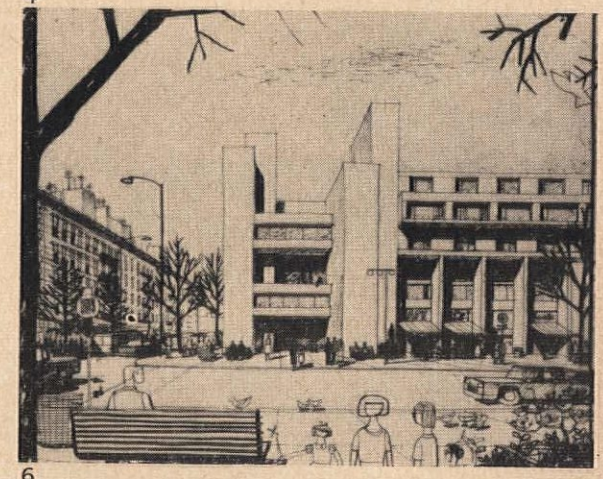

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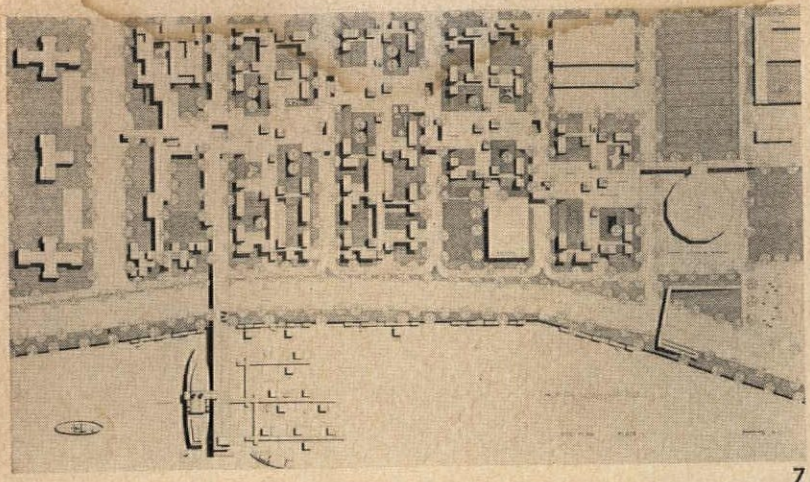
Minneapolitans Win Ruberoid Competition

NEW YORK, N.Y. A team of architects from Minneapolis has been announced as winner of top honors in the 5th Annual $25,000 Architectural Competion of the Ruberoid Company. This was the most closely followed of all the company's competitions, since the problem dealt with a real redevelopment problem on New York's Upper East Side, and the city government has given assurances that the winning proposal will be given close consideration when the time arrives for construction of the actual project. Jury for the competition was composed of architects Sir Leslie Martin, Albert Mayer, and Harry Weese; Herbert J. Gans, city planning associate professor at University of Pennsylvania; David A. Crane, director of land planning and design of the Boston Redevelopment Authority; Lewis E. Kitchen, president of his own Kansas City realty company; and Milton Mollen, chairman of the New York City Housing and Redevelopment Board. Architect B. Sumner Gruzen, professional advisor to the competition, proposed the program and the jury.

The winning scheme (1,2) by Thomas H. Hodne, Kermit Crouch, Tokiaki Toyama, Vern Svedberg, James Solverson, James McBurney, and Robert Einsweiler (affiliation: Hodne Associates) devotes the bulk of the site to buildings of five and six stories—the same height as most older structures in the section. Four high-rise towers occur at the river side of the area, and there is provision for a marina (as in most of the programs submitted). Every third floor of the towers is a common social and recreational area.

Second prize money went to the proposal (3,4) by Edvin Karl Stromston and Richard Scofidio (affiliation: Richard G. Stein) and Felix John



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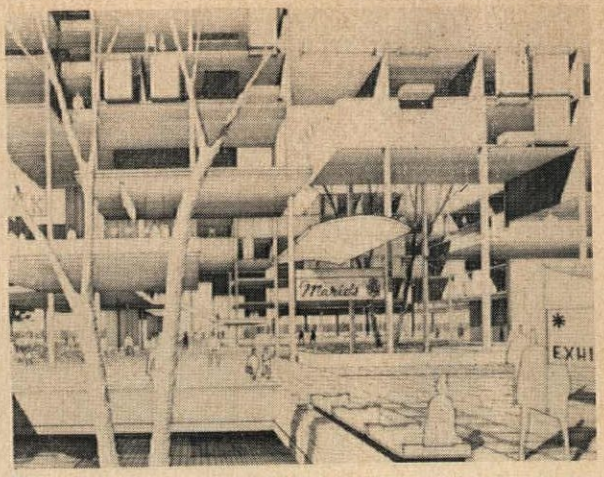

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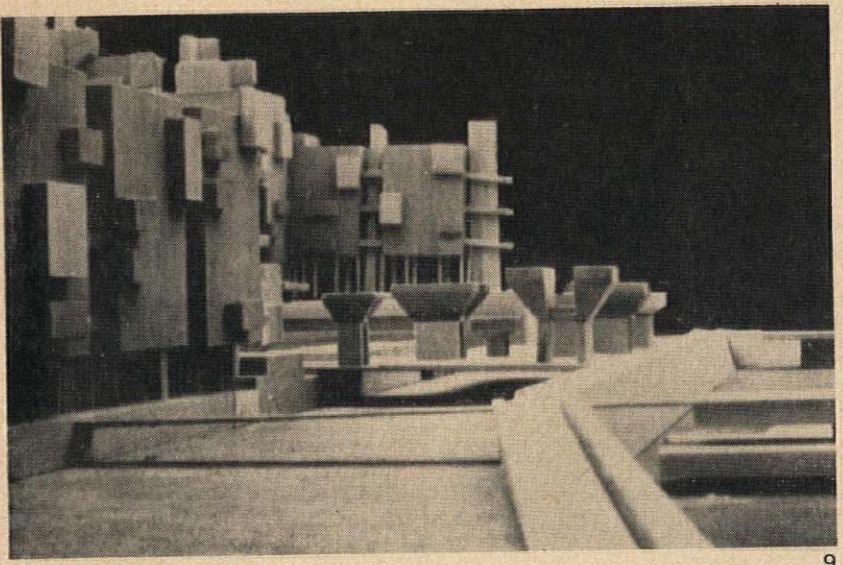

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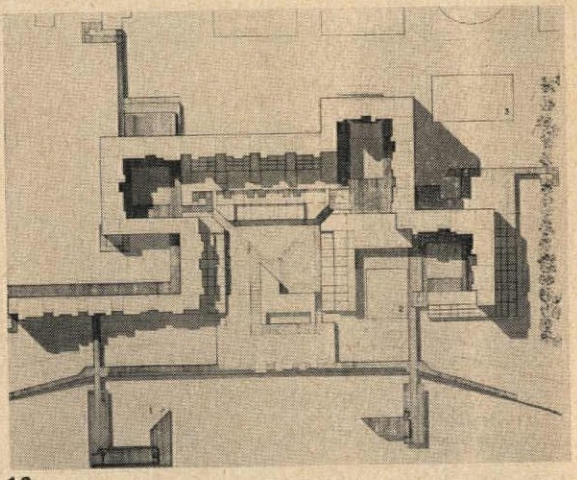

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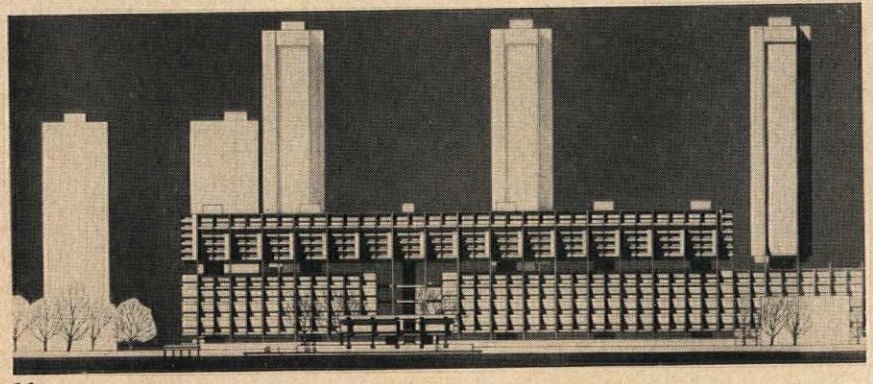

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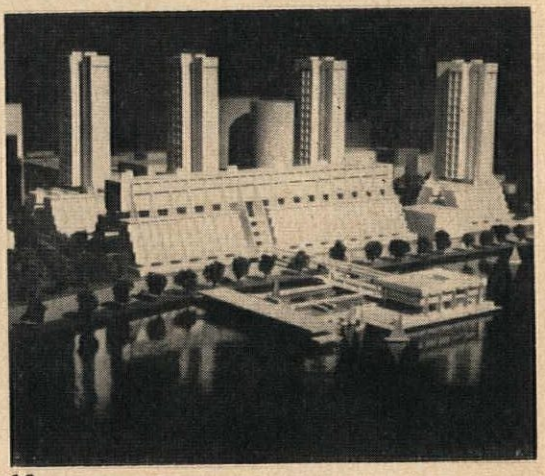

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Martorano (affiliation: Shreve, Lamb & Harmon). It creates a pedestrian community, parking being integrated within the structure—covered, but not buried underground. The jury thought this proposal the "least like public housing" and a "fresh and most radical approach."

Third architectural prize winner (5,6), by Hanford Yang and Amiel Vassilovski (affiliation: Pederson & Tilney), proposes a system of long "ramparts" of low-rise housing joining high-rise towers. Shops and stores occur beneath the housing, a New York characteristic. The low-rise elements tie in with East Harlem.

First prize winning scheme in the Student Awards section of the Ruberoid program (7,8) received praise for its proposed prefabricated frame system to furnish superior low-cost public housing. Designed by Robert P. Holmes and Robert L. Wright of the University of Illinois, the scheme depends on standardization of a certain variety of dwellings to make the prefabrication system viable.

The second student winner (9,10), by Michael Wurmfeld of Princeton, makes more than usual use of the river development, creating an extensive crossing of Franklin D. Roosevelt Drive and tying in marina and recreational areas on the river with the whole development. The design concentrates on the perimeter of the area, causing the buildings to "frame" a walled-off section.

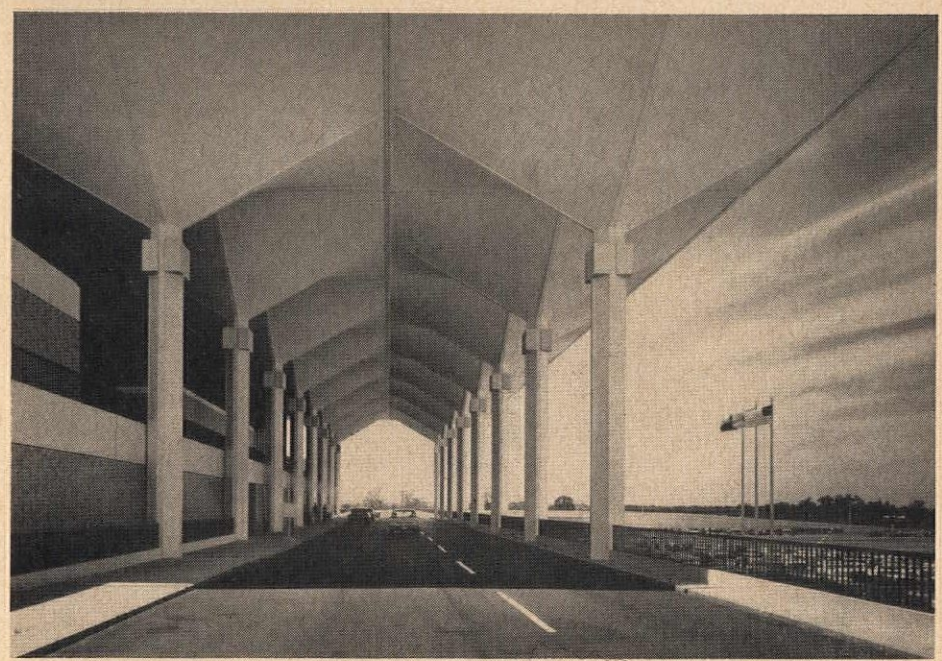
One of the most architectonic concepts of the whole list of winners is the third student prize winner (11,12) by Philip Augustus Shive, Woodrow Wilson Jones, Jr., and Garrard Edmond Raymond of North Carolina State College. Towers are oriented for maximum river view, and low-rise housing creates interesting pyramidal forms through use of step-back terraces designed to catch the sun and form a more man-scaled façade.

ANOTHER MAJOR U. S. AIR TERMINAL

Photos: API Photographers

MEMPHIS, TENN. "I have seen none handsomer, and I have seen most of the metropolitan airports in the world," said Adlai E. Stevenson, United States Ambassador to the United Nations. "An architectural masterpiece," he exclaimed.

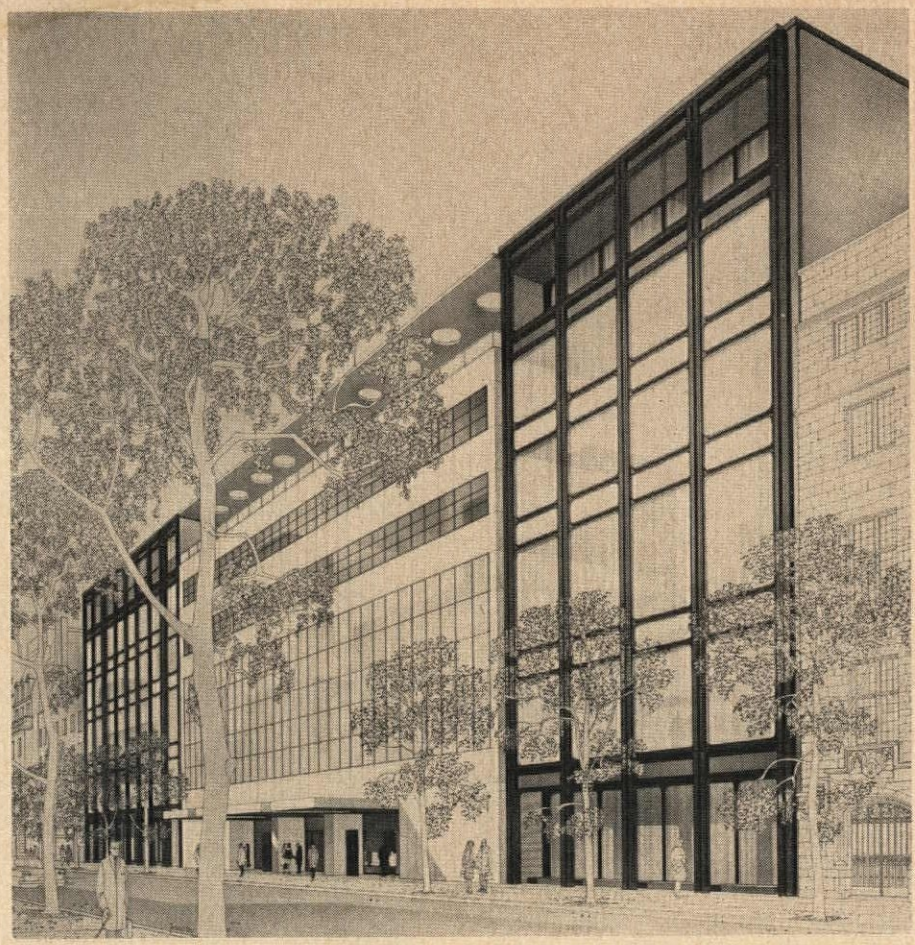
This high official praise came at the opening of the new Memphis Metropolitan Airport recently. Ambassador Stevenson's praise is justly earned by the Mann & Harrover design, according to those who have been through the new building. Winner of a PROGRESSIVE ARCHITECTURE Award Citation in 1961 (JANUARY 1961 P/A, pp. 112–115; detailed analysis in NOVEMBER 1961 P/A, pp. 132–135), the terminal is that *rara avis*, the building that, in completed form, looks almost exactly as it did in the project design stage.



The terminal, distinguished by the high, vaulted roof of its central section, has a smoothly operating, two-level traffic plan (*top*). Enplaning passengers are discharged from automobiles and buses at the top level under the great vaulted canopy (*center*), and deplaning passengers leave from the ground level, where there are baggage claims, telephone and telegraph facilities, rental car desks, and, of course, taxi, bus, and private car lanes. There is an underground passageway to the parking lot. Extending from the main building on the field side is the Y-shaped concourse structure, with its individual waiting lounges at each gate position. A notable "plus" by the Mann & Harrover office is its control of all signs and other graphics in the terminal, which has produced an atmosphere unmarred by the Coney-Islandish claims for attention of many older airports.

In an editorial on the terminal, the *Memphis Press-Scimitar* said, "The new airport terminal gives a lift to the spirit as it was designed to do. It is high and massive and gives the feeling of awe that the gate to a great city should have. But it gives comfort, too, and the comfort that hospitality wants to give."

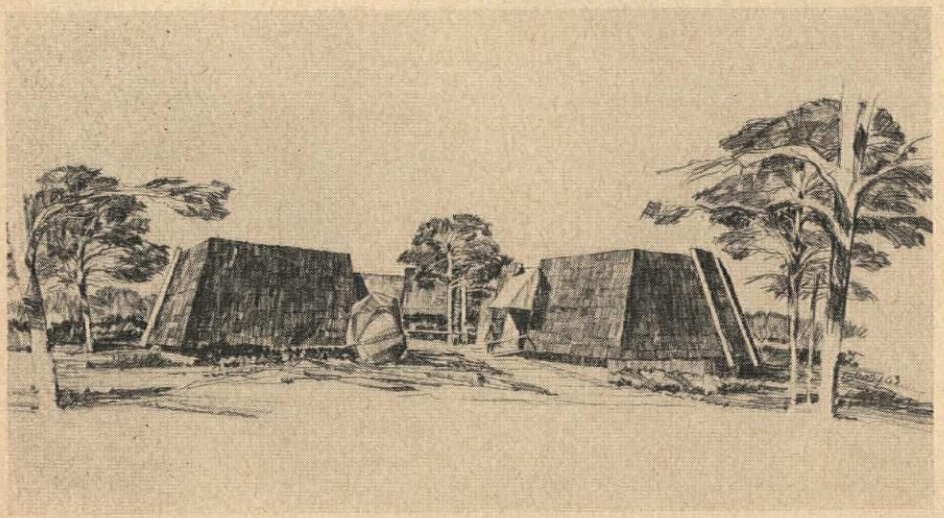
MUSEUM OF MODERN ART ADDITIONS PROCEED



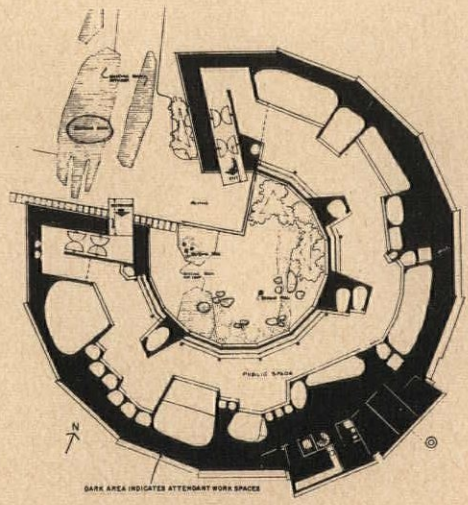
NEW YORK, N.Y. The Philip Johnson-designed additions to the Museum of Modern Art are now under construction following the demolition of the old townhouse next door on West 53 Street. Included in this first stage is the east building (*right in rendering*), which will contain three gallery floors, two office floors, and one floor for conference and reception rooms. Behind this will be the enlarged Sculpture Garden and wing (p. 61, NOVEMBER 1962 P/A). These new facilities will eventually be joined by the new west wing (*background in rendering*), which will be operated in conjunction with the recently purchased Whitney Museum of American Art building. The Whitney will move into a new building designed by Marcel Breuer.

Of additional interest are the changes to be made to the façade of the old Museum of Modern Art building, originally designed by Philip L. Goodwin and Edward D. Stone. The entrance will be moved to the center of the ground floor, and public spaces enlarged and modernized.

Robert Zion and Harold Breen are the landscape architects.



DARK WORLD FOR NOCTURNAL CREATURES



NEW YORK, N.Y. Bats, rodents, owls, and other denizens of the night will be the inhabitants of a unique new building at New York's Bronx Zoo. Designed by Morris Ketchum, Jr. & Associates, the building will be an arc-shaped structure surrounding a central entrance and exit court. Its in-slanting walls will be appropriately sheathed in dark gray slate.

"The World of Darkness," as the exhibition will be known, will use infrared lighting techniques to show the night creatures moving actively, in displays designed to simulate accurately their natural surroundings. The building will have a special "conditioning" room where the creatures' life cycles will be gradually and painlessly reversed before they go on display. The plan (*right*) will lead visitors through a light-baffled entrance to a circular aisle between the exhibit cases and displays. There will be displays showing nocturnal life in tropical forests, Southern swamps, the desert, and caves, in addition to exhibits of burrowing animals, large carnivores, reptiles, and birds and insects.

