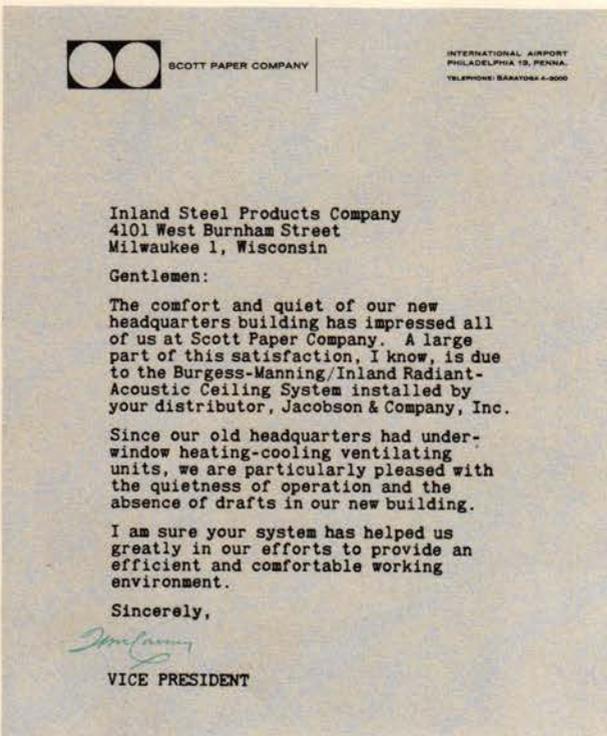


ARCHITECTURAL FORUM THE MAGAZINE OF BUILDING MARCH 1963

FORUM



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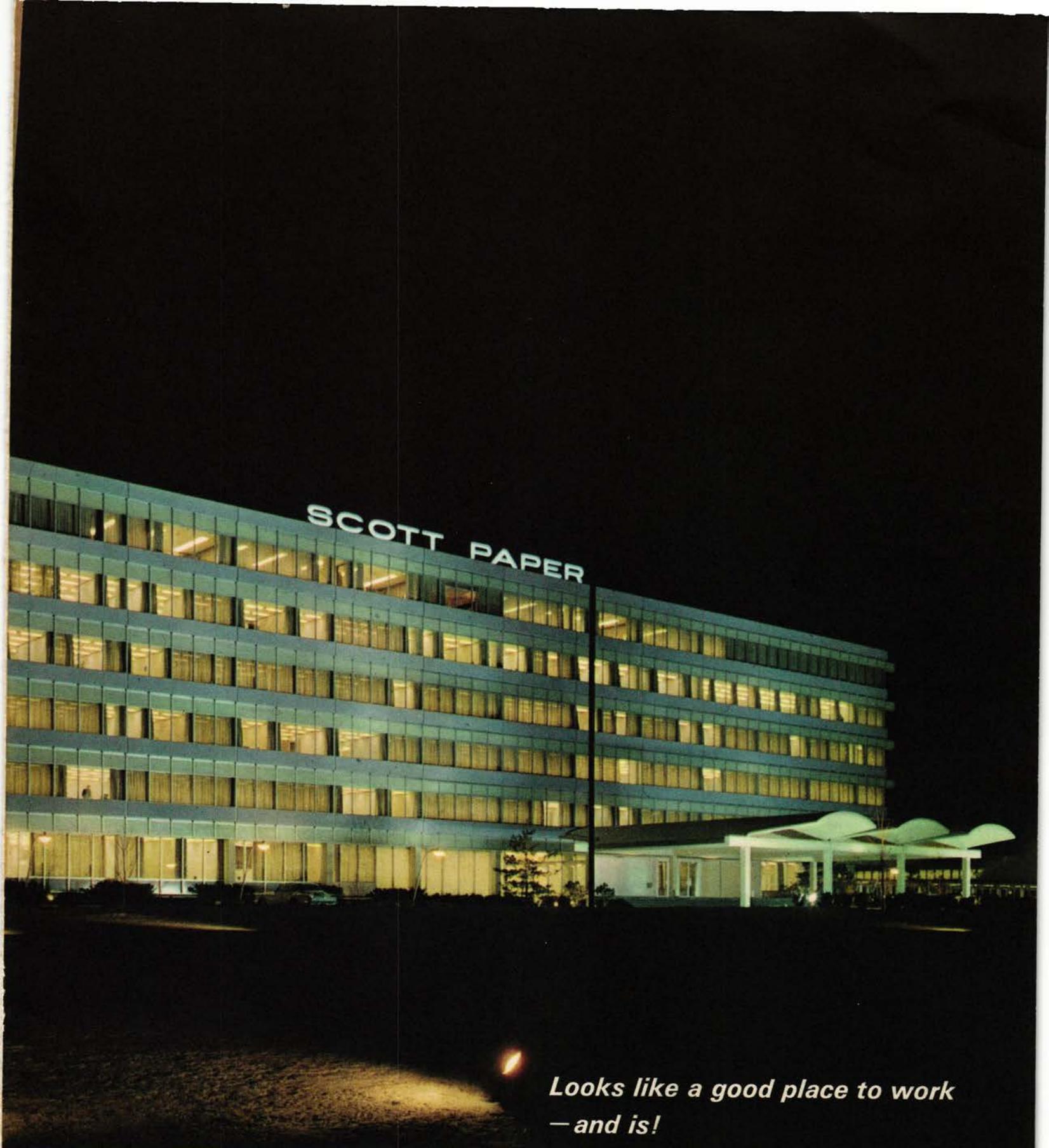
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SCOTT PAPER

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PUBLISHER'S NOTE

On this month's cover, Artist Ray Komai has awarded a varsity C to the colleges of America for their winning architecture. And deservedly so. Instead of warming the traditional design bench as they did for so many years, many

Colleges are now in action, producing some of the best contemporary architecture in America.

The change started slowly some 20 years ago when colleges began recruiting outstanding architects for their building programs. It was sparked, among other things, by a design competition which FORUM conducted in 1939 to select the architects for the Wheaton College Art Center: Richard Bennett and Caleb Hornbostel. Among the latest and most daring plays was that made by Harvard, which went all the way to France to get Le Corbusier to design its Visual Arts Center, dedicated last month (page 76). In between there have been many other winning combinations—Breuer and Vassar, Gropius and Harvard, Harrison & Abramovitz and Brandeis, page 84), Johnson and Sarah Lawrence, Kump and Foothill, Mies and I.I.T., Pei and M.I.T., Rudolph and Wellesley, Saarinen and Yale, SOM and the Air Academy, Stubbins and Mount Holyoke, Warnecke and the University of California (page 96), Wright and Florida Southern—to name but a few.

Slow to get going, Princeton is now in the running too, having put Yamasaki, Stubbins, and Barnes on its building team. For this recent architectural revolution at Old Nassau perhaps some credit is due FORUM's editors: exactly three years ago (March

'60) they published an editorial entitled "Poor Princeton" which criticized the university for its backward building program. (FORUM has 29 subscriptions on the Princeton campus.)

It seems likely, too, that the editors have contributed to the architectural renaissance on other campuses, for FORUM is widely read by those who own, manage, and pay for college buildings, as well as by those who design them. Among FORUM's 22,300 subscribers in the owner-manager category are 2,100 in the educational field alone—board members, building department executives, and others who are responsible for what their institutions build.

FORUM also has a big following—6,600 subscribers—among architectural professors and students, who also influence the course of college building. For example, students started the heated controversies with the trustees of Columbia and Texas U. over the design of their new buildings, controversies which the editors have reported and joined (FORUM, June '62 and Jan. '63).

Through this wide circulation among those who influence architecture, as well as those who practice it, FORUM helps to stimulate the desire for better corporate and institutional architecture in America—and thus to encourage more colleges to win varsity C's.

E Speaking of varsity letters, the editors themselves were awarded a major E (for editorial excellence) last month by the Associated Business Publications—the seventh won by the FORUM team during the nine years of the ABP competition.

—J.C.H., Jr.

NEW COLLEGE ARCHITECTURE 76

- Le Corbusier's Visual Arts Center at Harvard* 78
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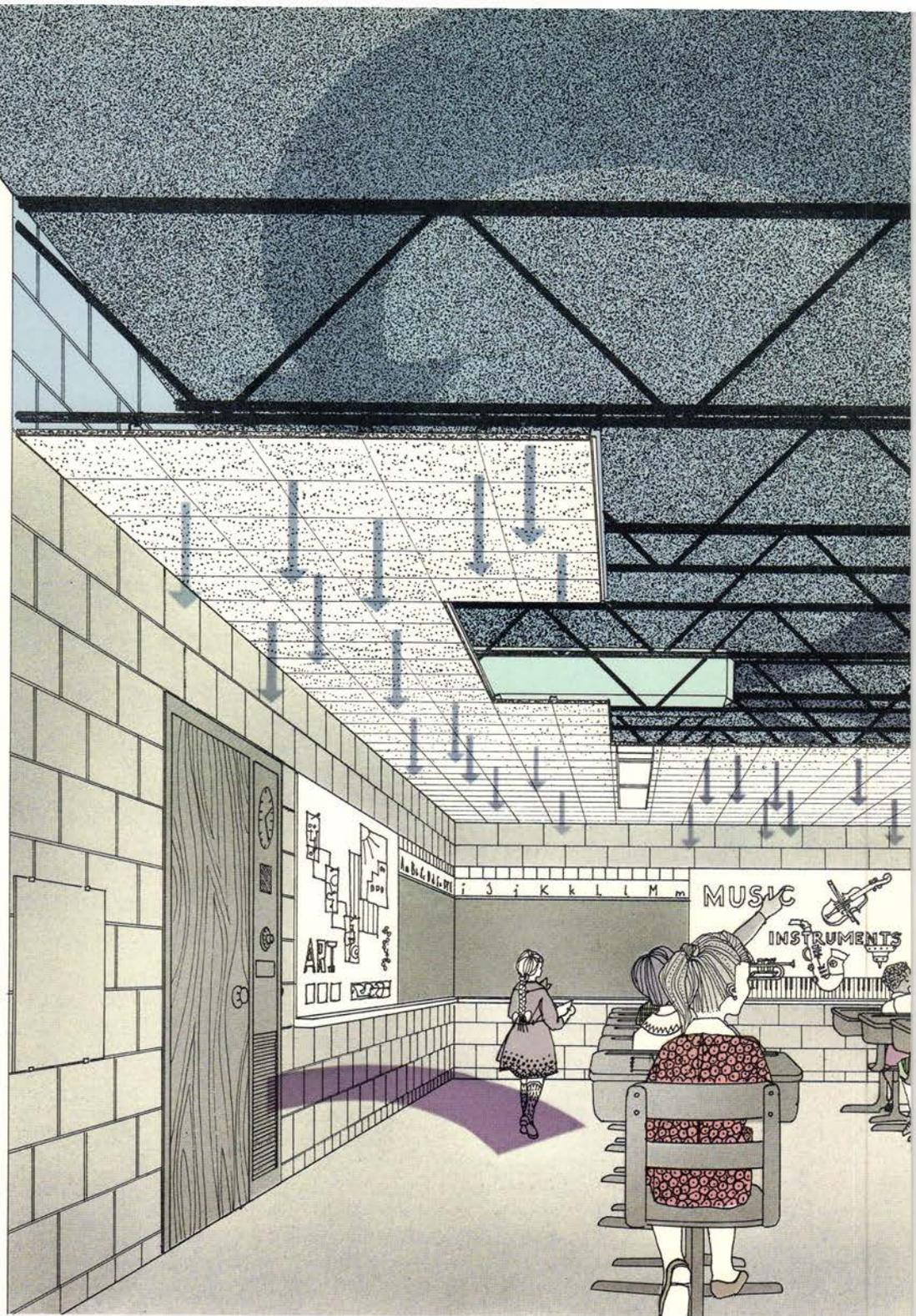
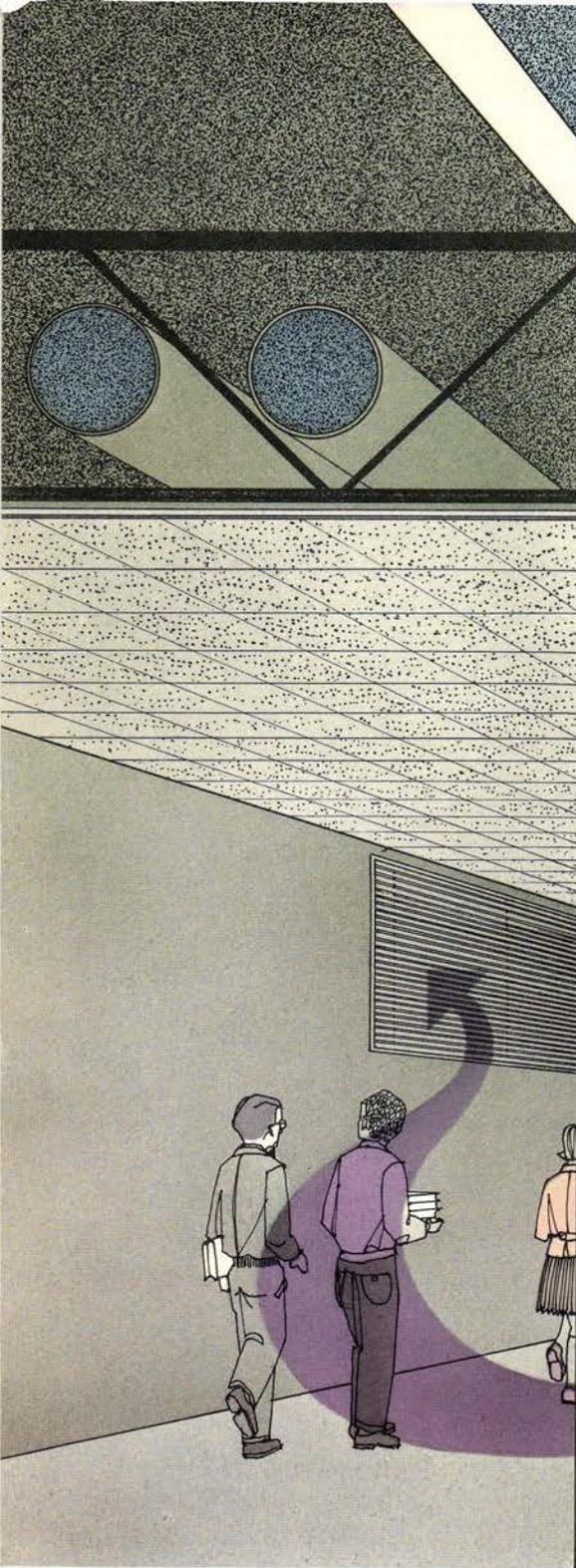
ALVAR AALTO 120

- Inventive new work of the AIA's 1963 Gold Medal winner*

REBUILDING: OLD OFFICES MADE NEW 126

- Manhattan headquarters are remodeled with skill and warmth*

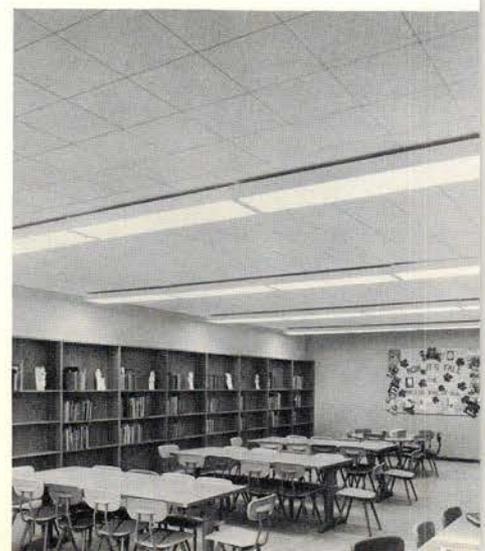
5	NEWS	Cover:	A varsity "C" for college design; drawing by Ray Komai (see page 76).
19	LETTERS	20	Editorial, subscription, and advertising data.
43	PROJECTS	170	Advertising index.
59	PRODUCTS		Published monthly by TIME INC., Time and Life Building, Rockefeller Center, New York 20, N.Y. This issue is published in national and separate editions. Additional pages of separate editions numbered or allowed for as follows: Western edition: W1-W6.
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75	EDITORIAL		Subscription price \$7.00 a year. © 1963 TIME INC. All rights reserved. Member, Audit Bureau of Circulations and Associated Business Publications.
130	EDITOR'S NOTE		
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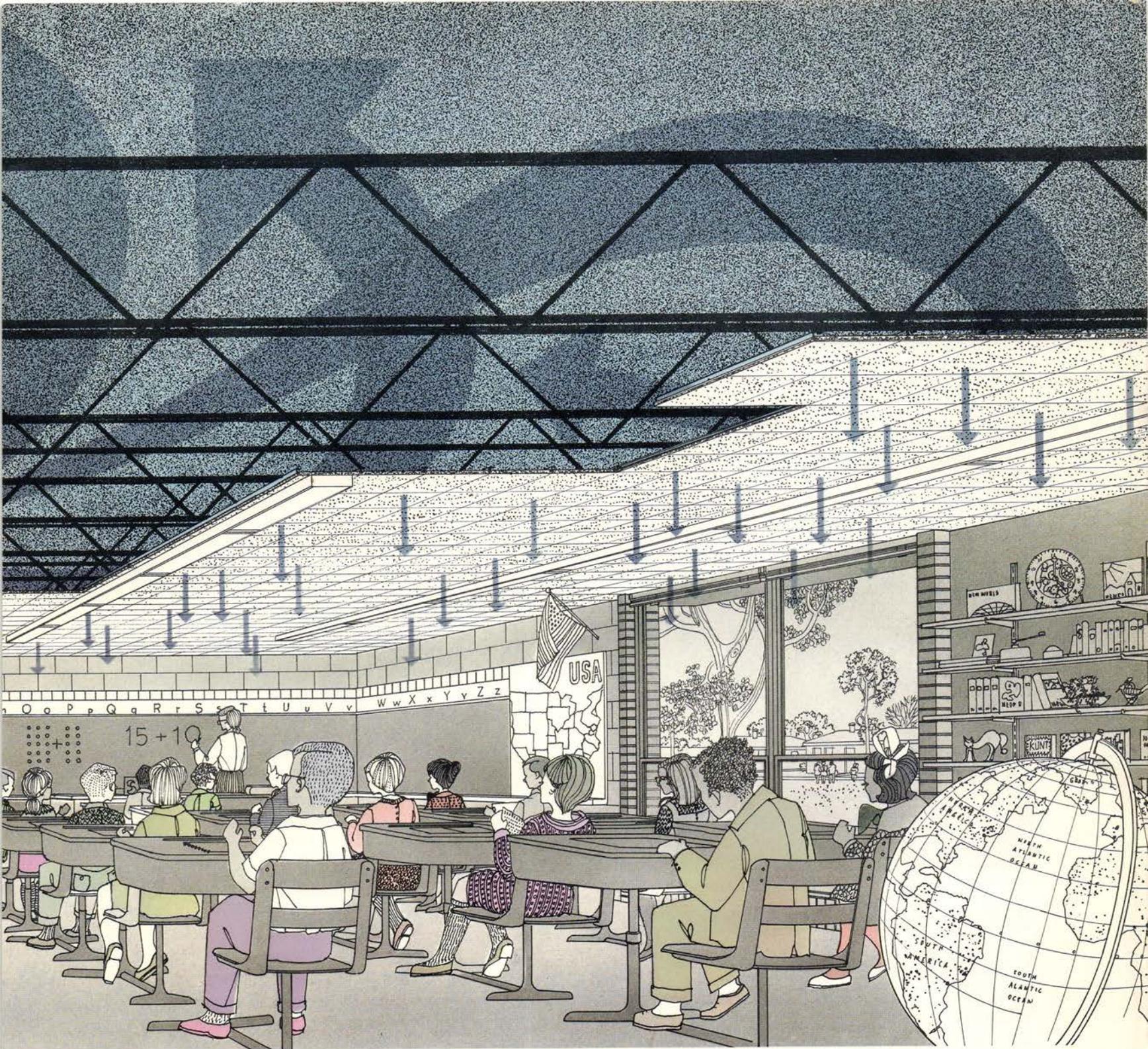


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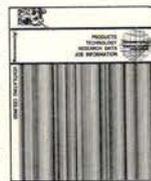




of ceiling systems: Armstrong Ventilating Ceilings

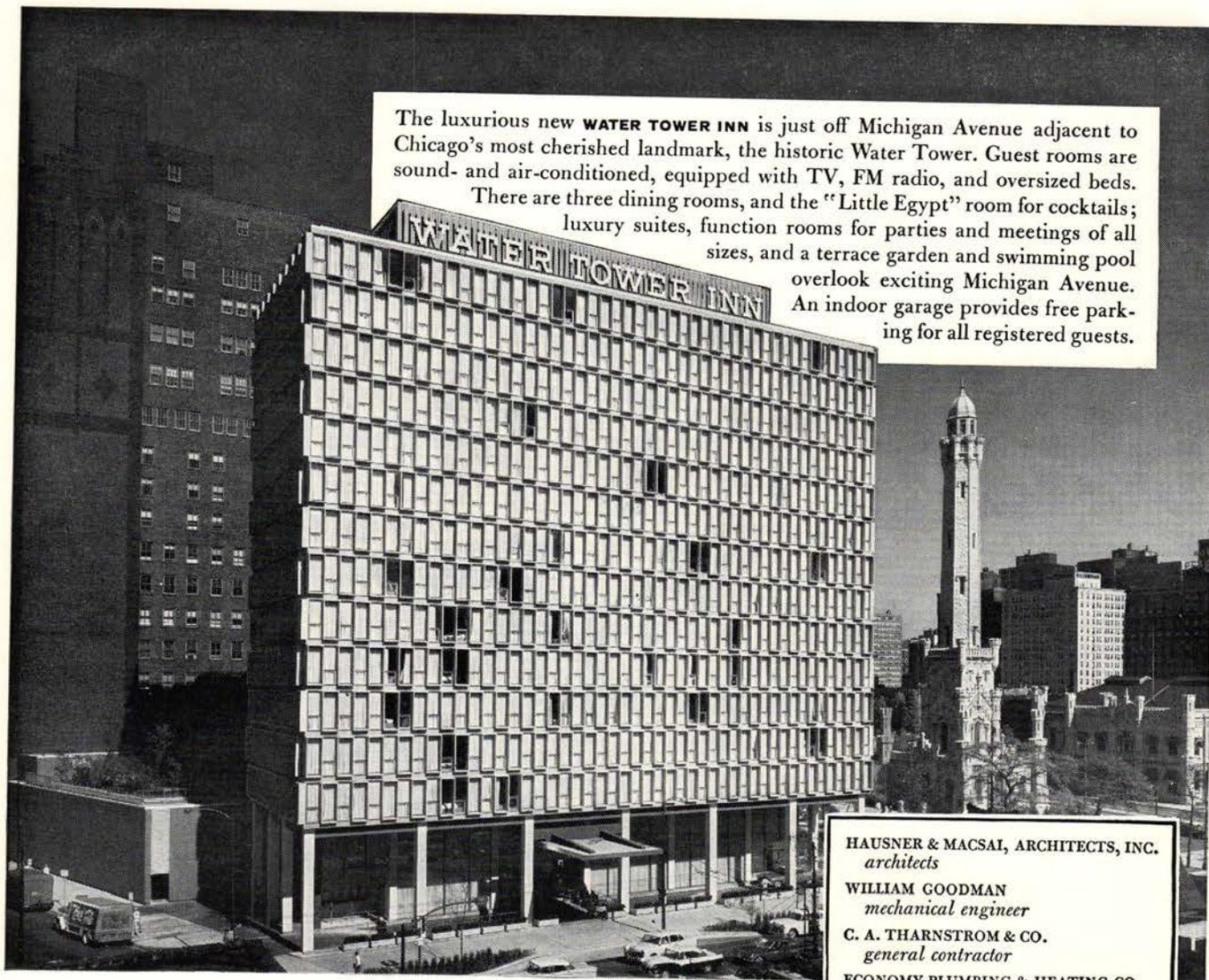
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AIA national awards (below)

Pei's prototype city school (page 7)

Preservationists arise (page 9)

Competition winner at RPI (page 11)

AIA JURORS PRAISE 1962 ARCHITECTURE

Last year, only one AIA First Honor Award was selected from a total of 382 submissions. The jury commented sharply that "superficiality, the patent solution, and lack of individuality and artistic expression were strikingly obvious."

This year, however, the official architectural picture changed for the better. Out of 411 submissions, there were five First Honor Awards (pictures right), and eight Awards of Merit (one more than in 1961). A jury composed of Robert L. Durham, William W. Caudill, Mark Hampton, Ernest J. Kump, and Hugh Stubbins happily announced: "The overall standards of excellence were unusually high There are many indications that the best American design is now characterized by a sense of appropriateness and creative individuality." No industrial or school buildings were premiated due to the many other "superior entries."

Honor Awards are identified beneath photos (dates refer to publication in FORUM). Awards of Merit went to: Eero Saarinen's TWA Terminal at Idlewild Airport (July '62); the John Hancock Building in New Orleans by Skidmore, Owings & Merrill with Nolan, Norman & Nolan; an apartment tower in Tulsa, Okla., by Harrell & Hamilton (Mar. '62); Community Hospital in Carmel, Calif., by Edward Durell Stone (Oct. '62); the Market Square Mall in Knoxville, Tenn., by the East Tennessee Chapter of the AIA (Apr. '62); the academic quadrangle at Brandeis University, Waltham, Mass. by The Architects Collaborative (Sept. '61); the Safir residence at King's Point, N. Y., by George Nemeny; and the Green-Johnson House in Mill Valley, Calif., by Marquis & Stoller, San Francisco.



GEORGE CSERNA

Ezra Stiles & Samuel B. Morse Colleges, Yale University; Architect: Eero Saarinen (Dec. '62)



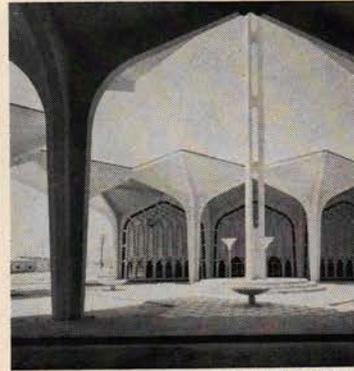
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Albright-Knox Art Gallery wing, Buffalo, N.Y.; Architects: Skidmore, Owings & Merrill (Mar. '62)



FRED LYONS

International Building, San Francisco, California; Architects, Anshen & Allen (Mar. '62)



RONDAL PARTRIDGE

Dhahran Air Terminal, Saudi Arabia; Architects: Minoru Yamasaki, R. M. Parsons Co. (July '62)



P. E. GUERRERO

United Church (nonsectarian) of Rowayton, Conn.; Architect: Joseph Salerno (Dec. '62)

AIA CITES KENNEDY

Of all the honors announced by the American Institute of Architects last month, none was so far-reaching as the special citation to President John F. Kennedy. It was awarded for his appointment of a Special Presidential Consultant on the Arts (August Heckscher), his policy of high architectural standards in all federal buildings, and his selection of an Advisory Committee on Pennsylvania Avenue. "All of these actions," reads the citation, "emphasize his awareness of the basic need for beauty in man's environment, the vital role of architecture in its development, and his readiness to employ the presidential power in achieving this goal." Kennedy, who is the first U.S. President to be honored by the AIA in its 106-year history, is also generally credited with having "saved" Lafayette Square in Washington from disfiguring changes, and with having insisted upon a suitably dignified design for the Federal Pavilion at the forthcoming New York World's Fair.

MORE FOR LESS IN 1964 HOUSING BUDGET

As national attention focused on the President's record budget—and more particularly, on its \$11.9 billion deficit—federal accountants announced that the housing budget will shrink by almost \$400 million in fiscal 1964. This means that the various agencies lumped under HHFA will reduce their direct withdrawals from the Treasury by about 40 per cent during the next fiscal year. At the same time, however, the budgeteers have indicated that most housing programs will continue to expand.

This seeming contradiction derives largely from two assumptions: 1) that, largely because of

a reviving economy, FHA will have to take back only about \$23 million of home mortgages in fiscal 1964, compared to a whopping \$211 million in 1963; 2) that college housing loans will be repaid at a rate almost equivalent to cover all expenses of the program, resulting in a reduction of \$155 million in such spending in 1964 relative to 1963. Together these two items account for \$343 million of the predicted \$393 million decline in net withdrawals from the Treasury in fiscal 1964.

The housing budget, moreover, contains only one new program still to be approved by Con-

continued on page 7

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continued from page 5

gress: \$100 million in grants to aid transportation.

Other budget components:

Urban renewal spending will remain at almost the same level as in 1963, although the number of projects that will go into execution will nearly double (206 compared with 110). Cumulative project completions will reach 195 (up 70) by the end of the budget year. Grant disbursements, which reflect the increasing rate of actual building, will be raised by \$47 million to a total of \$297 million.

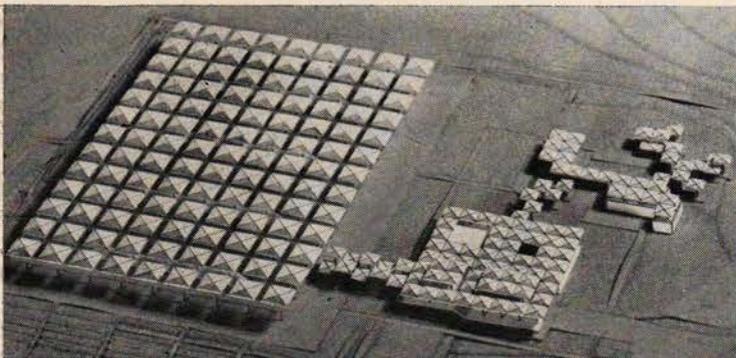
FHA mortgage insurance to urban renewal areas under Section 220 is expected to grow by 2,000 unit applications next year. Applications for below-market interest rates under Section 221d3 will continue to rise spectacularly. In fiscal 1964, a total of 35,000 such applications in apartment houses is expected—an increase of 10,000 over 1963. And in one- to four-family houses, estimated new 221d3 applications will rise 5,000 to total 50,000.

The Federal National Mortgage Association's commitments to buy these mortgages will grow by about 80 per cent to \$344 million (from \$193 million this fiscal year). Curiously enough, Fannie Mae's net spending is expected to decrease from \$165 to \$73 million, a neat trick to be accomplished by the fourfold increase

(to \$200 million) in the sale to private investors of mortgages now held by the agency. Hitherto, many of these mortgages have not been attractive to private lenders, largely because of their low interest rates; to make them more appealing, FNMA will offer buyers some concessions (e.g., a rebate of its fees).

Public housing will climb by about 35,000 units over 1963's figure, to make a total of 576,000 low-rent units in 3,575 projects operating by June 30, 1964. Some 42,000 new units will go under contract next year, which will almost exhaust the backlog which the program has been working on for several years.

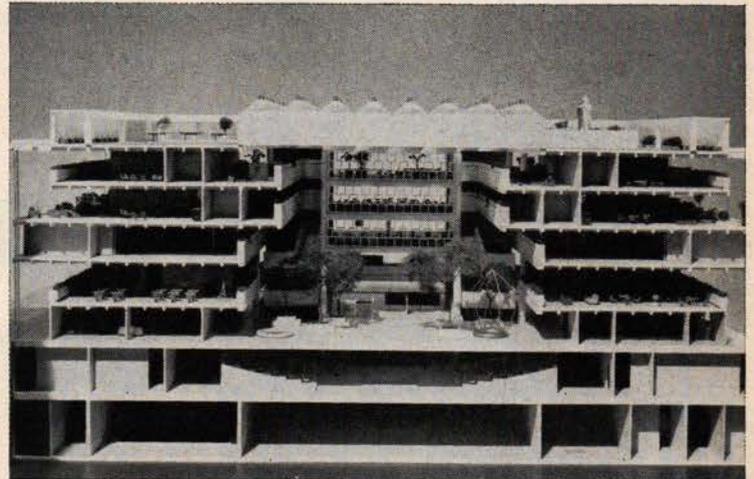
Other programs also reflect expansion. Commitments for low-income housing demonstration grants will increase from \$3 million to \$5 million, while urban studies and housing research will grow from its present \$375,000 level to \$2.5 million. New college housing loans will continue at the 1963 figure (\$300 million), but housing for the elderly loans will be boosted by \$25 million to \$125 million in fiscal 1964. The open-space program, which assists state and local governments to acquire vacant land, reaches the end of its authorization in 1964 with grant commitments of \$32 million.



FRENCH DESIGN WINS CONTEST FOR EUROPEAN BUILDING CENTER

A recent competition for the design of a permanent European building exhibition center was sponsored by a new organization in Paris, the Centre d'Information Européen de la Construction. Some 69 submissions were received from all over the world. The winning solution, by French Architects Michel Hubert and Marc Auberlet, is a forest of simple structural "trees" infilled

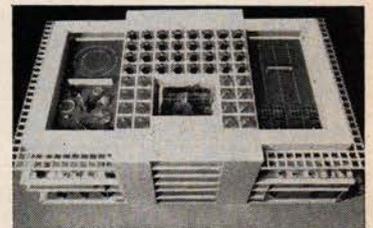
with glass and solid panels, which admirably fulfills the competition's requirements: 1) flexibility in component parts and in interiors, 2) ability to be built in stages, 3) economy, and 4) use of modern technology. The large exhibit hall will be connected to an office-reception area (center), which straggles nicely out to a snack bar, apartments, and landscaped restaurants.



PEI TACKLES THE CITY SCHOOL PROBLEM

Architect Ieoh Ming Pei has devoted his considerable abilities to one of the stickiest unsolved architectural problems of our time—the city school (FORUM, Nov. '62). Pei was asked by New York University, and the Ford Foundation's Educational Facilities Laboratories, to develop a unique design for a special private elementary school as an adjunct to NYU's teacher training program. His model (above and right) represents a preliminary, diagrammatic solution to three overriding needs: efficient use of scarce and costly land, flexibility for future change, and the attractive environment lacking in so many city schools.

Pei's five-story, 500-student school will fit a half-acre site, and could have no exterior windows, thus permitting it to be



slipped in between existing buildings. Play areas are on the roof; interior walls are movable along 40-foot floor spans; and the auditorium, gymnasium, and swimming pool are all underground. A central skylight brings sunshine to each floor, and to a lavish indoor garden at ground level.

Details such as acoustics and fireproofing are still to be worked out, but NYU intends to build the school near its campus on Manhattan's Washington Square by 1969 at the latest.

TRANSIT NEWS: PHILADELPHIA AND BOSTON

For 19 cold days ending February 2, Philadelphians endured a transit strike that created enormous traffic jams and curtailed business as much as 42 per cent. Called by Local 234 of the Transport Workers Union against the Philadelphia Transportation Company, it caused 5,600 workers to walk away from their jobs on subways, buses, trolleys, and elevateds within the city limits. At issue was a new contract. The TWU demanded a 75-cent-per-hour pay increase, and more important, retention of a "no-layoff" clause in the contract. The PTC refused, on the grounds that it would have

to drop some 300 employees if fares were not to be increased.

In the end, TWU received a 33-cent package and kept the no-layoff clause. The PTC hiked its fares (despite a \$5 million annual subsidy from the city to keep fares down) after gaining the approval of the state public utility commission.

Philadelphians, the losers during the strike, actually caused it indirectly. Over the past ten years, they rode their cars to work more and more; PTC patronage since 1953 dropped by about 30 per cent. To keep going, the transit company had to sell 80

continued on page 9

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continued from page 7

per cent of its track and equipment to the city and lease it back. In view of these circumstances, and the fare subsidy, PTC is said to want the city to take over the system completely. But Mayor John H. J. Tate, unlike his predecessor, Richardson Dilworth, has not shown much interest.