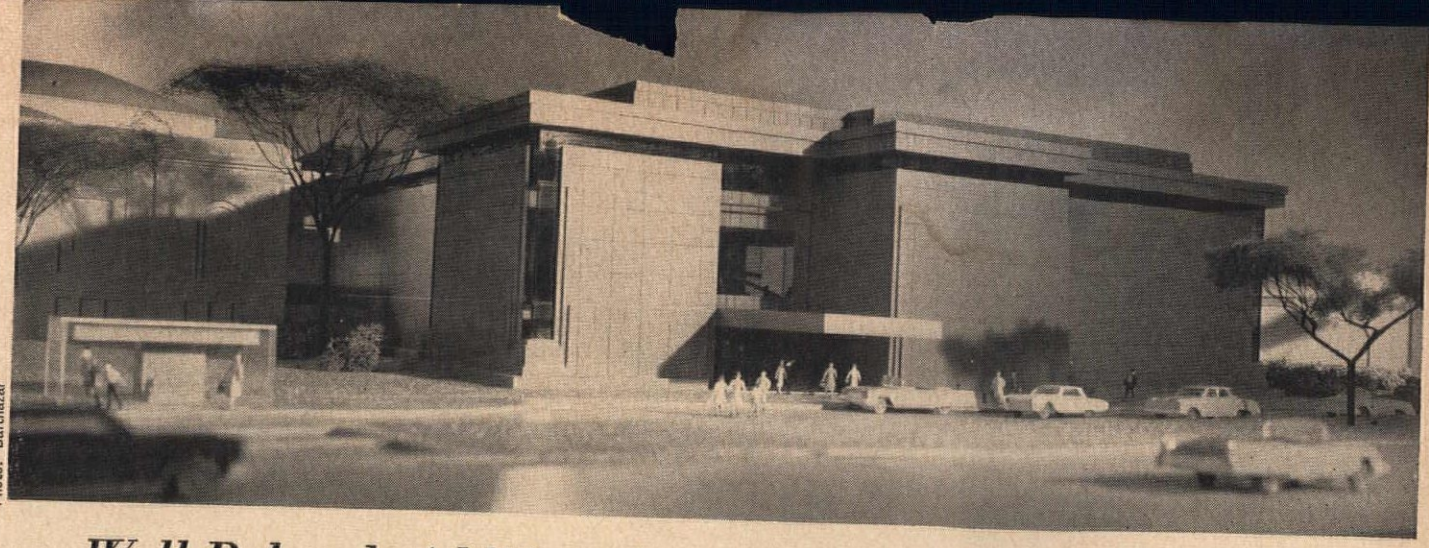


Photo: Balthazar

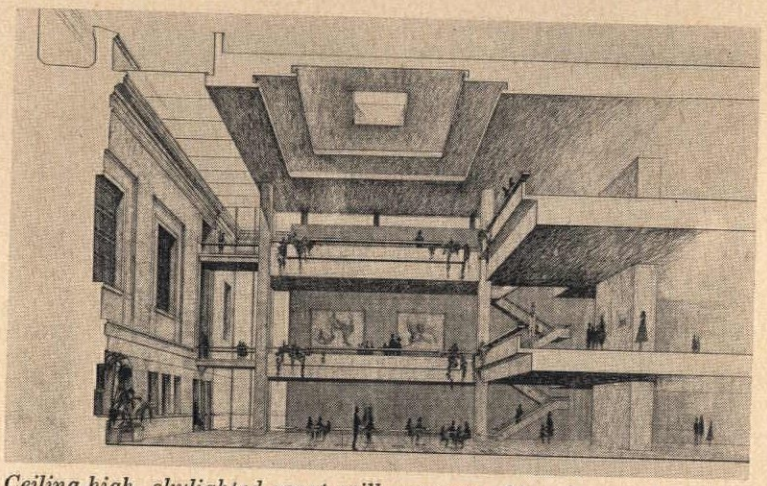
Well-Related Addition for Detroit Art Institute

DETROIT, MICH. A proposed addition to an art museum in which the new structure is perhaps better related to the parent building than the one on page 68, is the one designed for the south wing of the Detroit Institute of Art (Harley, Ellington, Cowin & Stirton, Architects & Engineers; Gunnar Birkerts, Design Consultant.)

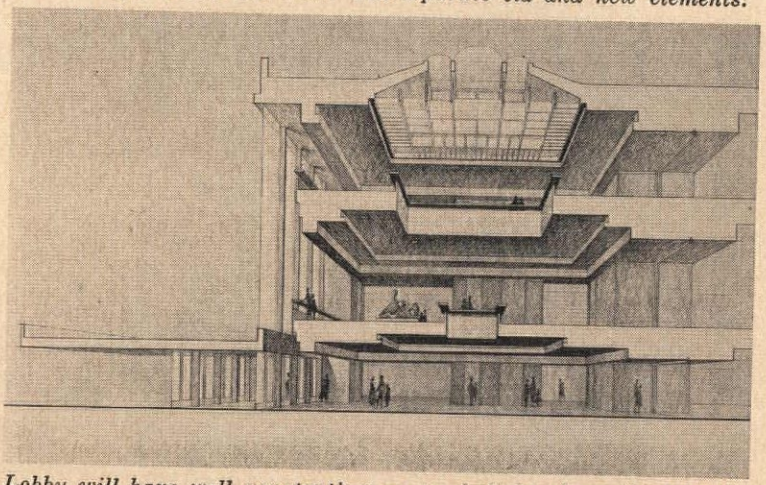
According to Birkerts, "The original building by Paul Cret, built in 1925 in Italian Renaissance style, is strong in its form and symmetry and the scale is tremendous."

The major design problem, of course, was to provide greatly increased gallery space in a building that will "go with" the Cret building while still preserving its own architectural integrity and contrast. Birkerts has done this very well in several ways. He follows the cornice line of the old structure faithfully, although in greatly simplified form. And, most interestingly, he makes of the new building what could almost be described as a "photographic reverse" of some of the old building's elements. The soffit line becomes glassed, reflecting the shadowed soffits of the earlier structure, and the new wing's corners are "cut out" in glass, recalling the inset but opaque corners of the eclectic museum. A particularly sophisticated element of the design is the three-layer, striated treatment of the granite walls (*right, bottom*). The walls are stepped in twice to become wider, taller panels, and the vertical emphases or striations alternate to deepen the texture. Thus, this building echoes the rich ornamentation of its marble progenitor in quite contemporary terms. Birkerts, incidentally, considers this one of the central design ideas of the project.

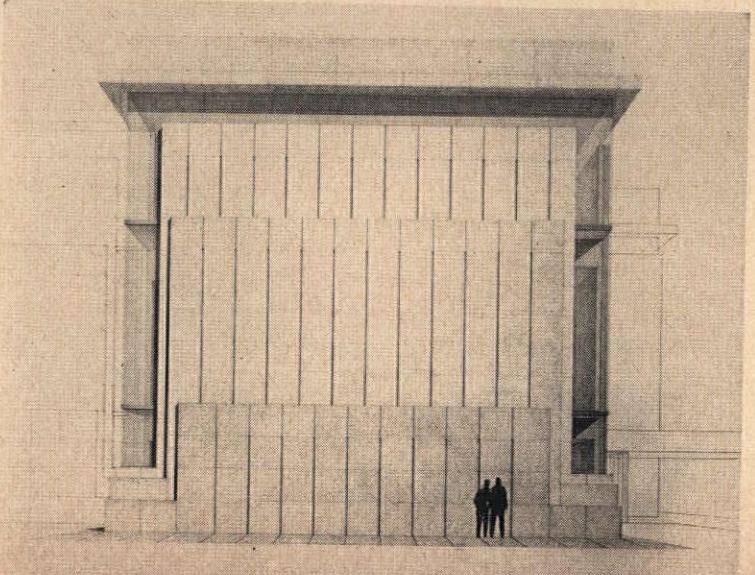
The new wing will provide lobby, sales space, and display areas on the ground floor, plus a dining court in the area joining the two structures. Temporary and permanent exhibition areas will occur on the two upper floors. Basement will house mechanical equipment.

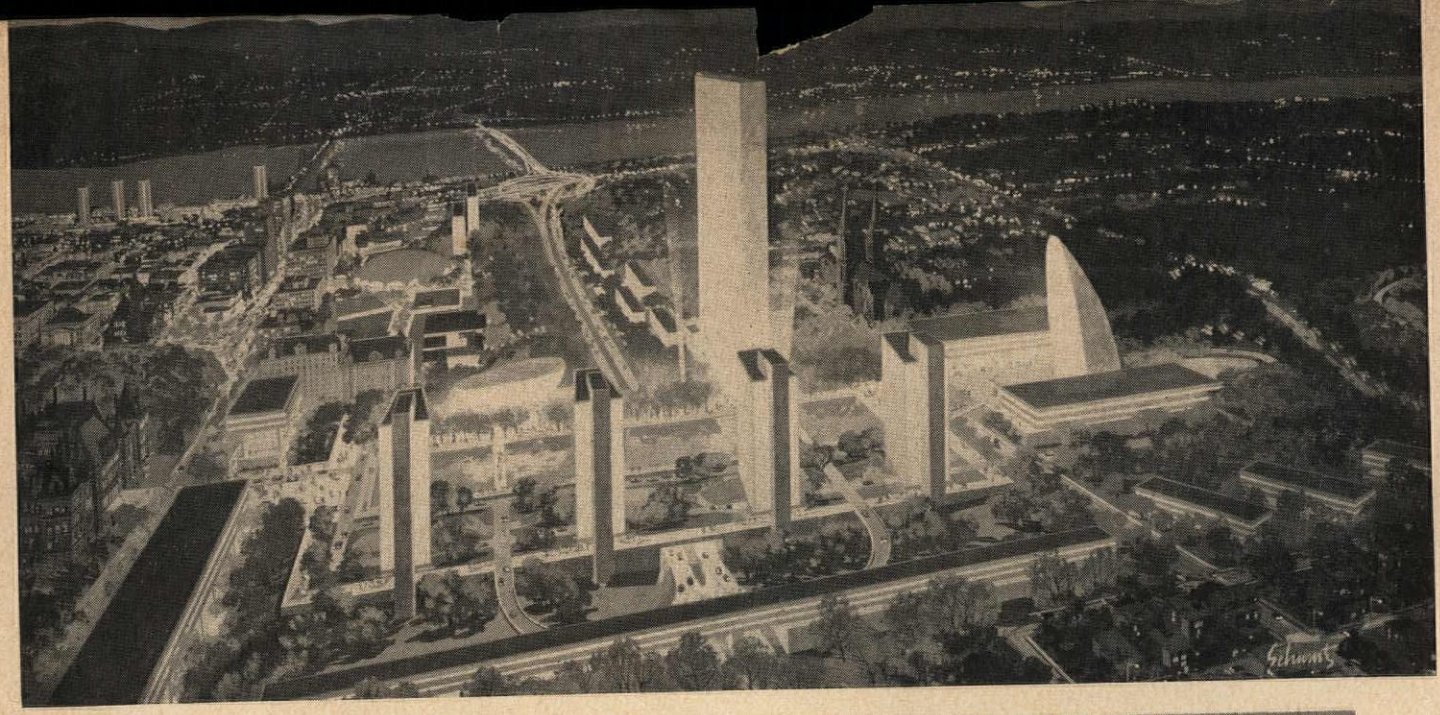


Ceiling-high, skylighted court will separate old and new elements.



Lobby will have well penetrating up to skylight above third level.





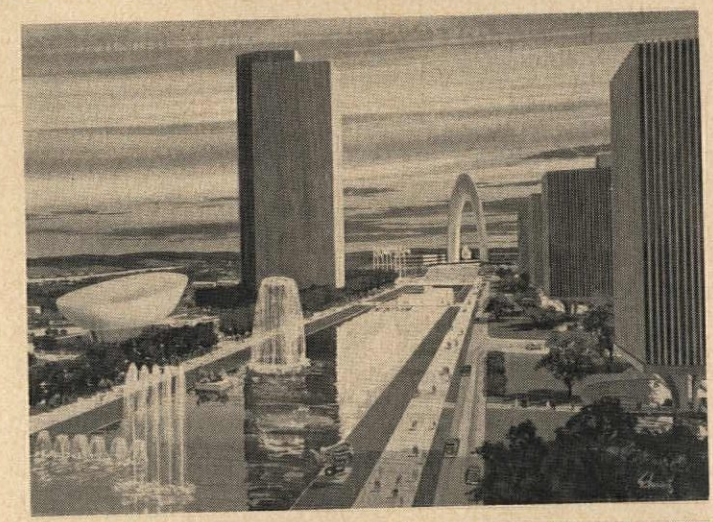
Cacophony of Forms in New York Capital

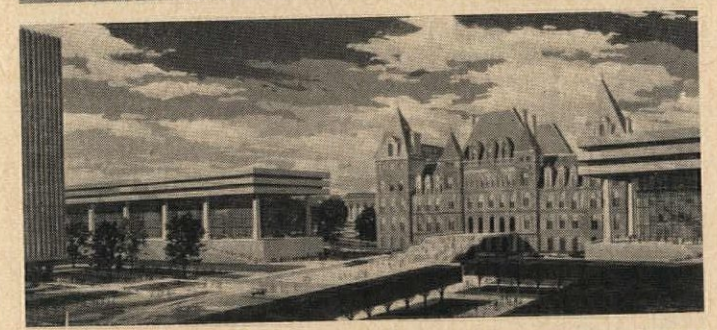
ALBANY, N.Y. Half a cantaloupe sliced on the bias, a croquet wicket with avoirdupois, an upside-down orange half from a Kraft salad, and four little towers and a big tower resembling forms of cubistic coition are the major elements in the South Mall Plan proposed — seriously, we presume — for the capital of New York State.

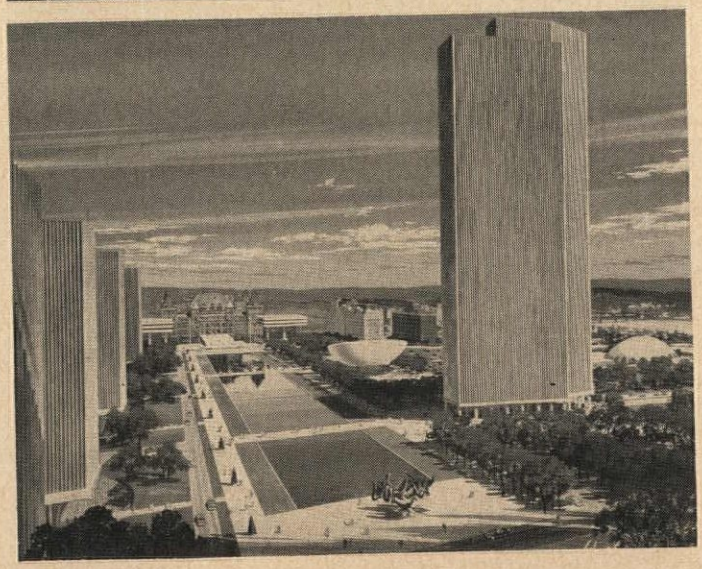
Culpable parties include Architects Wallace K. Harrison, George A. Dudley and Blatner & Williams, plus that would-be architect, Governor Nelson A. Rockefeller. A noted selector and collector of modern art, the Governor evidently has a lot to learn about the mother of the arts.

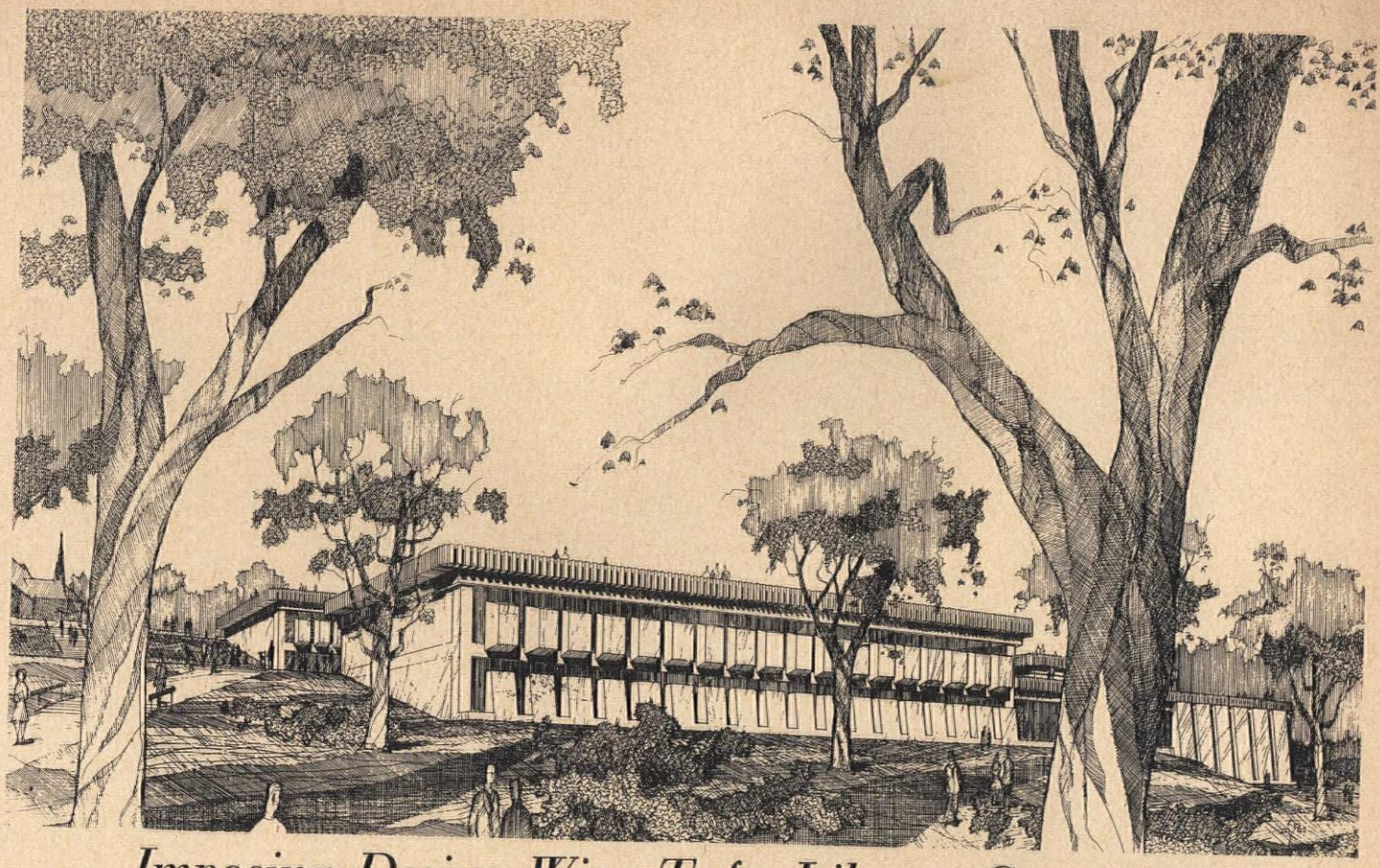
The badly related, diverse forms are proposed to extend from the capitol itself down a vast mall to the "Arch of Freedom" (the croquet wicket). Along the way will be the office buildings (for government agencies), the 750-seat auditorium and 300-seat conference room Meeting Center (the cantaloupe), a Legislative Office Building, a Department of Law and Department of State Building, State Library, and State Archives Building. Peripheral to the mall development will be a long, street-spanning Motor Vehicle Building and the Convention Center (the half-scalloped orange). Not content with diminishing the pleasantly Graustarkian old Capitol Building with all this M-G-M monumentality, the mall actually would climb up to its second story with a series of vast steps (*center, right*).

Admittedly, the state is in severe need of well-planned downtown space to integrate the many departments that now occupy ragtag and bobtail quarters throughout the city, but certainly the center of a rather proud metropolis need not become an exercise in architectural pop art.





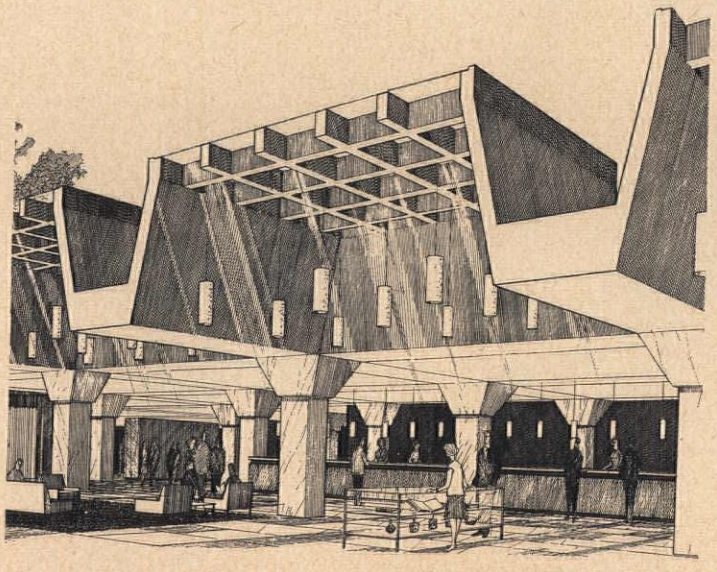


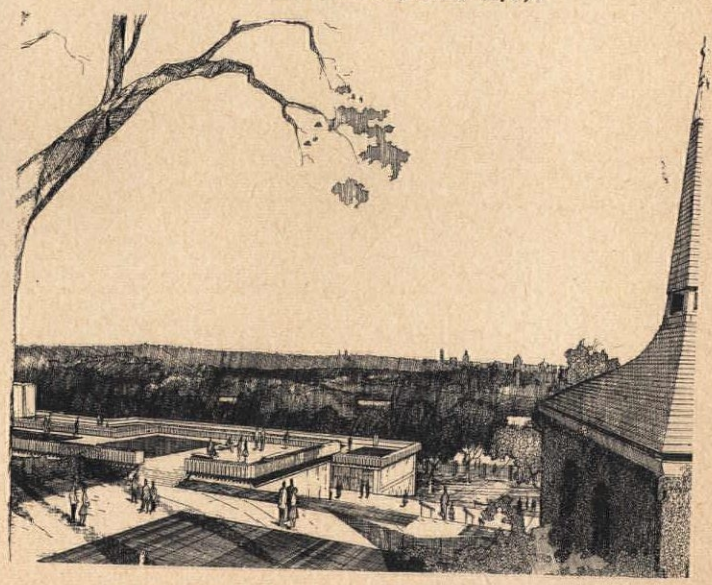


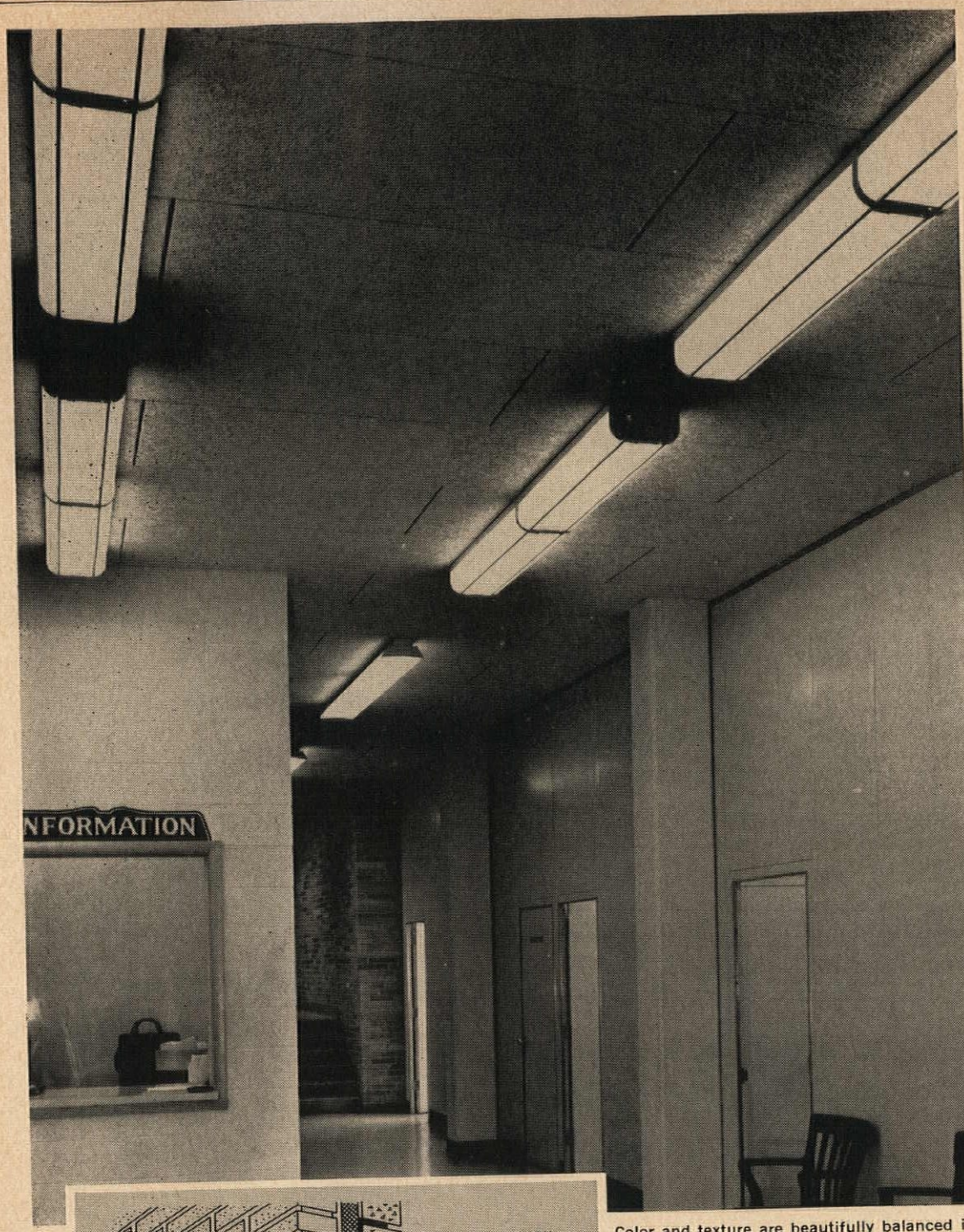
Imposing Design Wins Tufts Library Competition

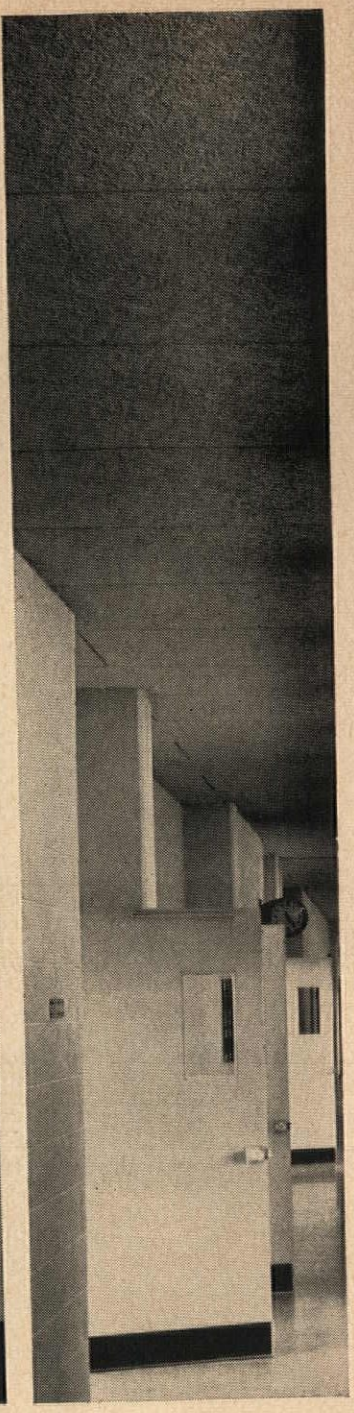
MEDFORD, MASS. Like a rock thrown into a quiet pool, the Boston City Hall design seems to be spreading its influence in ever-widening ripples over this New England state. Latest notable project to testify to the design resurgence of the Boston area is the one by Campbell & Aldrich, which recently won an invited competition for the design of the Tufts University Library. Competing against The Architects Collaborative; Shepley, Bulfinch, Richardson & Abbott; and Perry, Shaw, Hepburn & Dean, the intriguing Campbell & Aldrich concept walked off with honors from a jury which was, surprisingly enough, mainly nonarchitectural. Architect Lawrence Anderson and Landscape Architect Hideo Sasaki *were* jurors, as were Tufts President Nils Yngve Wessell; Tufts Vice-President Comegys Russell de Burlo, Jr.; and William Francis Keesler, Senior Vice-President of the Boston First National Bank and a Tufts Life Trustee. Pressional Advisor Walter F. Bogner of Harvard Graduate School of Design prepared program.

Unlike at least two of the other entries, the winning proposal makes wise use of the hillside site by stepping the building down the hill and creating a rooftop terrace (*below right*). This ties in splendidly with Goddard Chapel on the crest of the hill, a landmark of the university. The strong form of the building as seen from Professors Row at the bottom of the site (*above*) evokes a "fortress of learning" feeling that is impressive without being forbidding. Equally strong structural concept is seen in section through the circulation desk area (*below left*).

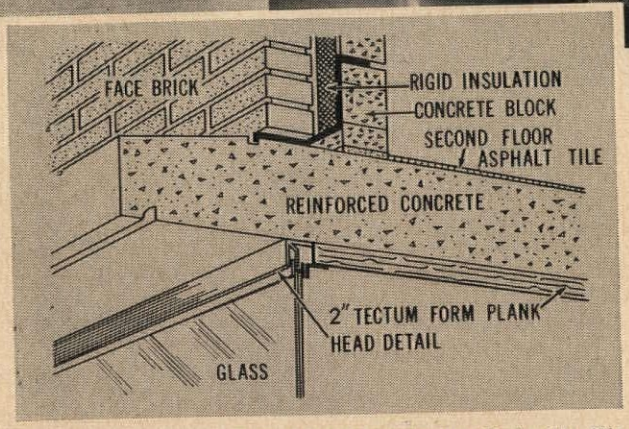








Color and texture are beautifully balanced in the reception area and throughout the building.



Building: Daniel W. Egan Hall, The College of Steubenville, Steubenville, Ohio
The Reverend Columba J. Devlin, T.O.R., President
Architect: Joseph F. Bontempo & Associates, R.A., Rochester, Pa.
Consulting Engineer: Michael Baker, Jr., Rochester, Pa.
General Contractor: Gilbane Building Company, Providence, R. I.

The Gold Bond difference is Tectum "Best construction on campus"

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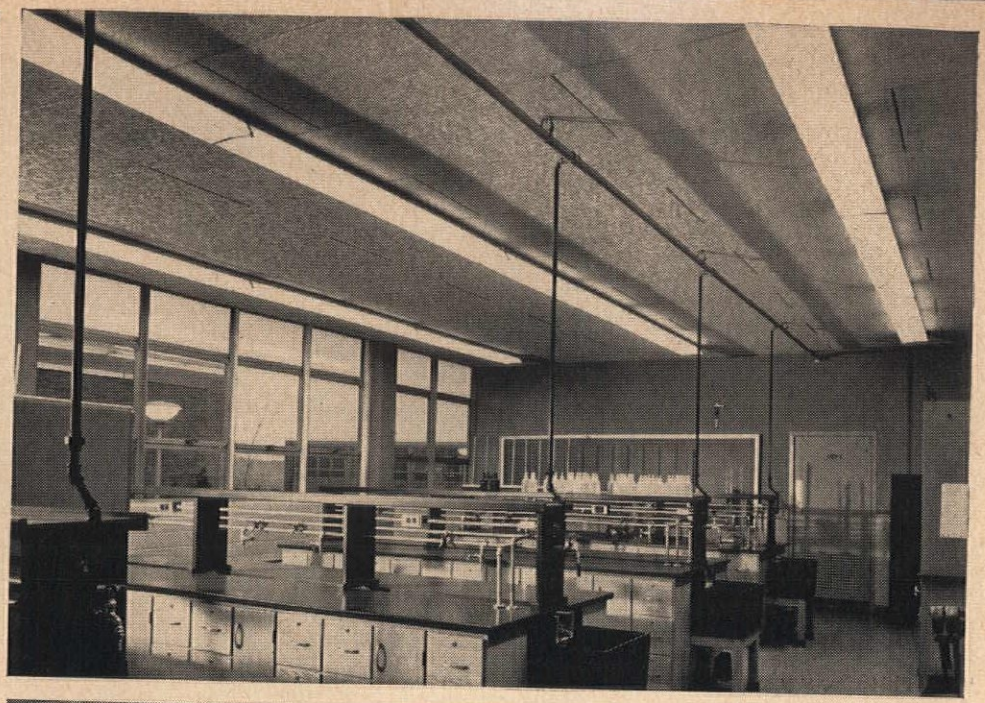

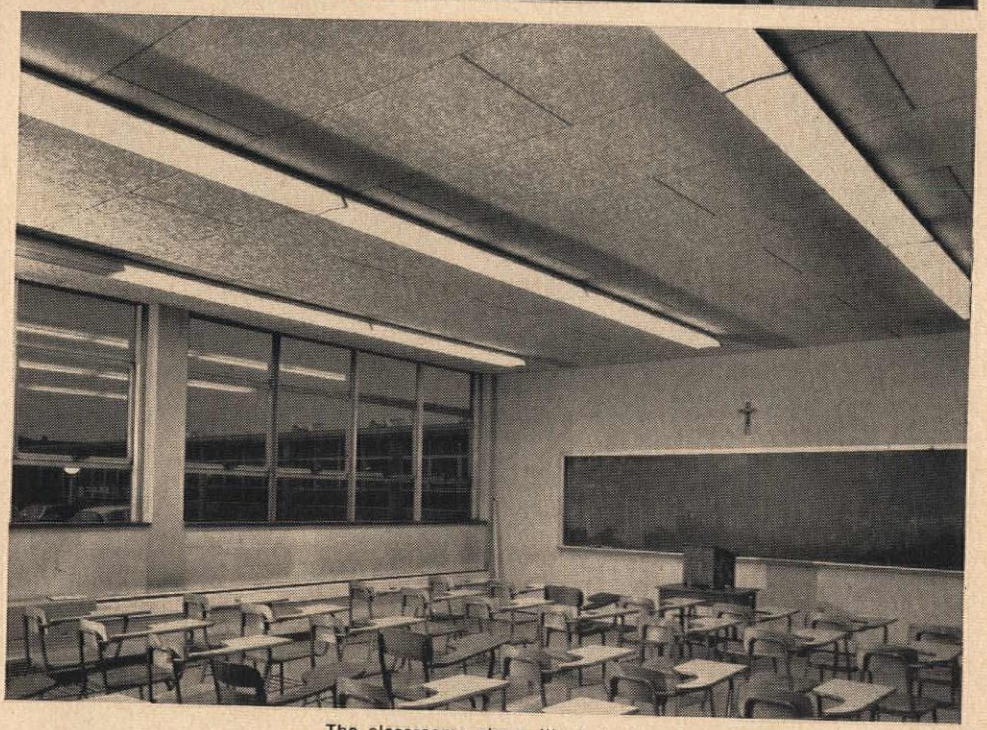

The classrooms above illustrate how the esthetic and the functional values of Tectum ceilings contribute to better study conditions.

Egan Hall on the beautiful campus of The College of Steubenville in Ohio is one of several buildings here employing the Gold Bond Tectum Form Plank method of construction. It houses classrooms, lecture halls, faculty offices, library, student lounge and book store.

According to school authorities, "Tectum was used in this electrically heated building for economies of erection as well as functional benefits inherent in the basic material. We are especially pleased with its insulating and acoustical values and the attractiveness of the richly textured ceilings. Tectum as a form plank for 8" reinforced concrete slabs—then functioning as a finished ceiling after shoring is removed—makes for fast, economical construction. We've used it for a number of our buildings with equal success."

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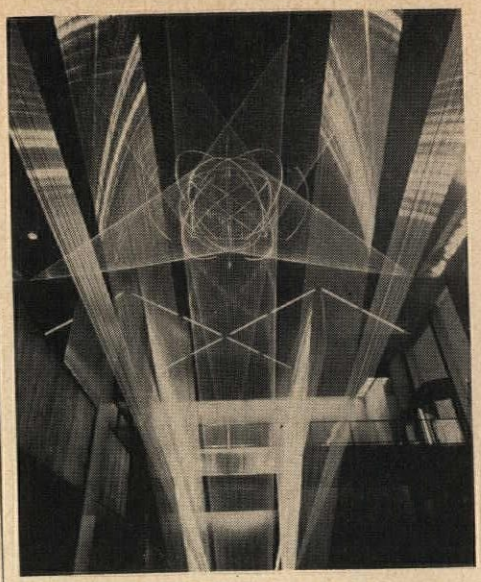
Dry Lumber Standard

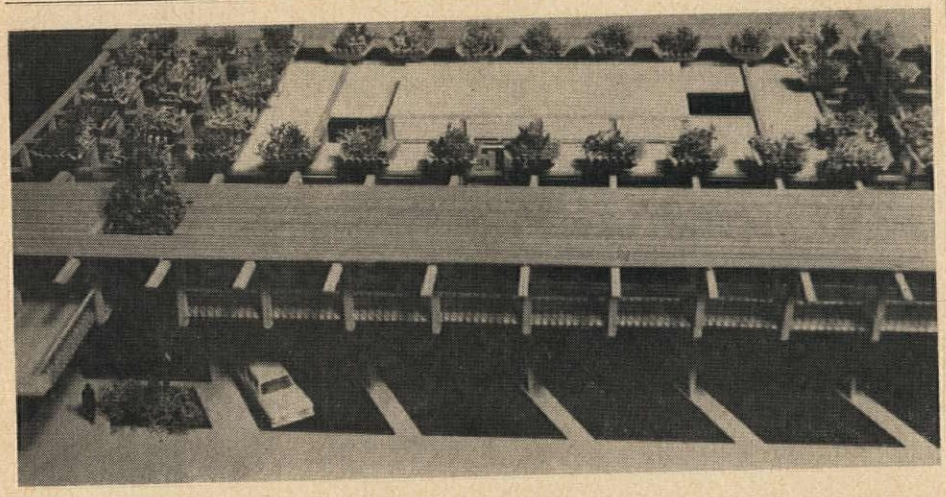
Through the efforts of the American Lumber Standards committee, a new standard for dry lumber has been circulated by the Department of Commerce to architects on its acceptor list for approval. The new standard, revised SPR 16–53, proposes the following: (1) establishment of a measurable lumber standard with sizes related to moisture content (average moisture content of 15 per cent with a maximum moisture content of 19 per cent); (2) provision of positive identification of dry lumber; (3) establishment of minimum surfaced thickness for dry lumber framing at 1½" (tests by U.S. Forest Products Laboratory say that this is more than adequate to meet existing span tables); (4) requirement that green lumber be surfaced at the mill to sizes that will allow for shrinkage to match equivalent size and strength of dry lumber. Among advantages, according to proponents of the standard, are: lower-in-place cost; higher strength-to-weight ratio; first step towards establishment of simplified span tables. Architects who are desirous of expressing their opinions should write to The Department of Commerce, Washington 25, D.C.

Lippold Piece Viewed

Richard Lippold's heroic arrangement of stainless steel and gold wires for the Pan Am Building is now complete and is by far the best art work in the building, and perhaps the most maltreated. The viewer, taken unawares when entering the side lobby of the building in which the piece is placed, tends to flinch back from the room-filling display of glitter. Cautiously edging his way in and around the work, he can appreciate Lippold's technical mastery of his form. The quasi-representational spheres at the center of the composition, unfortunately, recall Robert Moses's googy "Unisphere" at the New York World's Fair.

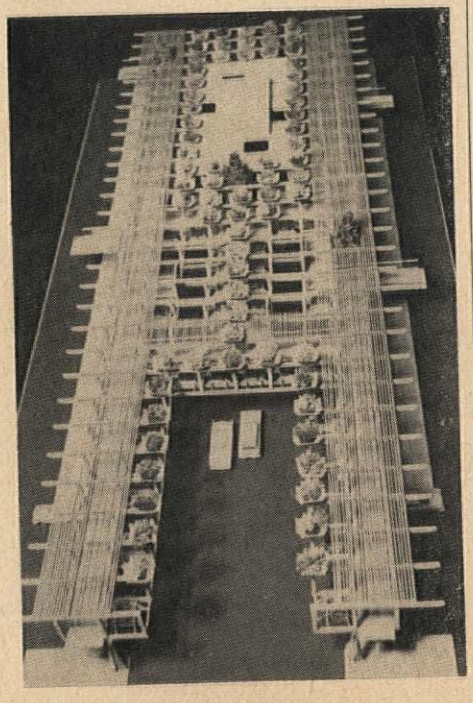


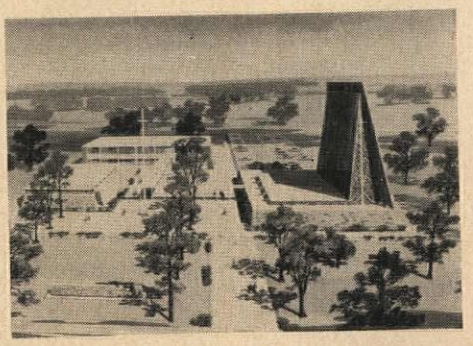
Elsewhere in the Pan Am Building, there were, at last count, about 12 signs and symbols — including one intruding all the way into the concourse of Grand Central Station — proclaiming that this *is* the Pan Am Building (who ever questioned that?). This display has earned the opprobrium of many architects for its vulgarity. Why not go the whole way and hang a Pan Am sign in the Lippold?



Overhead Mall Unified by Trellis Treatment

An overhead pedestrian mall proposed by Architect Herb Greene would provide additional downtown parking and reduce in-city congestion by separating cars and people. The proposal, which could span existing thoroughfares, is made a visually continuous form by treatment as a huge trellis covering the street. All diverse functions within the mall — shops, stores, offices, cafes, gardens, rest areas, etc. — are thereby unified into one aspect. A modular design of precast concrete units would permit some degree of flexibility. As stores change, locations of entrances to the mall could be moved, for instance. Overhead panels shading the pedestrian walk would double in brass as a platform for fire equipment. Local character would be attained through color and pattern of the precast panels and plant boxes. Proposal permits normal renewal of existing buildings, but with added dimensions for the city.