Philadelphians learned two lessons from the strike. First, like it or not, transit keeps the city's economic life active. During the strike, stores, hotels, night clubs, and other businesses were badly hit: losses are estimated at \$3.5 million per week. Even the city government lost, and not only \$50,000 in city tax withholding payments. Some \$540,000 extra was paid out for police overtime, and for fuel bills for public trucks which acted as transit vehicles.

The second lesson: Philadelphians rediscovered the commuter railroads which extend to most parts of the city and suburbs. Many sources now believe that riders, newly acquainted with the railway systems and the subsidized fares on some commuter lines, will use them rather than take to

their cars again to go downtown.

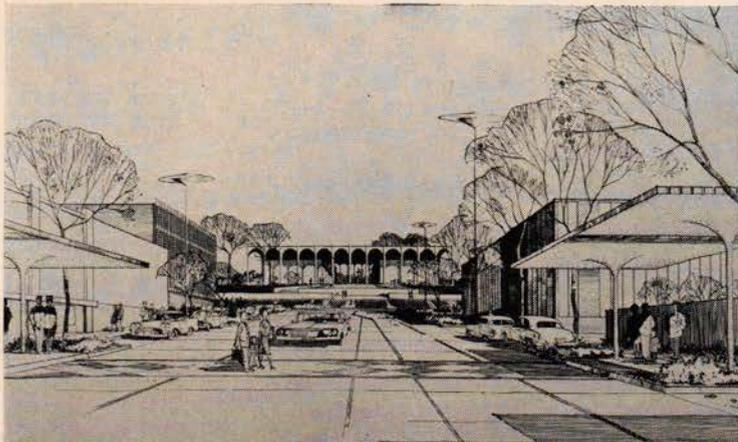
In Boston, meanwhile, commuters were also rediscovering rails in the \$2.2 million experiment being conducted by the Mass Transportation Commission with the Boston & Maine Railroad and connecting transit (FORUM, Jan. '63). By stepping up the number of trains by 78 per cent and lowering fares on the commuter line by an average of 30 per cent, a gain of some 32,000 passengers per week has been registered during the first month of operation—an increase of 25 per cent over this time last year. Some railroad officials are guardedly enthusiastic. Said one: "Some rise in commuters might normally be expected during the bad-driving months. The real test will come with spring."

Nonetheless, the B&M success has been noted by the much-derided New York, New Haven & Hartford, which will soon enter the experiment with its commuter service from areas to the south and west of Boston. Still undecided, however, is the New York Central, which serves commuters in the city's western suburbs.

PLAN FOR DOWNTOWN: SALT LAKE CITY SAYS IT WILL BE DONE

The uncluttered rendering below shows one small part of Salt Lake City's "Second Century Plan"—a much-needed art museum and gallery (background). The plan, which was drawn up by the Downtown Planning Association and the Utah Chapter of the AIA, takes into account a more than twofold expansion of population and economy projected for 1985. Concentrating on the downtown area, the planners have designed new systems of ac-

cess as well as new buildings. In one respect, they have a more simplified task than do planners in other cities: Salt Lake City is based on an original plan by Brigham Young which allows new proposals to jibe with the old structure of downtown. Although official approval of the plan is expected soon, several projects have already been started. Improvements such as tree planting and canopied pedestrian crossings begin this spring.



ROBIE HOUSE SAVED; VIEUX CARRÉ LOST?

"Only beauty is imperishable," stated New York Developer William Zeckendorf last month. The occasion: transfer of the deed of Frank Lloyd Wright's great Robie House from Zeckendorf's Webb & Knapp, Inc. to the University of Chicago, and the kick-off of a public fund-raising campaign for restoration of the masterpiece.

The man who knows as much about real estate values—and demolition—as anyone in the country went on to say: "Here is a house that cost \$35,000 to build in 1909, and yet today is worth saving at a cost of \$250,000 . . . this house in the future will be worth many times what is spent on it."

The move to save the house came when Chicago preservationists saw that designation of buildings as landmarks is not tantamount to saving them, and that the Robie House might soon go. Zeckendorf, who acquired the building in 1957 for \$125,000, was persuaded to give it to the university, which will use it as a

president's house or a residence for visiting scholars.

Meanwhile, in New Orleans, the Vieux Carré, one of the country's outstanding historic areas, was being threatened by the very actions of the seven-man Vieux Carré Commission set up (in 1937) to judge all proposed building changes in the rigidly zoned old French Quarter. The commission approved the demolition of three fine old buildings to make room for a new motel, a new hotel extension, and a bank.

Preservation groups, aided by the Tulane University Architectural School, the local Chamber of Commerce, and the Tourist and Convention Bureau, rose up at Planning Commission hearings to condemn the spot-zoning change in the motel case (see photo).

The other two demolitions will take place. A civil district court ruled that the Vieux Carré Commission, including its three architect members, was acting within its prescribed authority.

SIX DIRECTORS QUIT WEBB & KNAPP, INC.

When approached a few years ago with statistical evidence of the profits that he could reap by just consolidating the properties he then held, Developer William Zeckendorf, the story goes, grinned and said, "I can't do it. I'd go crazy." This, in effect, is the lesson that six British-con-

trolled members on the board of Webb & Knapp, Inc. learned the hard way over the past 13 months. By late January, all six had quit.

The British were not out of Zeckendorf's life, however. After he had run himself deeply into debt by the end of 1961, Zeckendorf was bailed out—for a steep

continued on page 11

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continued from page 9

price—by a British banking group (FORUM, Feb. '62). While he escaped bankruptcy then, the Britishers acquired: 1) half interest in Trizec Corp., which controls Zeckendorf properties in Canada—primarily Montreal's Place Ville Marie; 2) almost half interest in the newly formed Zeckendorf Property Corp.—to which Zeckendorf was obliged to transfer 13 of his most important properties, including most of his ambitious urban renewal projects; and 3) about 15 per cent interest in Webb & Knapp, Inc.—which brought with it the six seats on the board.

The British thus held veto power in two Zeckendorf companies, and a relatively small, though powerful, voice in Webb & Knapp. They used their power: by all reports Trizec is in good financial shape, although Place

Ville Marie is renting at a slower pace than expected (FORUM, Feb. '63); ZPC has sold off five of its properties to Alcoa to pay off its indebtedness, and has also accepted Alcoa as a controlling minority partner in seven other ZPC projects.

In Webb & Knapp, Inc., however, Zeckendorf still was boss. Although the British reportedly wanted to rid the company of high-cost debt by this time, they found that the more they advocated conservative measures, the more Zeckendorf wheeled and dealt. In resigning, they let it be known that Webb & Knapp, Inc. will get no further financial assistance from them. Zeckendorf has indicated that he will replace them with four new directors, adding, "and they will be basically real estate people who live around New York."

NEWS IN BRIEF

Governor's house. When San Francisco Architects Campbell & Wong won a contest for the design of the California Governor's mansion last year (FORUM, Apr. '62), they did not know what they were in for. Further work and research has shown that the original appropriation of \$475,000 is exactly \$400,000 too little. Reasons: an increase in the proposed size of the 18-room house from 13,000 to 22,000 square feet; poor soil conditions requiring \$50,000 extra in piling; and underestimation of landscaping costs. The legislature has been asked to include the extra \$400,000 in California's \$3.3 billion budget for 1963.

City vs. State. The Austin, Texas City Planning Commission and City Council recently approved

zoning changes which allow the Lumbermens Co. to build an 18-story office tower designed by Architect Edward Durell Stone—thereby disregarding a 1956 master plan for the Capitol area. State officials, furious at being bypassed, say that the land will be required for future state offices, and disapprove of high-rise buildings which block the view of the Capitol anyway. Lumbermens lowered the height of its tower, quietly awaits the Texas law-makers' next move. One possibility is condemnation of the land for state purposes.

Wanted: bright ideas. FHA has implemented a new experimental housing program authorized under Section 233 of the 1961 Housing Act. It allows 100 per cent insured mortgages on new housing ideas that will reduce costs, or improve design.



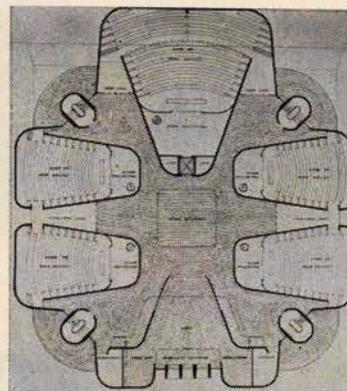
CHICAGO ARCHITECTS WIN R.P.I. CONTEST

Rensselaer Polytechnic Institute in Troy, N.Y., has spent some six years researching new techniques of teaching science and engineering—including the design of a building which could effectively house an increasing number of students as well as the modern technology which would be used in teaching them. To help solve the design problem, RPI invited six nationally known architectural firms to enter a closed competition for an "instructional communication and research center."

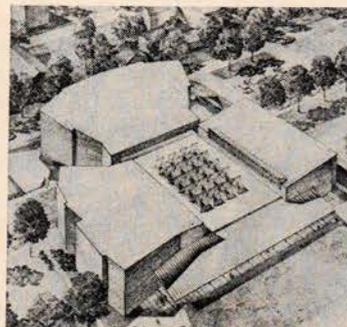
Perkins & Will of Chicago won the competition last month, and with it \$7,500 in prize money and a commission to build the structure (or another) for RPI in the future. In developing what may turn

out to be a prototype for science buildings (above), the architects had to take into account new audio-visual equipment, faculty and student needs, and manufacturers' recommendations. The lowest floor has offices for the technicians who ready and operate the instructional equipment. At grade are four 150-seat classrooms and an auditorium for 450, surrounded by exhibit areas (see plan). The top floor contains windowed offices and research areas, television and film studios, prop and set storage space. (Other entries are also shown at right.)

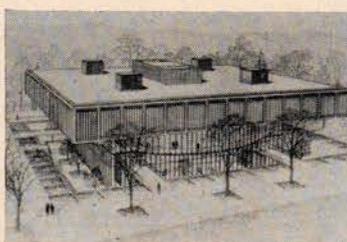
Because of the competition's success, RPI has offered to share the results of its studies with other educational institutions.



Main-floor plan of winning entry



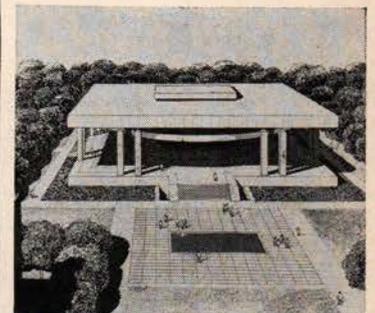
O'Neil Ford



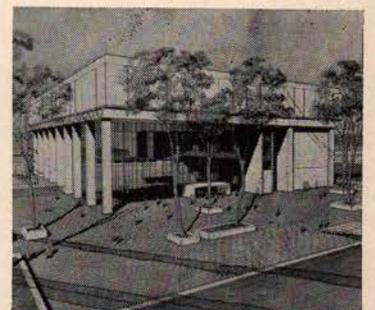
Richard W. Snibbe



Kump Associates



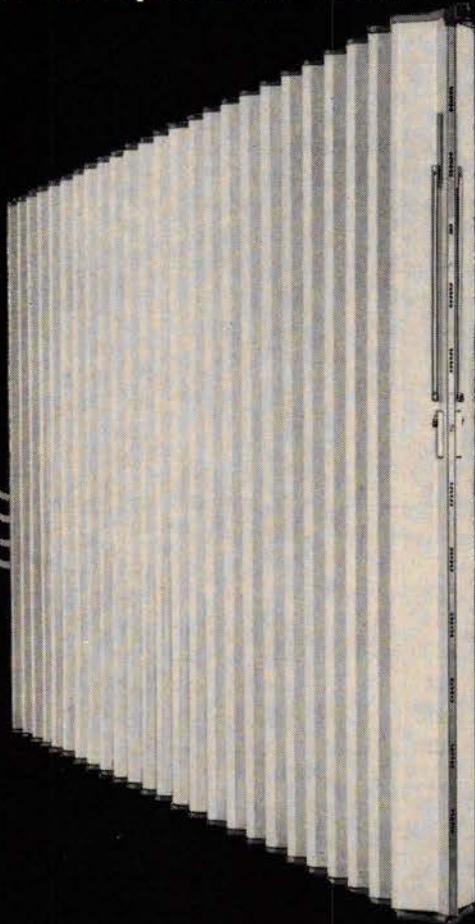
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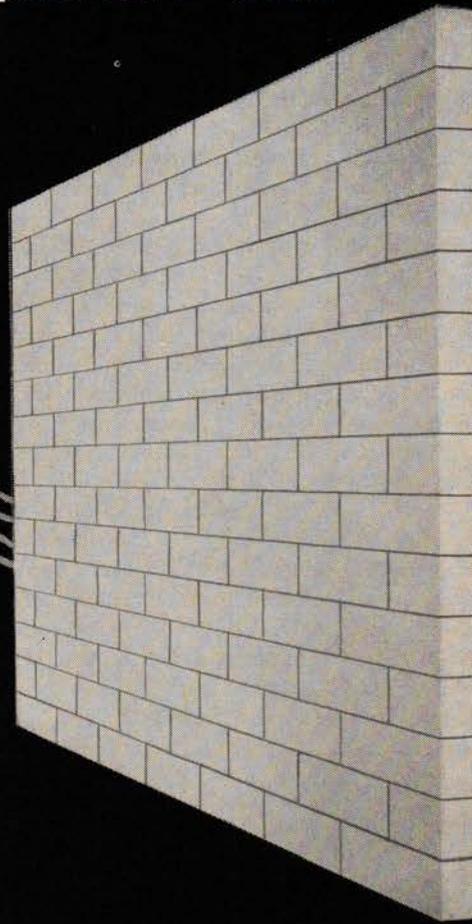
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QUOTE . . . UNQUOTE

"Property rights do not include the right to turn America into a junk shop." — *Columnist Stewart Alsop.*

"Plazas should not be designed for buildings, but for the people who will use them . . . they should be of all shapes and sizes, with rich floors, beautiful fountains, lively musical events, gigantic sculpture, paintings, pigeons, flags, benches, many things . . . Plazas are places for the choreography of life, where the pigeonholes of drab activity can be abandoned and, in a city, people can dance again."—*andscape Architect Lawrence Halprin.*

"Everybody has been Horatio Algerized. But the get-rich-quick urge erodes as a man ages. The greed is still there, but one is more likely to consider the chances of falling on his face if he goes for big stakes. It's a reversal of the reaction of Pavlov's dog—the attraction is greater in later years if the stimuli are reduced."—*Real Estate Investor Richard Swesnik.*

"In no other period except the modern one could men have worried about the problem of design. They would have been bothered as to whether an object could perform its function, whether it was likely to last, and to be useful and perhaps in the end to be loved. But design, as something added to the object and as something to be considered by itself, would have been unheard of."—*Presidential Consultant August Heckscher.*

"As middlebrow architecture for middlebrow art, Philharmonic Hall and Lincoln Center break no new ground."—*Critic Ada Louise Huxtable.*

"It is irrational, to say the least, to build high-speed highways to bring cars to central areas and then to leave these cars gyrating in growing frustration as they seek places to park." *Dr. S. S. Morris, City Engineer of Cape Town.*



STUART WESNER

THE WORLD OF PAOLO SOLERI

With a touch of Frank Lloyd Wright's inspiration and still more of his idealism, Arizona Architect PAOLO SOLERI recently proposed to start a foundation school not unlike that at Taliesin, to seek "an environment in harmony with man." Its name, Cosanti, would be derived from the Italian words *cosa* (thing) and *anti* (before), emphasizing Soleri's overriding concern with "the metaphysical structure of man" and, therefore, proper architecture. For the present, Cosanti remains a dream, but its theme does not. Soleri, who has just been awarded an AIA medal (see below), will conduct an open-air workshop this summer for Arizona State University's school of architecture. It will stress—as would Cosanti—a creative life close to nature.

Italian born and educated, the visionary Soleri came to Taliesin West shortly after World War II, worked under Wright for a little over a year before moving out to bind man's ingenuity to nature according to Wright's principles—in his own original style. He first developed, with fellow Taliesinite Mark Mills, the widely acclaimed Dome House at Cavecreek, Ariz., later designed a striking ceramics factory near Salerno, Italy. His most provocative work to date, however, has been his "earth house" in Arizona's Paradise Valley (FORUM, Feb. '61) and his plans for a Mesa City (March '61). The latter project, which is proceeding in part under a grant from the Graham Foundation, embraces "a complete concept of future city forms" and presumably will provide the basis for Soleri's Cosanti headquarters.

GRIFFIN HONORED

Architects remember WALTER BURLEY GRIFFIN, who died in 1937, for his short partnership with Frank Lloyd Wright at the turn of the century, and for some fine buildings in Australia and India. His major achievement, however, was probably the winning of an international competition in 1911 for the design of Australia's federal capital, Canberra. (Second prize went to ELIEL SAARINEN.) This month, on the 50th anniversary of his plan's approval, Australia is honoring Griffin with a fivepenny stamp. During Canberra's evolution to a parklike city of 60,000 (along lines set forth by Griffin), it was variously described as "more garden than city," and "six suburbs in search of a city." Later this year, Griffin's key feature—a 6-mile-long lake through the heart of the city—will be created by damming the Molonglo River. Its name: Lake Burley Griffin.

AIA GOLD MEDAL TO AALTO

Once again, a foreign-born architect will receive the coveted Gold Medal of the American Institute of Architects. It goes this year to Finland's ALVAR AALTO, some of whose recent work is presented on pages 120 to 125. He succeeds the late Eero Saarinen (1962), Le Corbusier (1961), Mies van der Rohe (1960), Walter Gropius (1959).

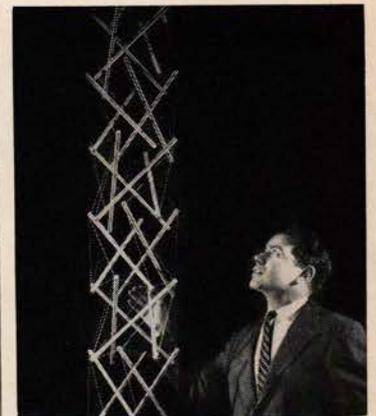
Other 1963 AIA awards, to be presented at the annual convention on May 5-9 in Miami: the Fine Arts Medal, to Sculptor ISAMU NOGUCHI, well known, too, for his elegant furniture designs; the Allied Professions Medal, to Engineer R. BUCKMINSTER FULLER, who developed the principles of geodesics; the Craftsmanship Medal, to Architect PAOLO SOLERI (see above); the Architectural Photography Medal, to G. E. KIDDER SMITH, photographer-author (*The New Architecture of Europe, Italy Builds, etc.*), whose work, like that of the others, has appeared frequently in FORUM.

The Citation for an Organization will go to The American Craftsmen's Council, a national group promoting all aspects of craftsmanship. The Edward C. Kemper

Award for "significant contributions to the Institute and the Profession" will be presented to former AIA Vice President (1945-46) SAMUEL E. LUNDEN, FAIA, of Los Angeles, who has been active in Institute affairs for over 20 years.

SNELSON STRUCTURES SHOW

Structural Designer KENNETH SNELSON, whose intricate space frames are part sculpture, part complex engineering, will show



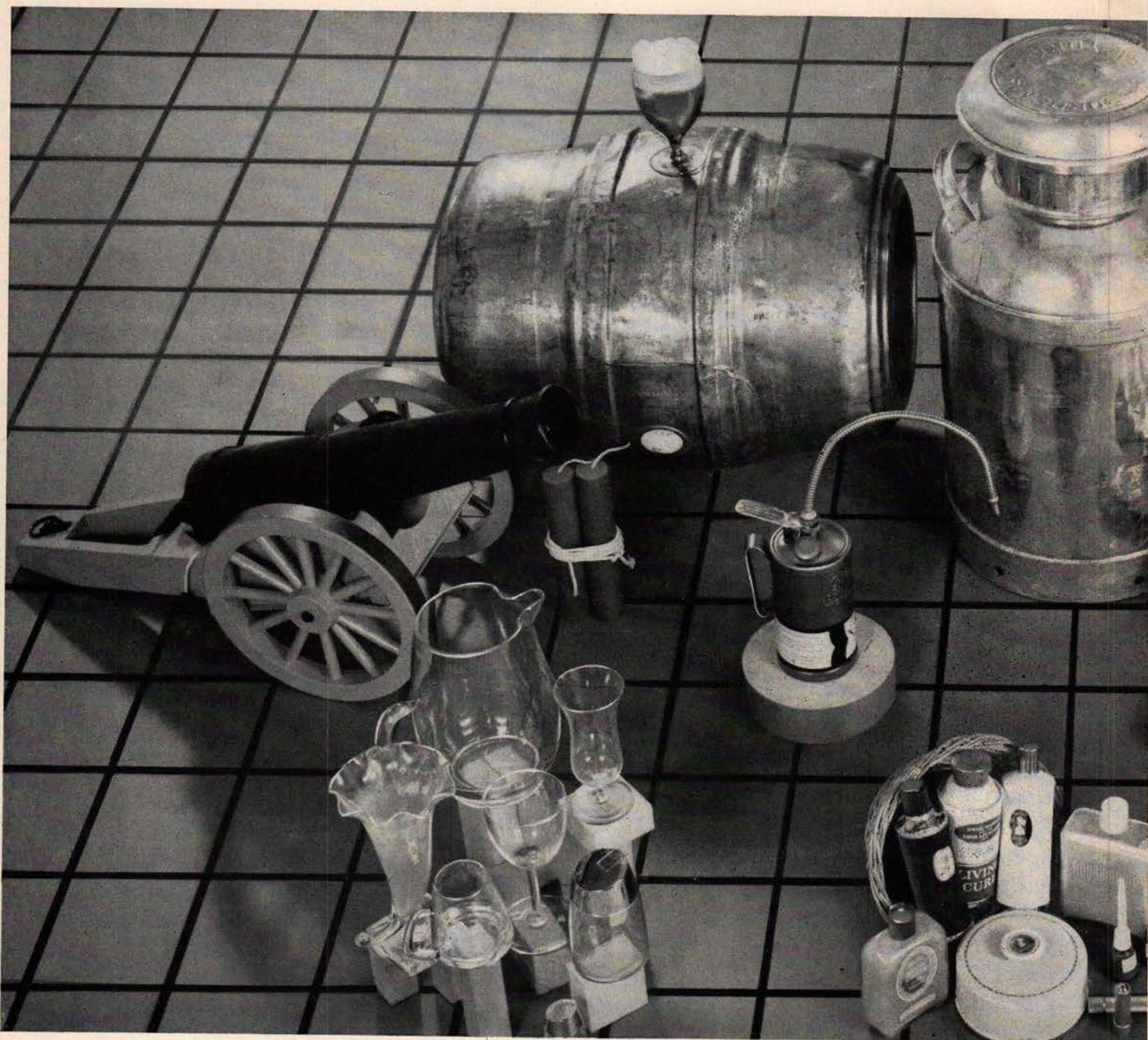
Snelson and "column"

some of his latest work at Pratt Institute in Brooklyn, N.Y., from March 4-15. These structures, which lock the wire and tube components in a careful balance between tensile and compressive forces, attracted the attention of officials of Pakistan International Airlines. At present, two 100-foot-high "columns" are being considered to stand near Architect EDWARD DURELL STONE's approved project for a mosque at the Karachi Airport.

CONWAY LEAVES HHFA

After two years as No. 2 man at HHFA, Deputy Administrator JACK T. CONWAY resigned from his post last month to head the Industrial Union Department of the AFL-CIO. The move came as a surprise, for he had recently been designated as the man to coordinate the federal government's activities in enforcing the open housing order. Conway, who left his previous job under United Auto Workers Chief Walter Reuther to join HHFA, allegedly expected a more important position on the New Frontier. When such a job was not forthcoming, he decided to return to big labor.

continued on page 16



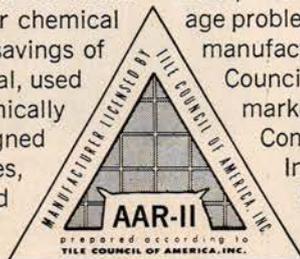
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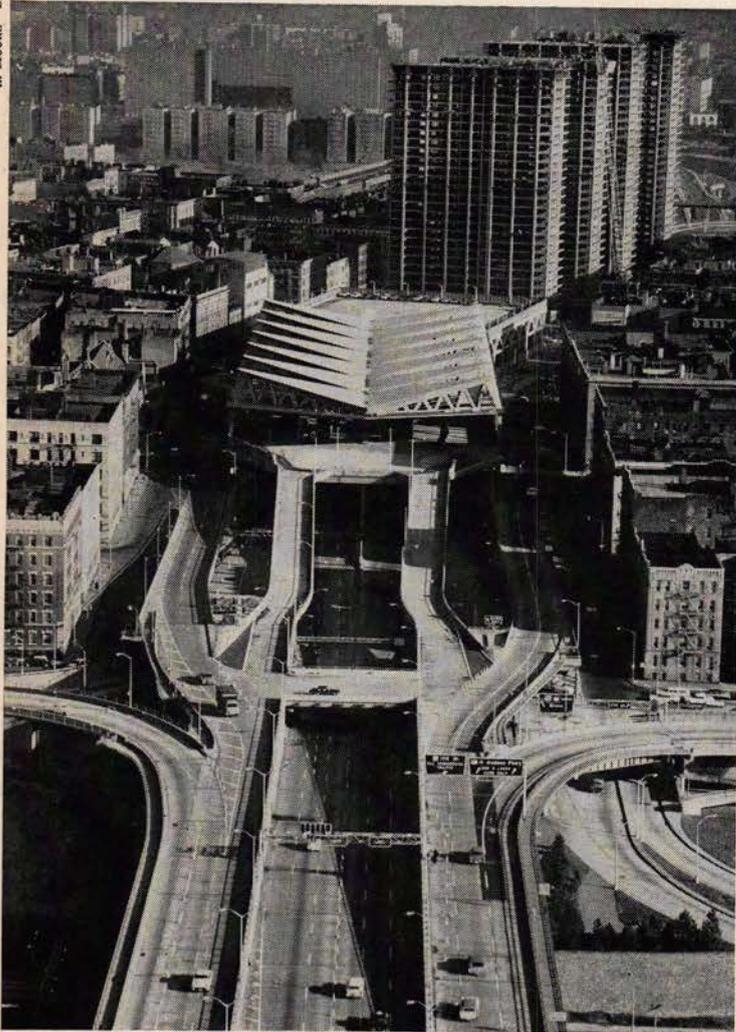


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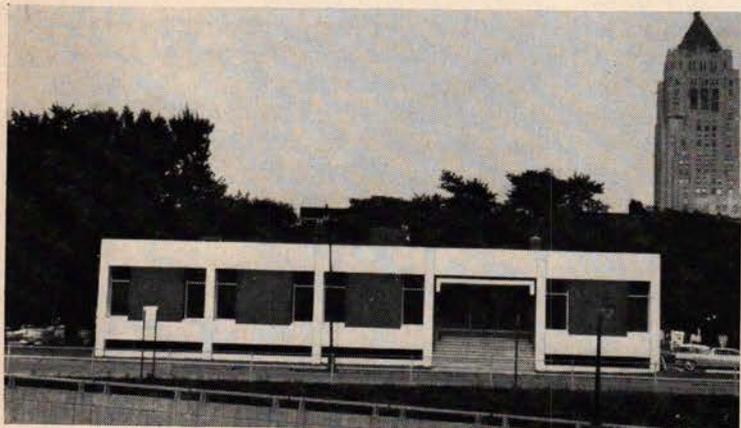
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R. MOORE—LIFE



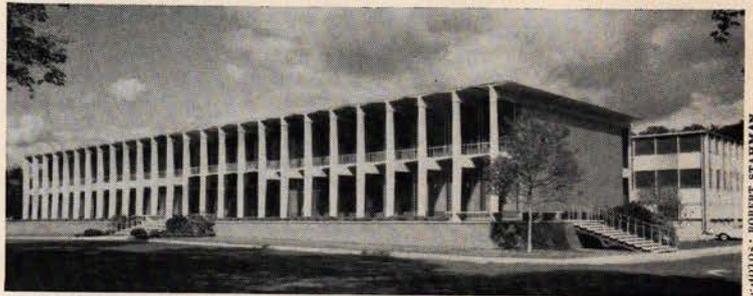
NEW YORK BUS STATION. Opened for traffic recently was Manhattan's \$14 million George Washington Bridge Bus Station, a robust roofwork of concrete trusses designed by famed Italian Architect-Engineer Pier Luigi Nervi (FORUM, Sept. '62). Nearing completion behind it are four apartment buildings on air rights over a depressed, cross-island expressway. Contractors: W. J. Barney and William L. Crow.

DETROIT OFFICE. The two-story rental office building shown below, located on the John C. Lodge Expressway, was built for the Phil Shanedling Investment Co. and leased to the Royal Globe Insurance Group. Designed to take a future floor, the \$206,000 structure has a steel frame, recessed windows, brick infills, and precast spandrel panels. Architect: Bruce Hartwigsen. Contractor: Roth, Wadkins & Wise.

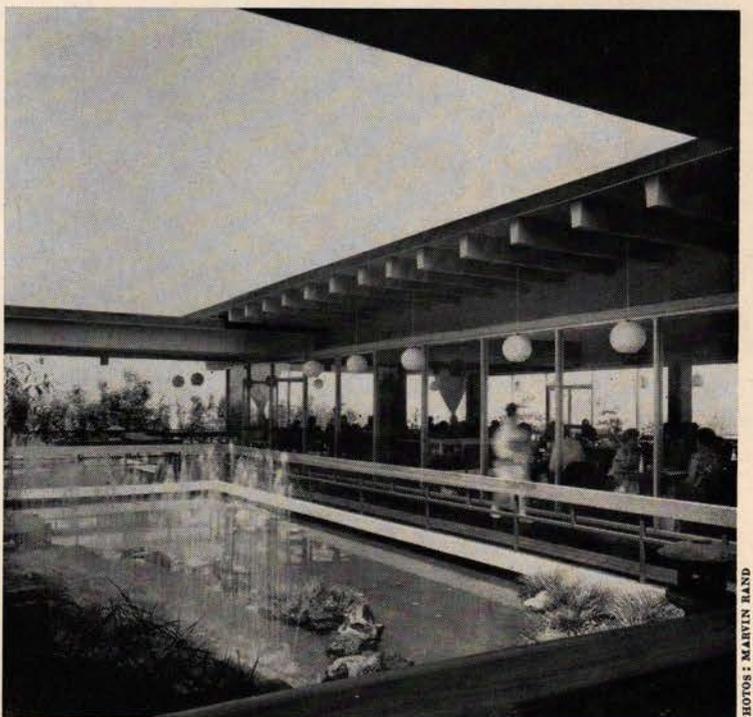


CONNECTICUT HEADQUARTERS.

Elegant T beams of prestressed concrete on tapered columns are left exposed in the administrative offices of the Perkin-Elmer Corp. in South Wilton, Conn. The beams span the two-story building's 60-foot width, eliminating the need for interior supports. The building is colonnaded on the long sides, closed on the ends. Behind the administration building is a two-story, steel-framed structure for research and engineering. Cost: \$1.6 million. Architects: Caproni Associates. Contractor: Vuono-Lione, Inc.



PHOTOS: ROBERT STARMAN



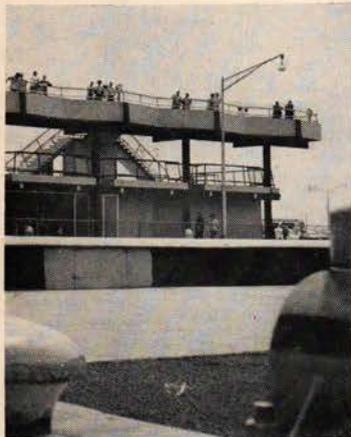
PHOTOS: MARTIN RAND

LOS ANGELES ROOF GARDEN.

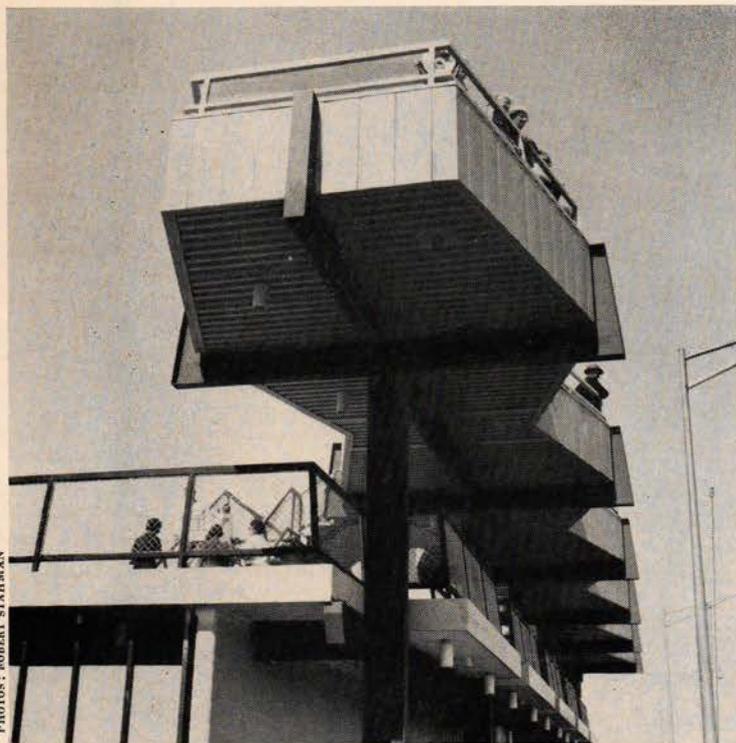
The new four-story Seibu Department Store on Wilshire Boulevard displays a number of Oriental touches, the most delightful of which is a roof-top restaurant (above) set beside a handsomely landscaped reflecting pool. The Japanese store packs 128,000 square feet of floor space behind monumental precast concrete col-

umns 60 feet high (right). Architect: Welton Becket & Associates. Contractor: William Simpson Co. Cost: \$6 million.





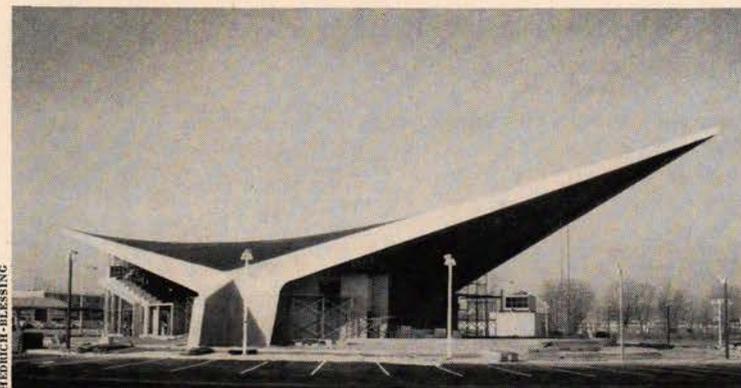
SEAWAY LOOKOUT. The shipshape look of this observation structure on the St. Lawrence Seaway at Massena, N. Y., results from a clean, straightforward use of steel. The three-level facility has a gift shop and snack counter at ground level, with a promenade deck on its roof overlooking the Eisenhower Lock. Twin stairs lead to the saw-toothed "flying bridge" (below), supported on six steel columns which form Y's. Architect: Daniel Chait & E. Slater. Contractor: John Rouse Construction Co. Cost: \$203,780.



PHOTOS: ROBERT STAHMAN

CHICAGO THEATER. A continuous 20-hour pour produced what is claimed to be the largest saddle-type hyperbolic paraboloid concrete roof in the U.S. (below). Four inches thick and 221 feet from tip to tip, the roof will

shelter the new Edens Theater in suburban Northbrook, Ill. Edge beams vary in depth from 22 inches at the tips to 58 inches at the abutments. Architects: Perkins & Will. Contractor: Chell & Anderson. Cost: \$500,000.