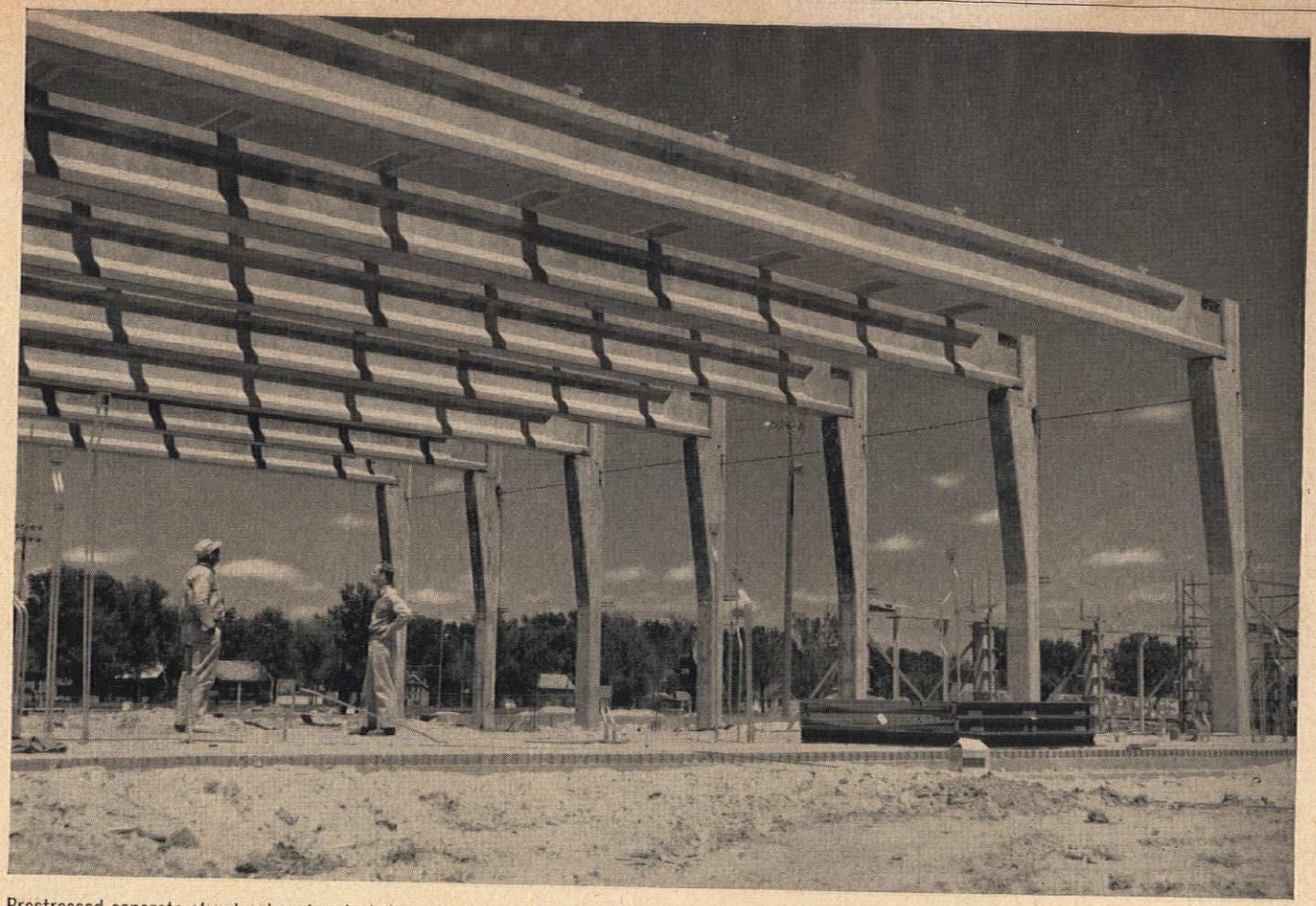


French Glass in N. J.

Sanctuary of First Baptist Church of Vineland, N. J.,will feature end walls of faceted mosaic glass from France. Thick glass, which will be set in concrete tracery, is made in pots and broken into pieces to be chipped when cool. Architect: John Robert Gilchrist.

Penn Center Compass

Vincent Kling's design for IBM's 21-story office tower at Penn Center



Prestressed concrete structural system includes columns, girders and purlins.

ARCHITECT: Hinde & Laurinat, AIA, North Platte, Nebraska
CONTRACTOR: Homan Brothers, Inc., North Platte, Nebraska
PRESTRESSED CONCRETE PRODUCER: Nebraska Prestressed Concrete Co., Lincoln, Nebraska
OWNER: City of Gothenburg, Nebraska

PRESTRESSED RIGID FRAME PROVIDES COLUMN-FREE COMMUNITY BUILDING

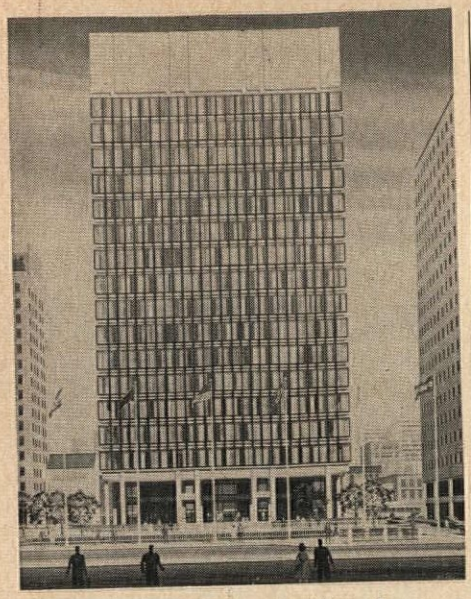
Structural system shown in the picture is part of the Gothenburg, Nebraska, Community Building. The structure consists of a precast, prestressed rigid frame, with a girder-column connection welded after erection. Clear span is 100 feet, with a total of 8,500 square feet of floor area. The girder is a Type III, 45-inch AASHO bridge girder section. Structural members spanning between girders are 8-inch deep prestressed concrete purlins.

This project is another example of the versatility of prestressed concrete construction. Prestressed concrete producer for the job was Nebraska Prestressed Concrete Company, Lincoln, Nebraska. Prestressing tendons were Union TUFWIRE Strand. Write for helpful folders on Union Wire Rope TUFWIRE or ask to have a Union Wire Rope specialist contact you.

TUFWIRE Strand and Union Wire Rope are products of Sheffield Division, **Armco Steel Corporation, Department S-853, 7100 Roberts Street, Kansas City 25, Missouri.**

ARMCO Sheffield Division

For more information, turn to Reader Service card, circle No. 309



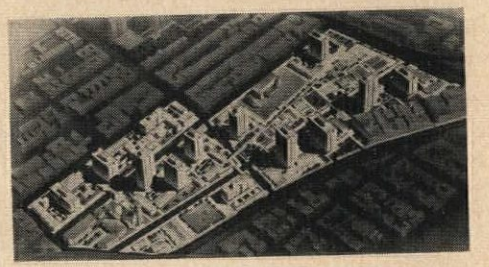
Plaza, Philadelphia, is based on a backbone/rib-cage structure. Its reinforced concrete "backbone" is the service core which, forming the south façade, will function as primary load bearer and as a shield against heat and glare. This core, faced in buff-colored limestone, will anchor the steel "ribs" of the tower. The character of each remaining façade, as that on the south, is derived from exterior environment as well as interior usage. On the shadowed north face, glass panels will be set forward from limestone spandrels to create a surface highly reflective of the Center's esplanade. East and west walls, mainly glass, will be faced in limestone at the southernmost parts. Limestone will be repeated on a two-story mechanical penthouse. A vertical tier of windows set into the core wall will tie in with glass expanses and provide views of the city from elevator lobbies.

One-Man, One-Woman Architectural Exhibit

The husband and wife architectural team of E. H. and M. K. Hunter recently presented a one-couple show of its works at Hopkins Center, Dartmouth College. The show by the New Hampshire architects will be traveling to other museums in 1963–64. Of particular emphasis in the exhibition is the attention paid by the firm to preservation of natural beauty, including a development on Stratton Mountain and a residential development in Hanover in New Hampshire.

3rd Generation Architect

Father Frederick G. Frost, Jr. (left) and grandfather Frederick G. Frost, Sr. (*center*), benignly look over the model of a school designed by son and grandson A. Corwin Frost (*right*),



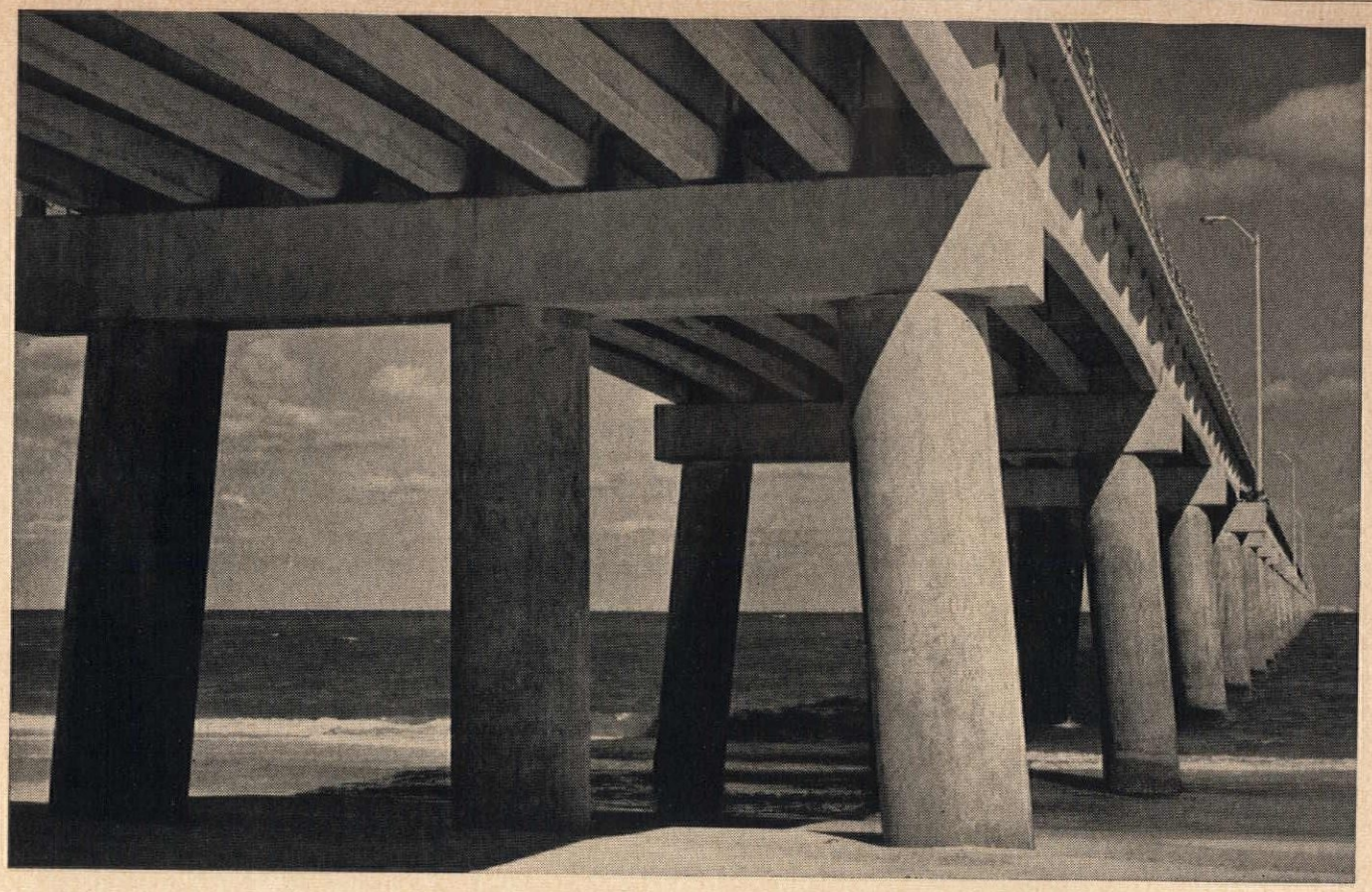
who was recently made an associate of the family firm, Frederick G. Frost, Jr., & Associates of New York (successor to the firm Frost Sr. started in 1917). Firm is currently working with a citizens' group in the south Bronx, attempting to provide a better-than-usual plan for redeveloping 27 acres for middle-income co-operative and low-income housing with generous recreational and commercial space (*shown*).

Mission's Apartments and HQ in Central Harlem

Occupants of the proposed Minisink Town House on Lenox Avenue in Central Harlem may be awakened in the wee hours by the ghostly strains of Ethel Waters, the Mills Brothers, and Cab Calloway's "Minnie the Moocher," for the apartment building is to be erected on the site of the famed old Cotton Club of the 20s and 30s. It will be part of a complex designed for the New York City Mission Society by Architect Edgar Tafel; the other section will be a service center for the society, which will include a headquarters for the resources and training program carried on by the group's Harlem branch. Also to be included are a combination gymnasium-auditorium, kitchen, craft shops, and classrooms. Tafel says the project has been "a hard, long pull and the agencies have been 'cooperative'."

Interior Design Show: October 11–20

The nation's most extensive interior design exhibition will be open from October 11–20 in the New York Coliseum. Called "National Decoration & Design 1964," this year's show is said to be carefully controlled so as to emphasize good design rather than mere



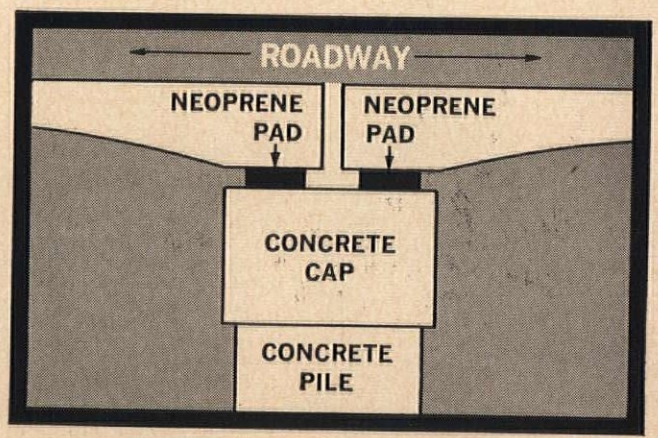
OCEAN BRIDGE RIDES ON NEOPRENE

More than 17 miles of open sea are being spanned in one of the greatest construction projects of all time—the Chesapeake Bay Bridge-Tunnel, joining the Delmarva Peninsula and the Norfolk, Virginia, area.

Supporting more than 12 miles of roadway are 14,700 bearing pads made with Du Pont Neoprene synthetic rubber. Eleven separately engineered types of pads provide for leveling, side thrust, expansion and contraction.

In hundreds of bridges and other structures throughout the world, bearing pads of Du Pont Neoprene have proved to be less expensive and more dependable than mechanical assemblies—both at construction time and over the long haul. Neoprene pads have no moving parts, never need to be cleaned or lubricated. Neoprene has been the elastomer which engineers have specified for years because it is highly resistant to set, ozone, temperature changes, salt spray, oil and the deteriorating influences of weather extremes.

For more information about Neoprene in structural bearing design, write E. I. du Pont de Nemours & Co. (Inc.), Elastomer Chemicals Dept. PA-9-NM, Wilmington 98, Delaware. In Canada, Du Pont of Canada Ltd., 85 Eglinton Avenue, E., Toronto 12, Ontario.



16 Neoprene pads on each cap support the ends of the roadway sections. The pads are about 8½" by 10½" and vary in thickness and hardness to meet the assorted engineering requirements of this job. The pads require no maintenance.

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novelty. Over 100 model rooms (some of them multilevel displays), broad avenues, and gardens are among the features; new elements in the show will be an Antiques Pavilion (in which *à propos* period decorating is to be displayed using art and antiques from several distinguished dealers and galleries), a group display of "Colonial Williamsburg" reproductions, and a prefabricated house. A program-catalogue is planned as a reference to furnishings and their sources. Architects should be interested in how U.S. interior design is being presented to the public.

Educational Program for Stainless Steel

The International Nickel Company, Inc., has initiated a comprehensive three-part program to augment the use of stainless steel in the building and construction field. First, a kit will be distributed to accredited architectural schools, which will include samples of gages, finishes, tubing, bar stock, extrusions, roll and brake form sections, and a stainless-steel data sheet. Second, to keep architects abreast of the developments in the industry, a four-volume Architect's Stainless Steel Library will be distributed to about 1000 architectural firms. First volume will contain finish and gage samples; second, architectural data sheets; third, suggested guide specs for stainless-steel products; and fourth, a design manual. Third phase is a program to be instituted for developing new stainless-steel architectural products. Entire program is being presented in symposia held in various cities.

Synagogue Show

The Jewish Museum in New York is devoting three months (September 29 through December) to an exhibition of contemporary Synagogue Architecture. The exhibition concentrates primarily on synagogue design in the United States during the last 15 years. It consists of photographs, models, and drawings of experimental and projected work as well as completed structures.

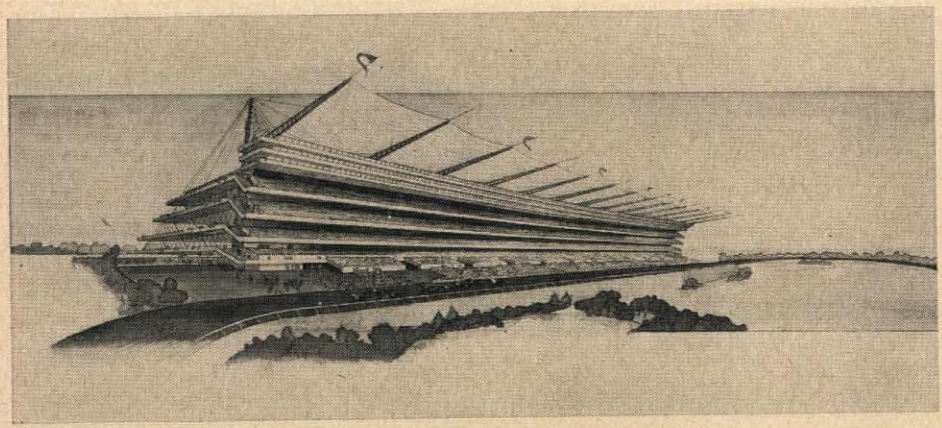
Approximately 15 architects are represented, including Mendelsohn, Wright, Kahn, Breuer, and Percival Goodman. The show was organized and designed by New York architect Richard Meier.

Two Corbu Projects

Le Corbusier has been commissioned to design two new projects: one in Paris, the other his second U.S. commission (not counting the U.N.).

André Malraux, France's Minister of Cultural Affairs, and Jean Chatelain, director of France's national museums, announced that Corbu will design a national museum of modern art to replace the present wholly inadequate museum. The building will be part of a cultural center at Rond Point de la Défense in suburban Neuilly.

On the U.S. West Coast, developer T. Jack Foster announced that he has commissioned *le maître* to design an apartment building in Foster City on the San Francisco Peninsula.



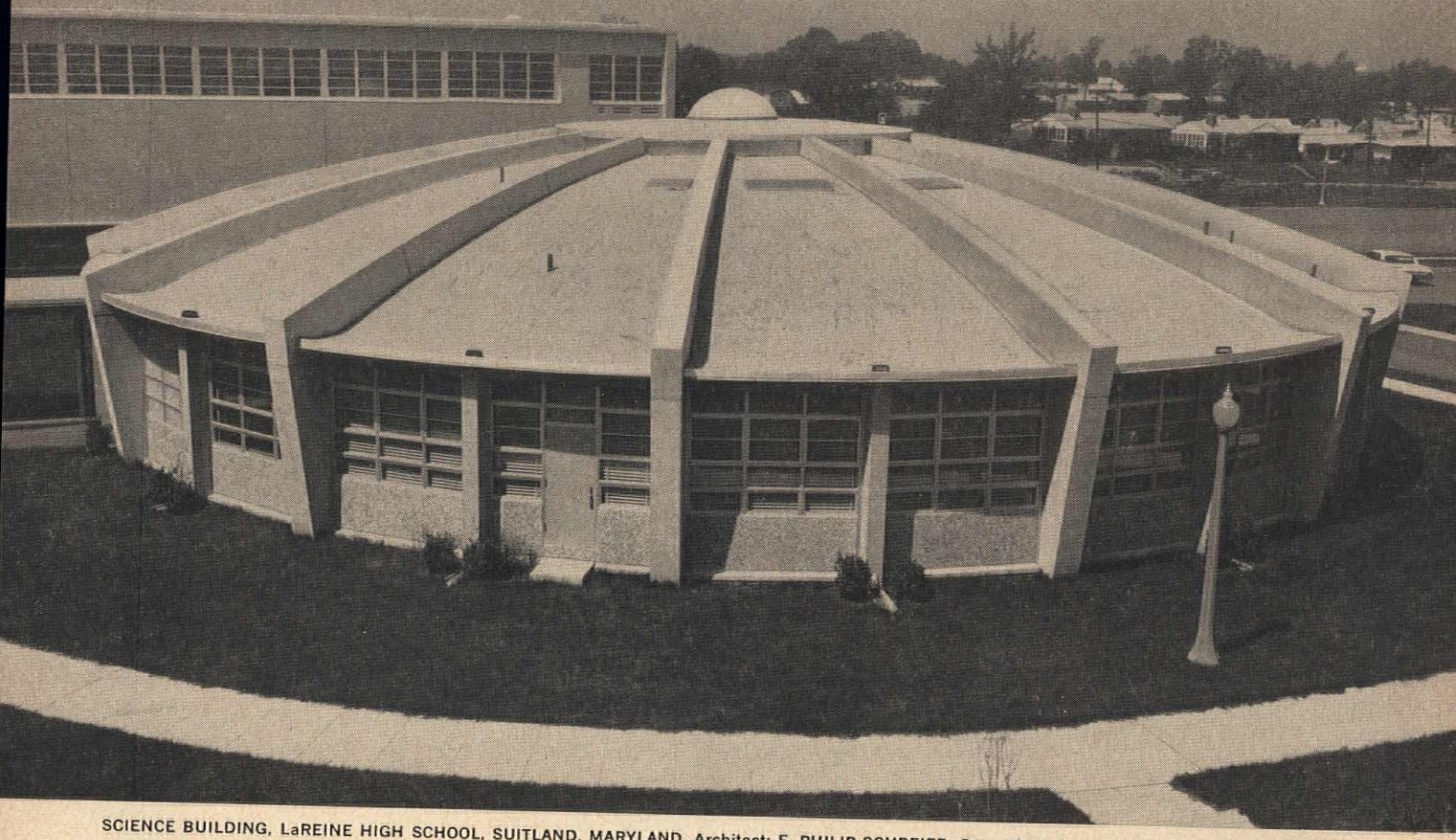
Balconied Betting At Belmont

Fans at Belmont Race Course, Long Island, may enjoy new visual perspectives under a pavilion proposed by William Wesley Peters of Taliesin Associated Architects to replace the present grandstand. This design features cantilevered balconies projected one-over-the-other from a central pylon. Thus the highest seats (most remote in traditionally banked grandstands) will be brought within 134′ of the rail. Each seating level will contain betting areas, dining rooms and bars. At the highest level a Clubhouse Promenade will have glass-enclosed lounges for the New York Racing Association. A translucent plastic canopy will be cable-supported from the pylon and extend over the standee ramp to shield all areas of activity. The canopy—pale green—is planned to blend with landscaped grounds. Glazed screens around wagering areas and a warm air curtain around balconies will provide additional protection. The 100′-bay module unit permits additions as needed.