HEDRICH-BLESSING



HEDRICH-BLESSING

CHICAGO OFFICE. R. R. Donnelley & Sons' new publishing headquarters (above) was designed to harmonize with the firm's old buildings; it uses the same exterior brick, and windows are framed with precast concrete to recall nearby stone and terracotta trim. The deep windows control sun and leave space for riser ducts. Architects: Albert Kahn, Inc. Contractor: W. E. O'Neil Co. Cost: \$2.5 million.

BOSTON'S BEHEMOTH. The biggest shadow in Boston now falls across Back Bay, where gentle old houses are dwarfed by the 52-story Prudential Tower (below). The 750-foot-high steel frame, at last complete, is part of the \$100 million, 31-acre Prudential Center and will be followed by a 29-story hotel, four low commercial buildings. Architect: Charles Luckman Assoc. Contractors: Perini Corp., Walsh Constr. Co. END



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WASHINGTON, D. C. ISSUE

FORUM: YOUR JANUARY ISSUE ON THE PROBLEM OF THE CITY OF WASHINGTON IS WITHOUT A DOUBT THE GREATEST CONTRIBUTION MADE IN THE HISTORY OF ARCHITECTURAL JOURNALISM IN THIS COUNTRY. CONGRATULATIONS.

A. L. AYDELOTT
Memphis, Tenn. Architect

Forum: A magnificent reportorial job, on matters sacred and profane. The issues are succinctly stated, and represent a challenge to us all.

STANLEY JAMES GOLDSTEIN
East Orange, N. J. Architect

Forum: Congratulations for the excellent issue on Washington. To my knowledge no magazine has ever attempted to treat the problems of a large American city in so thoughtful and comprehensive a manner. It should play an important role in clearing away the stultifying debris of governmental bureaucracy and getting planning efforts in our capital off dead center.

Hopefully you will continue with a series treating Boston, New York, Los Angeles, etc. in the same manner. The Washington issue is a very fine first chapter of what could prove an invaluable book.

RICHARD D. HEDMAN
New York City

Forum: Extremely interesting and challenging. I am sure it will help to move some of the problems forward.

The White House CHARLES A. HORSKY
Advisor for National Capital Affairs

Forum: The President asked me to thank you very much for sending a copy of the January issue. He read it with a great deal of interest.

The White House EVELYN LINCOLN
Personal Secretary to the President

Forum: The wonderful May '62 issue covered the birth of contemporary architecture in the U. S. as typified by its best example—Chicago. Now we have news of its death in our nation's capital.

Particularly saddening was the obituary on page 51 regarding the action of Commission Chairman Finley.

Further reading of the issue could be equaled to reading accounts of a crime wave.

WILLIAM A. RUMSEY
Evanston, Ill. Architect

Forum: Your Washington issue comes in good time. Endowed by nature with the magnificent valley of the Potomac, and by man with the most inspiring of city plans, the Nation's Capital confronts great decisions ahead. Shall traffic strangle us, skyscrapers crenelate the sky line, green spaces fall to the bulldozer, waste pollute our

streams, suburbia go its way unguided by a regional plan, racial intolerance blight the central city, and mediocre government buildings make a new Stalin-Allée of the town? As FORUM makes clear, none of this need be.

HENRY S. REUSS (D., Wisc.)
Washington, D. C. House of Representatives

Forum: Congratulations on your Washington issue. It is really a very compelling job, and the kind that we here in the AIA could not do. Our issue is primarily factual, while yours is critical. Thus they complement each other very well, and together should have quite an impact—I hope on the Congress.

JOSEPH WATTERSON
Washington, D. C. Editor, AIA Journal



Forum: The best thing on Washington since your critique of the Senate Office Building. And well-written, too.

Washington, D. C. JOHN RANNELLS
National Capital Transportation Agency

Forum: The Madison, Washington's newest luxury hotel, was *not* built in the "downtown section" of the city "at 12th and K Streets," but at 15th and M Streets. As a matter of fact, The Madison is in the same neighborhood of what you describe as "two of Washington's finest new structures," The Forest Industries Building and the National Geographic Society headquarters.

Washington, D. C. SHEILA BURNS
M. Belmont Ver Standig, Inc.

Forum: I have recently been working on the various problems, mostly racial, of the District in terms of a possible future documentary and find it somewhat ironic that the first really comprehensive piece on the ills of this city should appear in an architectural publication.

My congratulations on an interesting and useful survey.

Washington, D. C. RODNEY H. CLURMAN
NBC News

Forum: Congratulations... most interesting and timely.

New York City WILLIAM LESCAZE
Architect

Forum: I have read this issue with a great deal of interest. It does indeed represent a vast amount of work!

Washington, D. C. LEONARD CARMICHAEL
Secretary, Smithsonian Institution

NO HOLDS BARRED

Forum: I was pleased by the objective, "no-holds-barred" critique of the Air Force Academy Chapel (Dec. '62), and must also express my appreciation for your detailed and comprehensive report on the D.C. mess.

I detect in recent months a change taking place in the form of the FORUM. What I see, I like.

New York City PAUL JOHN GRAYSON
Architect

EERO SAARINEN'S ART

Forum: Softened by your own editorial comment, you recently reprinted a devastating piece on Eero Saarinen's new Yale Dormitories written by an English writer I very much admire (Dec. '62).

Eero was a delightfully disturbing designer, so much so that as each masterpiece comes along the critics say, "Eero is a great architect but this particular project is a failure." This is because each of his buildings is a frame for the unified and heightened experience of being fully alive in a unique space, solving a particular problem for a particular client on a particular site. He looked at, and into, his designs more carefully than almost any other architect. His projects are neither accidents nor sure-fire, smashing repackages of previous successes. They are meaningful contributions—attempts, as his wife says, at a vocabulary, not a style.

When every building a man does looks like all the others he has done, that man has a style and that is perfectly all right and convenient for criticism, but it is very wrong for a critic to condemn a man for aiming at *unique* solutions that try to synthesize *all* the factors, human and architectural, in a given problem.

I am delighted when you do criticism. We need more of it—and deeper.

Chicago RICHARD M. BENNETT
Architect

WRIGHT WRONGED

Forum: Thank you for some of the first photos of the Marin County project of Frank Lloyd Wright (Nov. '62).

It offers me a chance to call attention to a major alteration of another of Wright's buildings—the Guggenheim Museum in New York City—a foremost example of 20th Century architecture. Recently a large and very prominent plastic greenhouse was added to the front of the building. That it mars the original design of the architect is bad—that it does so in so ugly a way is even worse.

The building has already suffered with bad planting, furnishing, and a major altera-

continued on page 20

tion, for the worse, of the lighting. One wonders how many more "improvements" it can suffer and still be considered a building by Frank Lloyd Wright.

RONALD SLOWINSKI
New York City

PROPER CREDITS

Forum: In the *News* section of your December issue you published a photograph of the New York Telephone building in progress on Tenth Avenue with a comment concerning the veneer. The sign shown, but not legible, in the photograph states that Voorhees, Walker, Smith, Smith & Haines are the architects and that Kahn & Jacobs are the architects for the exterior design.

New York City PERRY COKE SMITH
Voorhees, Walker, Smith, Smith & Haines

TIMELESS CONTINUITY

Forum: You may well remember the outstanding treatment which FORUM gave to the subject of "America rebuilding—a problem in continuity" in the January 1960 issue.

This treatment has a timeless quality, as applicable three years later as it was when written. I have used the material in the various articles time and time again, as personal inspiration and as a means of expanding what might be called the constructive "philosophy" of architectural conservation.

ROBERT J. KERR II
Annapolis, Md. Historic Annapolis, Inc.

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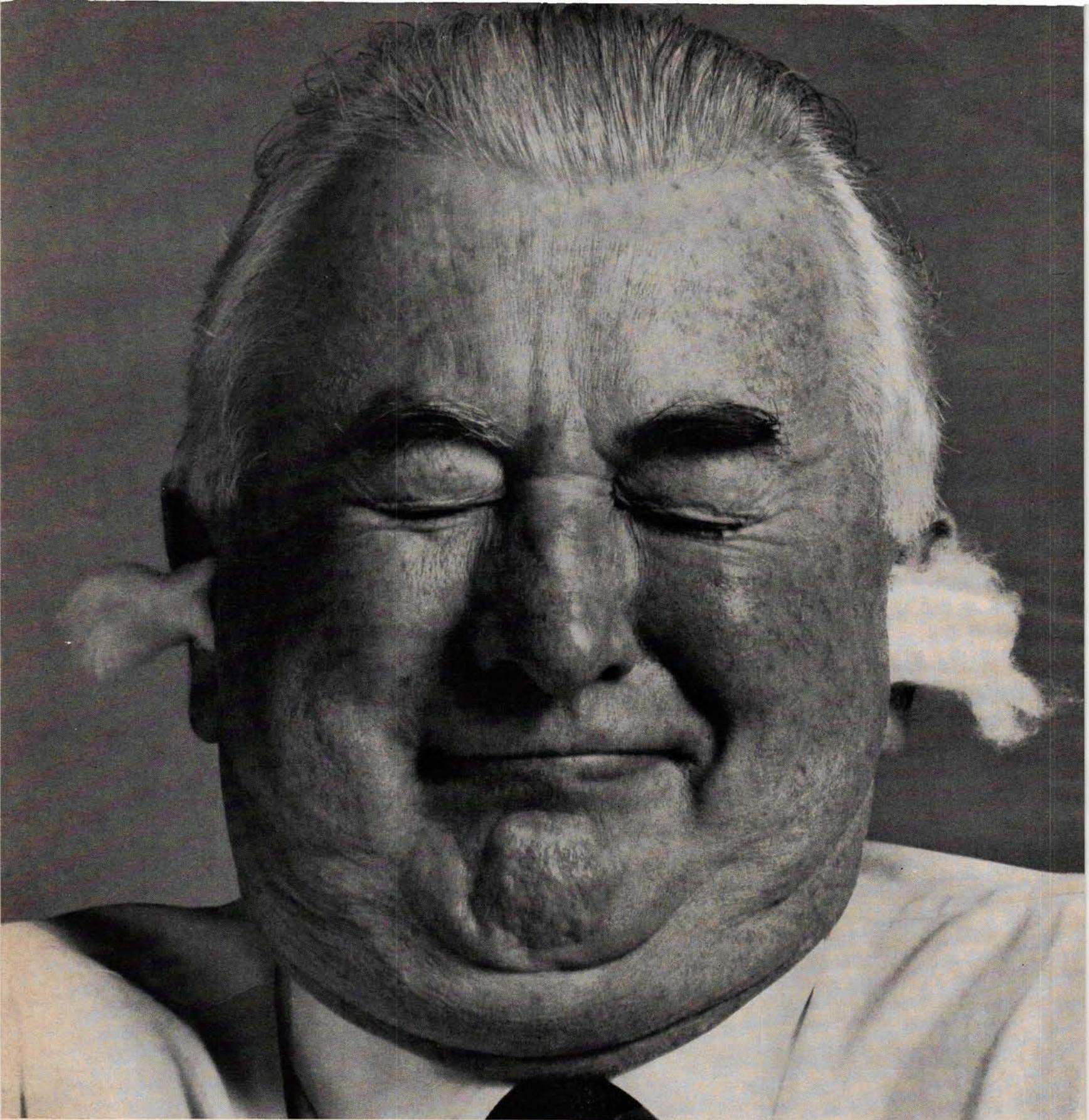
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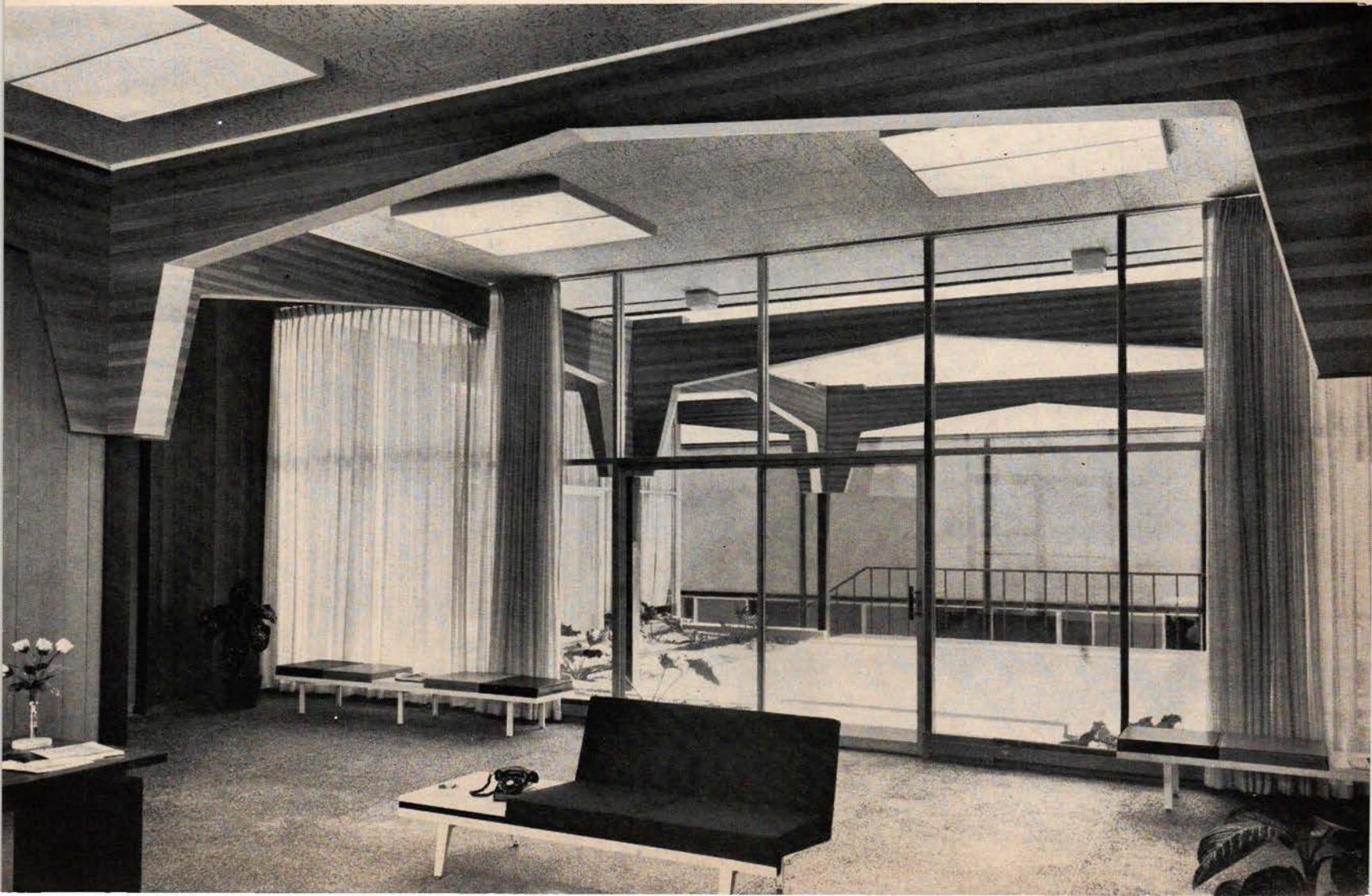
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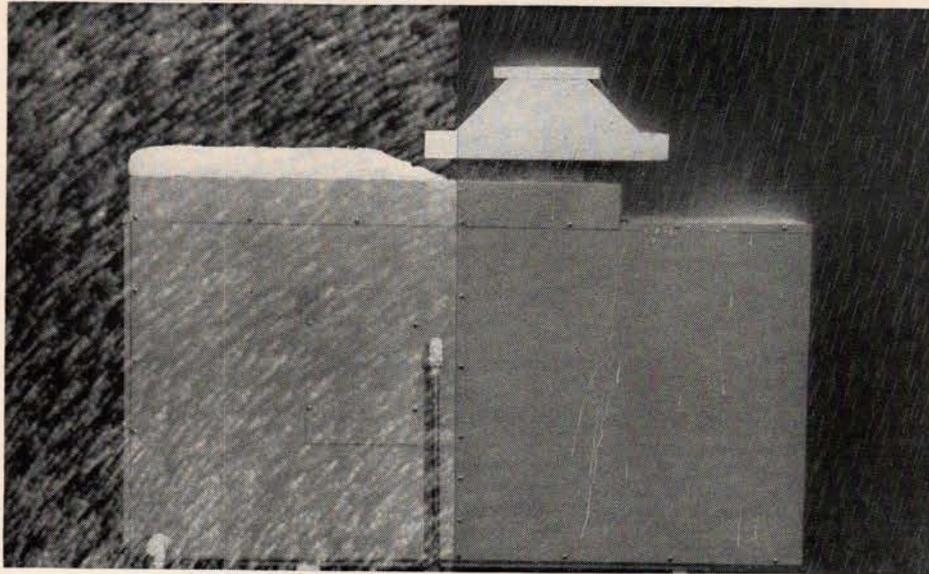
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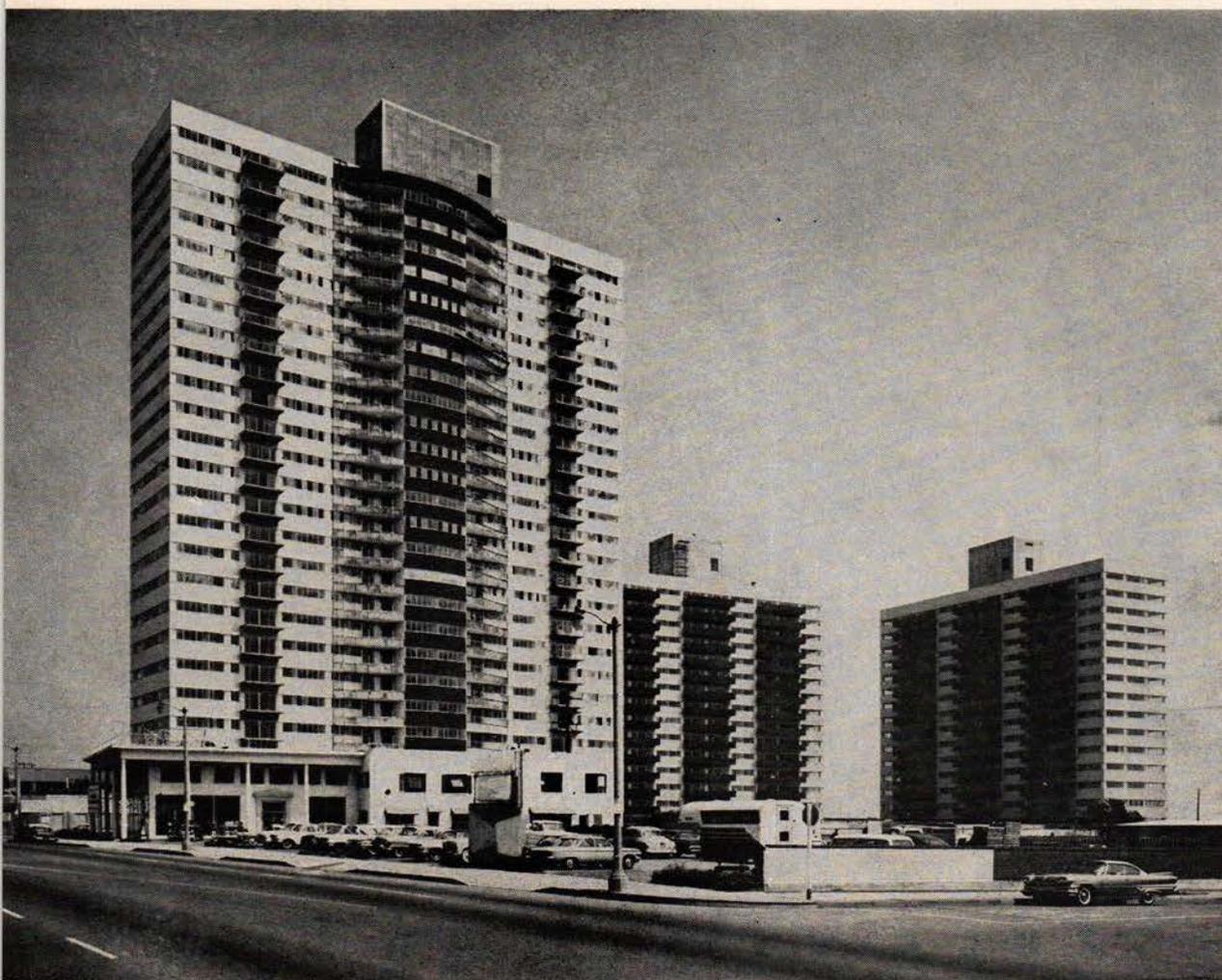
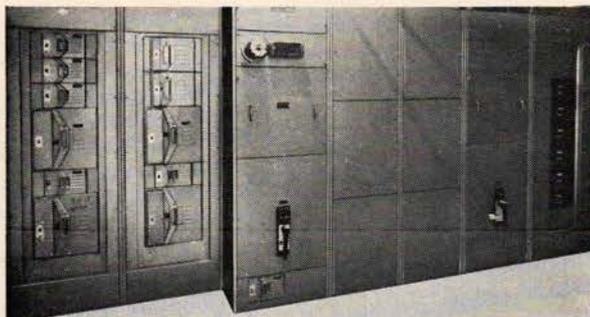
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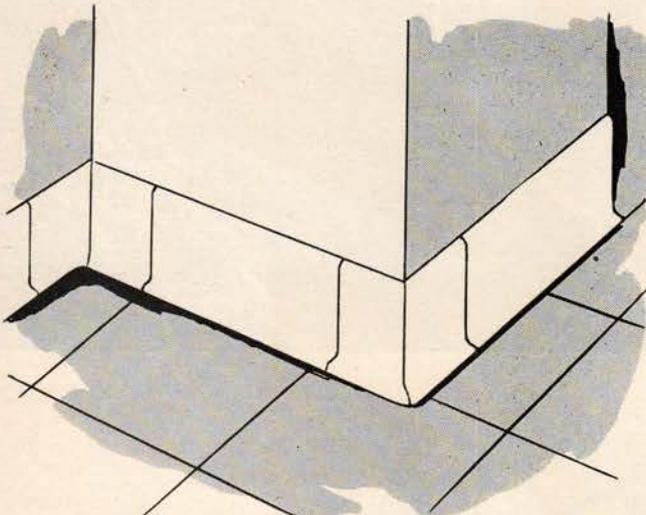
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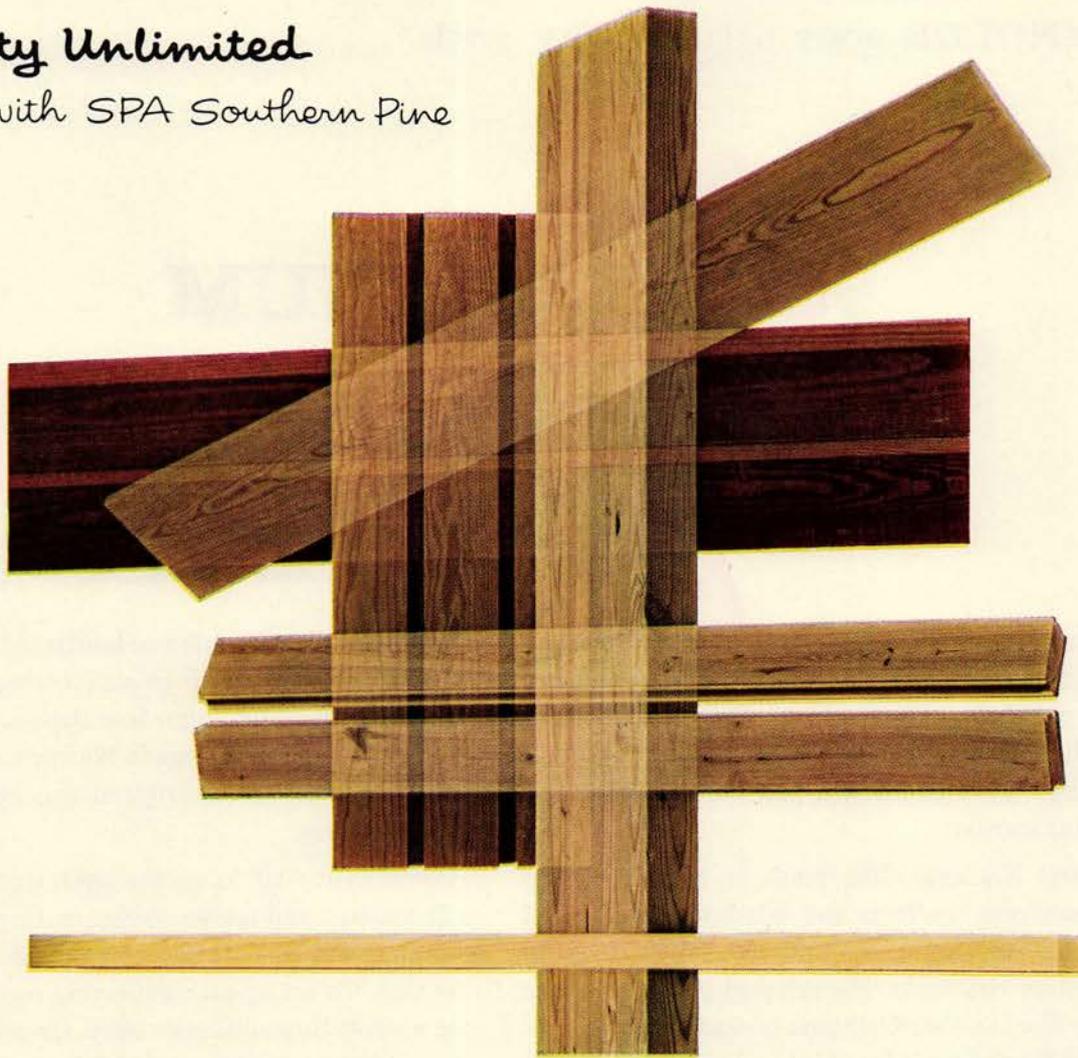
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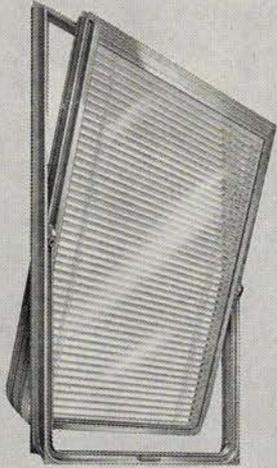
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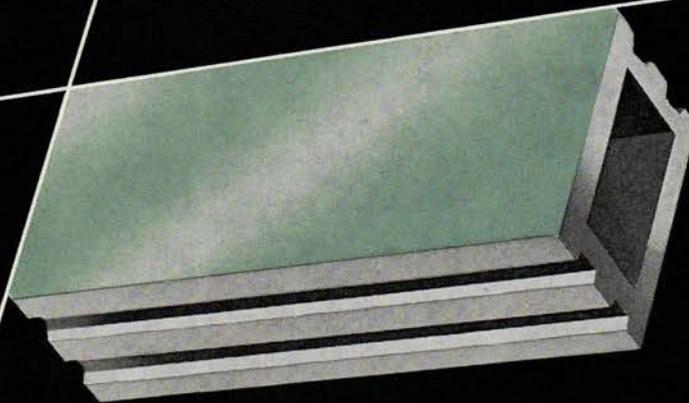
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Above: The Hall of Mirrors in the Palace of Versailles, begun in 1678 during the reign of Louis XIV. Photo courtesy of French Government Tourist Office.

Right: McGregor Memorial Conference Building at Wayne State University, Detroit. Architect: Minoru Yamasaki & Associates.

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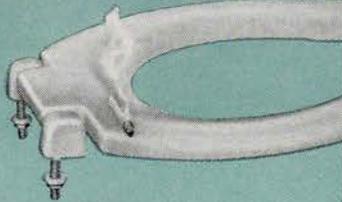
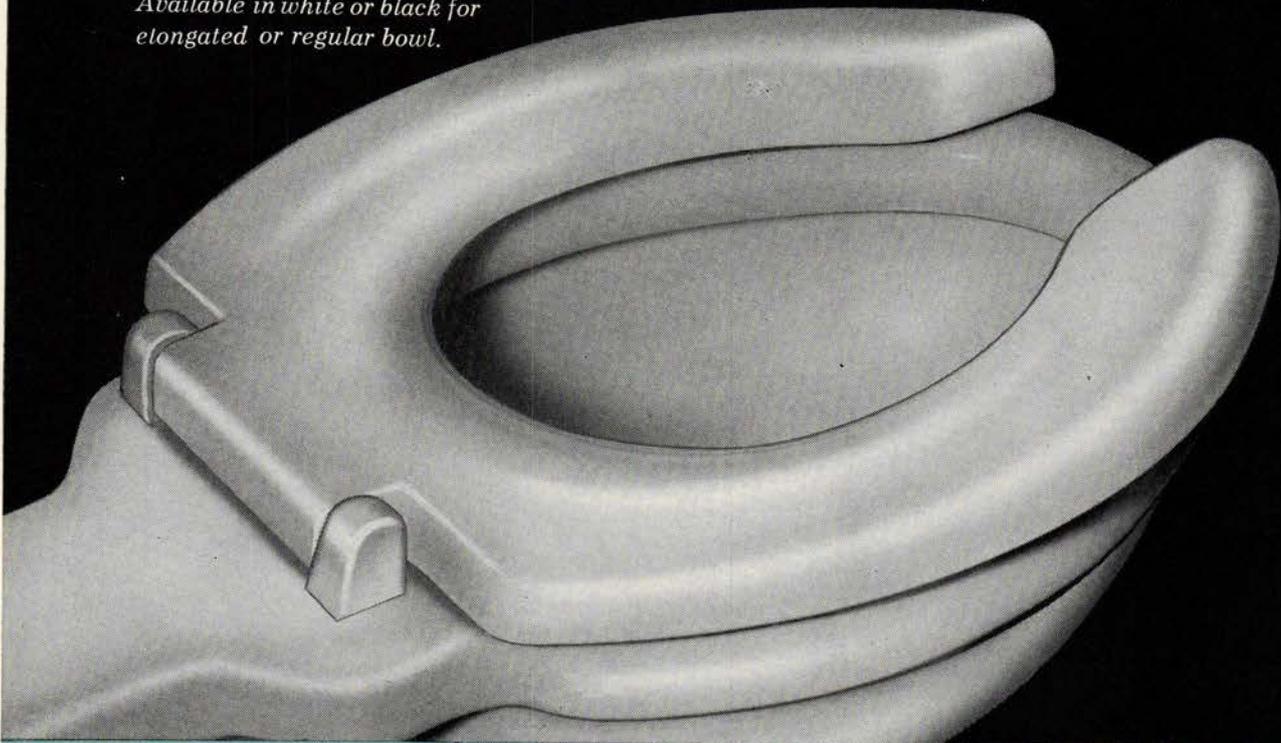
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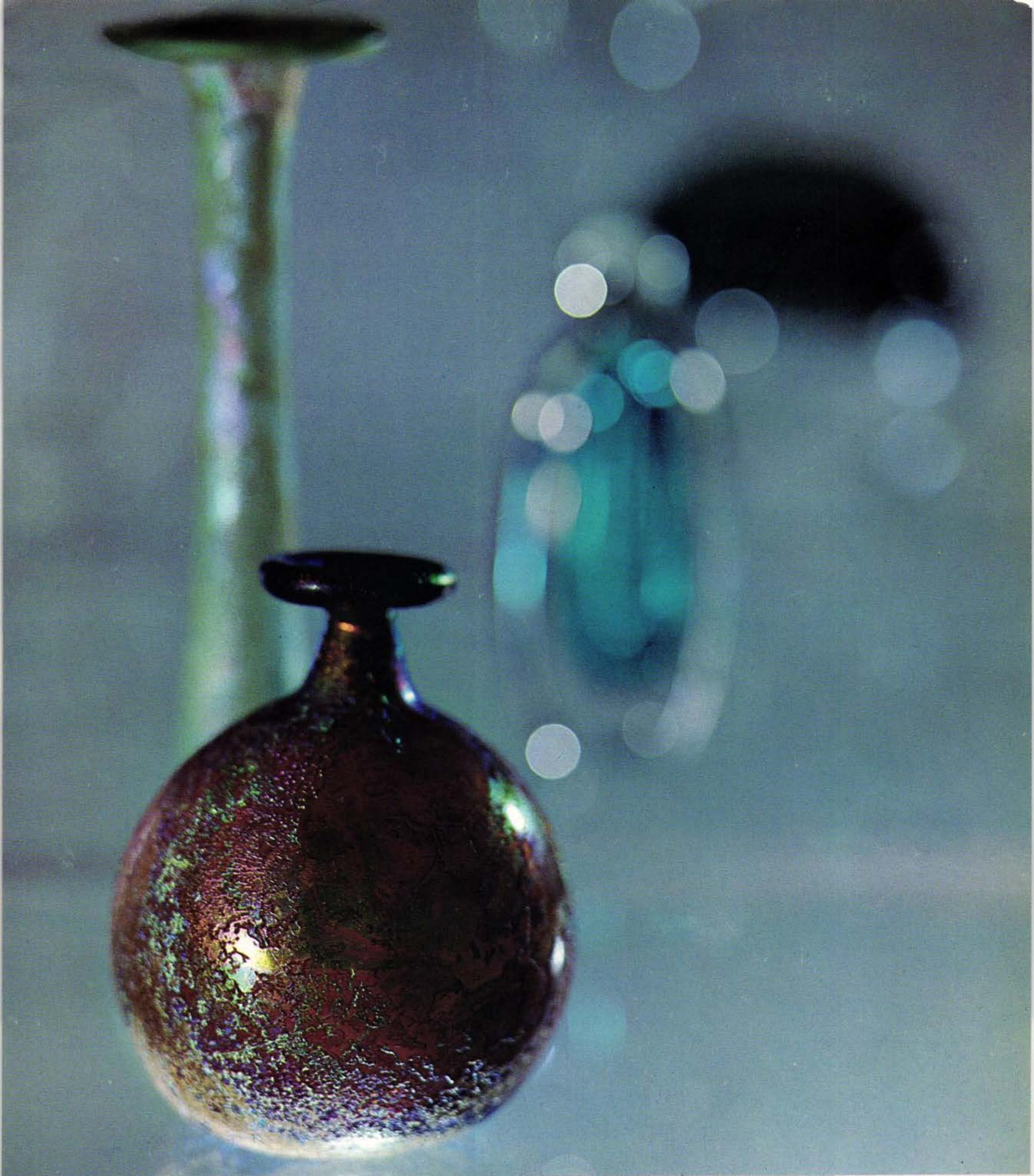
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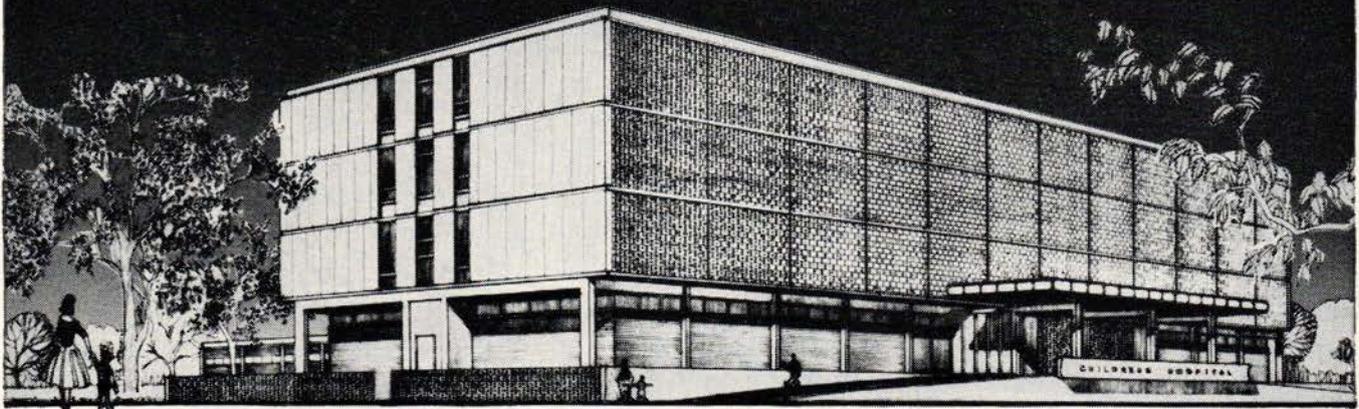
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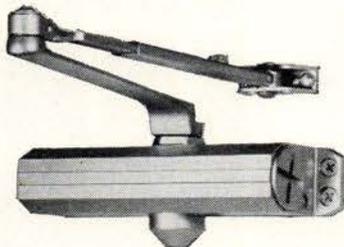
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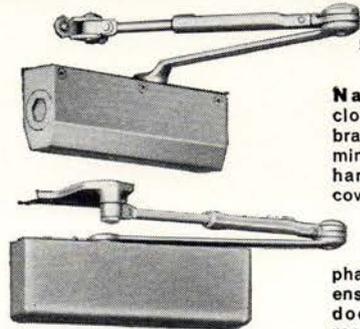
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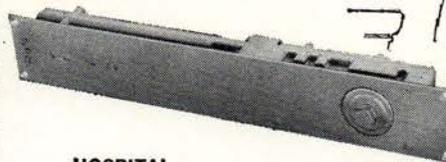
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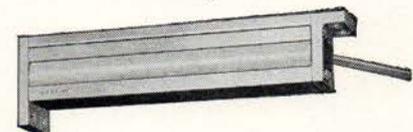
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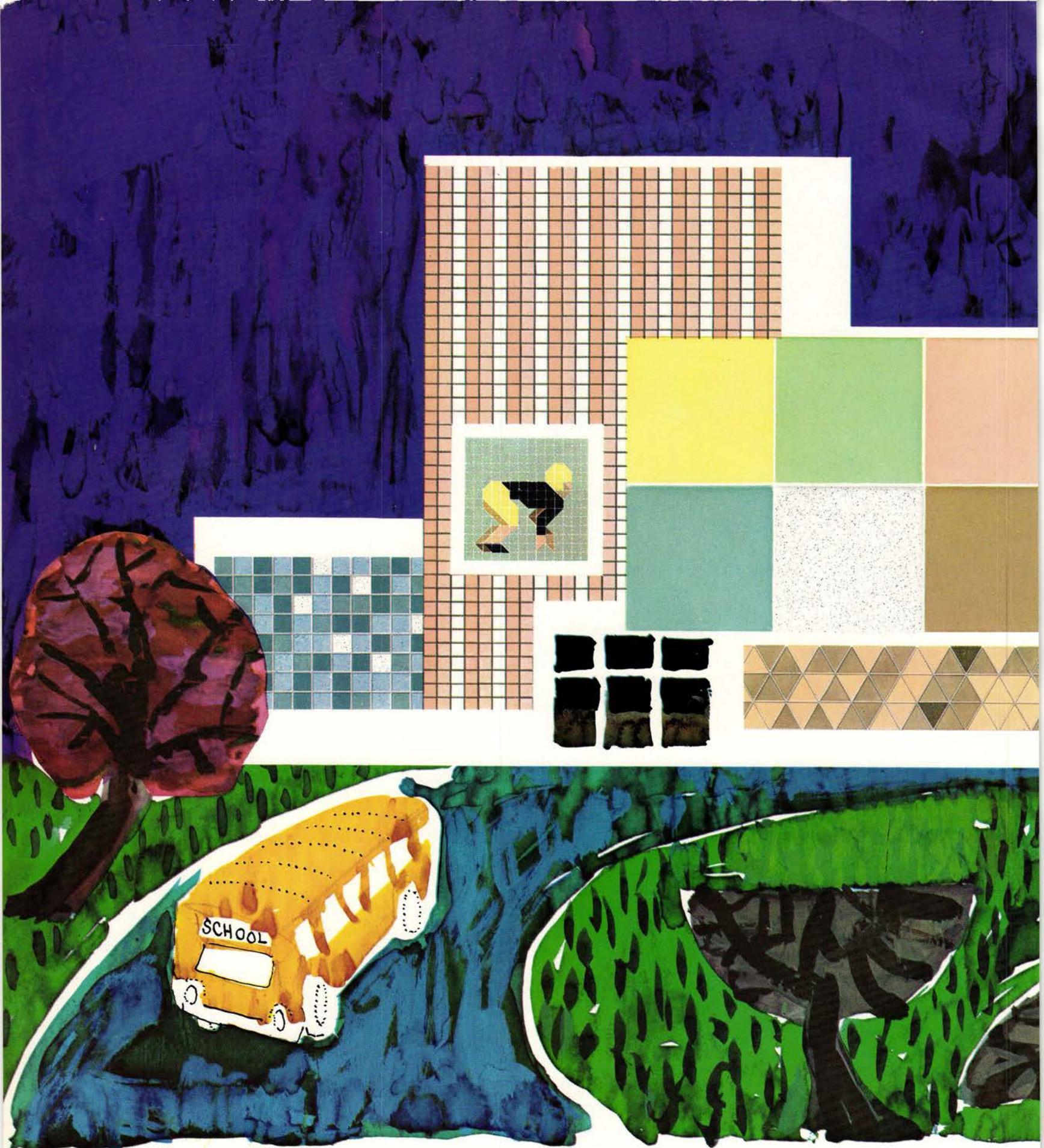