PERSONALITIES

Peru's new constitutional President, FERNANDO BELAUNDE TERRY, has a second profession—architecture. In 1935, while in exile, Belaúnde received his B.S. Arch. from the U. of Texas and had an active practice until, returning to Peru, he was elected a Federal Deputy. Ousted in 1948, he became Dean of the National School of Architecture. His son, Fernando, is now studying architecture at the U. of Texas . . . CHARLES H. BURCHARD will become Dean of Architecture at Virginia Polytechnic Institute in January . . . BENJAMIN THOMPSON of The Architects Collaborative will become chairman of the Department of Architecture, Harvard School of Design . . . MIES VAN DER ROHE is a recipient of the new Presidential Medal of Freedom—the highest peacetime civilian honor which a U.S. President can bestow . . . Program chairman at 1964 International Design Conference in Aspen next June will be ELIOT NOYES; Noyes will direct the conference in "exploring discrepancies between our standards and our performance" . . . The engineering works of EMIL H. PRAEGER, Praeger-Kavanagh-Waterbury, won him the 1963 award of the Consulting Engineers Council; cited especially was his use of precast concrete in Dodger Stadium, Los Angeles . . . AIA announces the appointment of three department heads: C. HENRI RUSH, Washington, D.C., Dept. of Institute Relations; JOHN F. DAWSON, Ann Arbor, Mich., Dept. of State, Chapter and Student Affairs; and BEN H. EVANS, College Station, Tex., Dept. of Research . . . JOHN W. LINCOLN, The Architects Collaborative, is head of the recently combined departments of graphic and industrial design at Rhode Island School of Design . . ERIC PAWLEY joins the University of Southern California staff as Professor of Architecture; Pawley is Research Secretary of AIA's Headquarters Staff in Washington.

new shape in science education



SCIENCE BUILDING, LaREINE HIGH SCHOOL, SUITLAND, MARYLAND. Architect: E. PHILIP SCHREIER. General Contractor: VICTOR R. BEAUCHAMP, INC. (both of Washington, D.C.) Precast Concrete Supplier: FORMIGLI CORPORATION, Philadelphia, Pa.

There's educational significance in the circular shape of the Science Building at LaReine High School. Combined laboratory and lecture rooms, with amphitheatre-type seating in the lecture area, are ideal for science instruction. Triangular rooms, then, are most appropriate. This, in turn, suggests a circular building.

Strength and symmetry were achieved with exposed precast concrete columns and arched roof beams. 112 precast concrete slabs are supported by the beams to form the domed roof, 105 feet in diameter and covering 7,450 square feet of column-free interior.

For maximum efficiency in producing the hundreds of units needed, the precaster made a time-saving choice. He used "Incor", America's *first* high early strength portland cement.

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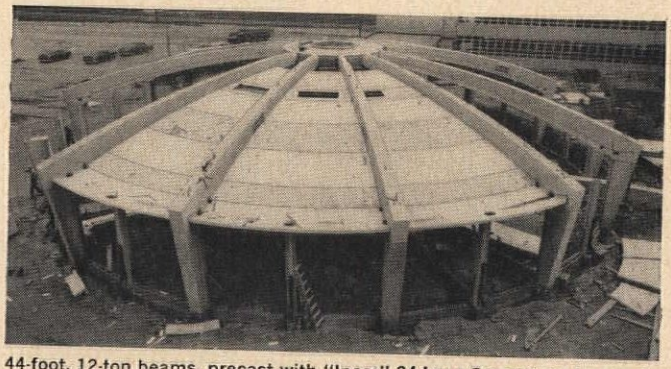
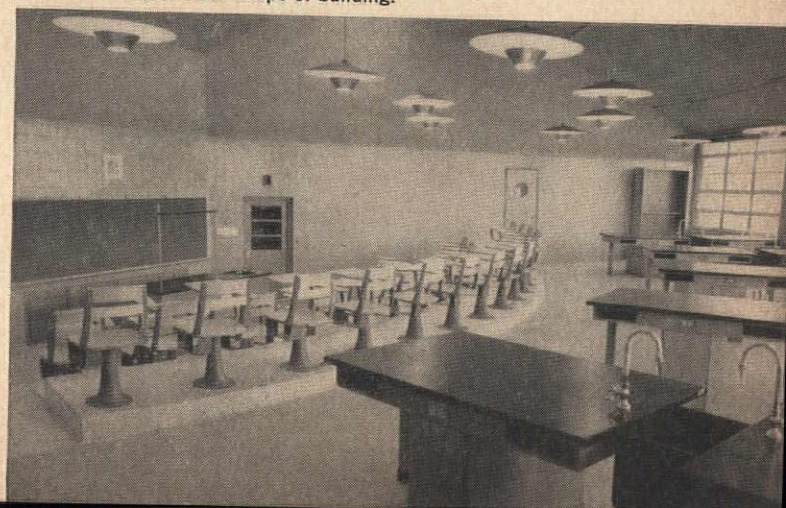
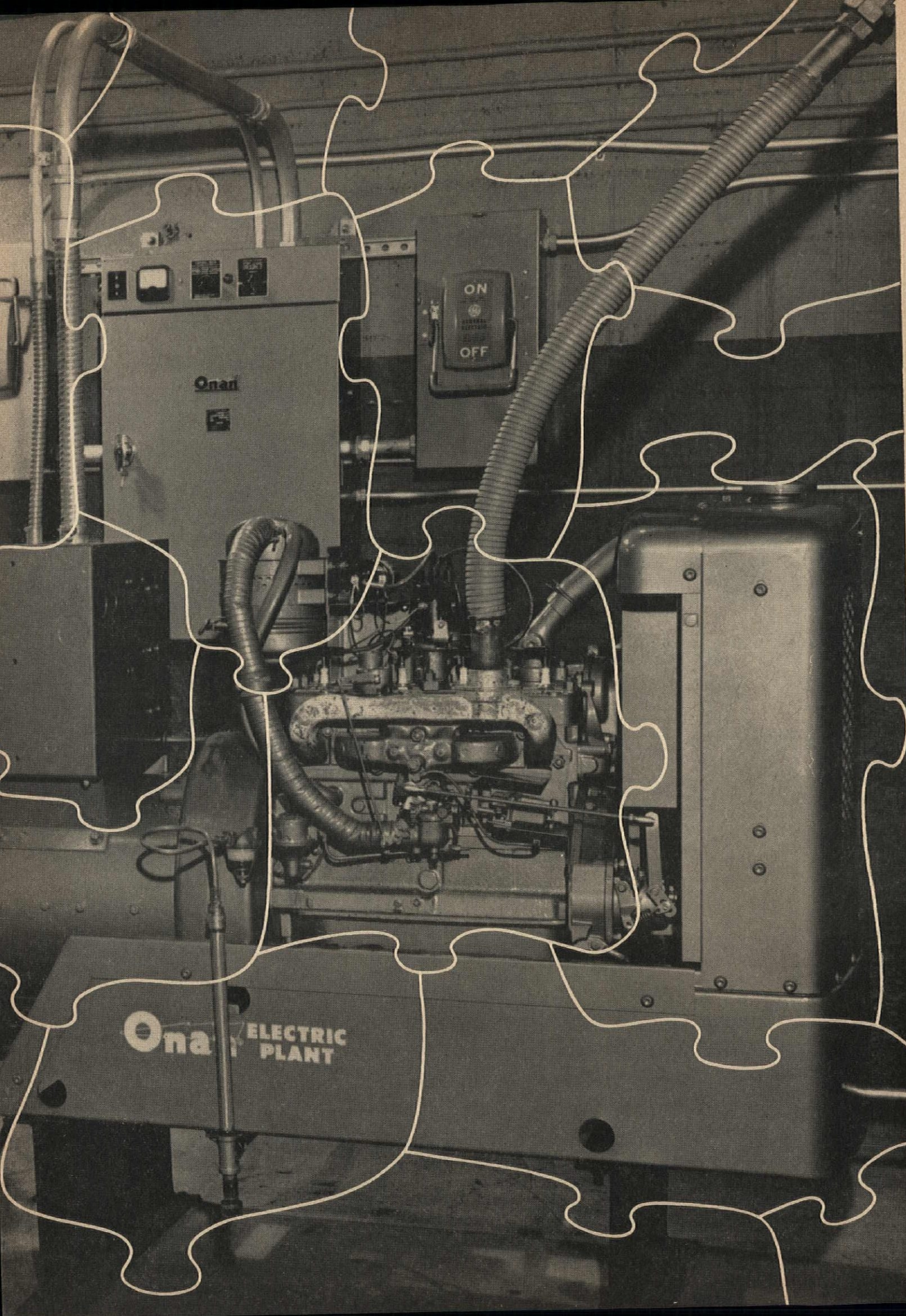


44-foot, 12-ton beams, precast with "Incor" 24-hour Cement, rest on cast-in-place center core and on 13-foot precast columns on the outside.

Advantageous arrangement of laboratory and lecture-demonstration areas is permitted by circular shape of building.

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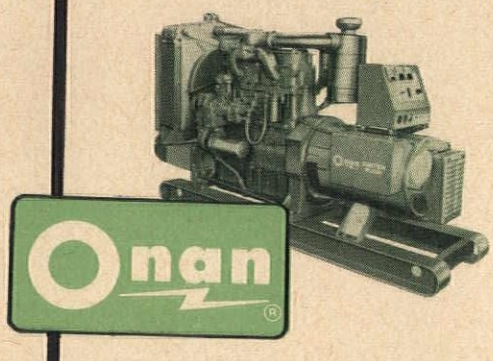

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CIVIL RIGHTS AND CONSTRUCTION

by E. E. Halmos, Jr.

Anyone involved in the construction industry is right in the middle of the highway down which the civil rights controversy is rolling.

This is bound to affect architects, even if only indirectly, as a result of difficulties anticipated by contractors in connection with orders issued by various Government agencies. It will affect costs, might cause strikes and other delays, and might even be an official opening wedge to bring about the long-held desire of the mechanical specialty contractors for contracts separate from those of the general contractors.

As you may know, Government agencies have already issued a series of orders threatening contractors with loss of Government contracts and even blacklisting them if they fail to comply with antidiscrimination orders.

The President's Committee on Equal Employment Opportunities now has moved to reinforce those orders through a series of meetings with contractor groups in Washington aimed at establishing nondiscrimination standards for the industry and methods for enforcing them.

Most disturbing to contractors was the very obvious intent of Government agencies to use building contractors as a means of ending discrimination in the building trades—a means they regard as "getting to" the trade unions through the employers. The contractors have protested that they often are unable to control discriminatory practices, since they are compelled by various Government agencies to accept hiring halls and exclusive referral agreements and thus must accept whatever men a union group sends them; but this argument seemed to have no effect on the Government people.

The general attitude of Federal officials seemed to be that the contractors could afford a few strikes, if this will force integration on the construction unions, and that the contractors should be forced to quit any contractor group that won't or can't extract nondiscriminatory pledges from the unions with which it does business. Contractors feel that officials have put no equivalent pressure on the unions.

These protests did succeed in postponing issuance of any final orders at least until late August, and the action may be further delayed by a Congressional committee that is also looking into the matter.

Separate Bids

As to the question of separation of mechanical trades bids, the implication is contained in the proposed industry compliance standards:

Prime contractors are required to certify—before being awarded a contract—that their subs subscribe to antidiscrimination rules. That implies that the subs will have to be named before bids are submitted. General contractors see this as an opening wedge toward full, separate contracts.

Local Scene

Washington's own problems with architecture and planning boiled along in usual shape through the hot summer days.

Capitol Architect J. George Stewart, for example, said he was miffed at failure of transit planners to consult him about plans for a subway station under the Capitol itself—thus (for once) getting on the side of an apparent majority who were dubious about the whole idea of subways in the city.

Edward Durell Stone came up (unofficially) with a plan to use 24 pillars, removed when the Capitol's east front was refurbished, as part of an open-air pavillion at the National Arboretum.

And the newly constituted Fine Arts Commission (charged with protecting the beauty of the capital) held the first meeting with all five Kennedy appointees present, and elected William Walton, a painter, as chairman.

D.C. Transit

On planning, Washington's horde of architectural and planning critics seemed to have abandoned any comments on architecture per se, and have concentrated their fire either for or against programs to build rapid-transit lines in this almost transit-less city.

Highway interests lined up on one side, railroad and rapid-transit advocates on the other, in a fight that has been sparked by a proposal that highway work be held up to some extent in favor of transit lines.

The implications are broad, of course: If Congress goes along with any such holdup, similar rules could be applied to highway projects in other urban areas. For the moment, however, the arguments over whether highways damage or beautify a city were dormant.

FINANCIAL

Three related items — all from the Census Bureau — serve to put some perspective into the future of one of the biggest segments of the construction industry, one of its biggest users of supplies and materials: the housing field.

Item: Construction of new, private non-farm residential buildings in June was up 8 per cent over May of this year, up about 3 per cent over June a year ago.

Item: Residential housing vacancy rates were virtually unchanged from the first to the second quarter of 1963, and up very slightly (0.1 per cent) over rates in the same period of 1962.

Item: Expenditures on residential additions, alterations, maintenance and repair in 1962 (full year's figures available) were $11.4 billion—$6 billion by owner-occupants, the rest by owners of rental properties of various sizes. (It is interesting that, of the maintenance and repair work listed by Census, $6.1 billion was for "alterations, additions, and replacements" to residential structures.)

Implication, when you put the items together, is inescapable: Between new construction and alterations, the housing market is somewhere near a balance between supply and demand. In Washington, observers are beginning to believe that housing construction is thus at or very near a plateau that will be maintained for some years to come — particularly as the wartime "baby boom" population comes to maturity and settles down, almost all at once.

Other economic indicators continue to show a steady health for the industry — as predicted, no boom, but a solid and apparently healthy increase.

Highway work, for example, got a boost when the Bureau of Public Roads announced the release of $3.7 billion of Federal-aid money for committment in the year 1965.

And, in May, voters showed their continuing support of local public works construction by approving a total of $553.3 million worth of bond issues presented to them, turned down $141.4 million worth.

Some facts and fallacies about LABORATORY SINKS

Selecting a laboratory sink involves many highly technical factors.

FALSE: Buying a laboratory sink is actually a very simple matter. There are, after all, only four meaningful considerations: corrosion-resistance, service life, cost (including freight) and appearance.

A "U.S." Chemical Porcelain Laboratory Sink provides universal corrosion resistance.

TRUE: "U.S." Chemical Porcelain Laboratory Sinks will safely handle all acids, alkalies, caustics and solvents — weak or strong, hot or cold. Thus, there's no need for corrosion charts . . . for special sinks for special corrosives.

And . . . *the body of the sink is every bit as corrosion-resistant as the glaze.* Thus, even if someone were to hit the sink with a hammer and chip the glaze, there would be no need for concern; the sink would retain its full utility.

Because the "U.S." Chemical Porcelain sink has relatively thick walls, there is ample "face" for caulking and sealing the sink to the laboratory furniture. On the other hand, a lasting, leakproof installation of a thin-walled plastic sink is extremely difficult to accomplish and impossible to guarantee. Considerable damage can result if a corrosive liquid splashes into such an imperfect joint or if someone fills the sink to overflowing.

"U.S." Chemical Porcelain Laboratory Sinks carry industry's longest and strongest guarantee.

TRUE: Because of their corrosion-resistance and rugged construction—(they'll withstand all the heat-shock and physical abuse they'll ever receive in normal usage)—U. S. Stoneware confidently backs its Chemical Porcelain Laboratory Sinks with a guarantee which we believe is unparalleled in American industry. Too comprehensive and lengthy to reproduce here, it appears in its entirety in Bulletin L-10. (Write for your free copy.)

Many "U.S." Laboratory Sinks in service today were installed more than half a century ago! Actually, today's "U.S." Chemical Porcelain Laboratory Sinks will *outlast the building they're installed in!*

The cost of laboratory sinks varies widely.

FALSE: Most laboratory sinks are bought through laboratory furniture manufacturers. A check will show that there's little if any difference in the price of equipment whether furnished with a "U.S." Chemical Porcelain Laboratory Sink, a cast epoxy plastic sink or a soapstone sink.

Motor or rail freight rates between any two points, incidentally, are the same size for size for "U.S." Chemical Porcelain and epoxy plastic sinks, with both being slightly lower than soapstone units.

All laboratory sinks are dull and drab in appearance.

FALSE: While epoxy plastic sinks can be furnished only in black and soapstone only in dull gray, "U.S." sinks are available in three attractive colors to match any decor: cool "surf green", soft "mist gray" and sparkling white.

They'll stay attractive, too, for they're non-staining and scratch-resistant — wipe clean as easy as a china dish.

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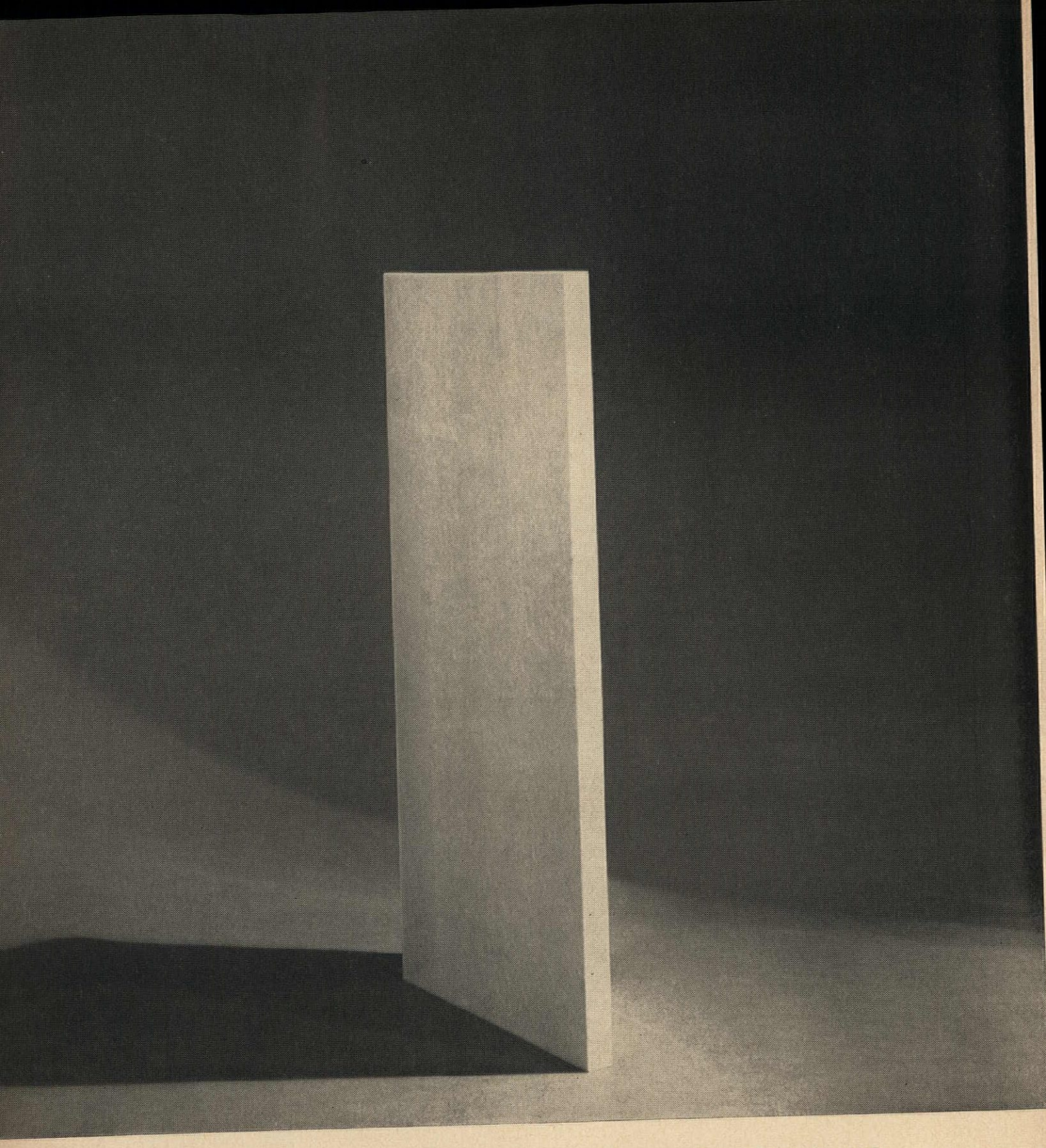