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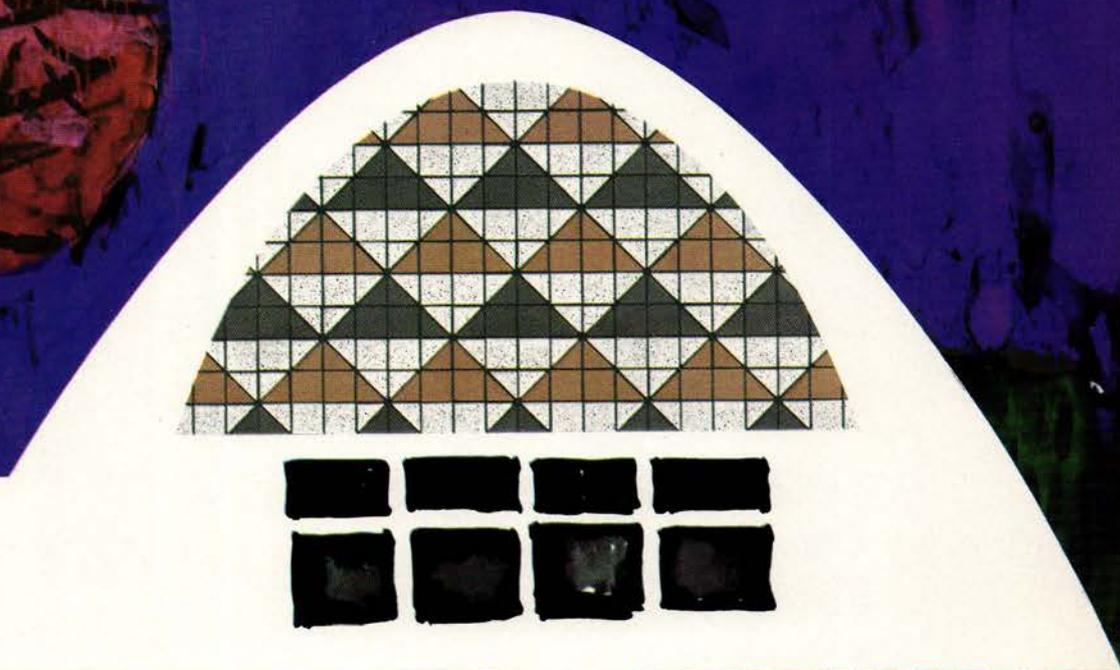
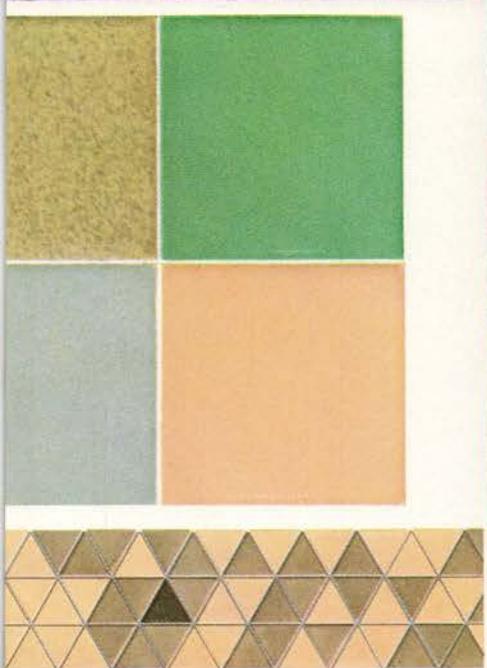
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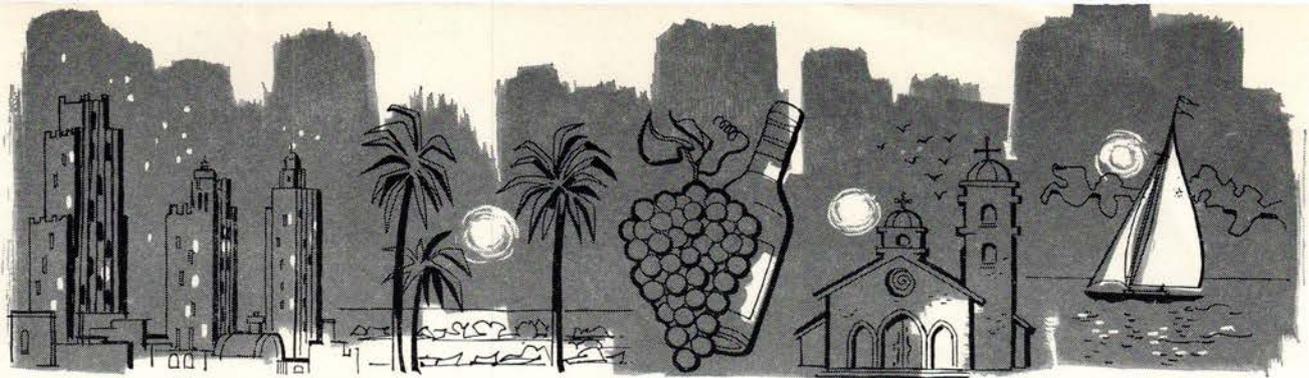
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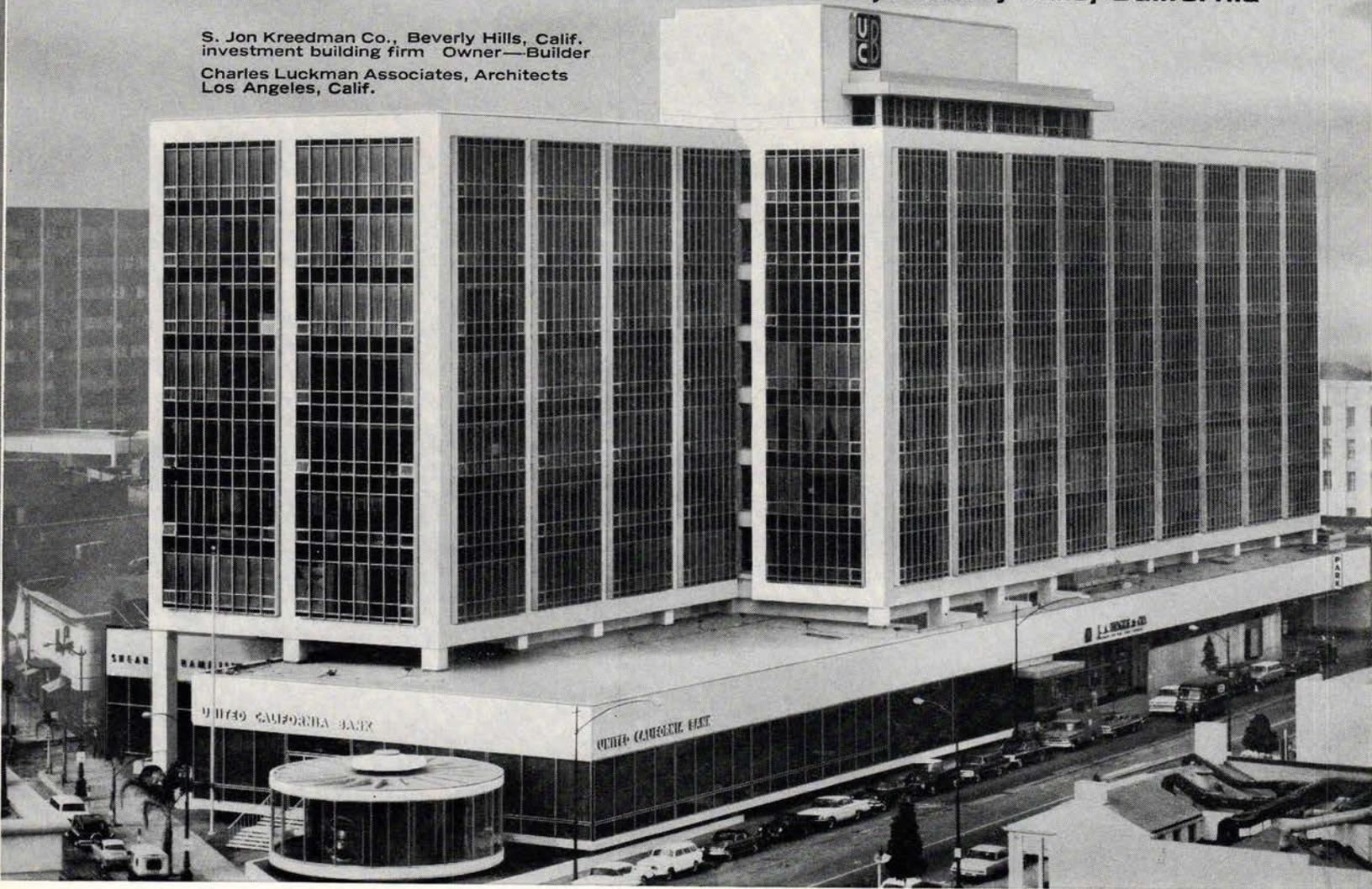
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BOSTON, BUFFALO, CHICAGO, CINCINNATI, CLEVELAND, CORONA, DALLAS, DENVER, DETROIT, EL MONTE, EL SEGUNDO, FRESNO, MEMPHIS, MIAMI, MILFORD, MILWAUKEE, MINNEAPOLIS, NEW ORLEANS, NEW YORK, OKLAHOMA CITY, PHILADELPHIA, PORTLAND, TAMPA, WASHINGTON, D.C., ZANESVILLE. REPRESENTATIVES: FAIR HAVEN, N.J., GAINESVILLE, PITTSBURGH, SPOKANE, ST. LOUIS. CORONA, CALIF., EL SEGUNDO, CALIF, IRONTON, OHIO, JACKSON, MISS., LITTLE ROCK, ARK., MATAWAN, N.J., ZANESVILLE, OHIO.



**UNITED CALIFORNIA BANK BUILDING, WILSHIRE BLVD.
at Camden Drive, Beverly Hills, California**

S. Jon Kreedman Co., Beverly Hills, Calif.
investment building firm Owner—Builder
Charles Luckman Associates, Architects
Los Angeles, Calif.

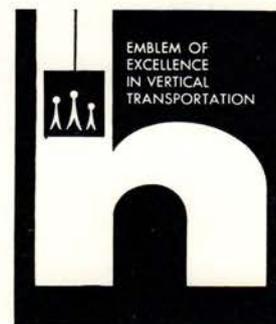


**FIVE HAUGHTON AUTOMATIC ELEVATORS HELP
FULFILL A CREED . . . "Building as it Should Be"**

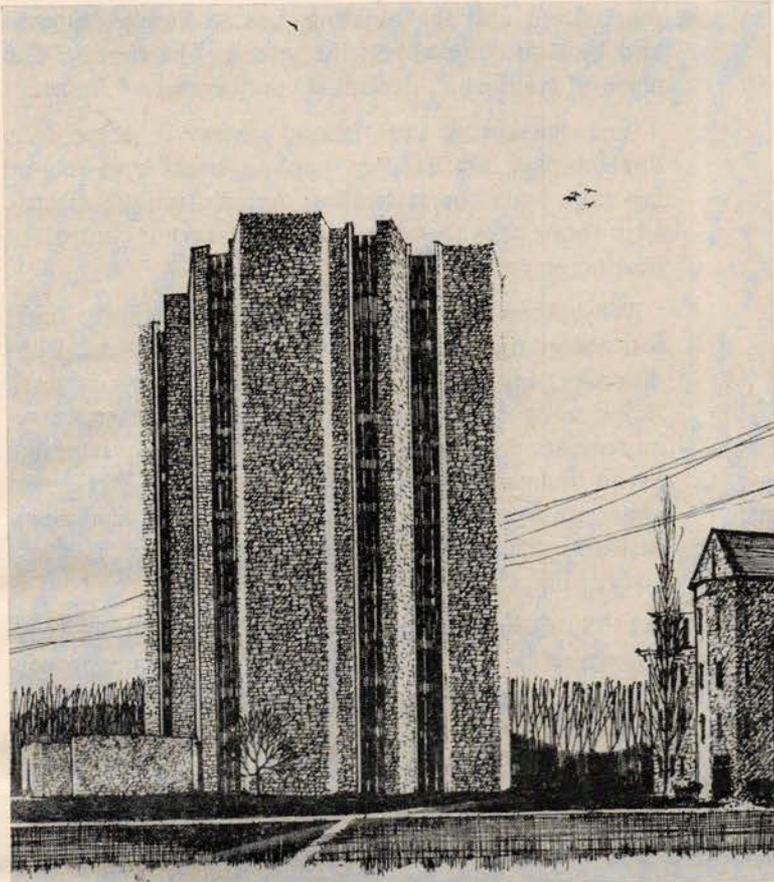
"Building as it should be" is a way of life for the Kreedman organization. They've proven it again with the United California Bank Building... eleventh major office building they have developed since becoming investment-builders and general contractors in 1946. ■ In this distinctive new building, largest in Beverly Hills, an environment of matchless beauty, comfort and convenience gives tangible meaning to the Kreedman creed. ■ Take the elevators, for example. Five Haughton elevators under fully automated electronic control provide uncanny speed and smoothness. A new, advanced-design computer created by Haughton Elevonics* maintains constant surveillance and controls car travel to match traffic needs exactly. ■ Include Haughton elevators in your building or modernization plans. Contact your Haughton sales office (listed in the Yellow Pages) for full information, or write: Haughton Elevator Company, Division of Toledo Scale Corporation, Toledo 9, Ohio. ■ Passenger and Freight Elevators, Escalators, Dumbwaiters, Complete Maintenance Service.



Haughton's advanced program in systems research and engineering with specific emphasis on the creative application of electronic devices and instrumentation for betterment of systems design and performance. Reg. in U. S. Patent Office.



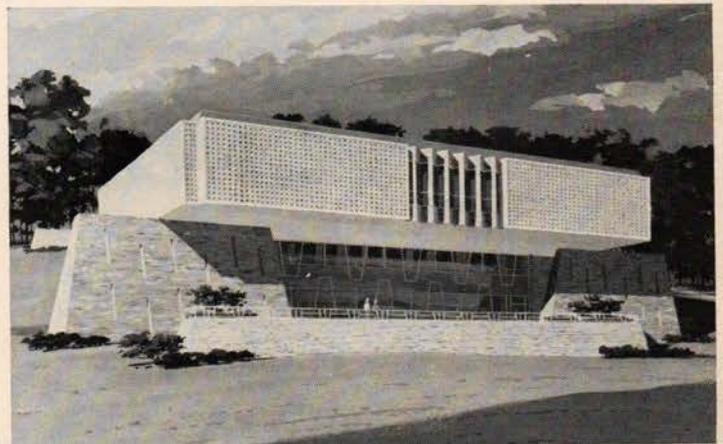
Three distinctive college buildings (below)
 Project Apollo's \$100 million cube (page 47)



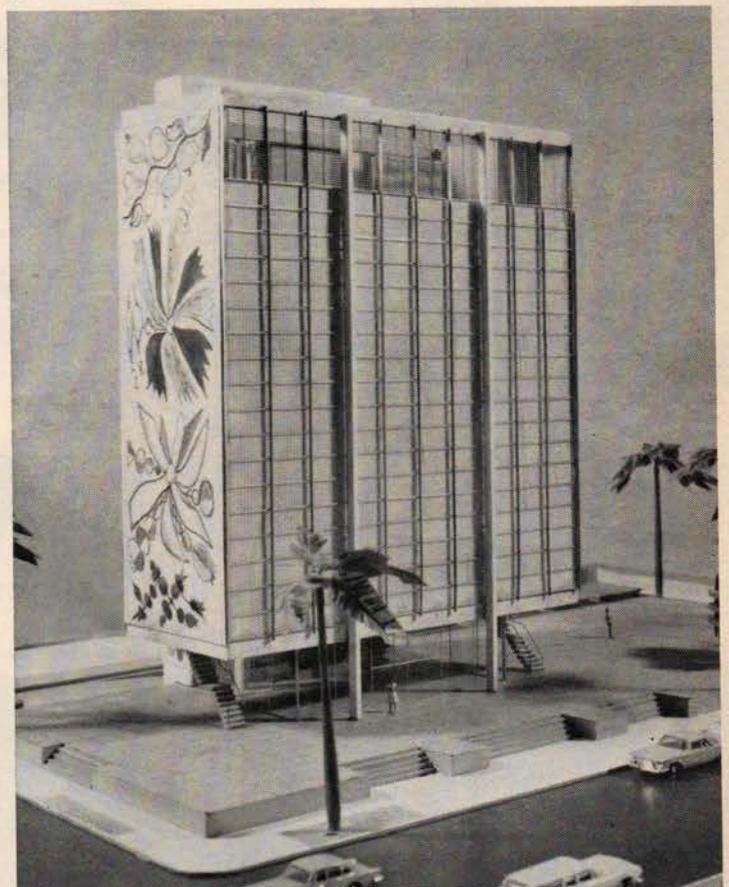
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1. MINNESOTA DORMITORY. Like some other colleges of recent note, St. Olaf College in Northfield, Minn. has transplanted the irregular, shaggy outlines of the oldest English universities to two new dormitories of its own. The one above, a dormitory for 296 women, has no two rooms alike on a given floor, and clusters six to eight students in each projection within a group of 25 to 30. Architects: Sovik, Mathre & Madson.

2. PHARMACY AT WAYNE STATE. Another strong trend in modern architecture is echoed in the Shap-

ero Hall of Pharmacy at Wayne State University in Detroit, designed by Paulsen, Gardner & Associates of nearby Bloomfield Hills. Efficient laboratory use shaped the building: the big laboratory floor is at the top, nearest the mechanical equipment needed to run it. The smaller floor below it houses the dispensing laboratory. At the bottom, in the narrowest space: a tall lobby and 160-seat auditorium. The exterior materials, including the first-floor columns, are precast concrete; the structure, of reinforced concrete.

What appears to be a high fence enclosing the pharmacy building is actually a one-story hospital scheduled for a later stage of construction.

3. COLLEGE LIBRARY. The new library for Cedar Crest College in Allentown, Pa. will crouch over a high stone breastwork. The entrance will be a bridge over a dry moat leading to a reading room on the upper floor. Below, two floors of stacks, study, and conference rooms are glassed in and recessed beneath the main floor. Architects: Bond & Miller.

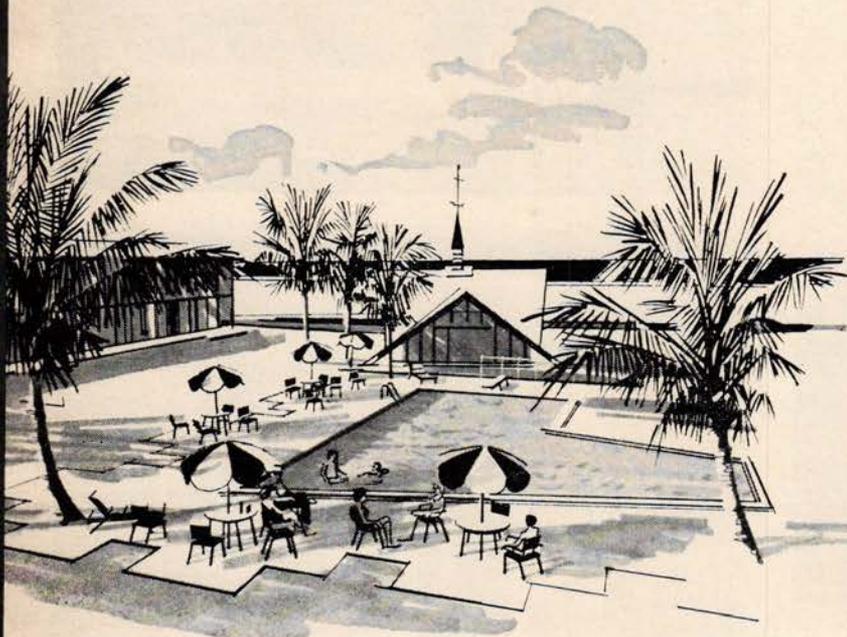
4. TILED TOWER IN MIAMI. The makers of Bacardi rum, patrons of Mies van der Rohe and Felix Candela in the past, have commissioned the Puerto Rico firm of Sagmac International to design their first building in the continental U.S.: these executive offices for Bacardi Imports, Inc. in Miami. The most eye-catching part of their design is a big Spanish mural of blue and white tiles that encloses both ends of the office tower. The 6-inch tiles will be made in Brazil by Francisco Brennard. Cost: about \$1 million.

continued on page 45

Beauty and the best...

Air Conditioning

by **Acme**



Howard Johnson's Motor Lodge at Juno Beach, Florida is, truly, a "jewel". The location, right on the ocean, is magnificent and the buildings are strikingly designed and built to complement the setting. The rooms? The acme of comfort . . . comfort conditioned by Acme.

Yes, the entire, year 'round system is Acme . . . dual chillers, air handler, cooling tower and remote fan coil units (incorporating Acme's unique electric strip heat package) for individual room control of heating or cooling.

Why Acme? Compactness rated particularly high, for, according to O. D. Altman, McDonald Air Conditioning, Inc., contractors (one of Florida's largest), Acme units best fit capacity and restricted space requirements . . . the electric strip heat, was regarded as an outstanding feature, too. Finally, McDonald knew, from previous experience, that Acme equipment performs "as advertised" and maintenance is practically nil.

L. S. Cain, Manager of the Lodge is an Acme "booster", too, for he states, "The equipment performed superbly throughout an exceptionally hot summer. Room units are noiseless . . . very important in this business. And they keep rooms pleasantly cool at all times . . . which impresses guests upon arrival."

Contractors, building owners (consulting engineers, too) are *sold* on Acme. When may we sell *you*?

Acme INDUSTRIES, INC.
JACKSON, MICHIGAN • GREENVILLE, ALABAMA

Architect: Howard Chilton, Palm Beach; Contractor: McDonald Air Conditioning, Inc., West Palm Beach



continued from page 43



5



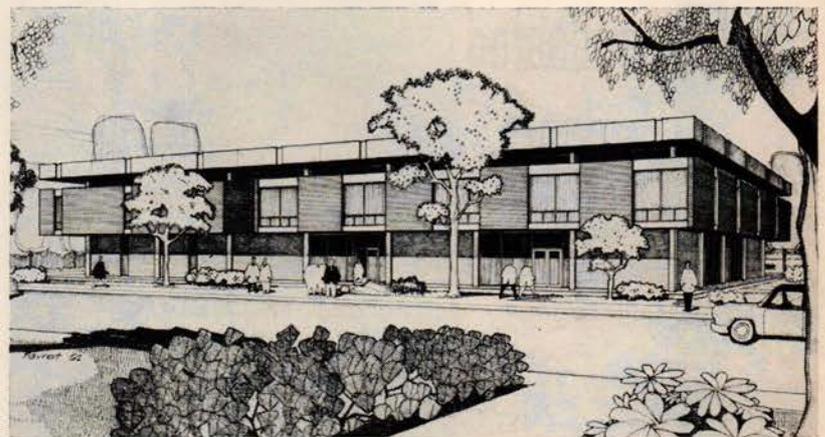
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5. GRAND RAPIDS COURTHOUSE.

The first phase in the development of a civic center for Grand Rapids, Mich. is the justice building proposed by Giffels & Rossetti, Inc. for part of the 29-acre site. The two-part structure provides offices and courtrooms in a four-story section and police service in a low wing (left).

6. APARTMENTS IN MICHIGAN. By combining concrete members that are precast, slip-formed, and conventionally poured, King & Lewis Architects, Inc. hope to achieve economies in the construction of

Dearborn Towers, an apartment building in Dearborn, Mich. Following the slip-formed core, big precast window frames, notched at the top to receive the next floor, will be set in place as each slab is poured. The building will be enclosed floor by floor so that interior trades may begin work before the structure is complete. Owner: the Lundblad Co.

7. DALLAS BANK. The Republic National Bank, which proudly hailed its new building as the tallest in Dallas on its completion in 1954, lost that title in 1959 to

Southland Center. The bank now reclaims it, adding a 50-story free-standing tower (right) linked to the older building by ground-level arcades and lobbies connecting the first eight floors. Architects: Harrell & Hamilton; Thomas, Jameson & Merrill; Grayson Gill, Inc.

8. CONCRETE CLUBHOUSE. Rather than lease space in Los Angeles' Century City complex of office buildings, the Automobile Club of Southern California will build its own separate quarters, designed by Welton Becket & Associates, coordinating architects for Century

City. The north and south sides will be a series of precast concrete arches topped by post-tensioned double tees which span the building and project 4 feet beyond the exterior walls.

9. TULANE DINING HALL. The new men's dining hall at Tulane University in New Orleans, by Architects John M. Lachin, Jr. and Favrot & Grimball, will serve 1,800 students a day for meals, and will also be their post office and laundry. The construction is of reinforced concrete and steel, the exterior walls of brick.

continued on page 47

the

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of

concealed
door
controls

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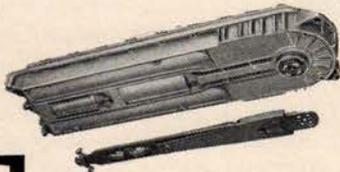
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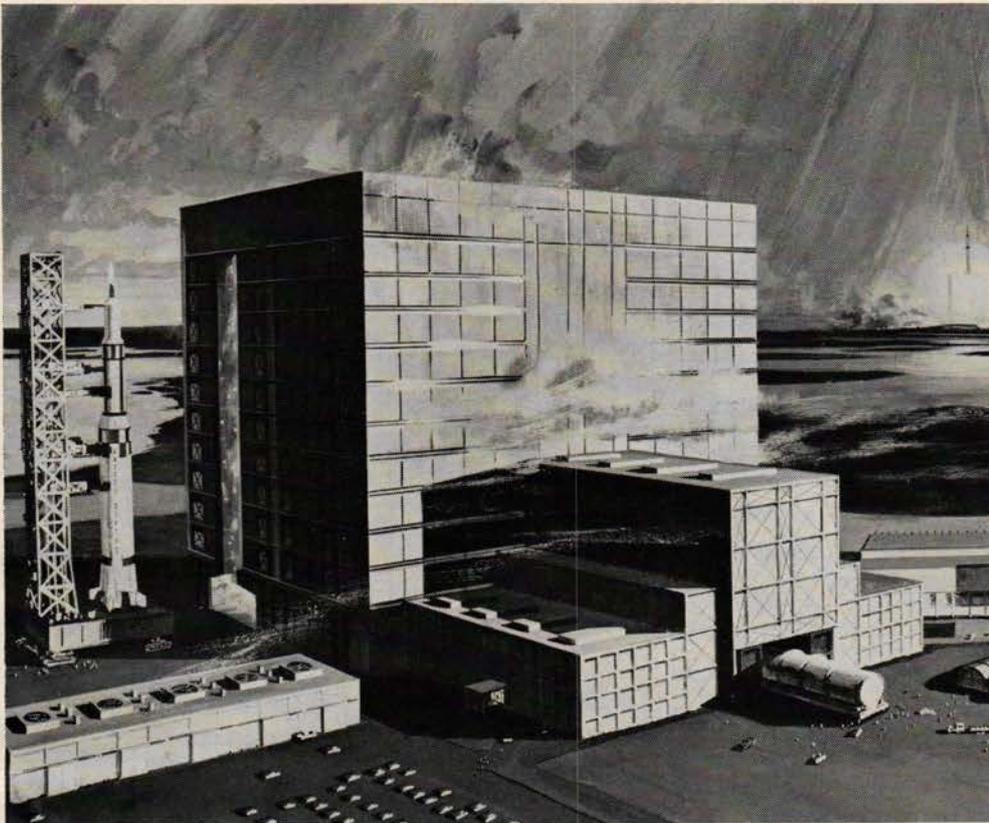
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continued from page 45



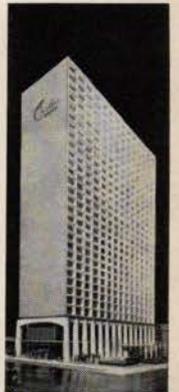
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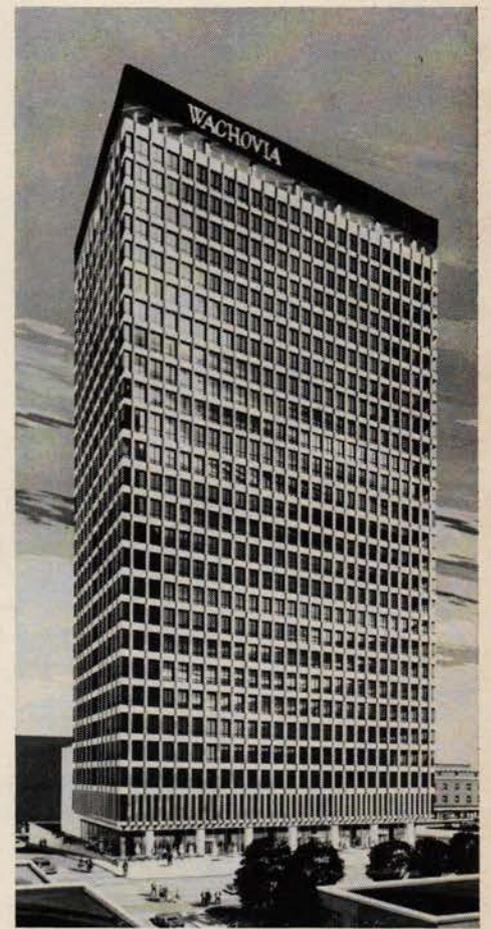
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14

10. HUGE MOON PROJECT. NASA's Launch Operations Center in Merritt Island, Fla., where Saturn C-5 rockets will be assembled, promises to be one of the biggest buildings anywhere: 524 feet tall, 674 feet wide, 513 feet long, and costing \$100 million. The design team is Urbahn-Roberts-Seelye-Moran.

11. CAMPUS CLINIC IN CHICAGO. The first of six mental health clinics in Illinois is this one in Chicago, for which ground will be broken next month. The facilities are designed for outpatient care for both children and adults, di-

vided into small groups, although there is room, too, for some full-time patients. Architects: E. Todd Wheeler and Perkins & Will.

12. PITTSBURGH APARTMENTS. The ninth building in Pittsburgh's Gateway Center will be called Gateway Towers, and it will be the biggest apartment building in the city: 1,300 rooms in a slab 27 stories high. Expected to cost about \$10 million, Gateway Towers will be built, owned, and managed by Tracco Gateway, Inc., a subsidiary of the Tishman Realty & Construction Co., on land leased

from the Equitable Life Assurance Society. Architects: Emery Roth & Sons.