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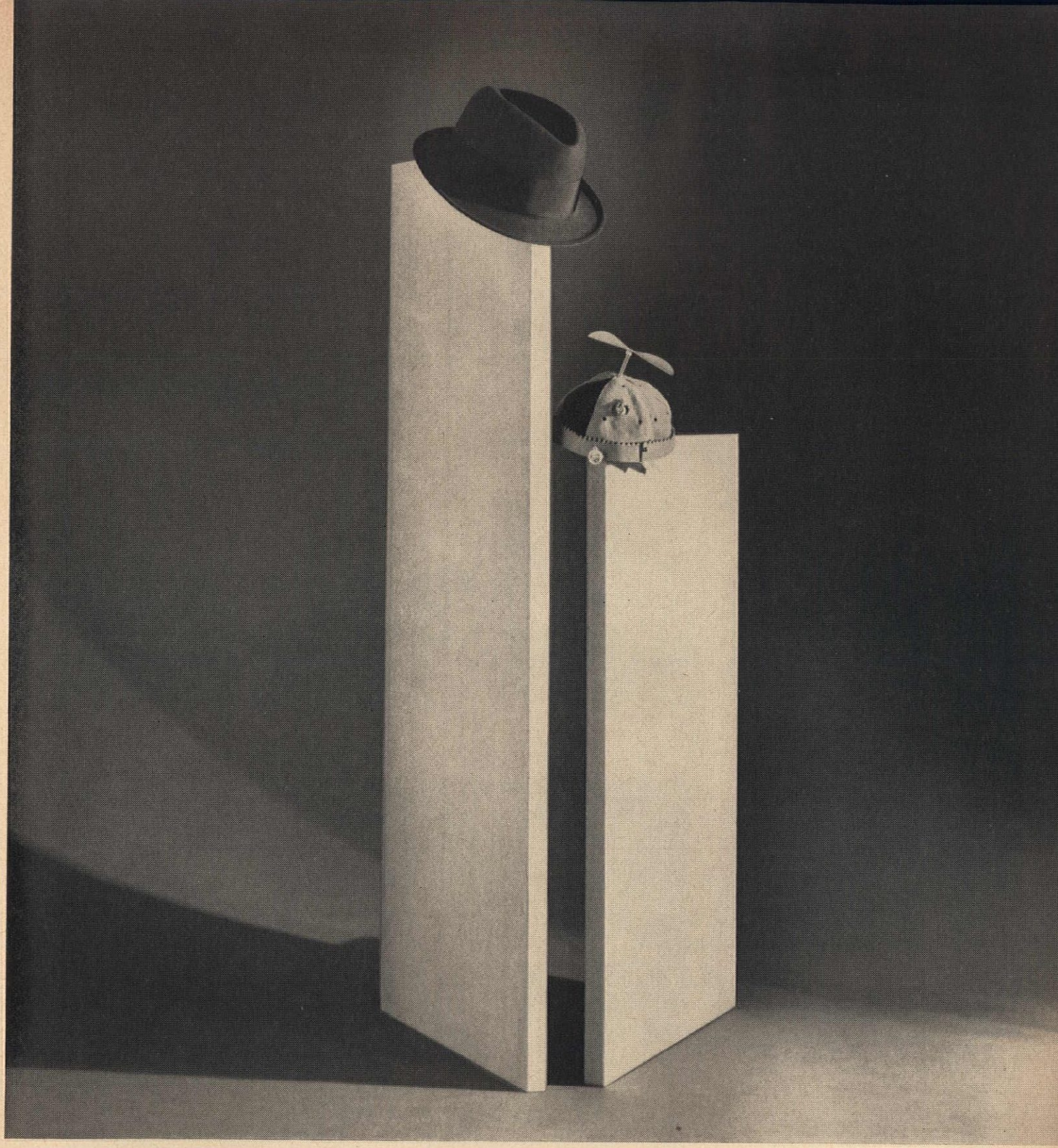

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DOW

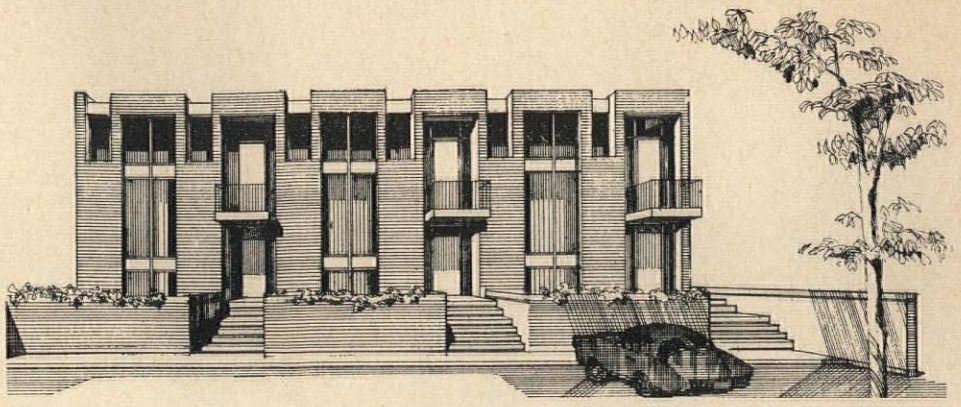
For more information, turn to Reader Service card, circle No. 323

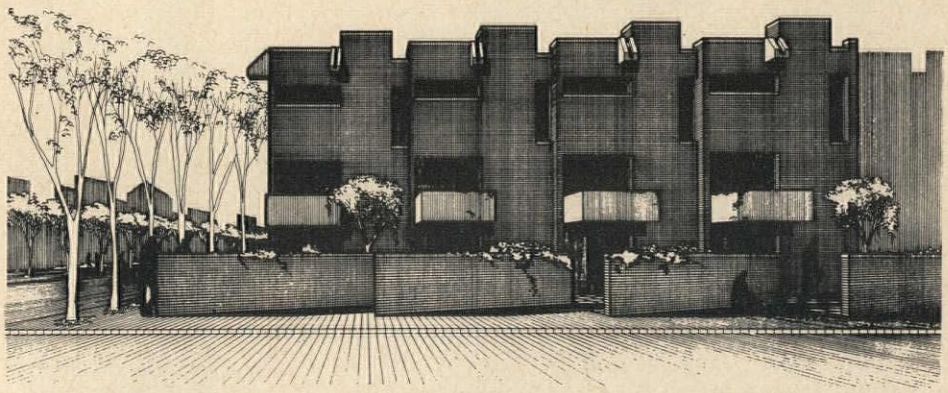
TWO NEW TOWNHOUSE PROJECTS

The current proliferation of new townhouses and townhouse projects marks one of the most interesting trends in today's urban housing picture.

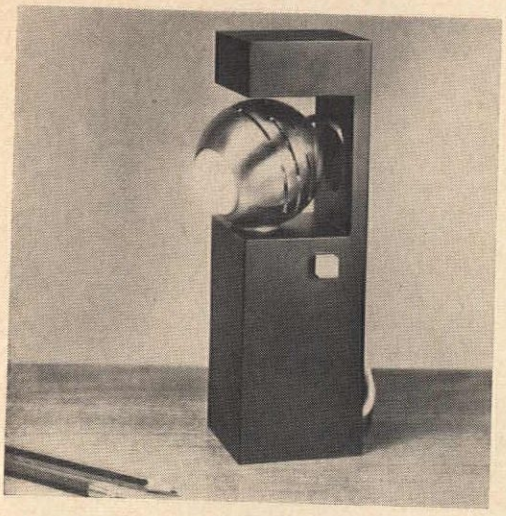
A group of three townhouses (*top*) designed by Clovis B. Heimsath for Westmoreland, an older residential section of downtown Houston, is planned for entertainment-prone families without children. Structure will have heavy timber or concrete floors and load-bearing brick walls. This is the first project under the newly formed Westmoreland Urban Action Group, of which the architect and his client are members.

"Pickwick Village" by Tigerman & Koglin (*bottom*) will be situated in the periphery of Chicago's Old Town section. Eight three-story townhouses will be grouped around a common, interior, cloistered entranceway. Ground floors will open from private courtyards (*see rendering*) and contain dining room, kitchen, and family room. First floor will contain living room and library separated by a free-standing core, and top floor will be devoted to sleeping area. Structure will have masonry bearing walls conventionally spanned in timber.



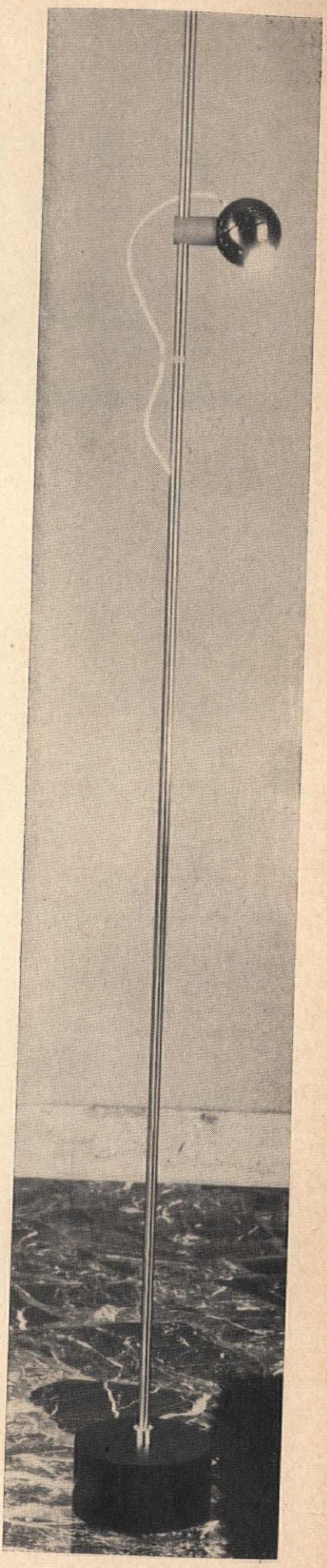


NEW PRODUCTS



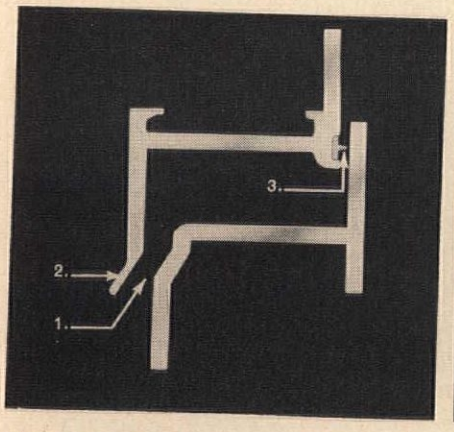
A unique collection of lighting from Arredoluce of Italy is now available in the U. S.—14 sculptural designs, all meticulously articulated. Many of the lamps have an "eyeball" sphere (3″ diameter) which may be manually rotated in a magnetic socket for reading, spotlighting, or general illumination. The 18-w bulb especially designed by General Electric, sheds light equal to 100-w. A 9″-high table lamp *(left)*, cubistic in feeling, has a rectangular black metal body, contrasting nickel matte "eyeball" and red button. Standing lamp *(right)* has "eyeball," white wire, long stem, and black base. Stiffel, 225 Fifth Avenue, N. Y.

On Free Data Card, Circle **100**



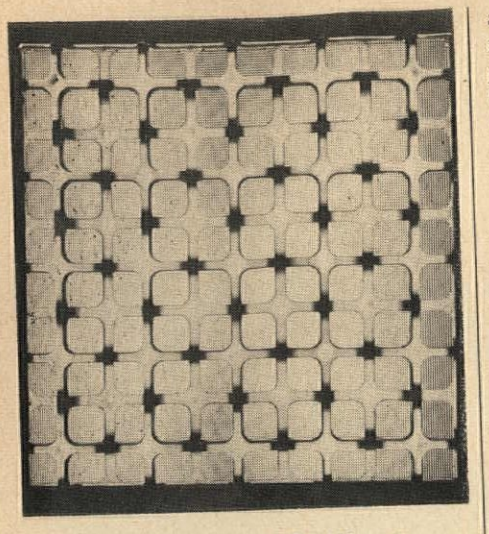
Revolutionary refrigerator design features sliding doors of triple pane glass to keep doors free of frost and fog. "Avanti," 72″ x 48″ x 26″, also features exterior side paneling in walnut, oak, birch, or paint. Refrigerator is located in upper half of unit, freezer below. Total interior space is 23 cu ft, refrigerator area 13 cu ft, and freezer space 10 cu ft. Cold-air machinery is concealed in rear portion of drawer area in freezer. Refrigerator can be free-standing, built-up, or utilized as a room-divider unit. Tentative price is $800. Studebaker Corp., Franklin Appliance Div., 65–22nd Ave. N.E., Minneapolis, Minn.

On Free Data Card, Circle **101**



"Sealair" window resists water and air leakage by means of a triple weather guard consisting of (1) "Pressure Equalization Slot"; (2) integral drip member; and (3) complete neoprene weather sealing *(detail illustrated)*. System represents two years of development and testing. During turbulent weather, outside pressure is substantially higher than air pressure inside a building, producing water leakage. To alleviate this condition, a continuous air Pressure Equalization Slot runs the width of the window and allows air pressure within the extruded frame member to achieve balance quickly with outside pressure. Kawneer Co., 1105 N. Front St., Niles, Mich.

On Free Data Card, Circle **102**



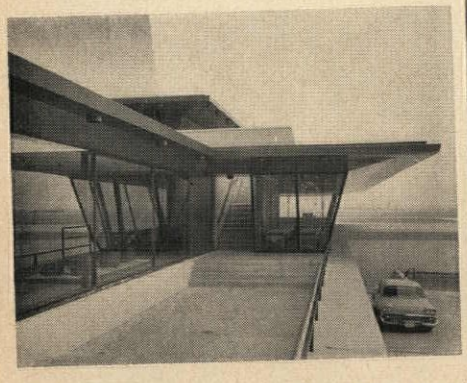
Sculptural Ceiling

New in suspended-ceiling lighting diffusers is this three-dimensional sculptural acrylic grille designed by Erwin Hauer. It is composed of modular plexiglas units (24″ x 24″) which are pigmented to shed glareless light. Grille is easily installed by steel hanger hidden suspension; any "T" bar spline system may be used for perimeter treatment. Acrylic will not discolor or warp and is dirt-repellant. Available in semitransparent, gray-green matte finish or any standard plexiglas color. Arts for Architecture, Inc., 16 E. 53 St., New York, N. Y.

On Free Data Card, Circle **103**

Welding Studs to Porcelain Panels

Special fasteners and equipment were developed to mount on-site, porcelain



panels to aluminum studs at the Terminal Building at the Dulles International Airport. Terminal contains 40,000 sq ft of porcelain enamel used as soffits, fascia, and other formed panels that frame portalounge entry and exit gates. These poreclain-enameled aluminum panels are welded to aluminum studs that are ¼″ in diameter and 1″ in length. Fasteners prevent any risk of warping or damage to enamel finish and eliminate need for spiral channels or angle supports. Nelson Stud Welding Division, Gregory Industries, Inc., Lorain, Ohio.

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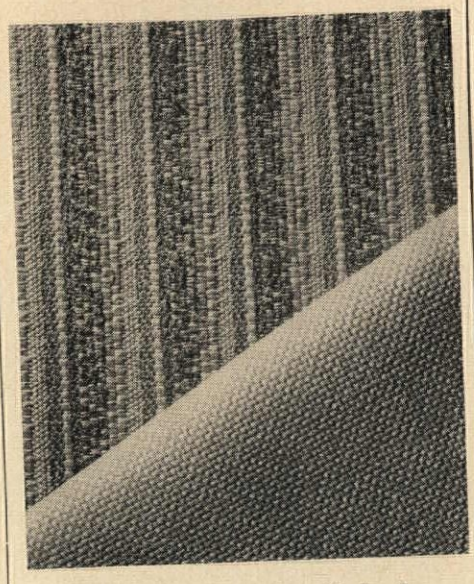

Dorothy Liebes Fabrics

Dorothy Liebes, well known custom textile weaver and color arbiter, has designed her first collection for a fabrics house. The line consists of 90 upholstery fabrics and 18 casement cloths. In a myriad of color, there are textured stripes, bulky weaves, twills, and basket-weaves—most of them with colors correlated to go with other fabrics in the collection. Many are constructed with Dupont's durable "Antron" nylon, yet they retain the hand-crafted look for which this designer is renowned. Stroheim & Romann, 155 E. 56 St., New York, N.Y.

On Free Data Card, Circle **105**

Ventilated Cooking

High oven range, 40″ tall, features advanced ventilation system and removable oven panels coated with Dupont's "Teflon," so that cleaning is quick and easy. Range also has side-by-side, eye-level ovens with double-paned glass doors that lift-up and out-of-the-way for easy oven access and cleaning. From horizontal tube beneath ovens, air jets spiral out over front surface of units, wafting grease, odors, and smoke to rear intake. Inside range, pleated glass-fiber filter and a bed of activated charcoal clean air, which is then returned to the room. Vent system, connected to two ovens to permit closed-door broiling, eliminates heat and fumes that would otherwise fill kitchen. Hotpoint, Division of General Electric Co., 5600 West Taylor St., Chicago 44, Ill.

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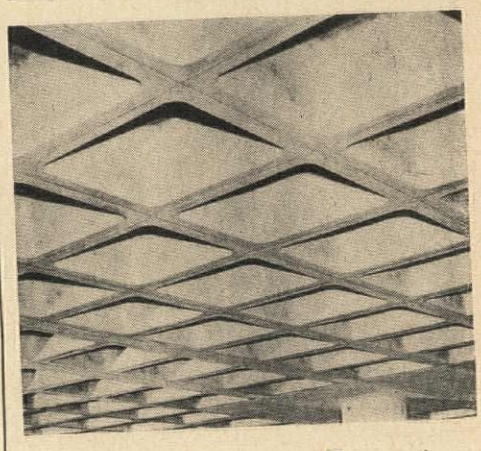


Deeper Dome Forms

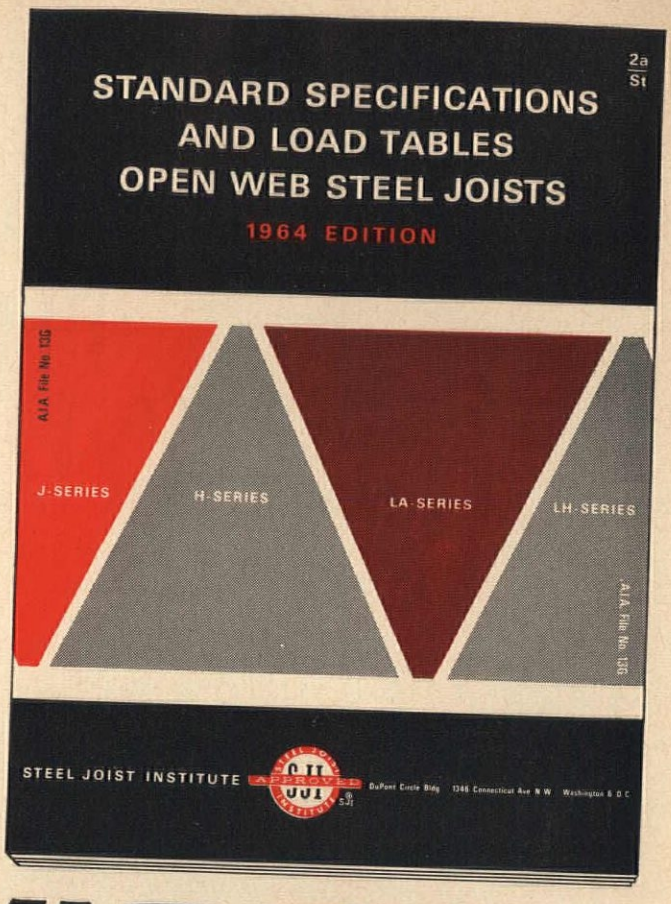
Deeper, one-piece steel dome forms for larger span reinforced concrete waffle slabs have been introduced. Steel dome, 30″ x 30″, formerly limited to 14″ in depth, is now available in 16″ and 20″ depths. Utilizing dome forms for waffle flat-slab roof and floor framing system, greater stiffness is produced enabling spans over wider areas and support of heavier loads. Deeper depths will now permit column-to-column spans in 50′ range as compared to previous span of 40′. Ceco Steel Products Corp., 5601 W. 26 St., Chicago 50, Ill.