13. TEAMSTERS' PROJECT. In St. Louis, Teamsters Local 688 plans to build a 27-story apartment house for senior citizens. Preference will go to retired union members, but others will also be eligible for some of the 400 units in the completed project. Schwarz & Van Hoefen of St. Louis drew up plans for Chadis House, expected to cost about \$6 million. Its name is taken from the initials of the project's motto: "comfort,

health, activity, dignity, independence, and security."

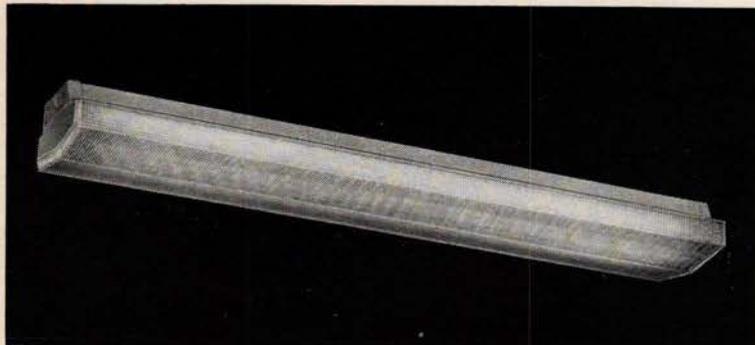
14. NORTH CAROLINA BANK. Counting landscaping and plaza, the Wachovia Building will spread over a full block in Winston-Salem, N.C. and stretch 30 stories (410 feet), making it the tallest between Dallas and Baltimore, according to the Wachovia Bank & Trust Co.'s estimates. Cameron Associates of Charlotte designed the building with a strong grid of stainless steel projecting from the bronze-colored glass. The tower is expected to cost \$15 million. END

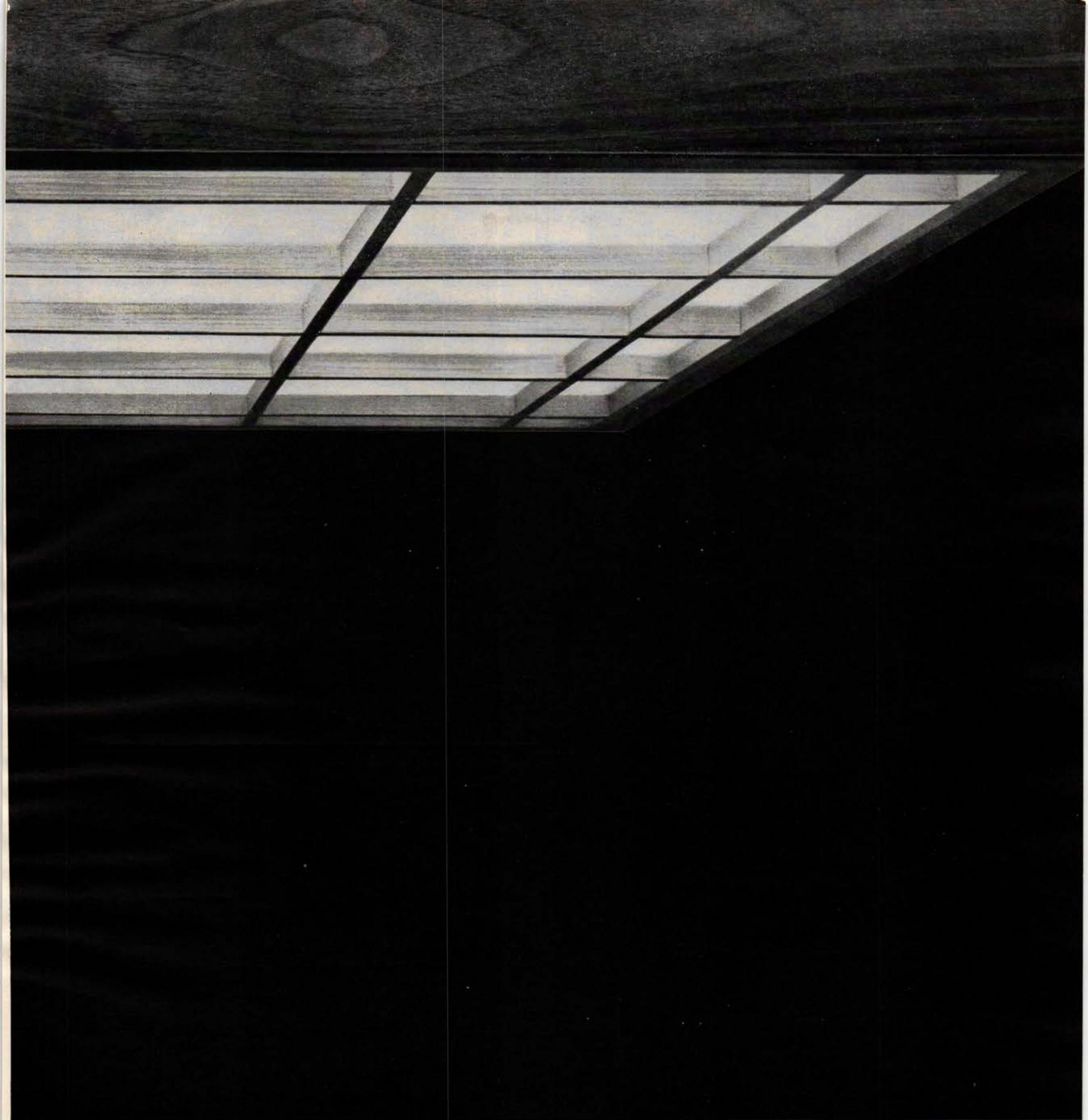


Corona puts fluorescents in an entirely new light. It makes the use of fluorescent fixtures a decorative asset, adding richness and distinctive charm to important interiors. The satin-finished walnut frame...the natural red birch pattern across the face of the smooth, white styrene diffuser contribute a feeling of warmth to contemporary or traditional interiors. Corona is available in four sizes for fluorescent lamping and in smaller matching designs for incandescent. It is completely enclosed yet engineered for easy cleaning and relamping without the use of tools.

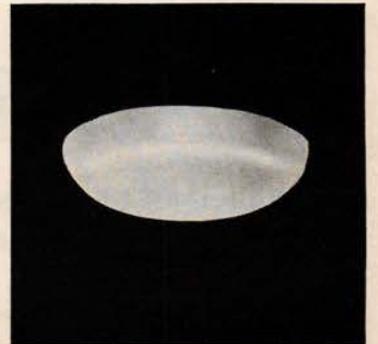
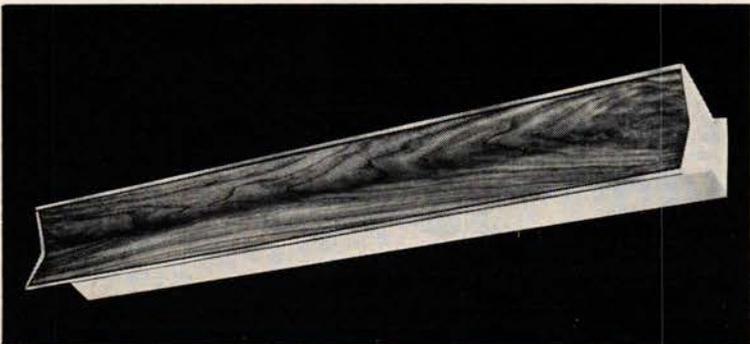
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of a long line of lighting achievements by LIGHTOLIER®





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Murray quarry tile floors are 6" x 6" x 1/2" in Sahara and Golden Glow. Plate 483.

MURRAY QUARRY TILE DOES DOUBLE DUTY HERE

In these busy social and dining areas, planned for a college dormitory, Murray quarry tile floors create a desired feeling of warmth and rugged informality. In addition to its pleasing appearance, Murray quarry tile also provides important practical advantages—low initial cost, matchless durability, easy cleaning and minimum maintenance. Write for new 1963 Murray product catalog.



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STEEL WINDOWS HAVE THE STRENGTH AND RIGIDITY THAT NO OTHER WINDOW CAN MATCH



MEN'S DORMITORY, DRAKE UNIVERSITY
Des Moines, Iowa
Harry Weese and Associates, Architects
Ringland-Johnson, Inc., General Contractors

Windows with a three-directional view add space and daylight to the rooms and provide an inviting atmosphere for study and relaxation. Window seats warmed by heating convectors and ventilated by casement windows assure comfort in any season. Truly a modern application of the Bay Window.

More than 180 of these prefabricated bay windows were furnished by Hope's for this building. They were manufactured from galvanized sheet steel precision cut, formed and welded into one-piece units, and fully insulated between the inner and outer skins. Galvanized hot-rolled



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HOPE'S WINDOWS ARE MADE IN AMERICA BY AMERICAN WORKMEN

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The fabulous features of **PORCELAIN ENAMEL**

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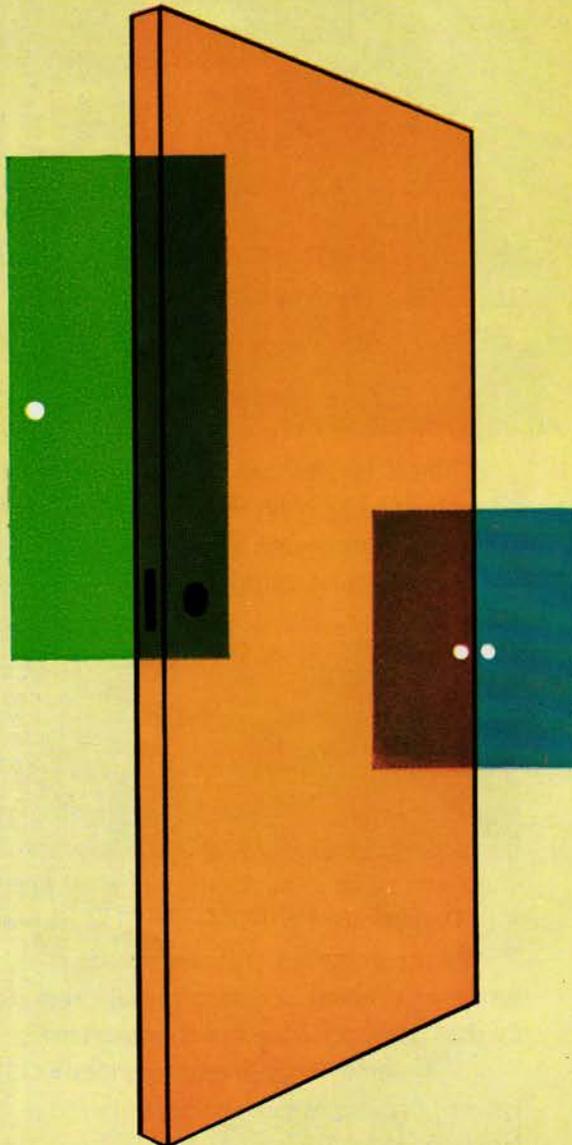
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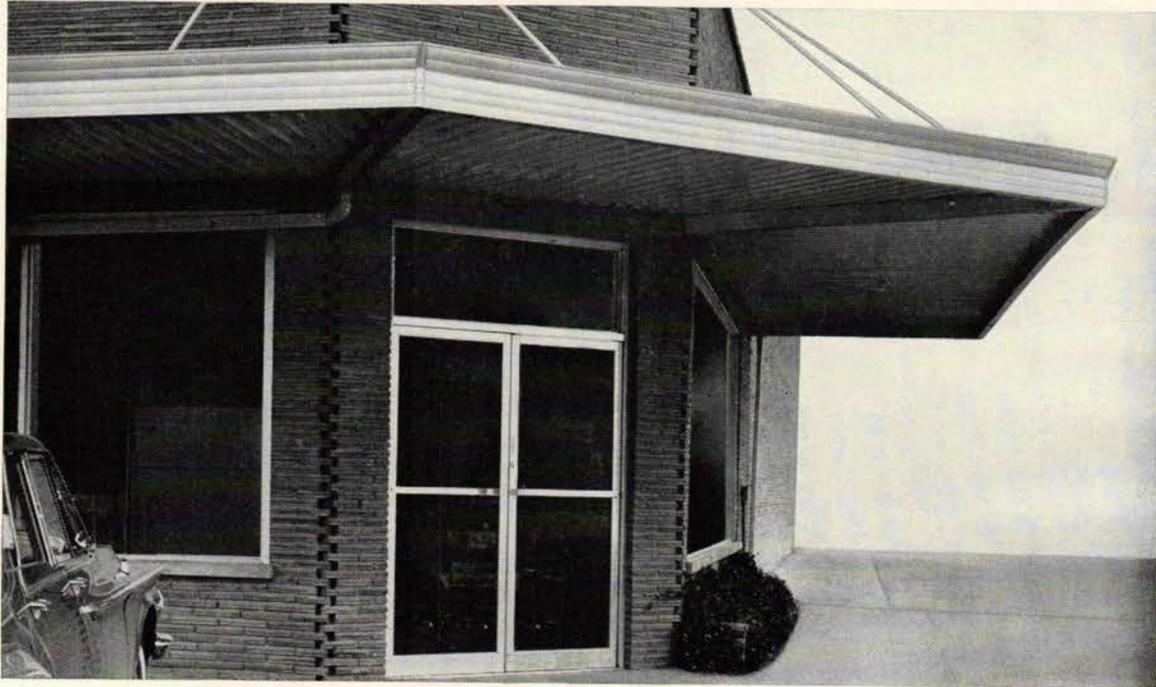
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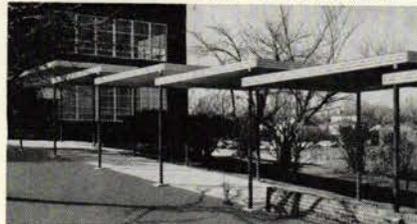


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Forget the old massive approach of steel and concrete — with lots of “dead load.” Use light, strong structural aluminum in this completely new approach for marquees, store fronts, walkways, canopies: the H-D Portiko.

It looks great. Initial cost is low. It's an integrated roofing system that you can custom-style to meet your most exacting specifications.



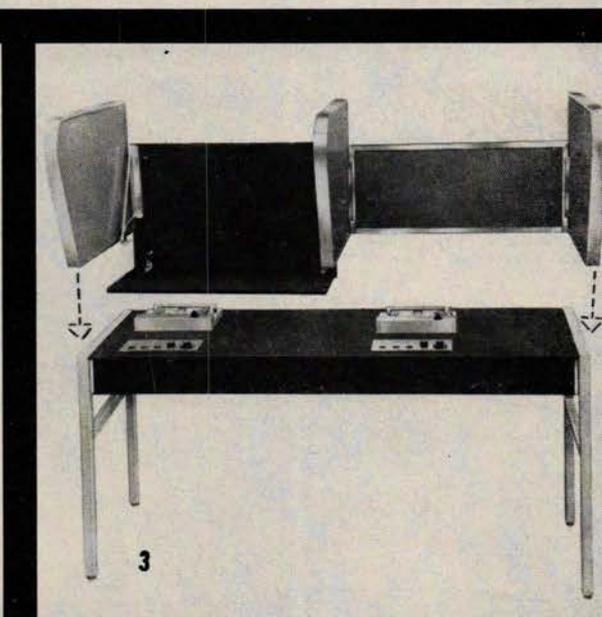
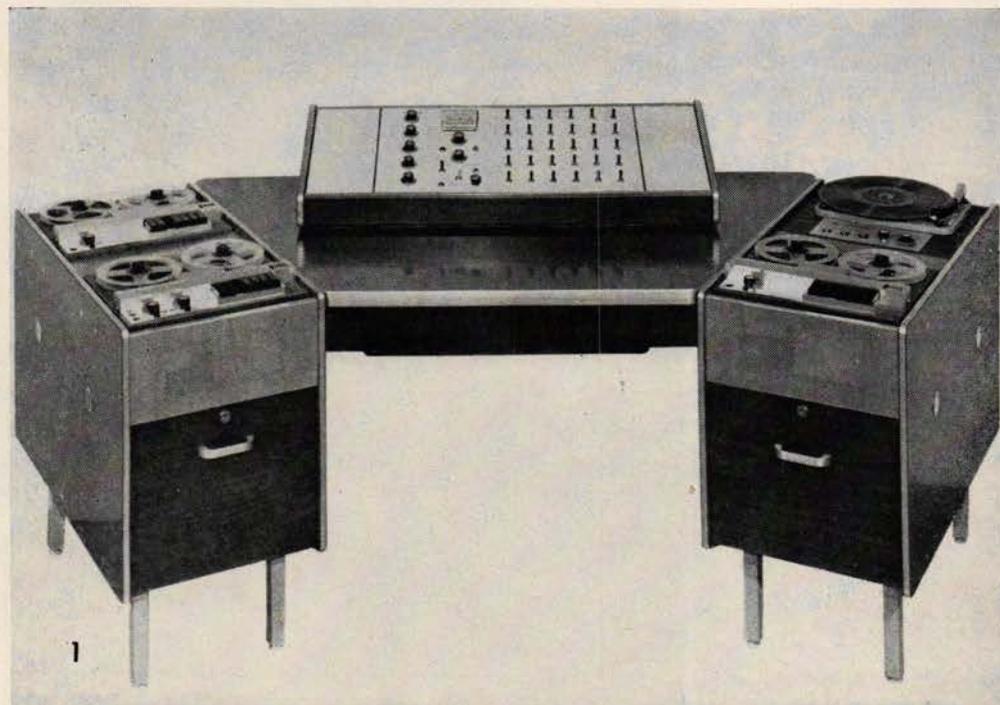
How's this for design versatility: You can select from six different types of facia, from a slim 4½" straight face to a big 11½" high facia with a bevelled extender to give a cornice effect. All facias are slotted to retain color trim aluminum strips in an almost unlimited range of color combinations.

Projections? Up to 16 feet without supports. Up to 24 feet with supports. Widths are unlimited. You can use overhead or a wide variety of upright supports. Aluminum panels are available with either baked enamel or mill finish. Facias, either anodized or mill finish.

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 **portiko**

Electronic language labs (below)
 Hypalon-based floor tiles (page 62)



THREE NEW LANGUAGE LABS

In the good old days, students began the study of a spoken language by repeating phrases after the teacher, mimicking the sounds of *le crayon de ma soeur est jaune*, or whatever, as best they could. Nowadays, the language instructor can call on a whole battery of electronic equipment to speed the learning process—equipment that ranges from a simple listen-respond mechanism to extremely sophisticated recording laboratories. In schools with the latter equipment, the teacher pockets her students' records at the end of the day and takes them home to grade. Shown at left and on the next page is the newest in electronic equipment from two manufacturers, and a folding laboratory from a third.

► Thompson Ramo Wooldridge's modular line consists of add-on units. A school operating on a tight budget might buy the simplest unit, the portable lab (2), which carries ear-phones and all equipment needed for ten students, and expand it later to 20 or 30 positions. The next step is the student desk (3) and perhaps the acoustical enclosures to go on top of it, and finally the full teacher's console (1). The latter incorporates the original portable laboratory as one of its side pieces. These add-on units mean that earlier equipment is still usable when a school decides to upgrade its language lab. All equipment is transistorized and may be outfitted with magnetic tape or magnetic disks, whichever the school prefers. Furniture is solid-core wood finished in wood-grain plastic laminate; the metal trim is brushed aluminum; the legs are green enamel on steel. The basic price starts at about \$1,000 for the portable laboratory and rises to around \$14,000 for a 30-unit laboratory of the most sophisticated type.

► American Seating's new units are a small console (4) and a portable lab (5). The budget console fits conventional schoolrooms and does not require special furniture. It may be used on top of a table or desk; the student headsets that go with it may be installed on standard chair-desks or tablet-arm chairs. The cost for this unit and 30 headsets is approximately \$3,500. American Seating's other new unit is a cylindrical portable lab, smaller but about the shape of an old Maytag washer. It has a three-track tape deck, four-speed phonograph, and eight headsets attached. Cost: about \$1,200.

► Howe Folding Furniture Co. has introduced its first folding classroom desks designed specifically for use as language labs. These do not include any electronic equipment, but are wired for headsets. The top surface may be used as an ordinary desk (next page), or converted into an instant language lab: the top flips up, exposing the dividers which convert the table into three amply private carrels. Howe's *Audio Carrel-Desk* comes in two lengths, one for three students (72 inches), and another for

continued on page 61



For the first time you are seeing a new woven wall covering that combines unusual performance with rare beauty

Until now you had to choose wall coverings that measured up to your standards of low-cost performance or styling versatility. Now—with new woven fabric wall coverings of Rovana—you get both, perfectly coordinated with the patterns and textures of draperies made of the same Rovana saran flat monofilament. New wall coverings of Rovana are tough. Fire, stain, and abrasion resistant. Color-fast. Easy to clean. Dimensionally sta-

**WALL COVERINGS OF
ROVANA**

ble, even when applied to new walls. The fact that they "breathe" makes them ideal for installations in warm, humid climates. For the complete story on the low maintenance costs, exceptional performance, and styling versatility of these unique wall coverings of Rovana, contact one of the distributors in the adjacent columns. And see our listing in Sweet's Architectural Catalogue, file 13-15. THE DOW CHEMICAL COMPANY 

continued from page 59



Wall coverings made with ROVANA®

VANAWEVE wall coverings, designed by the C. W. Stockwell Company, woven with The Dow Chemical Company's Rovana saran flat monofilament, are available in deep, rich colors, subtle neutrals and pastels, dramatic embossed patterns, intriguing textures, solids and stripes. Shown at left: "Sierra Stripe"



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*T.M. C. W. Stockwell Co.



two (48 inches); and three heights, 25, 27, and 29 inches. The whole unit folds to a slim 3½ inches for storage. The tops are tan plastic laminate over a wood core; the legs, tubular steel. Cost: about \$130 each for the 6-foot table, \$115 for the 4-foot model.

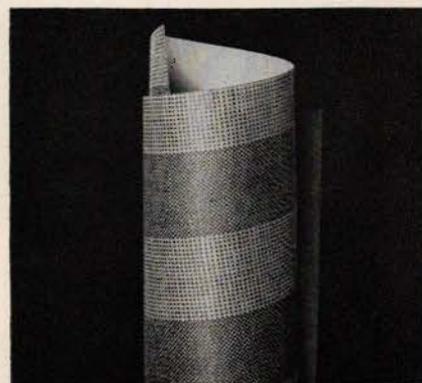
Manufacturers: Educational Electronics Division, Thompson Ramo Wooldridge Inc., 6325 Huntley Rd., Columbus 24, Ohio; American Seating Co., Grand Rapids 2, Mich.; Howe Folding Furniture, Inc., 360 Lexington Ave., New York 17.

PACKAGED PANELS

Formica, the ubiquitous melamine plastic long used for countertops and tables, is now being marketed as a packaged wall panel as well. Formica calls the package *V.I.P.*, for Vertical Interior Paneling, and suggests it as a wall surface for new or remodeled offices, hospitals, restaurants, banks, motels, and stores.

The panels are 16 inches wide and alternate with hardwood splines nailed into standard furring strips (see photo). Panels may be adjusted on the spline for a standard V-groove joint or set ¼ or ½ inch apart; the visible joint is either stained or covered with Formica to match the wall panels. The

continued on page 62



Wall coverings made with ROVANA®

WoVan wall coverings, developed by LSI, woven with The Dow Chemical Company's Rovana saran flat monofilament, add textured beauty and serviceability to foyers and elevator areas, offices and lounges.

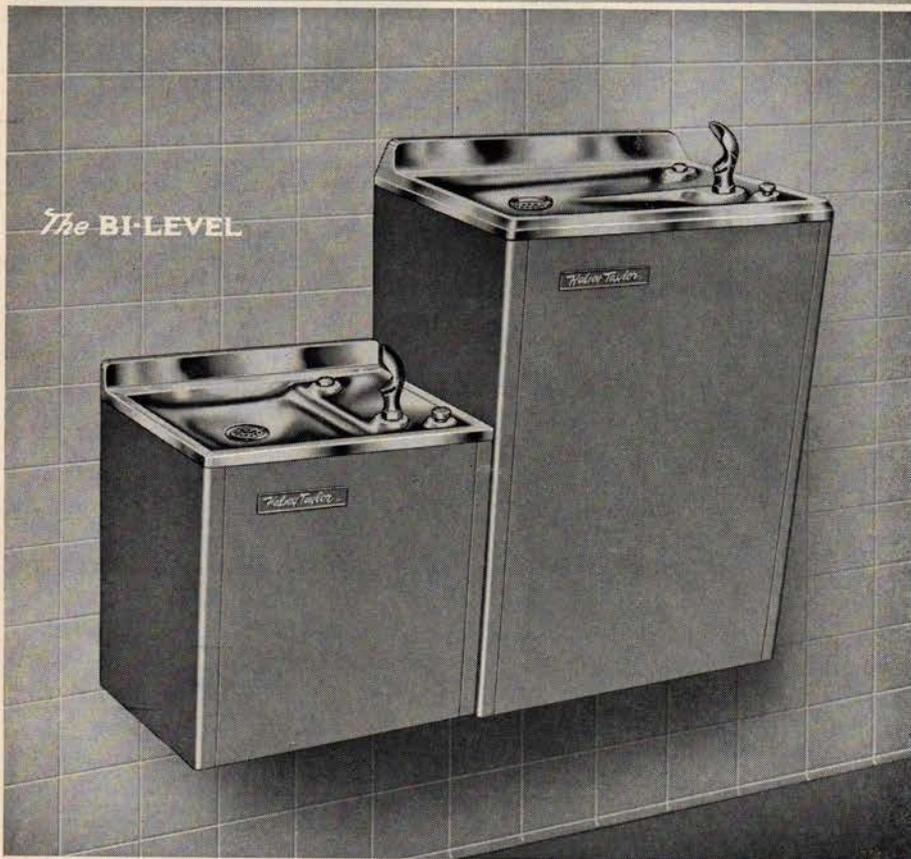
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- J. L. Brandeis & Sons
119 S. 17th St., Omaha, Nebraska
- Hanley Paint Mfg. Co.
1214 San Pedro, N. E., Albuquerque, New Mexico
- Hoddick & Taylor
2661 Main St., Buffalo, New York
- Laue Brothers, Inc.
101 Park Avenue, New York, New York
- Southern Flooring & Acoustical Co.
931 E. Morehead St., Charlotte, North Carolina
- Ben Kramer & Son, Inc.
803 N. Fourth St., Columbus, Ohio
- The Gellin Company
1111 Carnegie Avenue, Cleveland, Ohio
- Interior Designers
2019 S. W. Main St., Portland 5, Oregon
- Armando T. Ricci
102 S. 21st St., Philadelphia, Pennsylvania
- Standard Floor Company
185 - 41st St., Pittsburgh, Pennsylvania
- Piedmont Paint Center
321 North Main St., Greenville, South Carolina
- Kearney & Son
2850 Logan St., Dallas, Texas
- Kearney & Son
1218 W. Main St., Houston 6, Texas
- Bennett's
65 W. First St., Salt Lake City, Utah
- Anning-Johnson Company
1077 W. Glebe Road, Alexandria, Virginia
- CANADA
Downs of Canada
292 Princess St., Winnipeg, Manitoba
- Fiber-Plast Company, Ltd.
9035 Ave Du Park Ave., Montreal, Quebec
- Shirrite Mfg. Co., Ltd.
91 Whitney Place, Kitchener, Ontario
- MEXICO
Materiales AGG, S. A.
Durango 261-A, Mexico City, D. F. Mexico

Novel Idea for '63

Taylor-made for greater convenience



The Bi-Level, illustrated above, is a drinking-water accommodation providing a low convenient level for children. It's designed for cabinet-to-cabinet installation (left-side mounting only) on all Halsey Taylor wall-mounted WM-series water coolers . . . available only as a factory-assembled unit.

The Bi-Level is ideal for places where crowds of all ages gather, and especially adapted for school, institutional and shopping-center buildings.

Write for complete specifications.

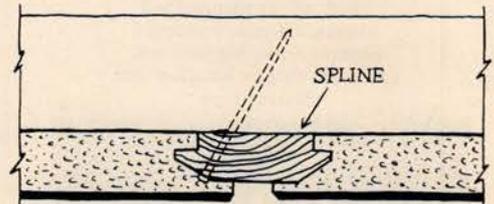
THE HALSEY W. TAYLOR CO., Warren, O.

see Sweet's
or the
Yellow Pages

Halsey Taylor®

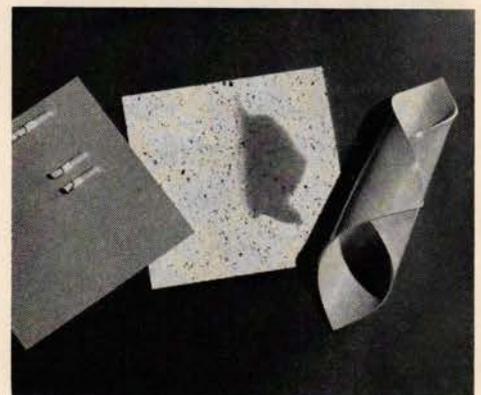
Quality Drinking Fixtures—Styling plus Service

263



panels are a thin layer of Formica (1/32 inch) laminated to 3/8-inch flakeboard. Standard heights are 8 and 10 feet. The installed cost is about \$1.50 per square foot.

Manufacturer: Formica Corp., 4614 Spring Grove Ave., Cincinnati 32.



HYPALON FLOORING

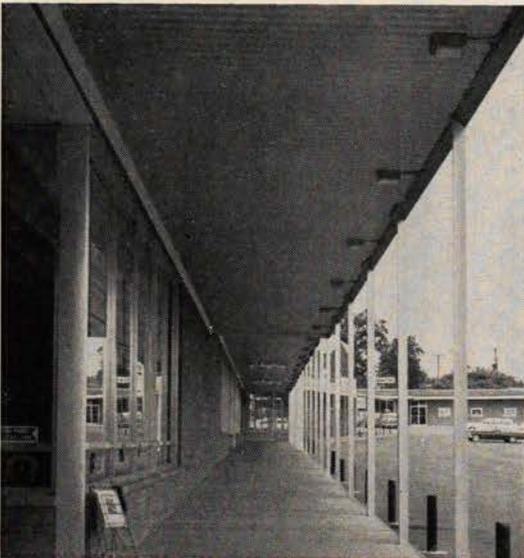
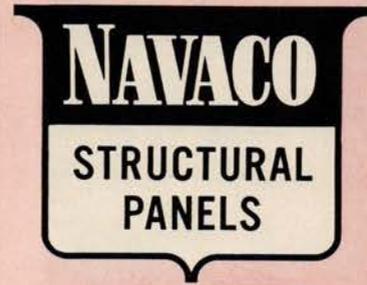
Demonstrating three properties at once, this photograph shows Armstrong's new Vistelle Corlon Tile undamaged by cigarette burns and chemicals (left and center) and rolled into a canape (right) as proof of its flexibility. The only flooring compounded from Du Pont's elastomer Hypalon, Vistelle Corlon cost ten years of research, but Armstrong is now convinced that the Hypalon base makes it the most significant new material for floors since the introduction of vinyl. It resembles rubber tile's resiliency underfoot, and it springs back from the crescent-shaped scars left by spike heels. Normal maintenance will remove nicotine and chemical stains.

Armstrong introduces the new tile in one

continued on page 64

Architecturally Accepted

**SCHOOL WALKWAY COVERS
COMMERCIAL CANOPIES
SERVICE PARKING**



- Sturdy .036 Gauge Aluminum interlocking Roof Panels in Hi-Bake Enamel Finish
- Anodized Extruded Aluminum Fascia With Controlled Drainage System.
- Attached or Free-Standing — Customized To Any Size Requirements!
- Meets & Exceeds Most Building Code Requirements!

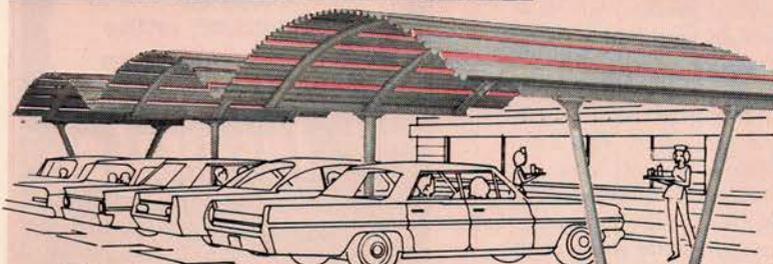
Note the clean, uncluttered understructure . . . the added strength in roof design with interlocking roll-formed panels . . . the tailored decorative trim . . . the variety in post supports and overhang. NAVACO STRUCTURAL PANEL CANOPIES are fast becoming the "specified" treatment anywhere overhead protection is required. Let us send you engineering data and additional information in the next mail!



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Factories in
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MIAMI, FLA., DALLAS, TEXAS
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interiors . . . factory-formed steel beam understructure . . . and choice of interlocking panels with extruded translucent RIGID-VINYLI

Darrell E. Johnston
NAVACO COMPANY, A Div. of Howe-Sound Co.
601 Hall St., Dallas 26, Texas
Please rush me additional architectural data on:
 NAVACO STRUCTURAL PANELS
 NAVACO "STRUCT-O-CURVE" CANOPIES

AF/3/63

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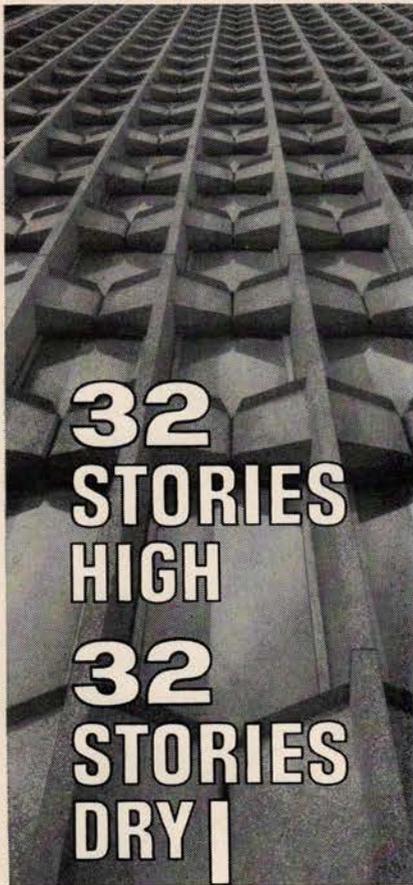
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**32
STORIES
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32
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DRY |**

**WILLIAMS
EVERLASTIC**

**SEALS AND GASKETS
SELECTED TO LOCK
MOISTURE OUT**

building: Michigan Consolidated Gas Company, Detroit.

architects: Minoru Yamasaki-Smith, Hinchman and Grylls, Assoc.

problem: Effectively sealing the joints of thousands of pre-cast exterior wall panels and interior marble panels.

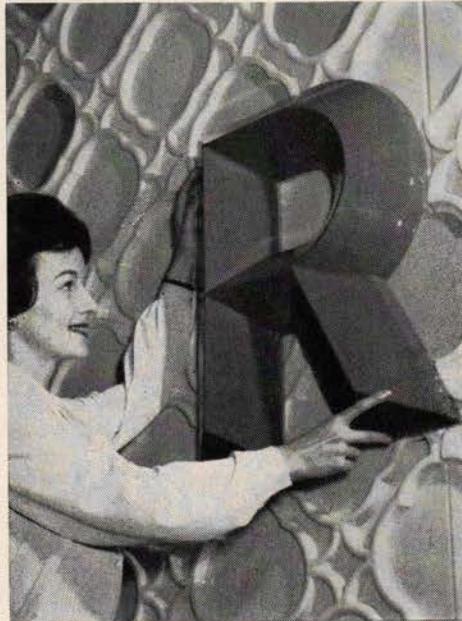
solution: Williams Everlastic die cut neoprene gaskets and Williams Double Wing seals.