On Free Data Card, Circle **107**

Storing Paintings

Carnegie Institute in Pittsburgh has installed "Space Frame" overhead arbor and suspended movable aluminum display panels for storing valuable paintings. Space-saving rack consists of vertical storage panels, 8′x10′, suspended on rollers, that can hold many sizes of paintings. The rack spans a clear distance of 25′. Thirty-six open-slotted channels are strung horizontally near the ceiling of the storage vault. Each panel, rated to hold 500 lbs, is placed so that paintings can be hung on both

Continued on page 99



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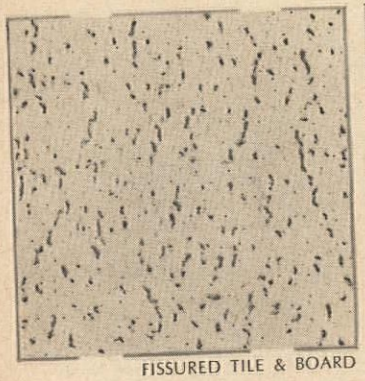
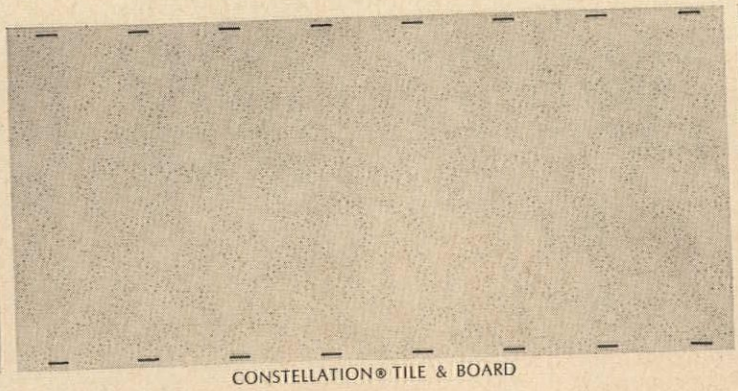


FISSURED TILE & BOARD



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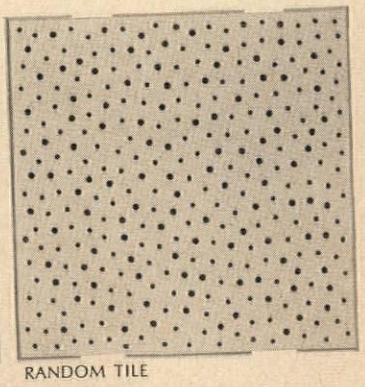
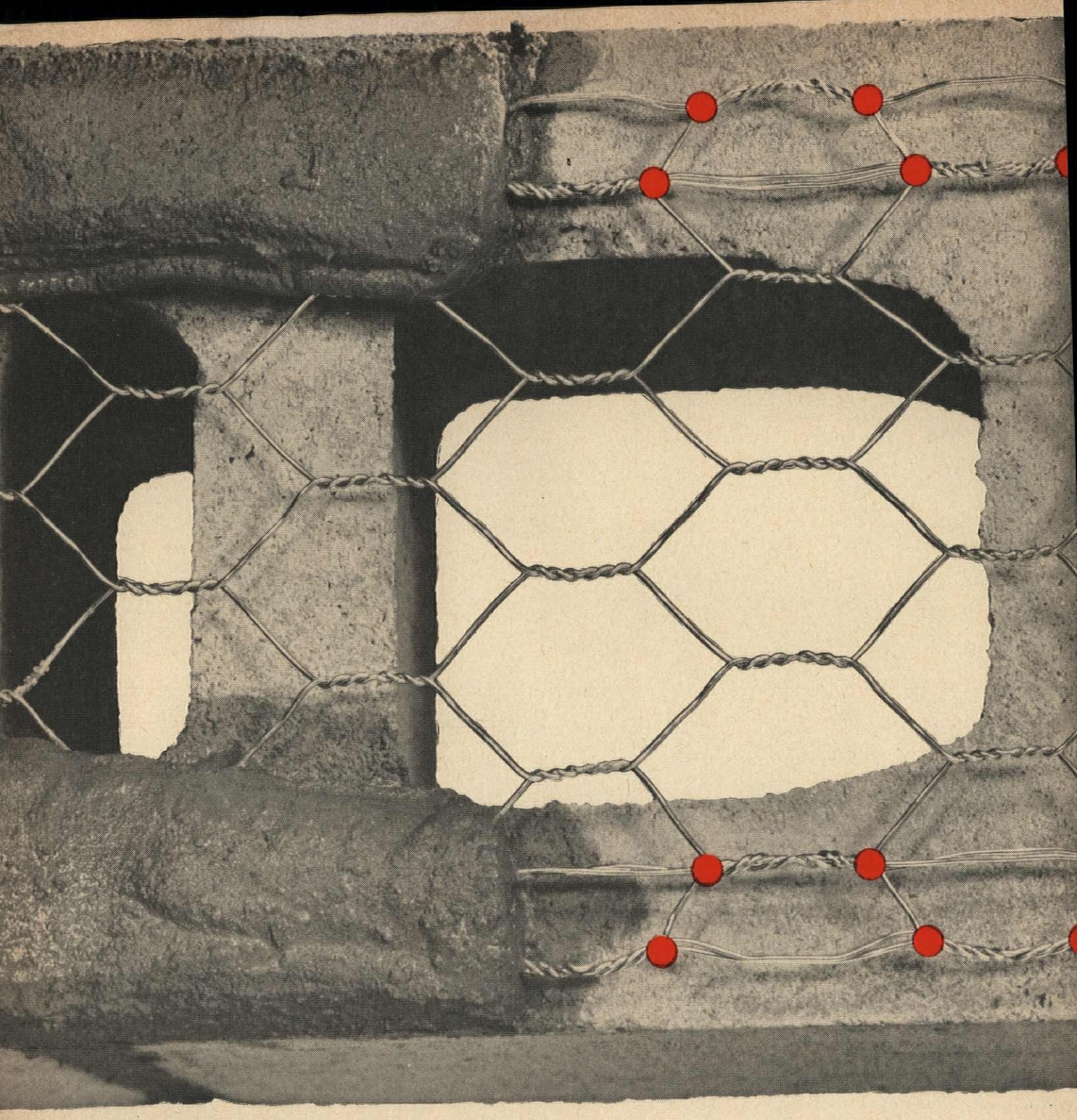
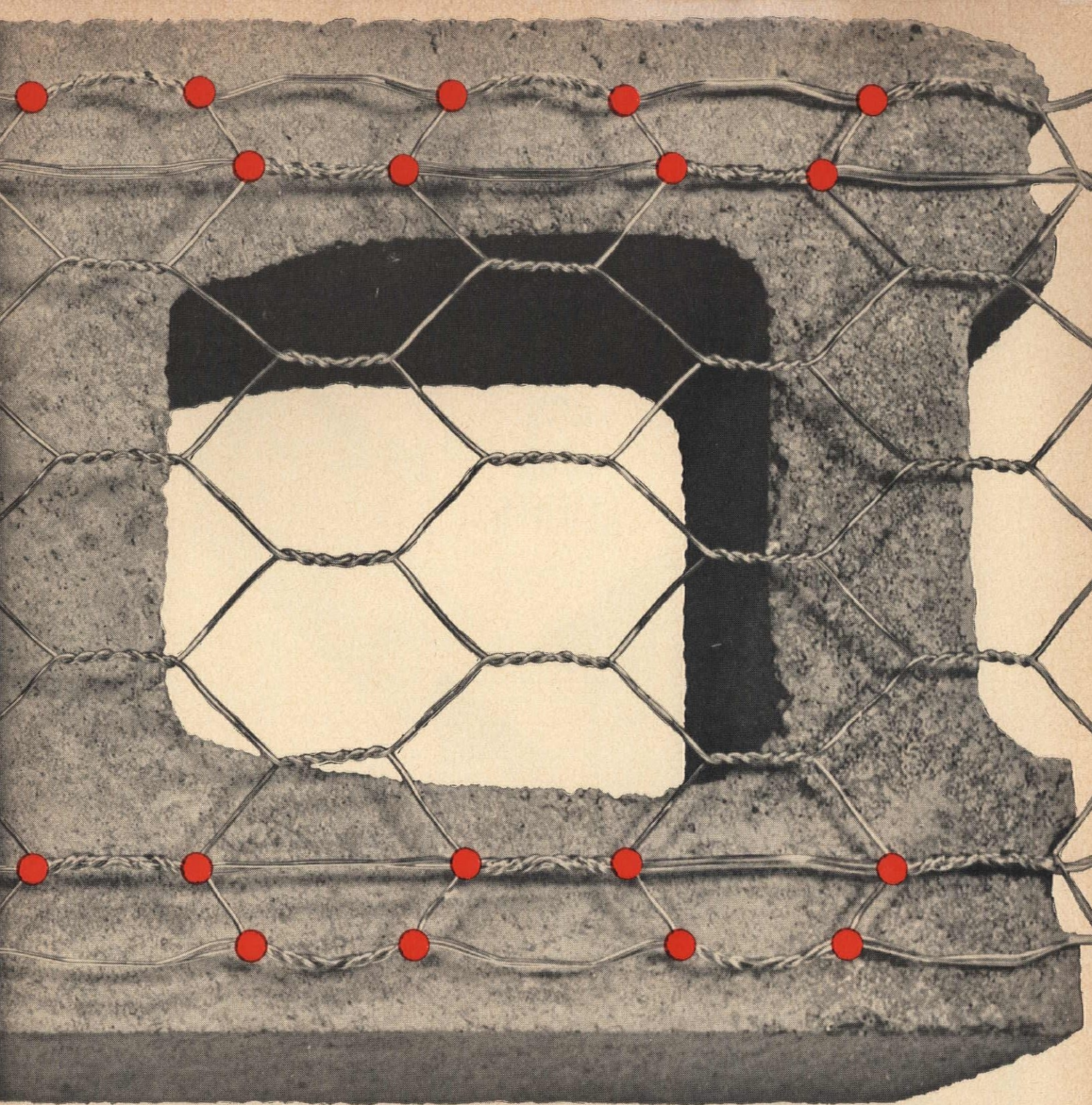


RANDOM TILE

Centurion at the Foot of the Cross, a Byzantine mosaic dating from the 11th century.



KEYSTONE STEEL & WIRE COMPANY Peoria, Illinois



***28** mortar locks to the block foot with Keywall reinforcement. The more locks, the more resistance to cracks resulting from shrinkage. Movement is restrained at each of Keywall's mortar locks. No one lock has to restrain more than the movement in ¾" of block. That's the kind of reinforcement that works.*

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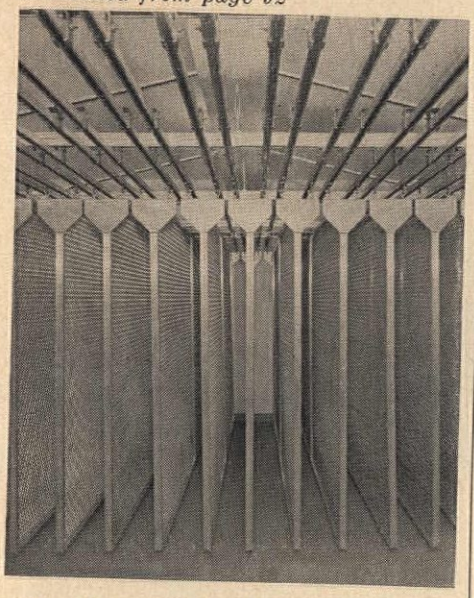
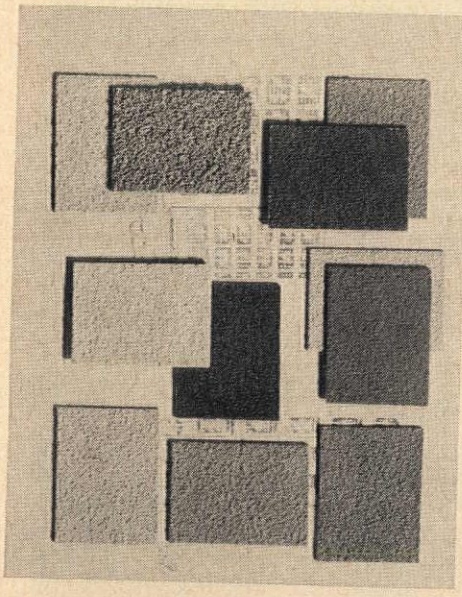
Continued from page 92



sides. Steam, water lines, and uneven wall conditions are not a problem. Brackets can be added for placement of additional paintings or picture frames. Unistrut Products Co., 933 Washington Blvd., Chicago 7, Ill.

On Free Data Card, Circle **108**



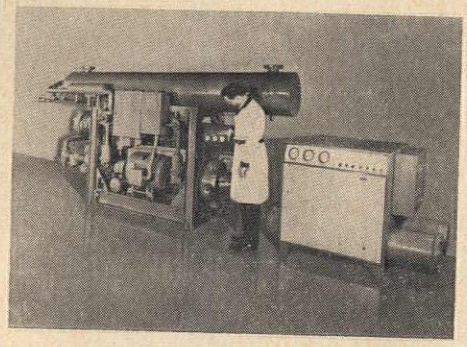
Weather-Resistant Exterior Coating

Exterior coating, called "Textane," is made of polyurethane resins and specially selected graded aggregates. Coating permits normal transmission of water vapor which eliminates costly film failures that often occur when non-breathing materials are employed for exterior applications. Textane resists deterioration resulting from efflorescence and condensation. It is chemical- and weather-resistant, as well as tough and durable. Textane can be used for coating concrete blocks, bricks, poured concrete, cement plaster, asbestos-cement board, and other forms of masonry backing. It is available in a variety of colors. Desco International Assn., Box 74, Buffalo, N.Y.

On Free Data Card, Circle **109**

Vibration-Free Chiller

Chrysler Corporation has announced new line of air-conditioning equipment in 20-to-100-hp range that solves problems of equipment isolation and



space requirements. Particularly emphasized is reciprocating chiller that is quiet and vibration-free. Chiller is the only available 100-hp unit that occupies only 19 sq ft of floor space and weighs less than 2 tons. Compressor muffler is acoustically tuned to frequency of refrigerant gas. Cooler and condenser tanks are used as "structural backbones" of chiller to eliminate unnecessary supporting material. Through more efficient use of cooling surfaces and redesign of tube sheets, tube bundles have been reduced in size and spacing with no loss in overall heat transfer, thereby reducing size of both cooler and condenser. Photo compares sizes of old and new chillers. Chrysler Corp., 1600 Webster St., Dayton 4, Ohio.

On Free Data Card, Circle **110**

Glass Fiber Garage Doors

Glass fiber reinforced paneling for garage doors is lightweight, shatterproof, and impact-resistant. It will not fade, rust, or warp. Panels are available in wide variety of colors and require no painting. Resins are evenly dispersed for better weathering and longer wear. Structoglas, Inc., 11701 Shaker Blvd., Cleveland 20, Ohio.

On Free Data Card, Circle **111**

Heat-Absorbing Glass

Bronze plate glasses provide glare- and brightness-reduction, as well as heat-absorbing advantages. Two types, "Parallel-O-Bronze" and "Rough Bronze Plate Glass," are offered. Parallel-O-Bronze is a twin-ground, tank plate glass providing a "high degree" of visual clarity. It is available in thicknesses of 13/64", ¼", ⅜", and ½". Rough Bronze Plate Glass is a translucent glass providing relatively high light transmission and good obscurity. It is available in thicknesses of 9/32", which is rough on both sides, and 17/64", which is rough on one side and polished on the other. Libbey-Owens-Ford Glass Co., 811 Madison Ave., Toledo 2, Ohio.

On Free Data Card, Circle **112**

The Effluent Society

Waterless, electric incinerating toilet features catalytic odor reduction. Method catalyzes odors given off during incineration of human waste, both

liquids and solids, into sterile, odorless ash. It reduces effluent odors during incineration below threshold of smell. Unit is self-sustaining in supply within 80 lb disposal plant and does not need replacement. Research Products Manufacturing Co., P.O. Box 35164, Dallas 35, Tex.

On Free Data Card, Circle **113**

Glass Fiber Roof Ventilator

An up-blast roof ventilator has been introduced that is notable for corrosion- and moisture-resistance. Components that are exposed to air are all glass fiber, except for the motor shaft, nuts, and bolts, which are made of stainless steel. Ventilator offers capacities from 1700 through 34,000 cfm and is available in standard sizes of 14", 18", 24", 30", 36", and 42". Aerovent Fan Co., Inc., Piqua, Ohio.

On Free Data Card, Circle **114**

REVISED AISC STEEL MANUAL

By Ira M. Hooper, Associate, Seelye, Stevenson, Value & Knecht, Consulting Engineers.

America's most popular book on construction has been completely revised for the first time in 17 years. It will enable designers to take full advantage of new materials and new design methods.

Since the previous edition, technological research has developed high-strength steels, high-strength bolts, improved welding techniques and electrodes, stud shear connectors for composite construction, to name just a few innovations. At the same time, improvements in the theory of structures resulted in the development of plastic design, and a better understanding of plate girders and of columns.

It was no small task to accommodate all of this new material in a manual. An eight-man committee worked for more than a year, with assistance from an editorial staff of 14. Suggestions and recommendations were received from more than 1200 engineers, architects, educators, and fabricators. The committee chairman was William H. Jameson; the editor was Mace H. Bell of AISC. Other members included Theodore R. Higgins, who is Director of Research and Development, AISC, and five representatives of steel fabricating firms.

The basic steel is now ASTM A-36, instead of A-7, which represents an increase in yield strength to 36 ksi from 33 ksi with practically no increase in cost per ton. A-36 steel has good welding characteristics and is now generally accepted in place of A-373 steel, which costs about $3 more per ton. With this basic revision, the manual has been conveniently regrouped into seven logical, thumb-indexed parts. A list of the parts and new features follows:

Part 1. *Dimensions and Properties.*

a. Data for new lightweight wide-flange sections.

b. Data for new square and rectangular tubes.

c. Rearranged section on standard mill practice.

d. New data for crane rails, welded and bolted splicing.

Part 2. *Beam and Girder Design.*

a. Plastic section modulus table added.

b. New tables of allowable loads for laterally supported beams of A-36 steel; conversion factors are included for high-strength steels.

c. New charts of allowable moments for A-36 beams without lateral support.

d. Expanded section on plate girders, with detailed examples and tables of section properties.

e. New section on composite beams, with explanation, examples, and tables of section properties.

Part 3. *Column Design.*

a. New tables of allowable concentric load for A-36, and for A-242, A-440, A-441 steels; detailed examples showing use of tables for concentric loading and for combined loading.

b. New tables of allowable concentric loads for steel pipe and structural tubing, A-36 steel.

c. New column base plate tables for A-36 and for high-strength steels.

Part 4. *Connections.*

a. New tables for framed connections and for seated connections; includes use of rivets, plain bolts, high-strength bolts, welding with two types of electrodes; values shown for basic steel and for high-strength steels.

b. New design examples for special connections, one-sided connections, moment connections.

c. Enlarged section for eccentric loads on fastener groups and weld groups, with examples.

d. Added section on suggested details.

e. Enlarged section on welding symbols and permissible welds.

Part 5. *Specifications and Codes.*

a. New AISC Specification for the Design, Fabrication and Erection of Structural Steel for Buildings, adopted April 17, 1963; a commentary is included.

b. New summary of ASTM Specifications for rolled structural steels.

c. Revised Minimum Design Loads; excerpts from American Standards Building Code.

d. Added Recommended Live Loads for Storage Warehouses, U.S. Department of Commerce.

e. New Specifications for Structural Joints Using ASTM A-325 Bolts (high strength).

f. New Specification for Architecturally Exposed Structural Steel.

g. New Specifications and Load Tables for Open Webb Steel Joists—longspan, shortspan, standard steel, high-strength steel.

Part 6. *Miscellaneous Data and Mathematical Tables.*

a. Added information on corrugated steel construction.

b. Expanded discussion of the effect of heat on structural steel, including the use of heat for straightening and cambering.

c. New geometric tables for bracing and for the parabola and ellipse.

Part 7. *Index.*

The manual is preceded by a complete list of nomenclature, which explains all of the symbols used. Partial lists of nomenclature are to be found in the body of the manual where they apply. These lists are a great help in understanding the text and the tables. The manual represents a remarkable effort by an entire industry to modernize its basic source of information. Inevitably, there will be some typographical errors, as well as criticism by practitioners with preference for personally developed methods. It is to be hoped that these will be brought forward in a constructive manner. The following remarks are offered as helpful comments and are not intended as adverse criticism.

In Part 2, the charts for allowable moments in beams without lateral support are not easy to use. The complexity of the jagged intersecting curves and the lack of accentuated grid intervals are some of the difficulties to be encountered. Part of the difficulty can be quickly corrected by ruling grid intervals with a red ball-point pen.

Also in Part 2, the tables for composite design of steel beams with concrete slabs are admittedly limited in scope: only one concrete strength of 3000 psi; slab thickness, t, of 4″ to 5″, effective flange width of 16-t or 8-t; steel beam depth from 8″ to 21″. The tables, the explanation, and the examples offer a good introduction to the subject. Further information and more extensive tables are available in a recent publication of Bethlehem Steel Company. The subject really calls for a separate manual.

Plastic design is mentioned only in the design specifications, Part 5; and in the plastic section modulus table, Part 2. The explanations and examples were too voluminous for inclusion; the AISC has published a separate volume entitled "Manual on Plastic Design in Steel."

The absence of information about a steel unit that has increased the economy of steel office buildings is noteworthy. Cellular steel deck is widely used, but details vary greatly between manufacturers, so that standard sections have not yet been adopted. For the present, there is no alternative to using the manufacturer's literature.

In spite of the few comments above, designers will find that, with a little practice, the manual will be a great saver of time. Let us hope that the AISC will not rest for too long after

a job well done; the accelerating pace of research and development will require constant surveillance. Manual is available for $7.00 from the American Institute of Steel Construction, Inc., 101 Park Ave., New York 17, N.Y.

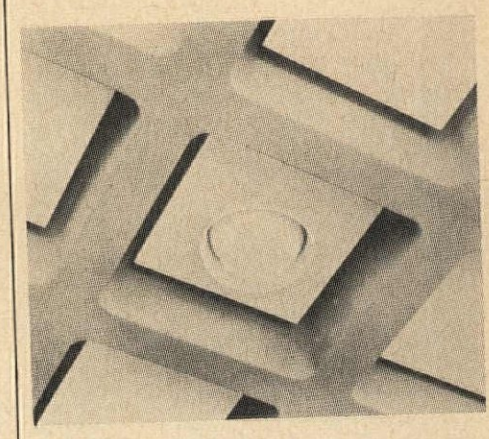
CONSTRUCTION
Tests on Cement

Flier, 6-pages, offers test reports, specifications, and other data on an all-purpose cement. Details and specifications include materials, mixture, properties, application, finishing, and curing. Perma-Cement Corp., 2501 N.W. 75 St., Miami, Fla.

On Free Data Card, Circle **200**

Joist Construction

Benefits of reinforced concrete joist construction are defined in 60-page publication. Topics discussed besides concrete joist construction are steelforms, steeldomes, flangedomes, adjustable steelforms, longforms, anchorage devices, underfloor electrification and ceiling construction. Also



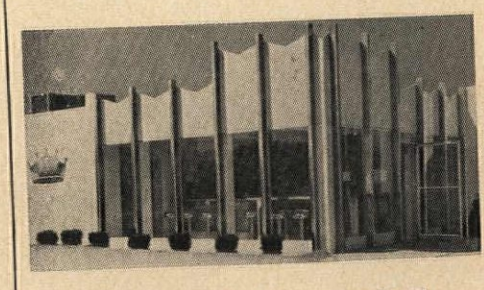
described are reinforcing bars, spirals, fabrics, and accessories. Illustrations, details, and specifications are given. Ceco Steel Products Corp., 5601 West 26 St., Chicago 50, Ill.