FREE! Write for new catalog covering technical details of Williams Seals, Gaskets, Water-stops and the remarkable new EVERLASTIC Polyurethane Sealing Compound.

WILLIAMS
SEALS and GASKETS DIV.
WILLIAMS EQUIPMENT and SUPPLY CO., INC.
Box 86, Hazel Park, Michigan

gauge, 1/8 inch, and one pattern for commercial and institutional floors, a flecked pattern available in ten colors, most of them neutral grays and beiges. The tiles are 9 and 12 inches square. Cost: \$1.75 to \$2 per square foot, installed.

Manufacturer: Armstrong Cork Co., Lancaster, Pa.



PLASTIC ALPHABET

For outdoor signs, Spanex Products has developed 17 alphabets and 15 background panels, all formed from Eastman Kodak's Uvex high-impact cellulose acetate Butyrate. Individual letters range in size from 4 inches to 4 feet; the background panels are all 4 by 4 foot squares. Both letters and background panels are stocked in 40 solid colors, and letters may be ordered in two or even three different colors for special effects.

Prices for a solid-color single letter in a simple type face run from \$1 each in the smallest size up to \$82 for the largest.

Manufacturer: Spanex Products Corp., Hainesport Industrial Park, Mt. Holly, N. J.

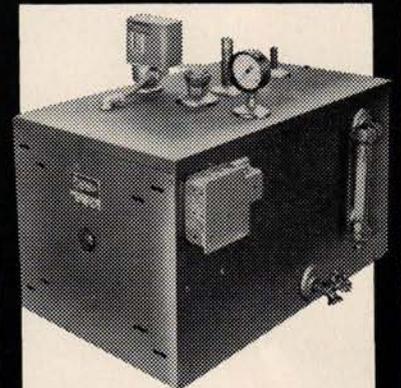
ADJUSTABLE FURNITURE

Last month, at the American Association of School Administrators' convention, American Seating displayed its Vanguard school furniture: a single desk and three chairs to fit children from the first grade all the way through high school. The secret is, of course, that all four pieces adjust easily. The desk, for example, rises from a low of 20 inches off the floor to a high of 30 inches. The chairs are adjustable in 1-inch increments. Also new in the Vanguard series is the color range: "canyon gold, valley green, and sage brush" plastic, paired with "prairie taupe and canyon gold" metal colors.

continued on page 66

THERMASOL[®]

**"POWER PAK"
FOR LARGE
STEAM
and/or
DRY HEAT
ROOMS**



■ Completely automatic operation.

■ Thermostatically controlled. No attendant necessary.

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■ Compact — may be placed in storage room, basement, attic, closet or hung from ceiling.

■ Completely wired, assembled, tested at factory and ready for immediate installation.

■ Residential units available to install in bath tub or stall shower.

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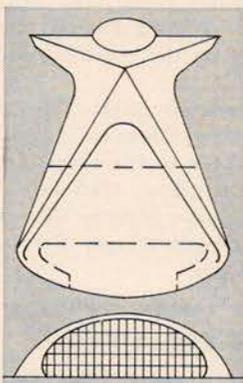
THERMASOL[®]

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**THIS URETHANE FOAM STRUCTURE
IS WAITING FOR A BUILDER . . .**



AND ALL SYSTEMS ARE 'GO'!



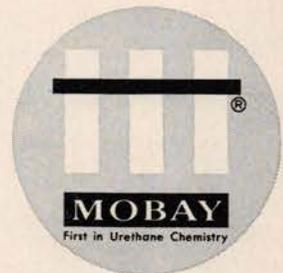
The plan for this free-form urethane foam concert hall is amplified in Mobay's new brochure.

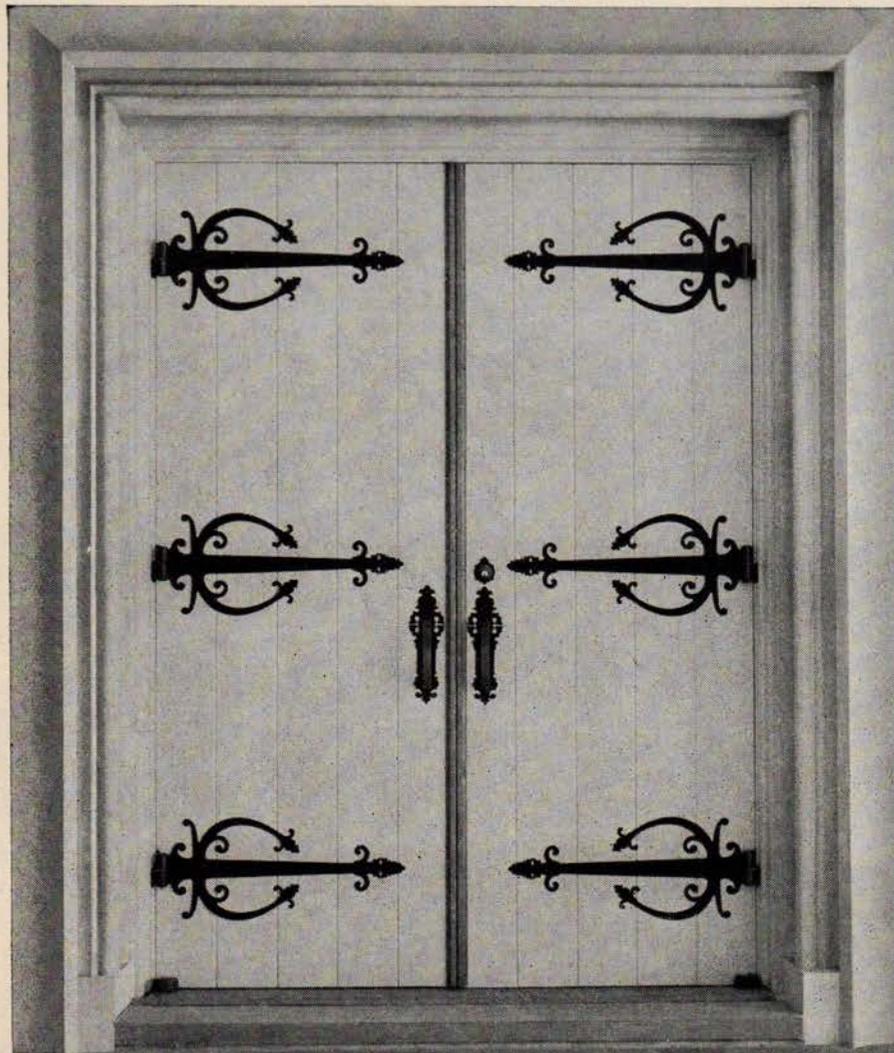
In this projection, a framework of steel is first erected and pre-formed arches of rigid urethane foam are then fitted and bonded into place in modular unit layup. The closed-cell structure of rigid urethane foam makes the material resistant to moisture penetration, weathering or deterioration from exposure to the elements. A K factor rating of .12 to .15 at 70°F gives it insulating value second to none, and its structural strength, lightness of weight and self-extinguishing properties make it an ideal material for public building design. For a revealing first look at this revolutionary architectural breakthrough—and some answers to the how, why, when and who—write for Mobay's new brochure, "RIGID URETHANE FOAM . . . a New Concept in Structural Design."

MOBAY CHEMICAL COMPANY

CODE AF-2

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McKinney Forged Iron

ELEGANCE IN
HARDWARE

Graceful lines, beautiful finish with unsurpassed quality are evident in every piece of McKinney Forged Iron Hardware. Creative design in traditional architecture demands this unequalled elegance. Next time consider . . . then specify for the whole job fine McKinney Forged Iron Hardware . . . choice of quality-conscious consultants.

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The desk, of sturdy steel construction, has a new, deep book-box underneath the writing surface. To provide a pleasant, neutral background for books and papers, the writing surface is a matte-finish plastic which American Seating calls Corktone.

The chairs are blow-molded plastic, formed with built-in air cushions in the back and seat. The colors match those of the desk.

Prices depend on quantity ordered and other variables, but generally run around \$15 for the desk and \$10, \$9, and \$8 for the three chairs.

Manufacturer: American Seating Co., Grand Rapids 2, Mich.

MATERIALS ESTIMATORS

Three pocket-size materials estimators are currently available: one determines the amounts of insulation needed on flat roofs and around piping, based on the insulation's "k" factor; another determines the quantities of tiles needed to cover a given floor area; a third determines the thickness of flat glass to withstand given wind loads.

The insulation estimator is a wheel, with flat-surface heat-transfer data marked on one side and pipe data on the other. The floor-tile estimator is a slide rule; its windows give readings for 1) area and number of tiles and 2) cost per square foot, total cost, and cost per 9-inch-square tile. The glass calculator is a double wheel that measures the glass thickness required to meet specific wind loads, based on the window's dimensions.

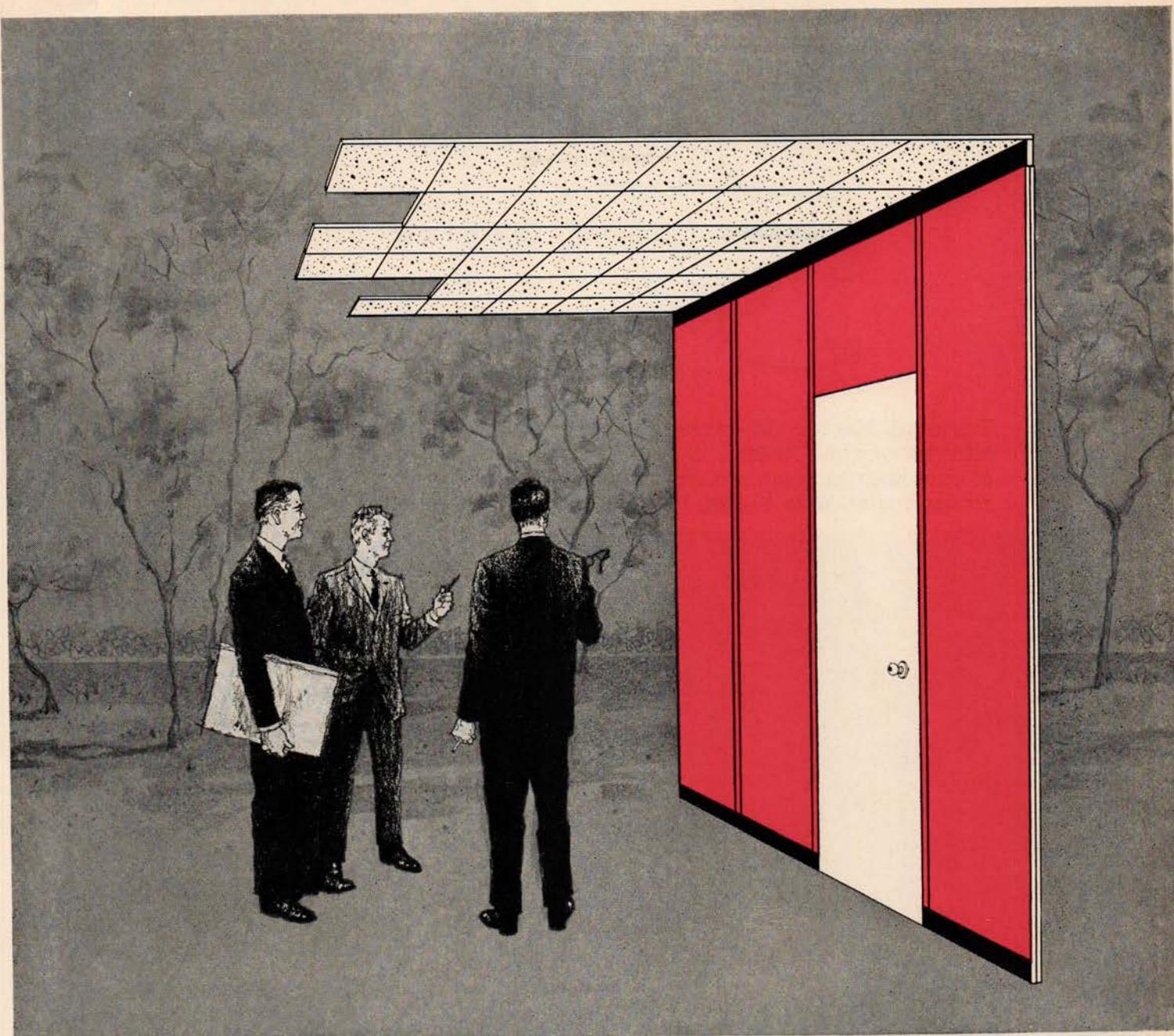
Distributors: insulation wheel (free), Barrett Division, Allied Chemical Corp., 40 Rector St., New York 6; tile slide rule (25 cents), Vinyl Plastics, Inc., 1825 Erie Ave., Sheboygan, Wis.; glass calculator (20 cents), American-Saint Gobain Corp., P. O. Box 929, Kingsport, Tenn.

NEW COATING FOR STEEL

Inland Steel's prepainted building products now receive a new double coating said to provide a tough, durable finish. The first coat is a flexible epoxy base, cured and oven dried before the second coat of alkyd-melamine paint is applied.

Manufacturer: Inland Steel Products Co., P. O. Box 393, Milwaukee 1.

continued on page 69



Assurance of a perfect job BEFORE it's installed ...with walls and ceilings from HAUSERMAN

There's no need to wonder and worry about the quality of your interior walls and ceilings... whether they'll be installed on schedule... whether they'll be installed right.

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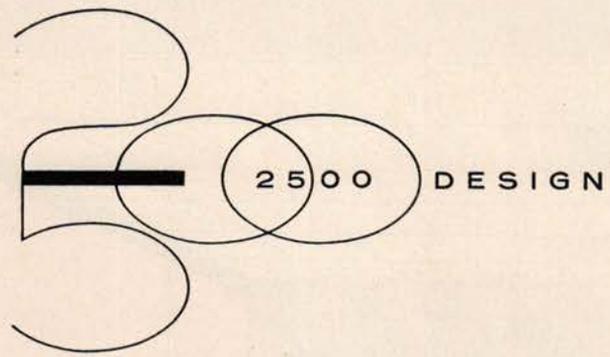
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Title _____

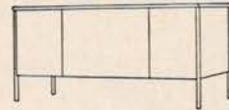
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This is the 2500 DESIGN—a new symbol of distinctive styling in office furniture from All-Steel. Its clean, straightforward design is at home wherever beauty and distinction in the modern manner are appreciated. Write All-Steel today for complete information.



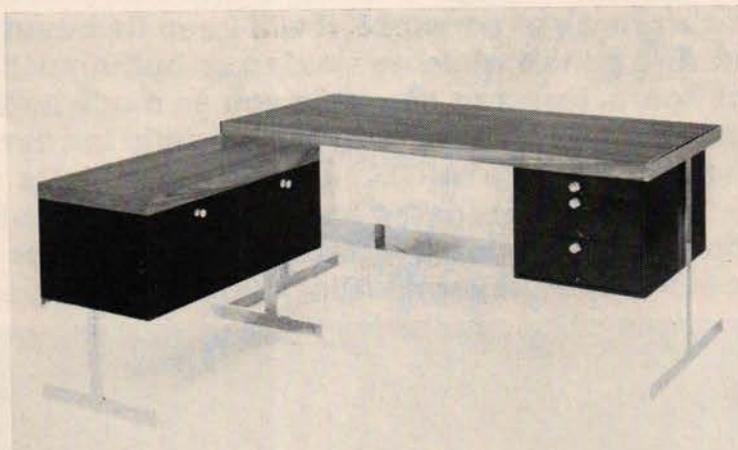
THE CHOICE WHEN YOU WANT QUALITY, TOO

All-Steel Equipment Inc.
Aurora, Illinois

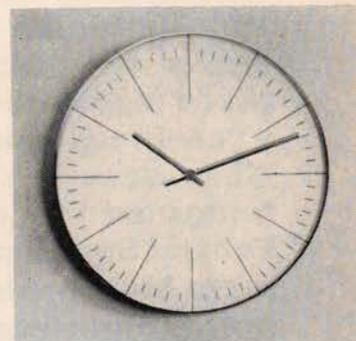
Max Bill clock, "Corbu" chair, double-decker desk



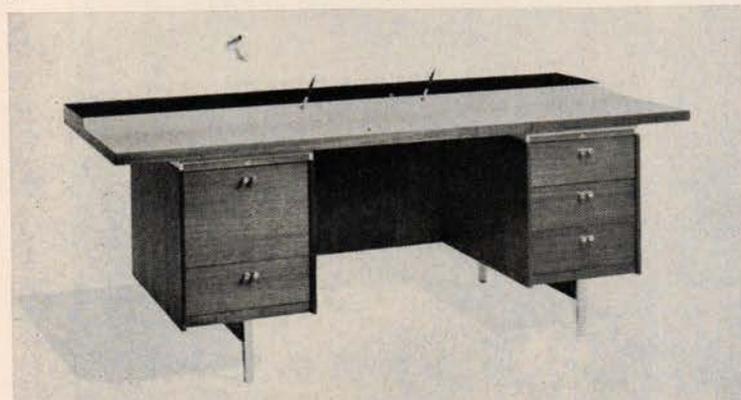
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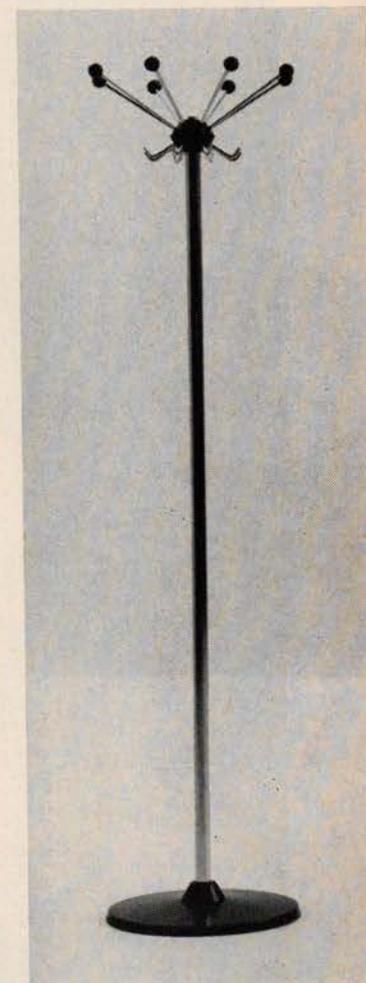
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7



6

1. BENTWOOD CHAIR. Ever since Le Corbusier launched a bentwood chair in the Paris International Exposition of 1925, this chair has been called "Corbusier," even though the molds for it date back to 1870. Stendig imports it from France in natural beech, walnut, or ebony finishes. Net cost: \$60.

2. EXECUTIVE DESK. Slimmer desks are part of Peerless Steel Equipment Co.'s new Formal series for executives. This desk and attached two-drawer file have tops of walnut veneer, black steel

drawers, mirror-chrome hardware. Cost: \$762.

3. GERMAN CLOCK. Almost any wall would be improved by this elegant clock, designed by Max Bill for the Junghans Companies in West Germany and imported on order by the Chronos Clock Corp. The case is brushed chrome; diameter, 11¾ inches; the cost, \$27. Minimum order: 12 clocks.

4. DOUBLE-TOP DESK. This double-top desk from the Leopold Co., one of its Template Group, has a walnut shelf raised above

a wide plastic work surface. Aluminum legs are finished in bronze, chrome, or wood grains. Cost: \$783.

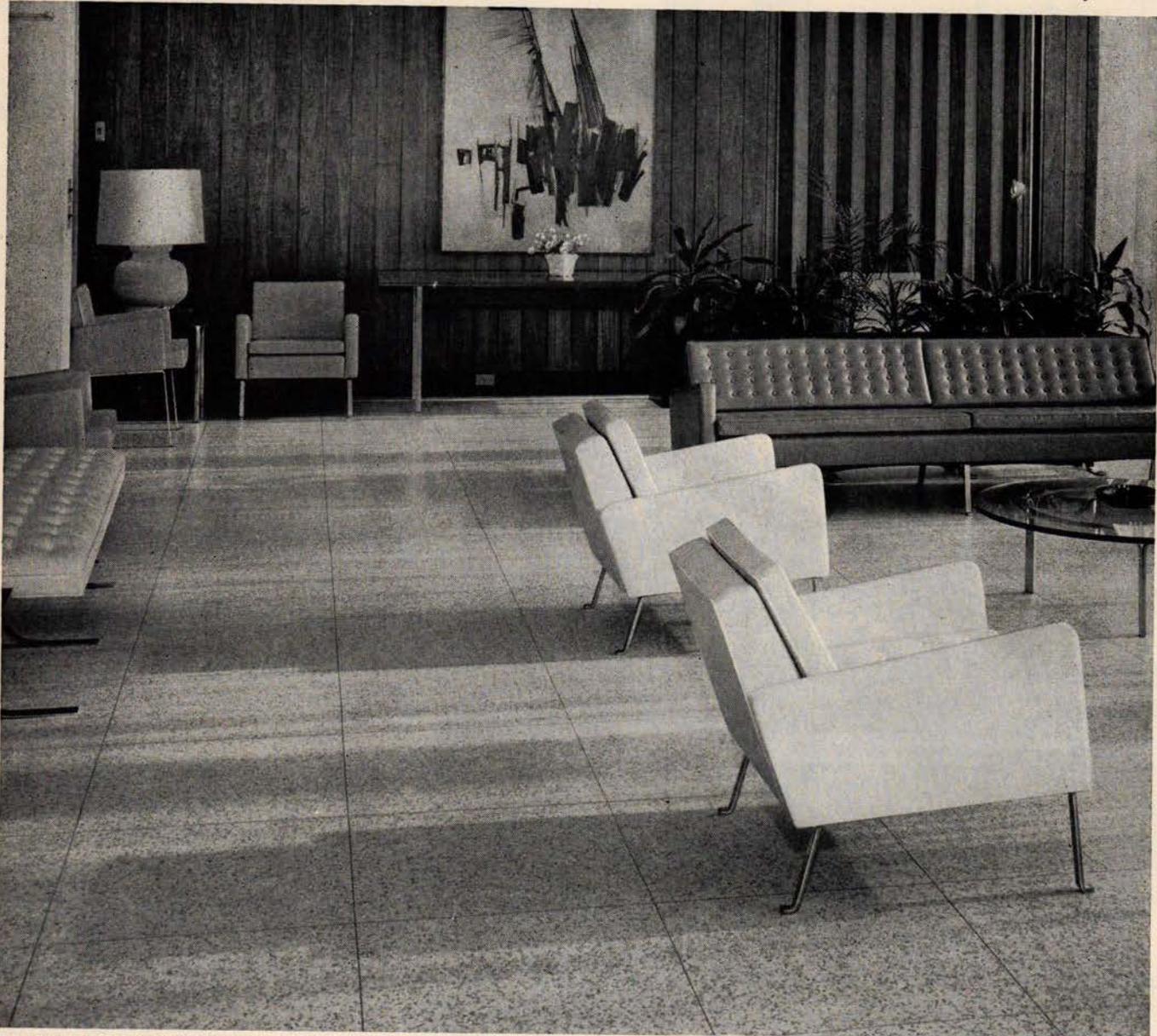
5. LEATHER CHAIR. Similar in shape but smaller than the famous Mies Barcelona chair is this glove-leather and chrome chair imported from France by George Tanier. As shown—24 inches wide, 28 inches deep, and mounted on leather straps—it costs \$450.

6. IMPORTED STACKERS. These stacking chairs are imported from Finland and Denmark by International Contract Furnishings.

Left to right: glass-fiber shells on chrome-steel triangles, designed by Toivo Korhonen and Esko Pajamies; Olli Mannermaa's upholstered chair, framed in black or chrome steel; Yrjo Kukkapuro's stacker, with round seat, curved back; Danish oiled teak shell on steel legs. The first three cost \$65 to \$70; the fourth, \$30.

7. FINNISH COAT RACK. This 65-inch column of chrome steel, another ICF import, supports an arrangement of black plastic knobs and chrome hooks for coats and hats. Cost: \$140. END

Terrazzo takes it easily. Smooth, jointless terrazzo flooring is comfortably at home in this quiet lounge of the new Cleveland Institute of Music building. Since it has the strength of concrete, it will keep its beauty not just for years, but for generations. And all the while no waxing or buffing will be required. Compared with resilient floors, terrazzo can save you as much as 23¢ per square foot a year in cleaning labor alone. ■ When you plan long-life terrazzo floors, wainscots, stairs, specify a matrix of ATLAS WHITE portland cement. Its uniform whiteness brings out the true color of aggregates and pigments. Complies with ASTM and Federal Specifications. Ask your local terrazzo contractor. For an informative terrazzo brochure in color, write Universal Atlas, 100 Park Avenue, New York 17, N. Y.



Terrazzo flooring made with ATLAS WHITE cement at Cleveland Institute of Music, Cleveland, O. Architects: Shafer, Flynn & Williams. General Contractor: Hunkin-Conkey Construction Co. Terrazzo Contractor: O. A. Bertin Co. (All of Cleveland)



Universal Atlas Cement
Division of
United States Steel

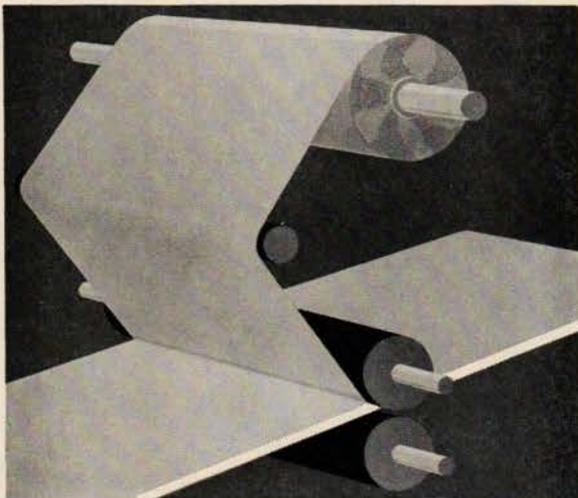
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DU PONT'S NEW LONG-LIFE, WEATHERABLE FINISH

What's different about TEDLAR?

TEDLAR* PVF film is a completely new kind of exterior surface. It's not a liquid or a spray; it's a tough fluoride film engineered and manufactured under careful controls by Du Pont.



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The manufacturer of a building product. We (Du Pont) make the film and sell it to the manufacturer (of siding, for example), who bonds it to his products in his factory. He uses special Du Pont adhesives, which make TEDLAR part of the material it protects.

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Frankly, we don't know. We haven't been able to wear it out under normal weather conditions. We predict, however, that when properly bonded to a stable material, TEDLAR should be serviceable for 25 years or more without refinishing. It may fade slightly, but chances are you won't notice it.

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What products are available with TEDLAR?

Manufacturers are now laminating TEDLAR PVF film in a variety of colors to produce built-up roofing systems, residential siding of aluminum and plywood; industrial curtain-wall panels, insulation jacketing; gutters, doors, downspouts, sheet and coil stock.

How much does TEDLAR cost?

Because TEDLAR is only the finish of a building product, its cost is determined by the manufacturer, not Du Pont. In general, TEDLAR costs slightly more than liquid finishes, but much less than porcelain enamel. Per year of life expectancy, TEDLAR is probably the most economical finish you can buy.

How can I find out more about TEDLAR?

Write the Du Pont Company. We'll send you more information, a list of manufacturers and bonded samples of TEDLAR. The Du Pont Co., Film Dept., Building Materials Sales Division, Box 45, Wilmington 98, Delaware.

*Du Pont registered trademark



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... through Chemistry



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at a price that saves up to 30% on each unit

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Here's how you can help keep down school building costs without cheapening the construction. As you plan new buildings be sure you detail and specify Cupples "Packaged School Door Units."

This is *not* a cheap, lightweight door designed down to a price. No sir, it's a rugged, heavy duty, wide stile entrance door, designed and constructed to withstand the tough demands of school use. It has 4" wide stiles, 6" high bottom rail; takes 1/4" plate glass; frame with transom up to 10'2" in height; comes complete with Von Duprin rim type panic device, master control cylinder lock, aluminum threshold,

three butt hinges and attractive outside pull handle. It's a door that will satisfy your toughest assignment. And, what's more, when compared with equal quality wide stile doors, this Cupples "Packaged School Door Unit" saves you approximately \$75 to \$100 on each unit.

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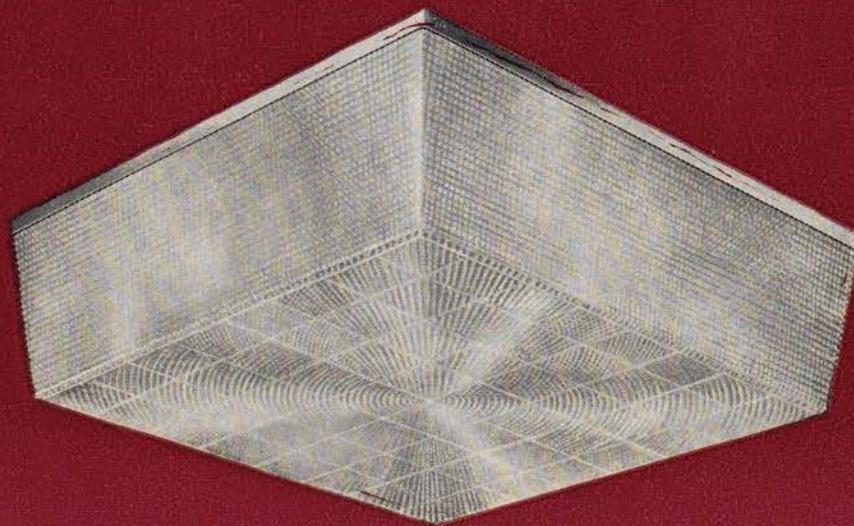
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An instinct for preservation . . . The crash of the wrecker's ball was heard last month across the land, and the sound was accompanied by cries of outrage. The cries were growing in volume: out of the efforts to preserve some valued old buildings there has emerged a new hardening of public opinion, and some indications that Americans are not totally committed to erasing their past.

In New York, the celebrated battle of Penn Station appeared lost (amid talk of political influence), as the city gave promoters the go-ahead to tear down McKim, Mead & White's noble pile for a not-quite-so-noble new sports arena and office-building complex. Under existing ordinances, said the Planning Commission, it was powerless to weigh the value of the old building against that of the new one; it could only decide whether the new building was justifiable *per se* in terms of public revenue, traffic problems, etc. An enraged band of architects and cultural leaders stormed the public hearings, but they were armed only with idealism—a commodity not listed in the city budget.

That New York needed a fourth new Madison Square Garden in less than a century—not to mention two more office buildings—was debatable. That a railroad gateway to Manhattan might deserve something nobler than a locker-room annex did not seem to concern the city. But the main issue that Penn Station raised was whether the largest U.S. city (or, for that matter, the smallest) should not have a policy, and machinery, to determine the true values of its more historic real estate—rather than depend on the last-ditch efforts of opposing pressure groups.

New York was not alone in this by any means: in New Orleans, the future of the old French Quarter seemed only a little brighter by comparison (see *News*). Elsewhere there were more encouraging signs. Leading Chicago citizens formed an international committee to restore and preserve Wright's Robie House. Public outcry had stymied the Naval Academy's plans to expand into historic Annapolis. And preservation was holding top priority in urban renewal programs from Providence to Mobile.

Out of it all two facts were becoming clear. Good buildings of the past stand little chance of being saved one by one; a city has to know in advance what its historic assets are before it can intelligently guide growth. The second is that, once it does know, a city must be able to act. To this end Chicago's official Commission on Architectural Landmarks has designated 38 buildings (two are already gone), and the Illinois legislature will be asked to pass a bill that will empower the city to preserve them by various means. Boston's committee is going over its city block by block to see what is worth saving. And New York City itself has an official Landmarks Commission whose belated inventory is now nearly complete.

The actual mechanics of preservation, of course, depend on individual circumstances. Ample precedents and alternatives exist, from outright acquisition to leases, covenants, tax abatements, and simple restrictions on appearance and use. But preservation takes pressure, and while the lists of history are being compiled, many of the buildings themselves are going or gone.

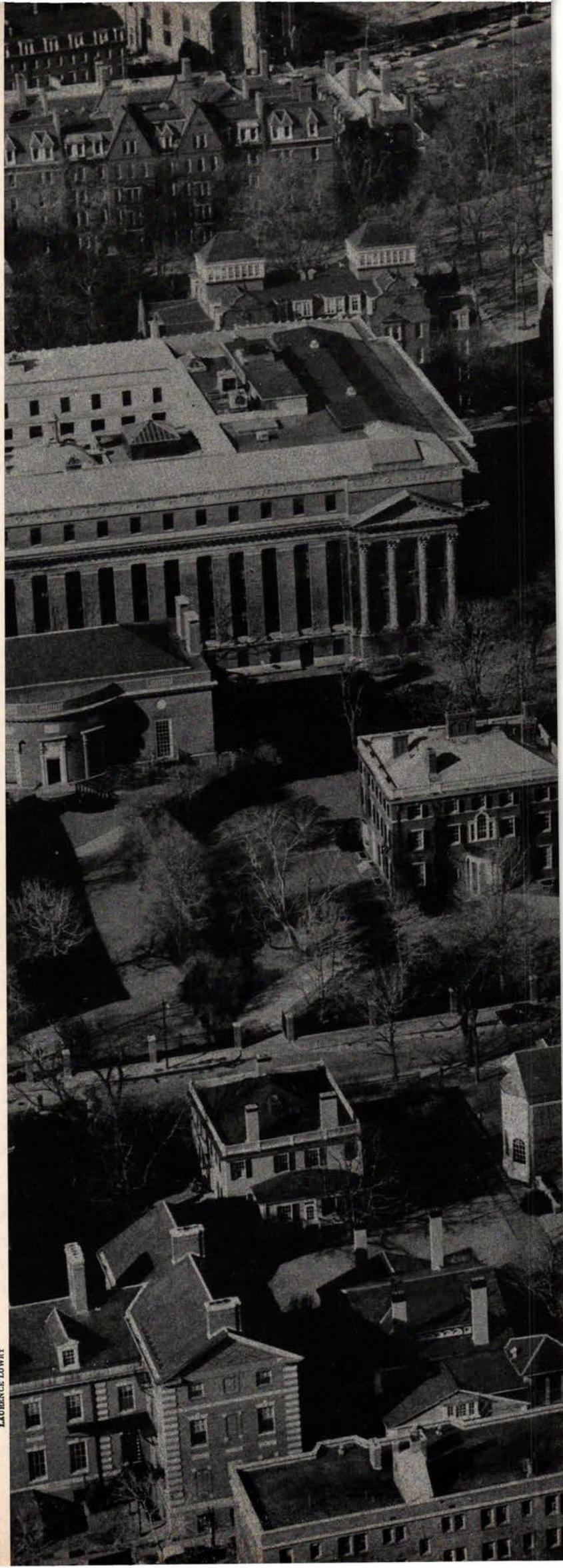
BIG CHANGE ON THE CAMPUS

The banjo-shaped Visual Arts Center just completed next to old Harvard Yard (opposite) is more than a fascinating tour de force by a great architect: it is also a symbol of some dramatic changes taking place on existing campuses across the nation—and of some dramatic changes in the planning of entirely new campuses as well.