On Free Data Card, Circle **201**

Structural Bolt Units

Advantages of high-strength structural bolting is explained in 22-page booklet. Bolt assembly has shorter thread length, requires no washers if turn-of-the-nut method of installation is used, and has ⅛" increased bolt head width. Nut and head widths are identical and same wrench can be used on both. Less construction time is required and higher shear values reduce number of bolts required. Booklet contains specifications, dimensions, and strength properties charts as well as sections on shear, tension, installation, bearing tests, etc. Republic Steel Corp., 1441 Republic Building, Cleveland 1, Ohio.

On Free Data Card, Circle **202**

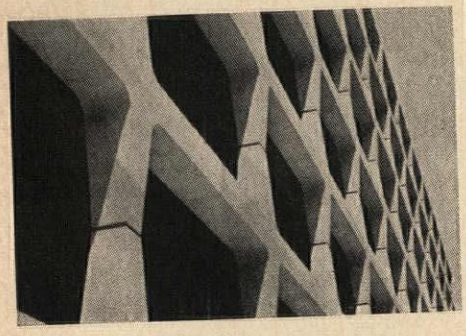


Porcelain-Enameled Curtain Walls

Booklet, 8-pages, describes porcelain-enameled steel curtain-wall system. It is protected from water by use of extruded butyl sealants, clamped under pressure, in all vertical joints. Poly-

sulfide sealants are used in horizontal joints. System utilizes panels as structural members, thereby eliminating all horizontal mullions and reducing joints by about 30 per cent. Also given are typical details, technical data, specifications, and photographs of completed installations. Erveen Corp., 4000 West Ridge Rd., Erie, Pa.

On Free Data Card, Circle **203**



Curtain-Wall Gaskets

Booklet, 24-pages, offers specifications on curtain-wall "zipper type" gaskets. Booklet includes physical properties; test data; sectional drawings of gasket installations; installation instruction; channels, spacers, and setting blocks. F. H. Maloney Co., P.O. Box 1777, Houston 1, Texas.

On Free Data Card, Circle **204**

Low-Cost Ceramic Tile

Brochure, 4-pages, describes ceramic glazed structural tile. "Utilitile" has been developed to compete in price with lowest cost utility wall materials. Tile offers fire-safety standards, imperviousness, resistance to stains, and structural strength. It is available in stretchers, corners, jambs, sills, and miters. Arketex Ceramic Corp., Brazil, Ind.

On Free Data Card, Circle **205**

DOORS/WINDOWS

Hardwood Doors

Brochure, 4-pages, illustrates special hardwood made for door skins. "Masonite Dorlux" hardwood skins are available in factory-primed or custom-grained walnut or cherry finishes. Temperature and humidity changes have no important effect on doors. It is free of internal stresses and has unusual dimensional stability that helps to prevent sagging or swelling of the door. It will not split, splinter, crack, rot, or corrode. Masonite Corp., 29 N. Wacker Drive, Chicago 6, Ill.

On Free Data Card, Circle **206**

ELECTRICAL EQUIPMENT

Outdoor Lighting

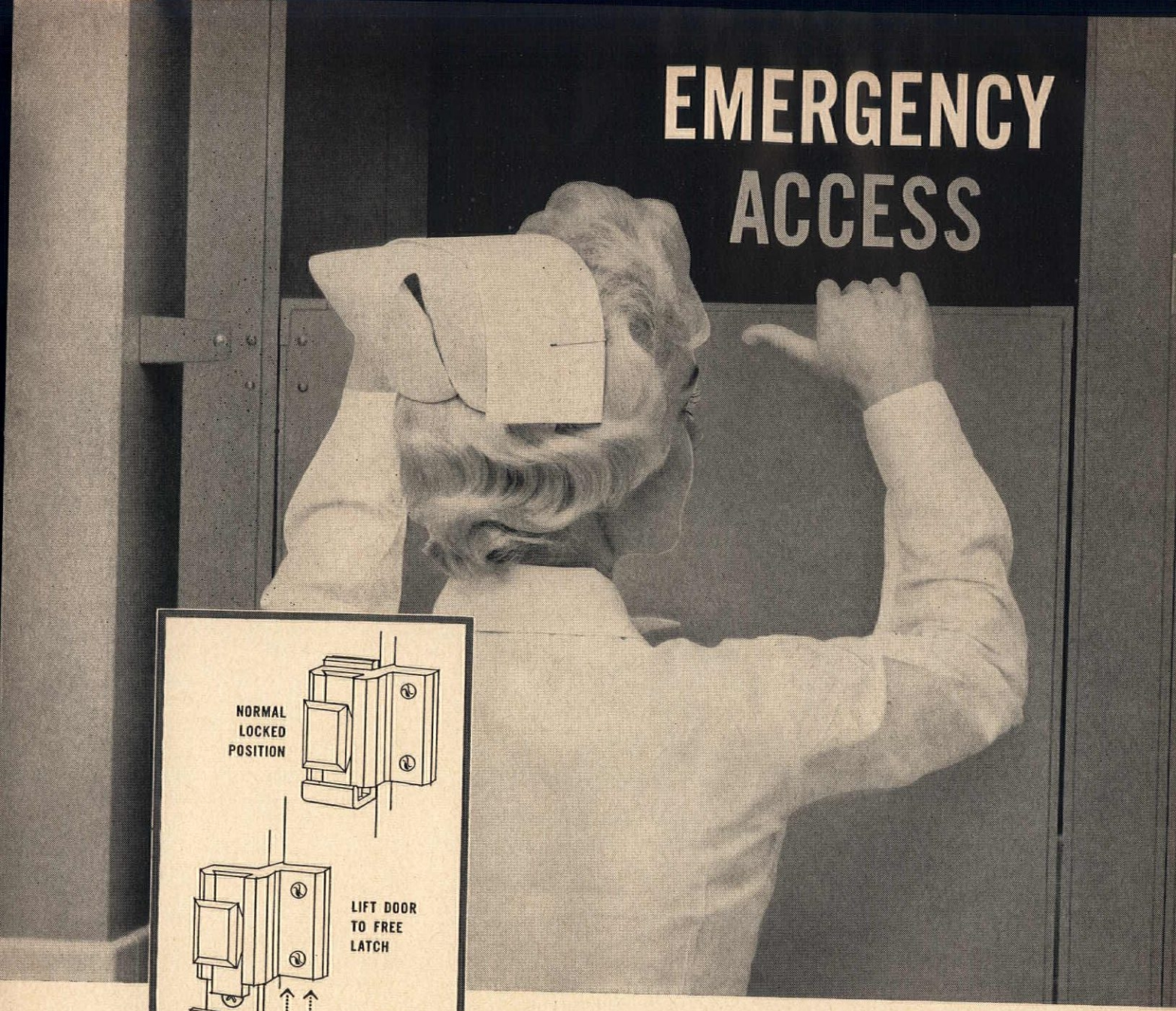
Booklet, 8-pages, describes outdoor fluorescent lighting units. They are used for lighting shopping centers, monuments, and commercial buildings. Booklet includes specifications covering lamp types, ballasts, wiring, enclosures, luminaires, reflectors, venting, color choices, and strength. Sterner Lighting, Inc., Winsted 1, Minn.

On Free Data Card, Circle **207**

Supplementary Lighting

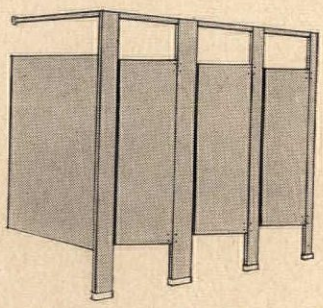
GE has published 16-page booklet entitled "Supplementary Lighting." Booklet contains information on lighting systems designed to fulfill specific re-

EMERGENCY ACCESS



(Pat. Pending

Weis Lift-Free Latch unlocks by merely lifting door upward



Lift the door... the latch is free... the door unlocked. No delay in reaching an emergency situation—*fast!* This exclusive Weis feature is especially important in hospital, nursing home, school and other institutional locations. It's a handsome, simple, cleanly designed latch, described in the new Weis Toilet Compartment catalog—write for copy.

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quirements of visibility that cannot meet requirements of general lighting. Techniques for alleviating problems involving objects of small size, low contrast, rapid motion, low brightness, color matching, and grading are discussed. General Electric, Large Lamp Department, Nela Park, Cleveland 12, Ohio.

On Free Data Card, Circle **208**

Dome Lighting

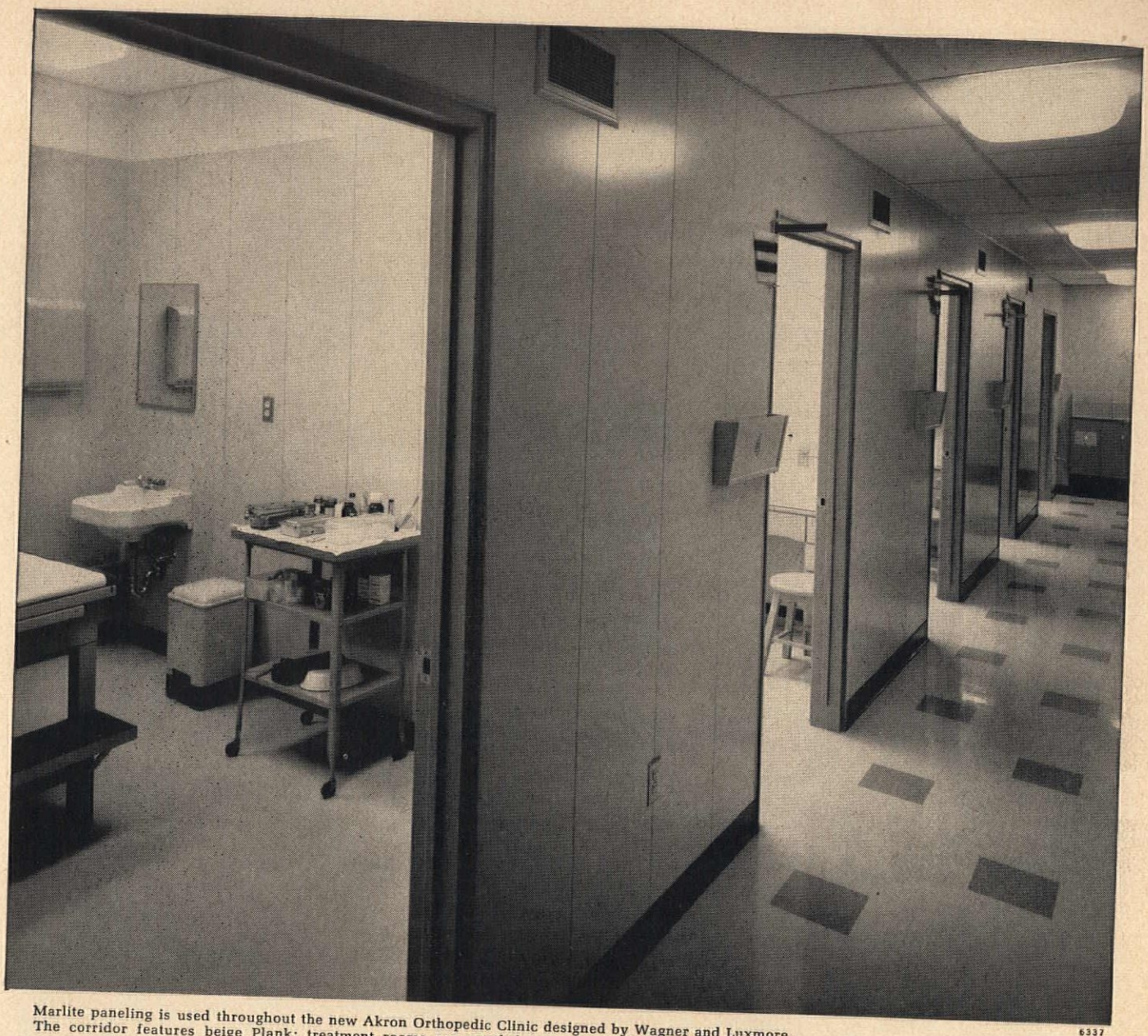
Booklet introduces line of fluorescent round dome lighting units. Domes are available in 6′, 4′, 3′, and 2′ diameters, and in larger diameters on special order. All fixtures have flat, concave, or convex Plexiglas diffusers. Detailed drawings show construction of fixtures, including variations in lamp spacing and placement, mounting details, and arrangements of hinged opening devices. Morris Kurtzon, Inc., 1420-30 St. Talman, Chicago 8, Ill.

On Free Data Card, Circle **209**

FURNITURE

Changeable Tables

Folder illustrates 17 tables and bases. Special attention is placed on CHF adjustable tables that are changeable in height from 18″ high coffee tables



Marlite paneling is used throughout the new Akron Orthopedic Clinic designed by Wagner and Luxmore. The corridor features beige Plank; treatment rooms are paneled in various colors of Marlite Plank.

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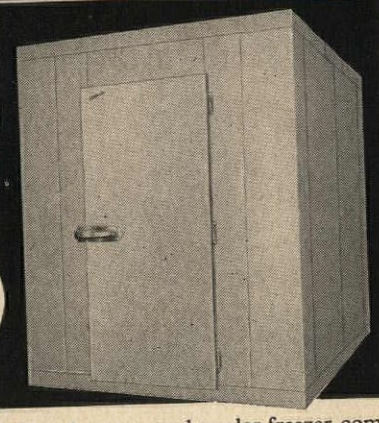

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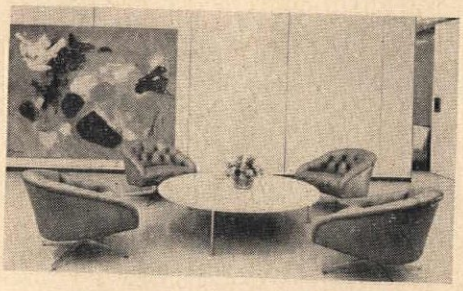
to 29″ high dining table. Metal finishes include solid bronze, bronze plate, satin or bright chrome, and anodized cast aluminum. Wood finishes include walnut and mahogany, as well as plastic and porcelain enamel tops. The Chicago Hardware Foundry Co., 2500 N. Commonwealth Ave., North Chicago, Ill.

On Free Data Card, Circle **210**



Furniture Catalog

Catalog contains descriptive information on benches and upholstered stools, cabinets, desks, sofas, and tables showing installation views. Separately included is a price list and specifications of all the aforementioned furniture. Lehigh Furniture Corp., 16 East 53 St., New York 22, N. Y.

On Free Data Card, Circle **211**

SPECIAL EQUIPMENT

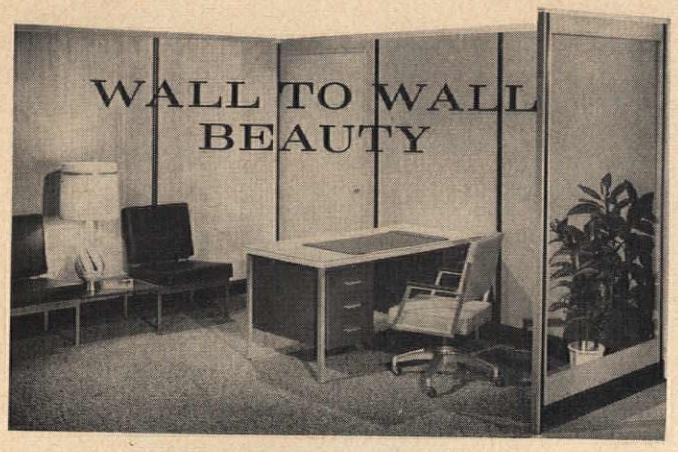
Wrought Aluminum Manual

Fifth edition of Standards for Wrought Aluminum Mill Products has been introduced. Manual contains information on properties and dimensional tolerances of aluminum and aluminum alloy mill products. It is revised annually to include data on new standard alloys and products, and advances in production methods. This year's edition includes tables of mechanical properties, which now list strength in kips instead of psi. Data on standards for painted aluminum sheet and bend radii for sheet and plate are also included. Write on letterhead to The Aluminum Association, 420 Lexington Ave., New York 17, N.Y.

Cleaning Acoustical Ceilings

Pamphlet, 4-pages, outlines complete procedures for care and maintenance of acoustical ceilings. Pamphlet describes how to clean all types of acoustical material, including wood-fiber,

Continued on page 112



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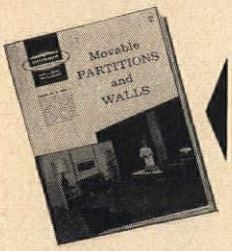

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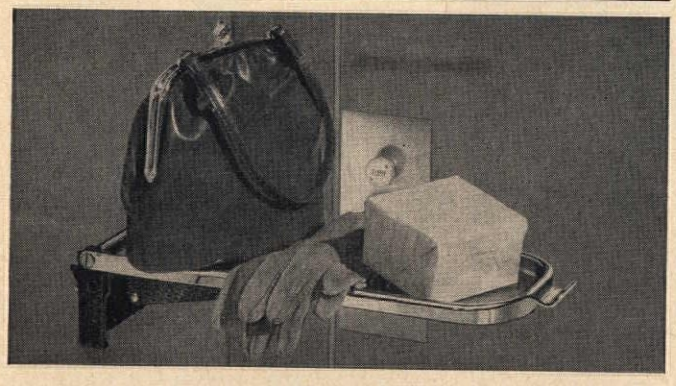

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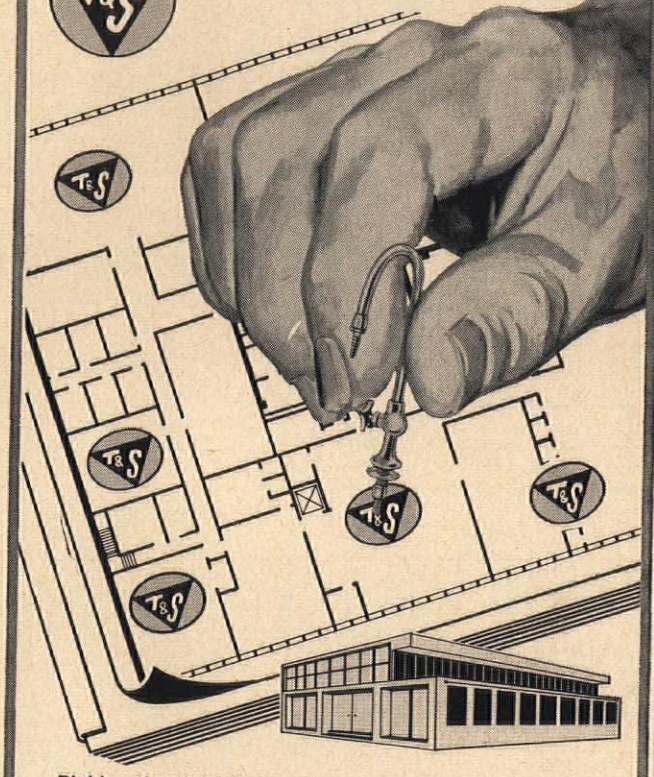

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Continued from page 109

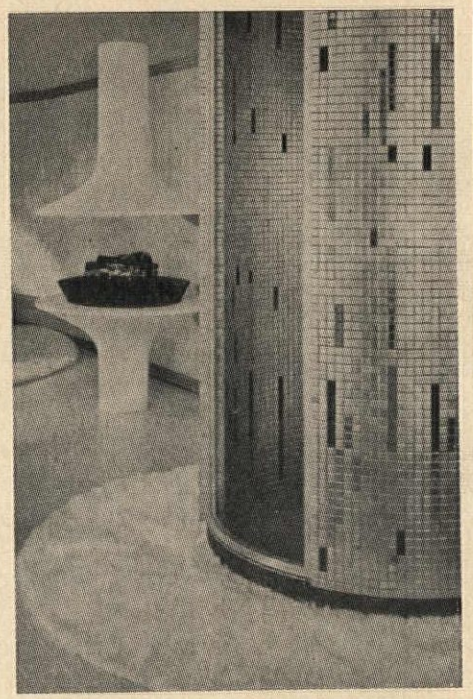
mineral, metal-pan, and membrane-faced ceilings. Included is information on types of paint, type of brush, and methods of application to be used. Armstrong Cork Co., Dept. P.I., Liberty and Mary Sts., Lancaster, Pa.

On Free Data Card, Circle 212

SURFACING MATERIALS

News in Tile

Highlights of Tile Technical Progress, 16 pages, sets forth in a series of short articles the most important recent innovations in ceramic-tile



products and procedures. Material covered includes new epoxy mortars and grouts developed by Tile Council research, as well as dry-set mortars and grouts, organic adhesives, conductive floor installations, cleaning procedures, and other aspects of tile installation. Write (enclosing 10¢) to: Tile Council of America, Inc., 800 Second Ave., New York 17, N.Y.

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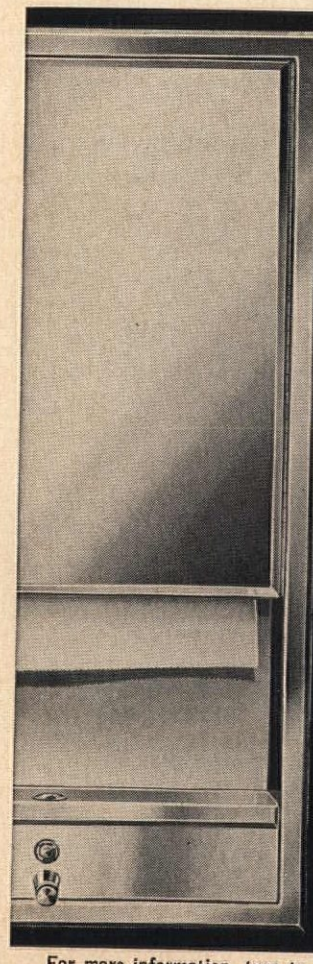

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