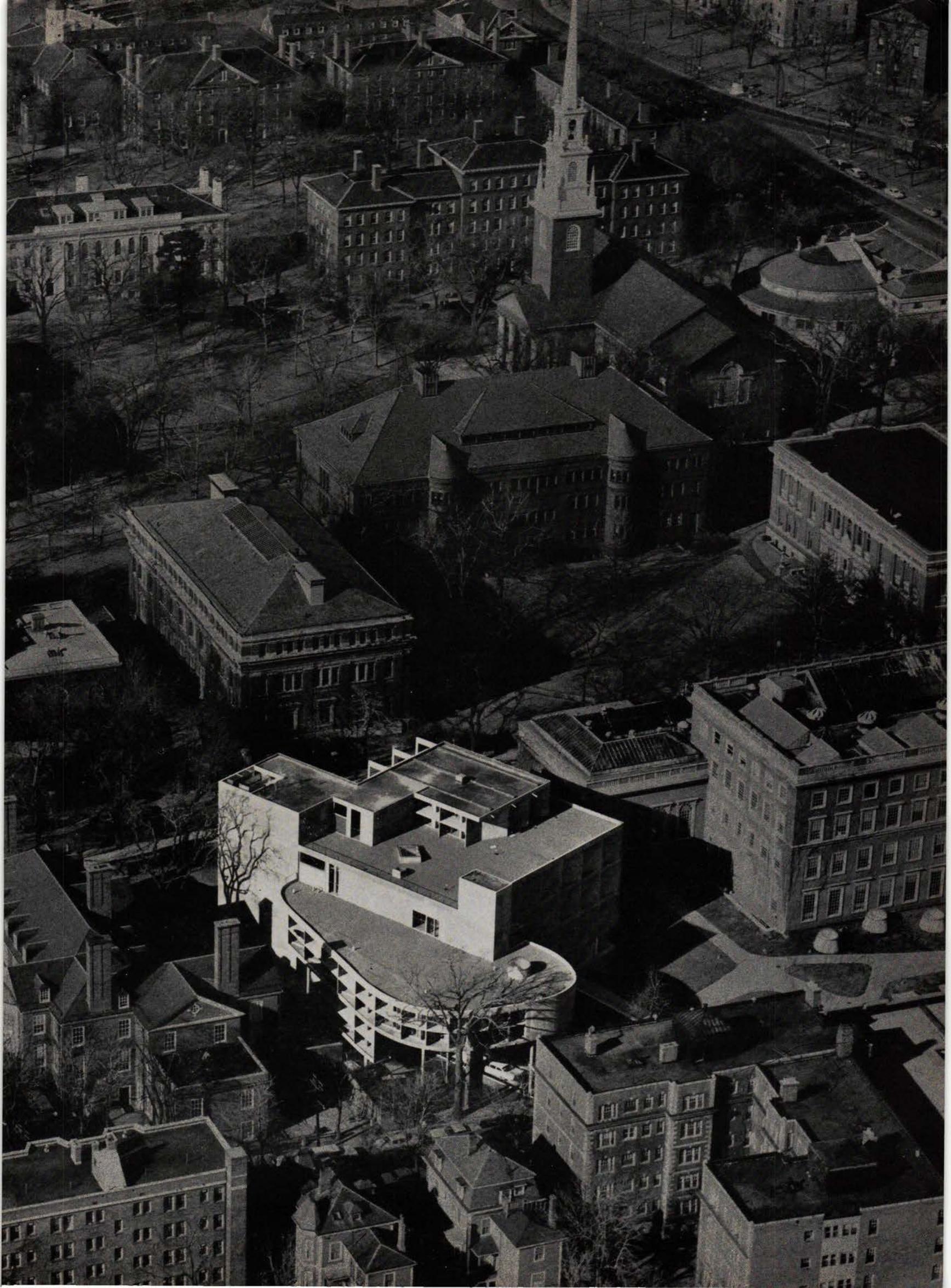
On these 28 pages is the story of some of these changes: it is a story of new buildings in old settings (pages 76 to 91); a story of joint efforts by universities and their host cities to improve the urban scene (pages 92 to 95); and a story of a remarkable boom in the construction of brand-new campuses in America's most populous state (pages 96 to 103).

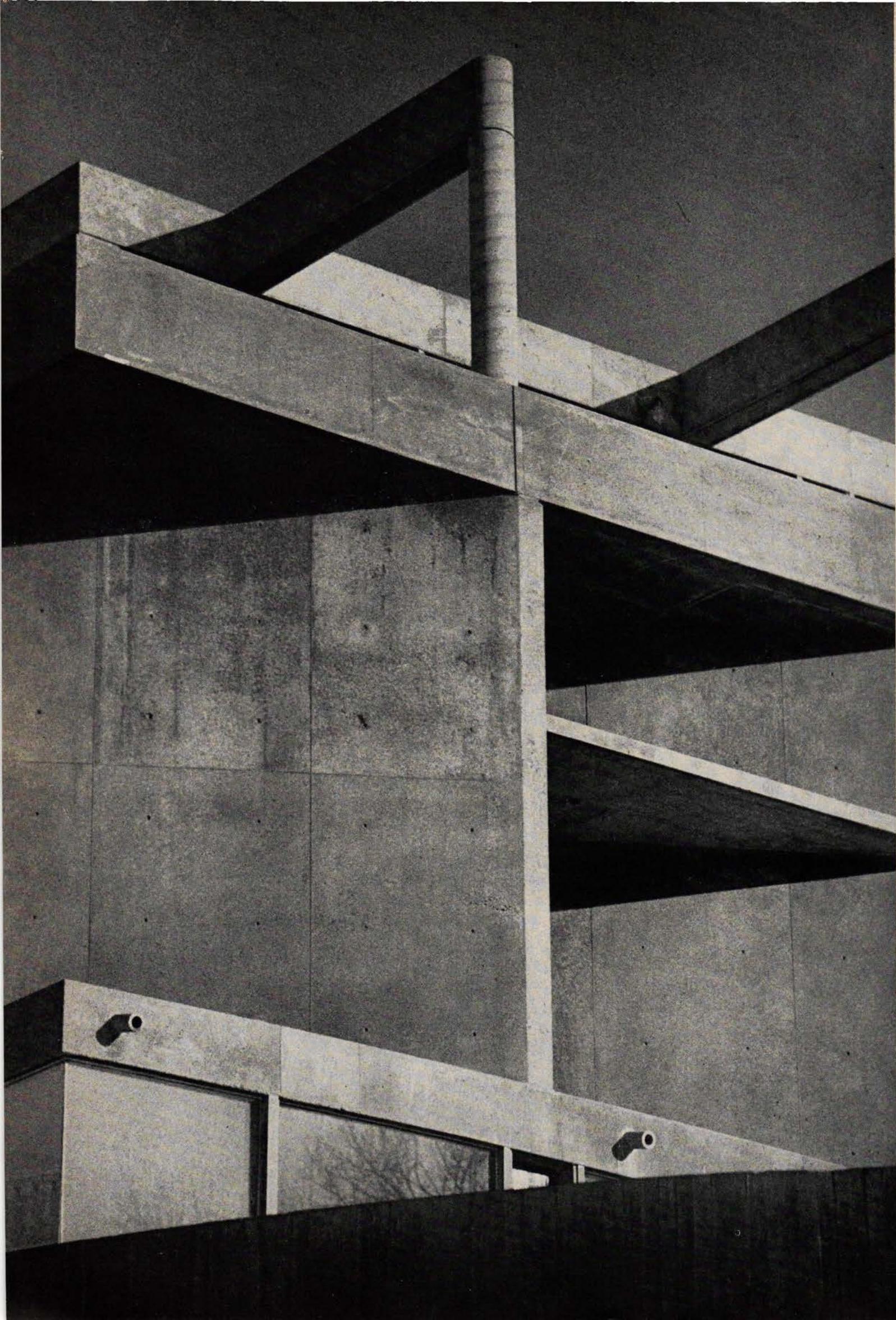
Some authorities believe that \$10 billion will be spent on new U.S. college buildings by 1970. The evidence on these pages suggests that this may be a conservative estimate.

In any event, here, at Harvard, is the most dramatic symbol of these changes and this boom: The Carpenter Center for the Visual Arts, designed by Le Corbusier, and opened last month. For details on this remarkable building, turn the page.



LAURENCE LOWRY





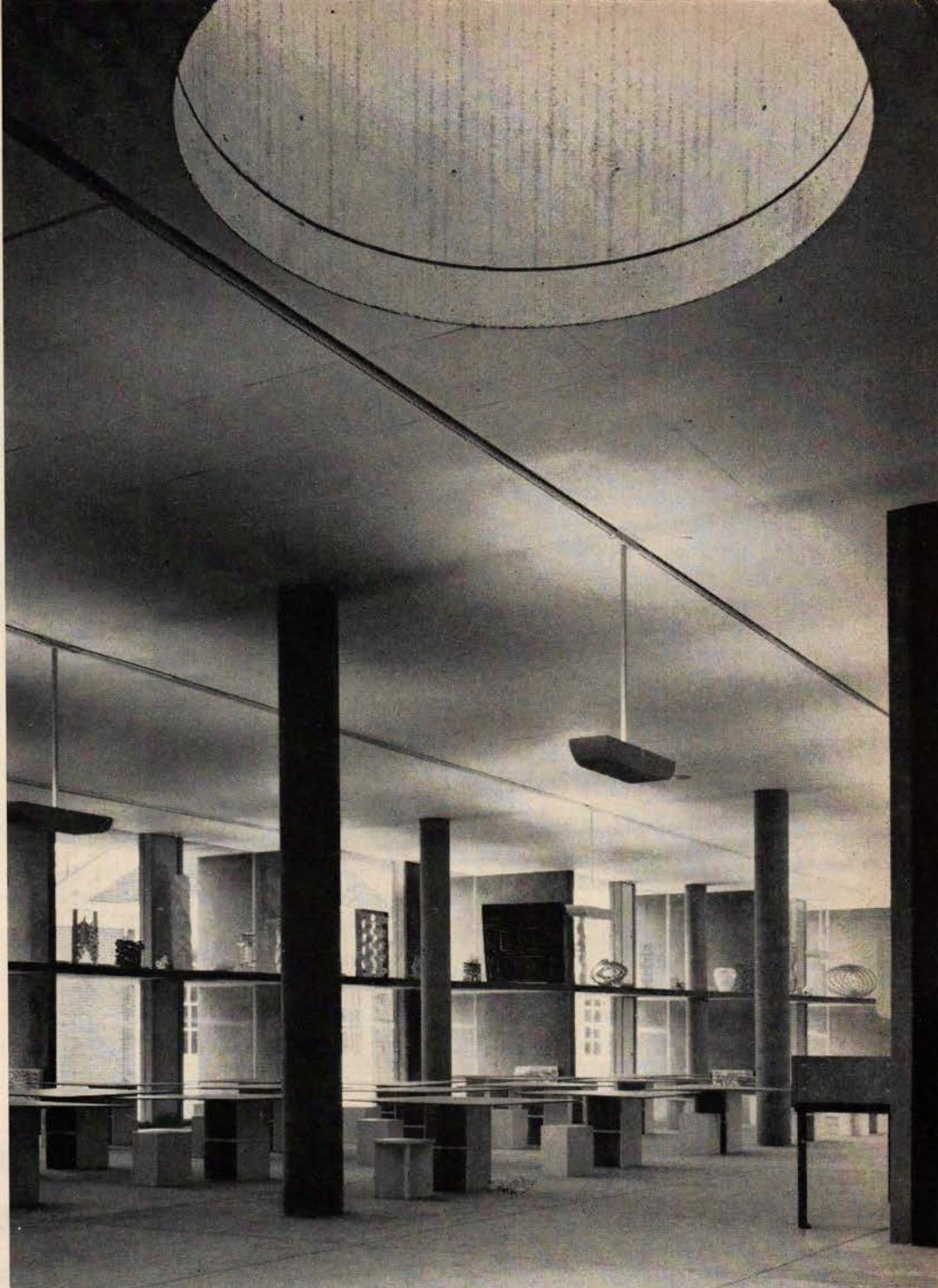
LE CORBUSIER COMPLETES HIS FIRST U.S. BUILDING

Harvard's new Carpenter Center for the Visual Arts, according to one visitor, is "a shock—but a positive shock rather than a negative one." Whether positive or negative, the Center is a building of historic importance, for it is the first structure designed entirely by Le Corbusier to have been built in this country.

Whether or not Carpenter Center will make a good school for the teaching of the visual arts to Harvard undergraduates remains to be seen: it has been in use for less than a month; its program is still extremely flexible; and neither the instructors nor their charges (who are college-level students, specializing in the humanities) have yet had a real chance to make up their minds.

But one thing is certain: like Frank Lloyd Wright's Guggenheim Museum (to which it bears an odd but superficial resemblance), Carpenter Center will stimulate vehement debate. A contribution to this debate will appear in a forthcoming issue of *FORUM*. Regardless of the final verdict on the building, the very fact that it *has* stimulated so much debate should make Carpenter Center a welcome addition to the campus of any self-respecting university. As a group of Harvard professors and administrators put it in an open letter to the Harvard Corporation: "In selecting Le Corbusier, you chose not a safe and familiar figure . . . You supported him without hesitation. As a result, Harvard has been rewarded with a daring and distinguished building. The leadership you have shown makes us all proud." To steer clear of the "safe and familiar," and to exercise intellectual leadership on every level, are, of course, the earmarks of any good university.

Opposite: Detail at northwest corner shows the buff-colored exposed concrete used throughout. Top floor has a long terrace outside the director's studio-workshop.



Studio-workshop on third-floor level (above) has a 8-foot-diameter skylight, display shelves built into serrated window wall. Below: approach ramp from Prescott Street to third-floor entrance.



PHOTOS: LOUIS REZENS

The Visual Arts Center is a very flexible building—and had to be, since the program also was kept very flexible. The Center will be used by undergraduates taking general introductory courses in such fields as photography, movies, painting, sculpture, and graphics.

The most striking aspect of the building (apart from its astonishing overall form) is the diagonal ramp that rises from Quincy Street to the third-floor level of the Center, and then descends toward Prescott Street. One purpose of this ramp is to place the entrance to the building halfway up, so that all five floors are easily accessible from the main lobby. Other characteristic features are the concrete *brises-soleil* long identified with Le Corbusier's work in semitropical areas, and the irregular "Modulor"-spaced window mullions.

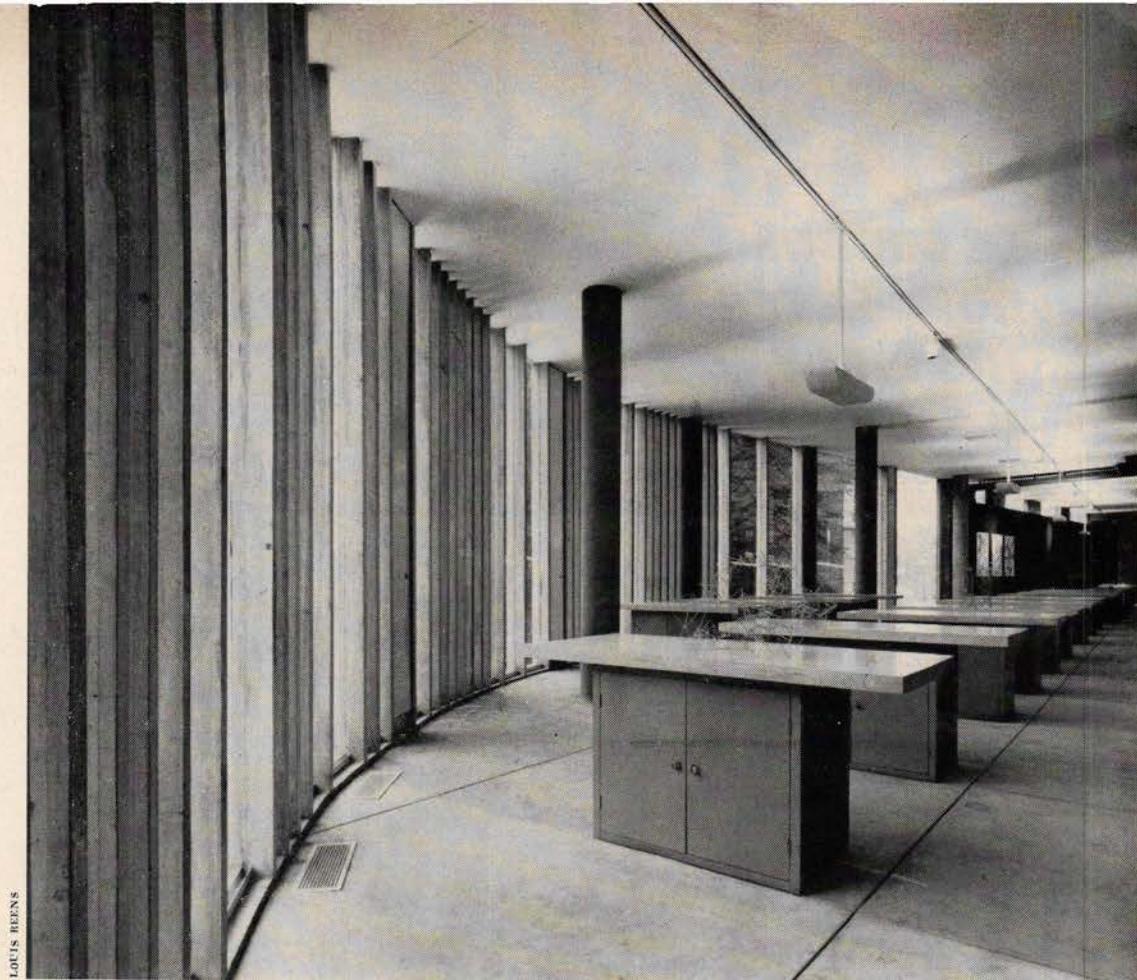
The colors applied to the buff concrete building cover the usual range of Le Corbusier's palette: bright yellows, reds, greens, and shining white, all used as accents between areas of glass. Thus, both in color and in form, the building is a violent departure from its traditional surroundings.

Perhaps this is as it should be: D. H. Lawrence used to say that it was the function of an artist to stand outside his society and to criticize it. This building may be the biggest "artist's studio" ever built—at \$1.5 million it is sure to be the most expensive. To have expected a somewhat more conformist building under such circumstances may be naïve.

FACTS AND FIGURES

Carpenter Center for the Visual Arts, Harvard University, Cambridge, Mass.

Architect: Le Corbusier; Sert, Jackson & Gourley, collaborating architects. Landscape Architects: Sasaki, Walker & Associates. Engineers: William J. LeMessurier & Associates, Inc. (structural); Paul Weidlinger, consultant; Delbrook Engineering, Inc. (mechanical); Thompson Engineering Co. (electrical). Acoustical consultants: Bolt, Beranek & Newman, Inc. General contractor: George A. Fuller Co. Construction cost: \$1.5 million.

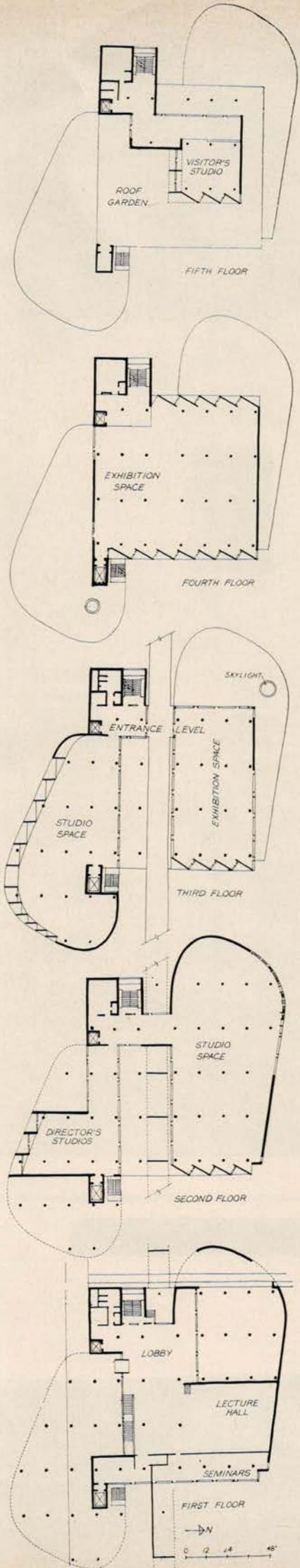


LOUIS BEENS

Three-dimensional studio-workshop on second floor has a curved glass wall divided by irregularly spaced mullions that follow Le Corbusier's Modulor scale. Below: same wall seen from outside.



GEORGE BARROWS

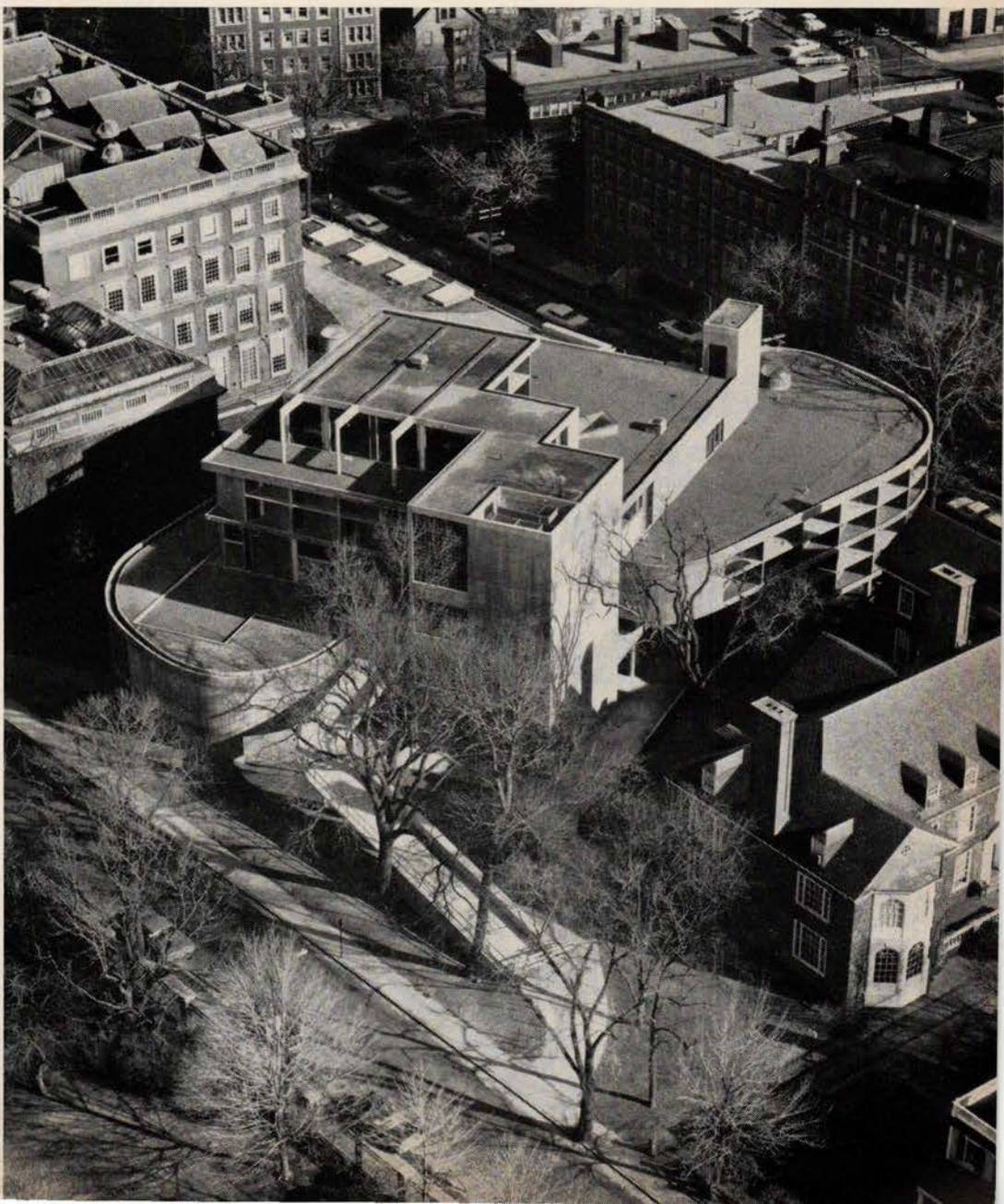


LOUIS REENS



Director's studio (above) is located on the top floor, has its own terrace. It is currently occupied by the sculptor Mirko. Below: the center seen from the southwest. Fogg Museum is at left.

LAURENCE LOWRY





SPLIT HALL FOR SCIENCE

The two widely contrasting wings of the Olin Hall of Science (left) at The Colorado College were separated to define two different methods of teaching college science.

The fortress-like building on the right, with thick brick walls and sparsely scattered windows, was designed for research and is as introverted as it looks. It houses the labs and research areas (4) for physics, chemistry, botany, and zoology. President Louis Benezet calls these labs "the shortest route to education in science."

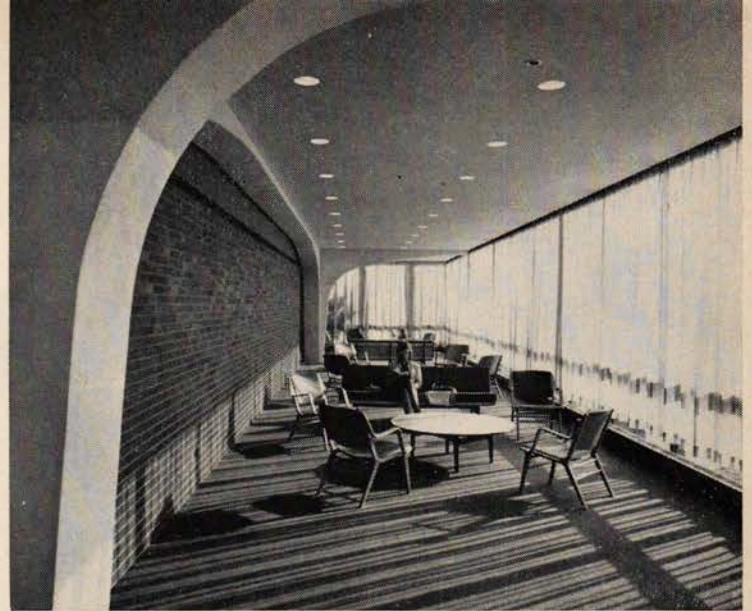
Architects Caudill, Rowlett & Scott compare the thick walls enclosing the labs with a grasshopper's skin where structure and vital parts are combined in a protective shell. Actually, Olin Hall's "exoskeleton" has two parallel exterior walls separated by a 4-foot chaseway, containing all the gas, water, and electric lines, as well as a special vacuum system for removing waste. With demountable interior panels that can be moved to open outlets anywhere in the building, the architects have provided invaluable flexibility for all types of research.

Group demonstrations and lectures also play an important part in science instruction and the low, glass-walled building on the left (opposite page) houses a 185-seat amphitheater. Sunny glass-lined galleries (1) are wrapped around the windowless lecture theater (2), forming cheerful open areas for group discussion and seminars. Instructors and students enter the amphitheater from different levels: a glass-enclosed tunnel on the ground level leads directly to the lecturer's podium (3); students arrive for lectures on a raised bridge connecting both science wings on the second-story level.

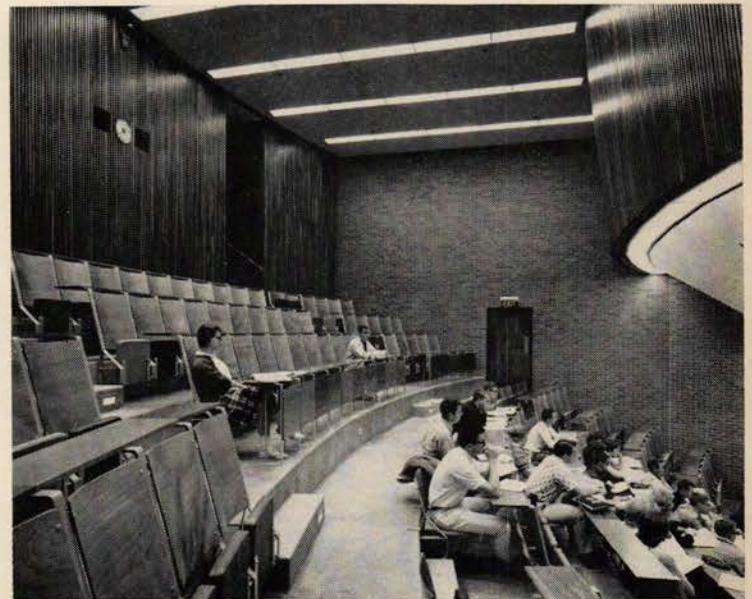
FACTS AND FIGURES

Olin Hall of Science, The Colorado College, Colorado Springs, Col. Architects: Caudill, Rowlett & Scott. General Contractor: B. H. Baker, Inc.

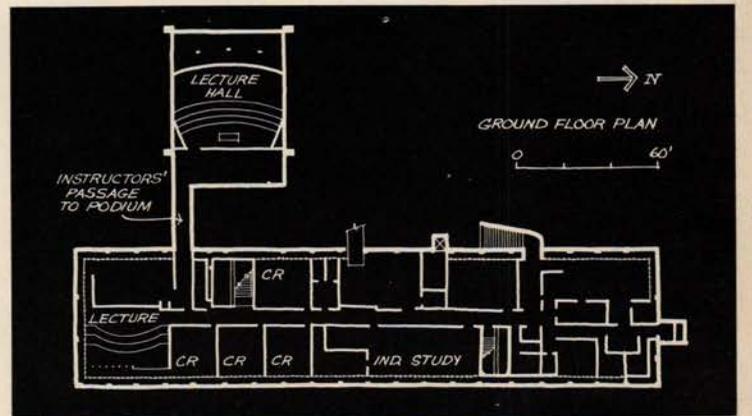
Building area: 70,442 square feet. Construction cost: \$1,146,172; \$16.26 per square foot. Financed by Olin Foundation grant.



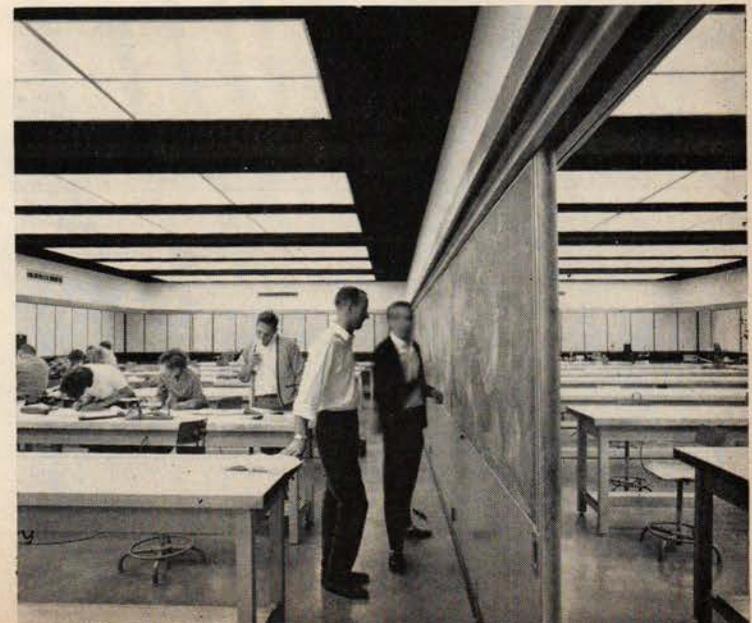
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SKYLIGHTS FOR STUDIOS

The line of slanting windows on the left assures a clear north light for the new Goldman-Schwartz Art Studios at Brandeis University, Waltham, Mass.

Architects Harrison & Abramovitz have carefully oriented all four of the larger teaching studios—for sculpture, painting (1), drawing (3), and graphics—plus three small ones (used by faculty artists for their own work) towards the north. Clerestory windows, set within the angles formed by saw-tooth roofs, bring natural light deep inside the long studios.

A terrace (opposite page) runs along the line of studio windows, and students set up easels there in spring and summer months. A central garden court is also available for outdoor work and as an exhibit area. The studios were sited in relation to a rock ledge, which drops off around the building, and a natural screen of trees; both of these contribute to a sense of privacy and isolation from the rest of the campus.

The pinwheel plan (2) with three different lines of rooms (studios, classrooms, administrative offices) spinning off from the central court expresses the building's three separate functions. Classrooms are used largely for studying slides. Since exterior light must be minimal, all windows there are clerestories.

Building materials are simple: a structural concrete skeleton, exposed and bushhammered; brick walls; and concrete floors covered with vinyl asbestos. The finishes are hardy enough to take the roughest student treatment. On the interior, exposed brick and cinder-block walls and raw concrete grid ceilings have been whitewashed throughout.

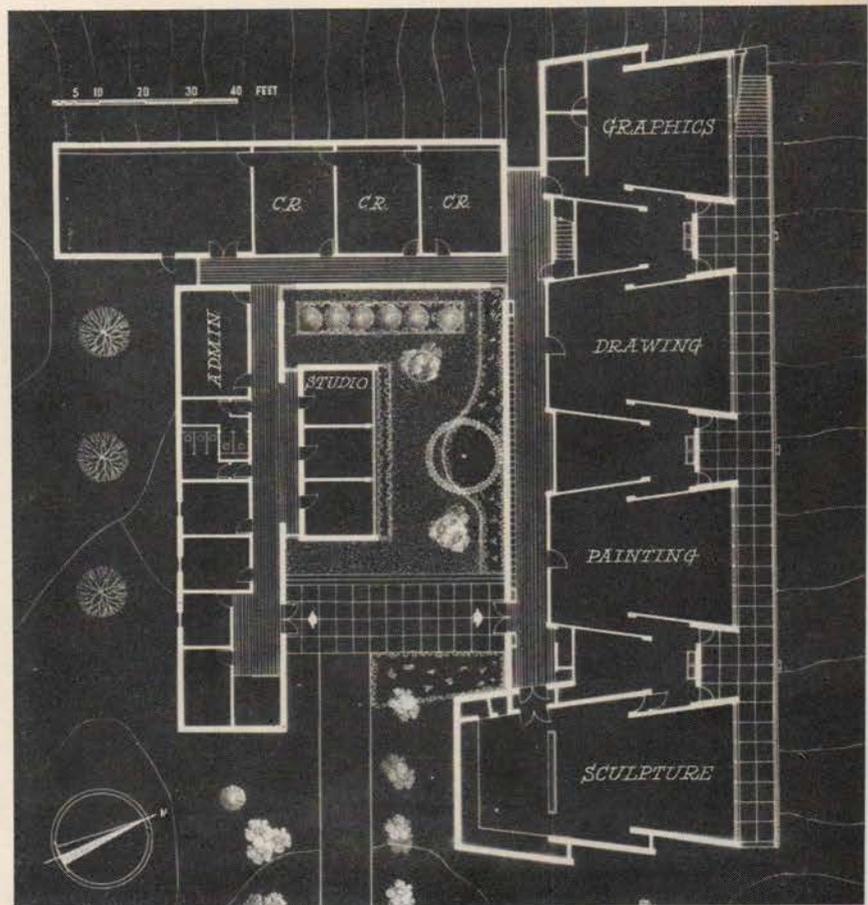
FACTS AND FIGURES

Goldman - Schwartz Art Studios, Brandeis University, Waltham, Mass.

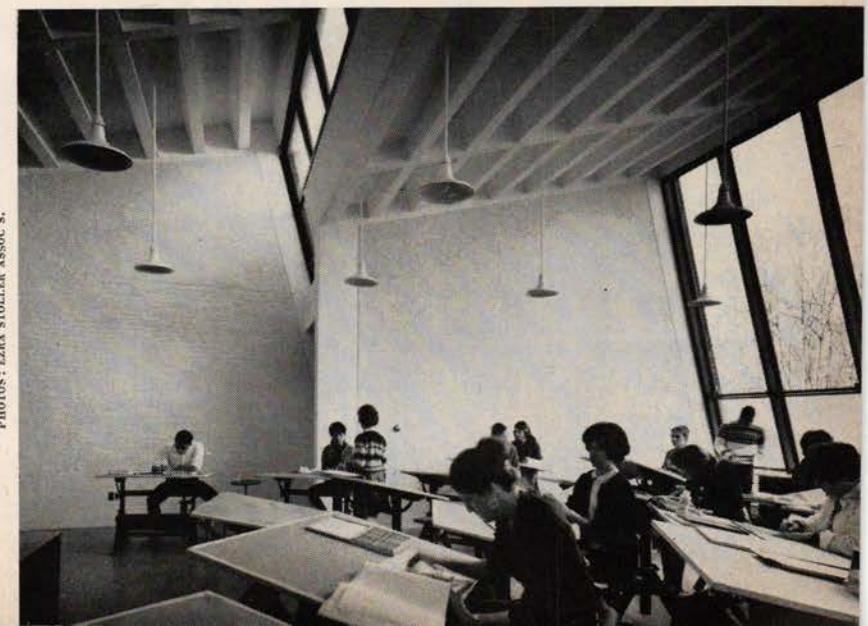
Architects: Harrison & Abramovitz. Partner-in-charge: Max Abramovitz. Landscape architect: Richard K. Webel. Engineers: Jaros, Baum & Bolles (mechanical and electrical); Linenthal & Becker (structural). Building area: 16,500 square feet. Construction cost (including fixed teaching equipment): \$495,000; approximately \$30 per square foot.



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PHOTOS: EZRA STOLLER ASSOC'S.



NEW DORMS FOR COEDS

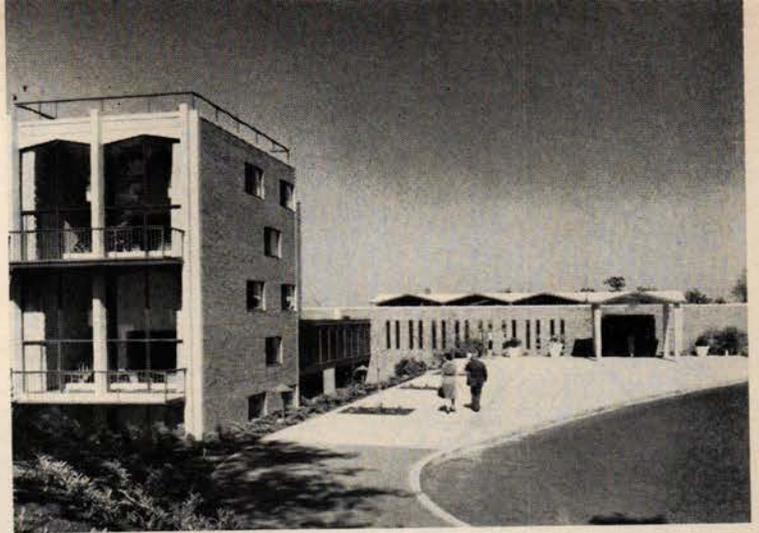
The terraced gardens and retaining walls shown opposite are part of a steep site chosen for the new women's residences at the University of Washington in Seattle. Three buildings (twin dormitories separated by an administration and recreation center) are perched on the edge of an abrupt slope, looking out over one of Seattle's spectacular waterways.

The three buildings are linked by bridges (2). Because of the different floor-to-floor heights, the bridges connect the top level of the central building with the third floors of the dorms. Facilities for the whole complex in the central building—dining and recreation rooms, a large lounge (4), and a garden court—are shared between the two residences.

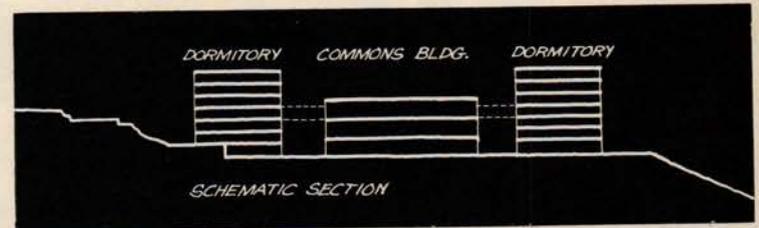
In place of the usual monotony of institutional brick walls, Architects Young, Richardson & Carleton have reduced the scale to more human proportions by using precast, brick-faced concrete panels with narrow, vertical joints (opposite), staggered windows and balconies (1). The dormitory interiors have also been broken down into "houses," each of which is formed by two floors with double-room accommodations for 100 girls. These independent "houses" have separate study rooms, laundries, kitchenettes, house-mothers' apartments, and two-story, glass-lined lounges (1). Altogether, there are six of these complete two-story units, three in each dormitory. Both residence buildings are placed at right angles to the slope. Coeds' rooms ring the perimeter with views out toward the lake. Across the corridor from these rooms is a central utility core.

FACTS AND FIGURES

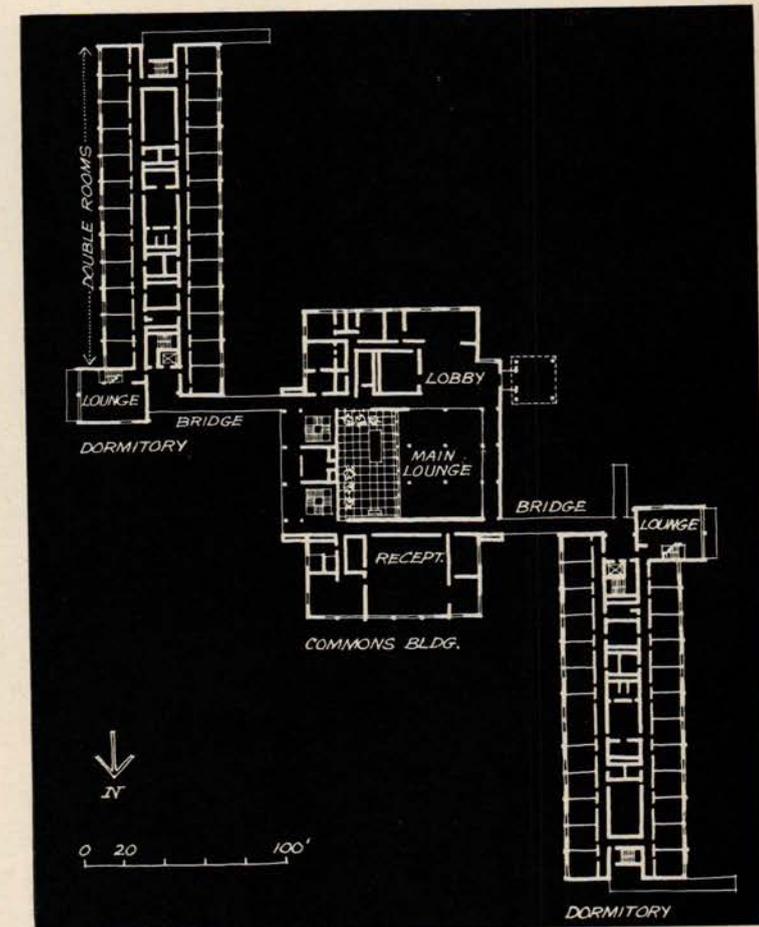
Women's Residence Hall, University of Washington, Seattle, Wash. Architect: Young, Richardson & Carleton. Job Captain: Phillip L. Jacobson. University architect: Frederick M. Mann Jr. Engineers: Worthington, Skilling, Helle & Jackson (structural); Bouillon, Griffith, Christofferson & Schairer (mechanical); Beverly A. Travis & Associates (electrical). General contractor: Wick Construction Co. Building area: 104,200 square feet. Construction cost: \$1.7 million; \$16.74 per square foot.



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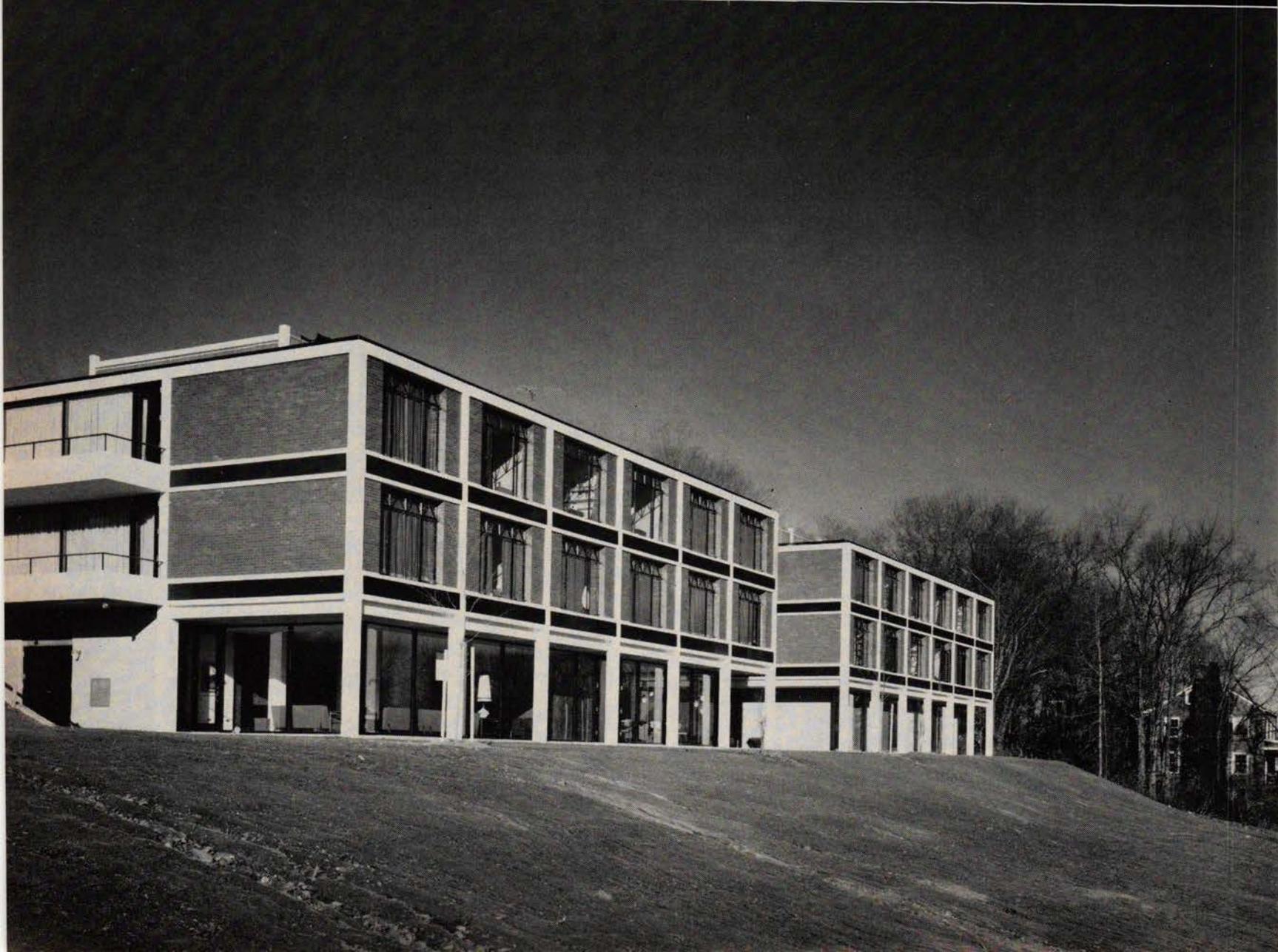
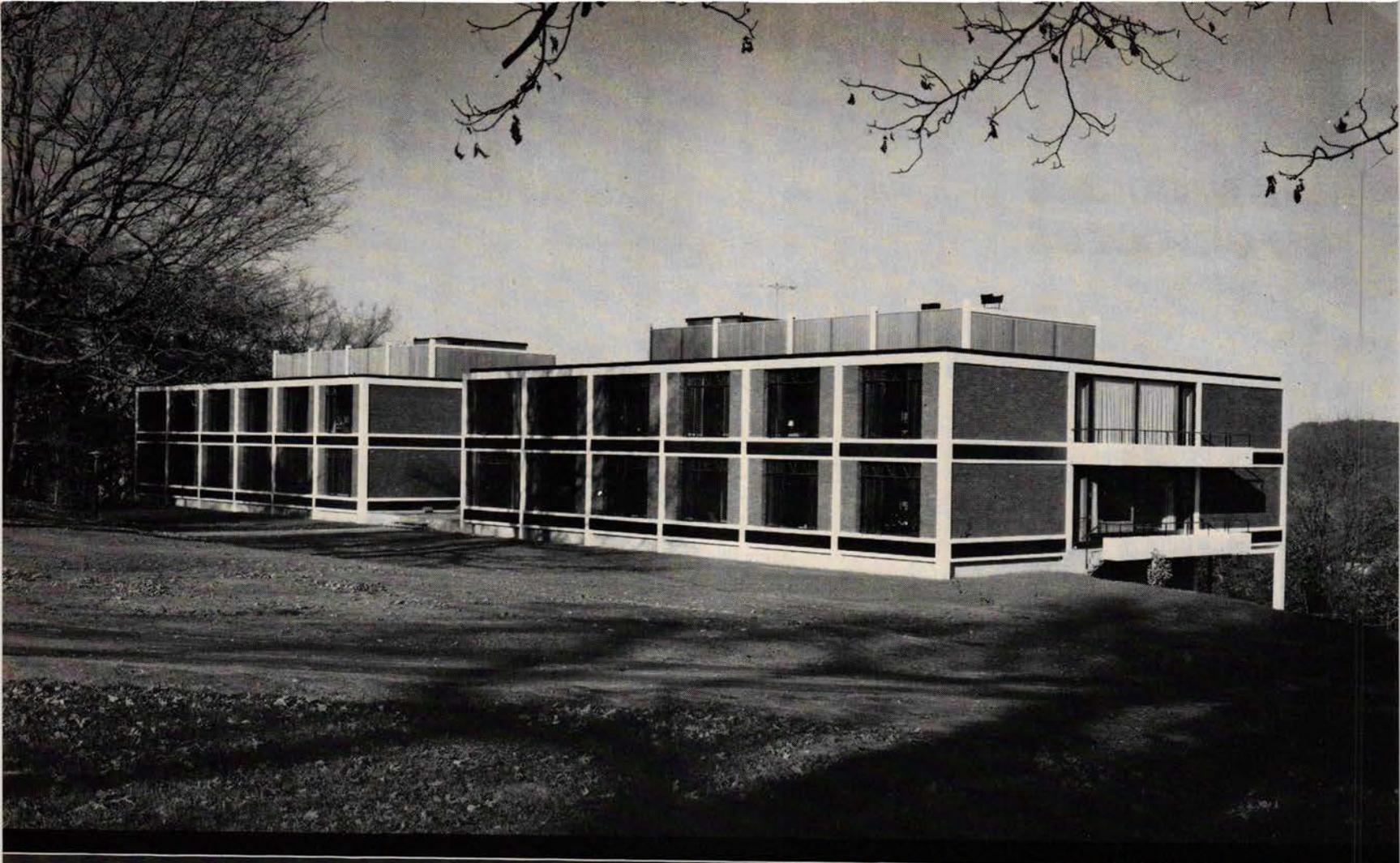


3



4

PHOTOS: CHAS. R. PEARSON



TRIM HOUSE FOR GIRLS' CAMPUS

The neatly blocked façade of Hillside House Dormitory (left) at New York's Briarcliff College marks the beginning of a ten-year, \$6.1 million expansion program. During this period, Briarcliff's enrollment will double from 300 to 600 girls. But Architects Sherwood, Mills & Smith have kept the charm of a small college community in designing the new, small-scale dormitory.

Two more dormitories, a library, auditorium, and chapel are included in the master plan (also by Sherwood, Mills & Smith) and will also be in keeping with Briarcliff's present character. Hillside House, for example, accommodates just 100 girls. This number has been further subdivided inside the dormitory into living units for 25 girls, with a study-lounge in each unit (2). Two more lounges are on the basement level, with an apartment for the housemother nearby. Hillside House derives its name from the site which slopes away to the east, providing pleasant views across a valley for most of the basement and lounge area. A flight of stairs (3) leads to a glass-lined lobby on the first floor.

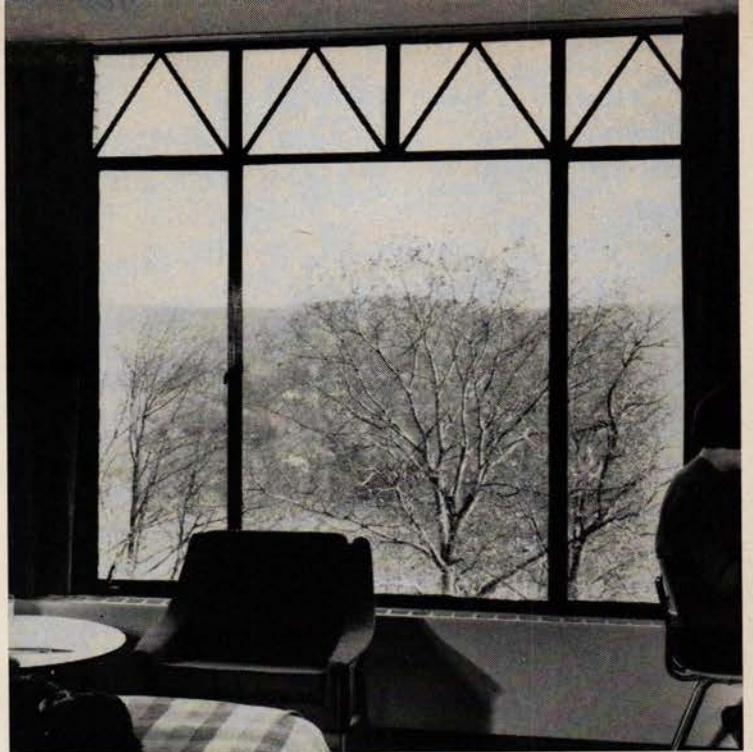
Rooms have a basic 250 square feet of floor area, and separate study spaces, for each student. Windows are virtually wall-to-wall and a decorative rickrack design of black steel has been added across the top panes (1).

The white concrete frame on the dormitory's exterior is infilled with red Pennsylvania brick. Black slate spandrels provide a definite horizontal accent. Translucent plastic parapets around the edge of the roof guard not only chimneys and mechanical accessories from view, but also a favorite spot for student sunbathing.

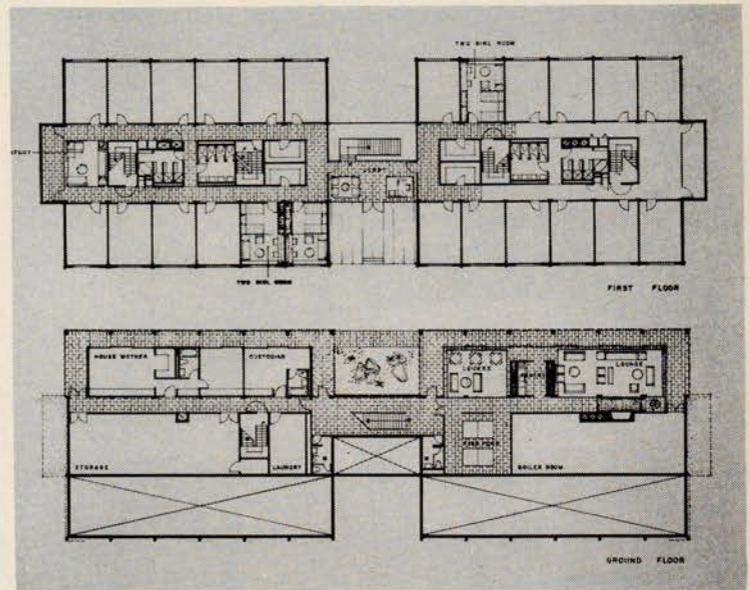
FACTS AND FIGURES

Hillside House Dormitory, Briarcliff College, Briarcliff Manor, N.Y. Architects: Sherwood, Mills & Smith. Partner-in-charge: Gray Taylor. Engineers: Abrams & Moses (mechanical and electrical); Wayman Wing (structural). General contractor: Peter Camilli & Sons, Inc.

Building area: 27,000 square feet. Total construction cost: \$600,000; \$21.08 per square foot.



1



2



3

PHOTOS: JOSEPH W. MOLLITOR



DESIGN FOR A CAMPUS

The vaulted spaces and shaded arcades at left are part of the first building on a large new campus near Brighton for the University of Sussex.

Sussex is one of Britain's three new postwar universities (others: Keele, York) and will have 1,200 students by 1965. At present, after one year of operation, there are 450 students living in Brighton's Regency boarding houses and commuting to the 200-acre campus of rolling parkland. The design of this campus is by Sir Basil Spence, whose Coventry Cathedral was completed last year (FORUM, July '62).

First part of the Sussex campus to be finished is College House, shown here (1, 3). It was given priority because the 38-foot central arch (opposite) will be the gateway to the future university. College House will be used by students for the kind of clubs and activities that are essential for a new university's *esprit de corps*. Some space is now taken over temporarily by classrooms.

A student refectory seating 300 is on the second floor and public dining rooms are on the third (2). Precast concrete vaults with spans of ten, 15, and 20 feet cover the ground-floor arcades.

Future campus buildings (included in first group: library, physics and chemistry classrooms) will also have concrete and brick as basic materials, a maximum height of three stories, and the recurring theme of vaulted arcades and interlocking courtyards. Sir Basil has acknowledged a combination of historical influences in shaping his new university: the site plan of the Athens Agora with its flexibility and room for growth; Le Corbusier's vaulted houses; and the great arches of the Roman Coliseum, as they are today with structure exposed.

FACTS AND FIGURES

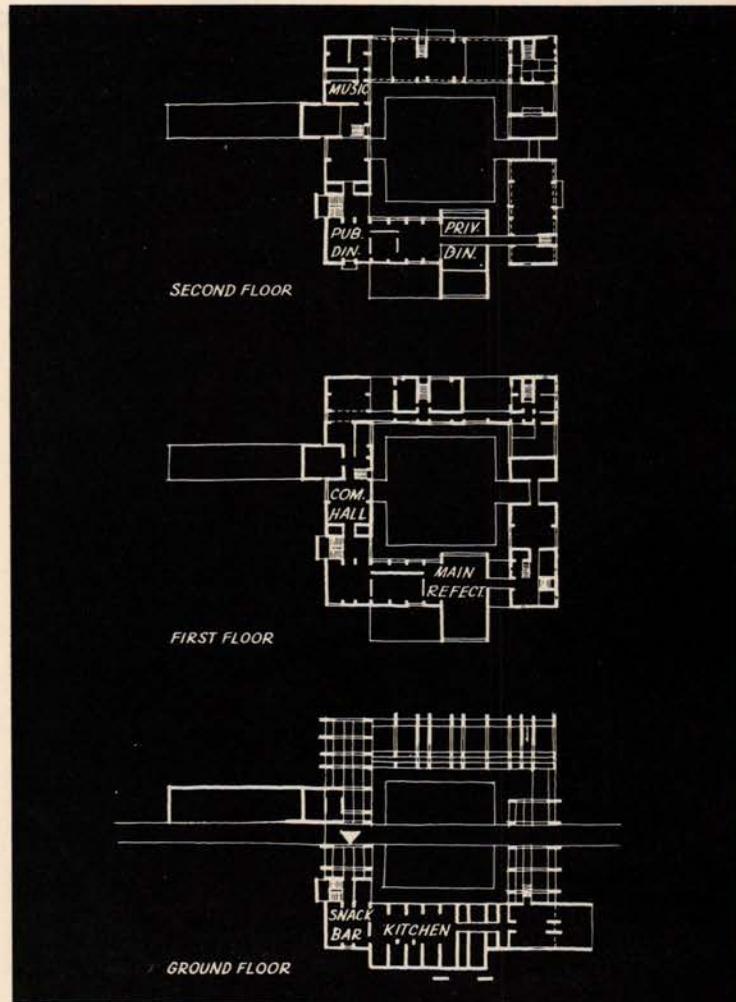
College House, University of Sussex, England.

Architect: Sir Basil Spence. Engineers: Ove Arup & Partners (structural); Steensen, Varming & Mulcahy (mechanical and electrical). General contractor: James Longley & Co., Ltd.

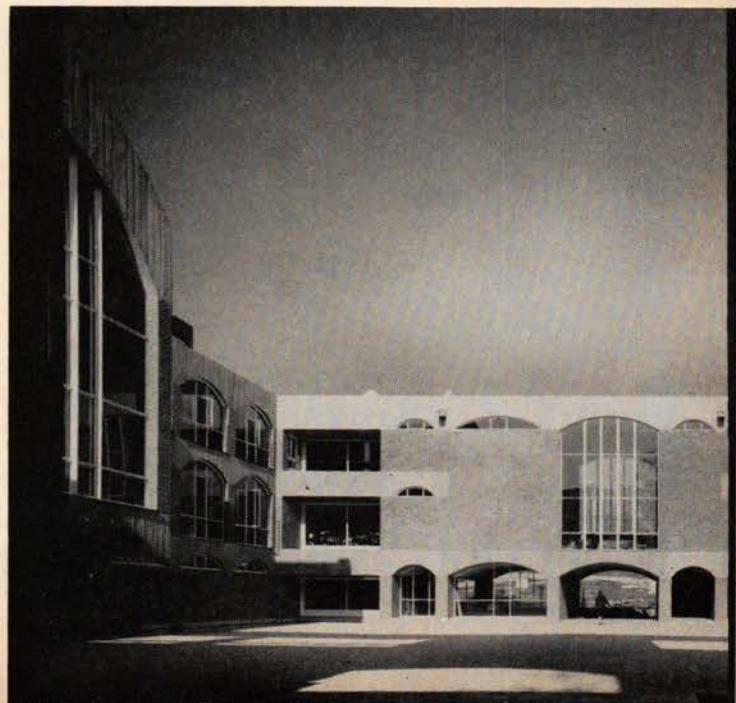
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The urban university—once a city-within-a-city—is under growing pressure to expand its facilities. In this expansion, it is beginning to come face to face with unexpected problems—and unexpected opportunities.

BY DAVID B. CARLSON

TOWN AND GOWN

One of the most spectacular growth industries of postwar years has been higher education. And it appears that this particular "growth industry" is just hitting its stride: estimates put the volume of new buildings at \$10 billion by 1970.

Most of this money will be spent in cities, much of it in ambitious expansion programs covering vast areas of once-blighted land. Programs are already underway in:

▶ Pittsburgh, where a \$450 million redevelopment and building effort is being led by the University of Pittsburgh and Carnegie Institute of Technology.

▶ Cleveland, where the University Circle Foundation is acting for 29 institutions (particularly Case Institute and Western Reserve University) in a \$175 million expansion program.

▶ Philadelphia, where the University of Pennsylvania and Drexel Institute are spearheading an expansion program that has already built \$80 million of new facilities in West Philadelphia, with another \$100 million on the boards.

There are many others, too. In Chicago, the University of Illinois is getting a new downtown campus (on the site of a former slum) through \$50 million of university expansion bonds approved by Illinois voters in 1960. And there is, everlastingly, the fabulous California boom (see pages 96-103), where university expansion and new campuses are in effect creating cities of their own.

How urban renewal binds the university to the city

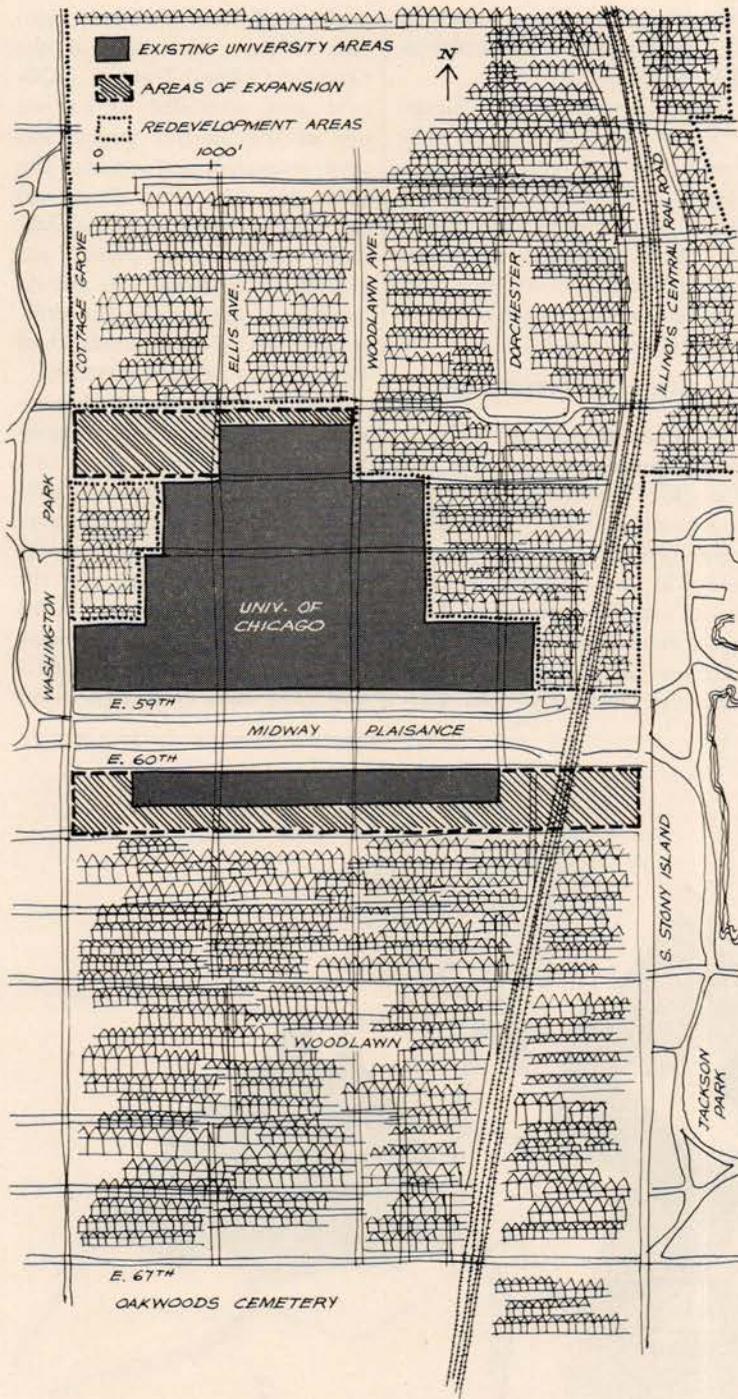
In all of the examples cited above, with the exception of California, the expansion programs represent a deep commitment by great universities to their cities. This commitment arises partly from the large investment already existing in educational plant, but it also reflects the recognition that the university really belongs in the city. And the city, for its part, desperately needs the university, for both economic and cultural reasons. (The economics are impressive: Yale University, for instance, is New Haven's second largest employer, and one of its top builders with a \$50 million expansion program currently underway. And in Pittsburgh, the University of Pittsburgh is today that city's second largest employer.)

This commitment to the city is being cemented through the medium of urban renewal. In Pittsburgh, Philadelphia, Cleveland, Chicago, and over 100 other cities, urban renewal is playing an

important role in university expansion. Renewal in this effort works basically in two ways:

▶ City redevelopment agencies acquire and clear land near colleges or universities, then sell it to them for expansion, at costs far below what the ordinary market price would have been. So far, 64 universities have bought 970 acres in this manner, at a total cost of \$28 million. Two great Chicago campuses are being created in this way, the one for Illinois and the other for the Illinois Institute of Technology.

▶ When universities buy land in blighted areas adjacent to their campuses, they can get urban renewal funds from the federal government in repayment for acquisition and clearance (though not for the cost of new facilities) under the so-called Section 112 program. At the same time, the city benefits, for it can claim the amount of the university's expenditure as part of its one-third



UNIVERSITY OF CHICAGO aims to expand its campus mainly at its southern and northwestern boundaries. Some land has already been earmarked for such expansion, while at the same time the surrounding Hyde Park-Kenwood neighborhoods are in the process of a big rehabilitation program.

But the University's tactics in the area have stirred up so much opposition in Woodlawn, to the south, that the city's redevelopment proposals for that section have been completely stymied. So far, the University's success in upgrading its area is almost balanced by failure to gain its neighbors' support.

share of urban renewal costs throughout the city. More than 90 universities (and hospitals, which are also eligible under the law) have applied for \$130 million of federal funds, which has the effect of adding an additional \$260 million to total urban renewal spending.

One of the most important by-products of urban renewal has been the planning of university growth within the framework of the city's overall development. This, in fact, was one of the hopes underlying the Section 112 program when it was passed in 1959. By that time, it was obvious that uncontrolled university expansion could contribute materially to the blight and obsolescence that already bedeviled many university communities. The 112 program requires that university expansion into or near renewal areas be planned and coordinated with the planning for the redevelopment area itself.

These federal requirements have been instrumental in the rise of the development corporation or foundation, as the principal instrument for planning of institutional expansion on a large scale. Cleveland's University Circle Development Foundation is a good example. Started in 1957, it coordinates the expansion of 29 institutions in a 488-acre area about 4 miles from downtown. The Foundation has acquired 44 acres of land already, about one quarter of the total 170 acres needed for growth over the next two decades. The Foundation has its own police force and is developing parking facilities (costing \$9.6 million) for the whole area. All planning is done by the Foundation (with Architects Adams, Howard & Greeley), which also develops and administers common open spaces throughout the entire University Circle area.

Cleveland's University Circle

development raises a critical question: Do such projects create cultural ghettos?

The Foundation is vitally interested in rehabilitating the vast blighted area near the university, but it is concentrating more on developing the facilities of its own institutions. Of course it wants a healthier surrounding community, but the present planning shows a strong trend to create a self-contained cultural complex with almost no strong ties to the adjacent neighborhoods.

Urban Renewal Commissioner William L. Slayton himself has emphasized what has long been obvious: "In assisting urban renewal projects in the immediate vicinity of universities, we have frequently observed that there exists an almost universal attitude in non-university people of hostility toward the university and its authorities."

Much of this hostility is directly attributable to the university's long-standing indifference to the problems of its surroundings. Partly it arises from a conflict between the needs of its own expansion and the desires of the people in the neighborhood to maintain their own character.

Chicago and its neighbors

The most significant example of a university attempting to establish some sort of meaningful rapport with its community has been that of the University of Chicago. In 1945, Chancellor Robert M. Hutchins said: "For the last 15 years, the university neighborhood has steadily deteriorated until today, I am ashamed to say, the University of Chicago has the unfortunate distinction of having the worst-housed faculty in the U. S."

Hutchins should have been more ashamed that it took another seven years (and only following a disquieting series of crimes) before the University

really knuckled down to do something in its community. And there was room for shame, too, in the University's steadfast enforcement of restrictive covenants in the area—at least until 1948 when these were declared by the U. S. Supreme Court to be legally unenforceable.

Through the first years of the postwar period, the University simply attempted to maintain the neighborhood's status quo, but by 1952 it was obvious it would have to organize its activities with an eye to massive redevelopment of the whole area. It established the South East Chicago Commission (SECC) to accomplish its ends, which were basically neighborhood stabilization (particularly to prevent the Hyde Park area from becoming all Negro) and getting land for expansion.

SECC launched at once into a vigorous program of building-code enforcement, developed an urban renewal plan (which was adopted by the city) for the area, and worked to keep upper-income families where they were. The University put \$4 million into "neighborhood activities," making it clear that it was no longer indifferent to its environment.

Success—and failure

SECC, under the vigorous leadership of Julian Levi, was successful in a number of ways. In Hyde Park and Kenwood, it did much to stem deterioration, through a program of rehabilitation, which involved considerable citizen participation. The city adopted SECC's plan for redevelopment of Hyde Park, including new housing (built by Webb & Knapp to the designs of I. M. Pei and Harry Weese) for upper-income families.

But if SECC—and the University—succeeded in its planning and redevelopment activities, it seems to have failed in obtaining much real support among its

neighbors. It stirred up a hornet's nest of opposition in its effort to get expansion land for the University in Southwest Hyde Park. Leaders of this largely Negro area vigorously protested against what they saw as the private use of the power of eminent domain to oust them from their homes. This opposition of the Negro community, fired by the memories of the University's support of restrictive covenants in the 1930s and 1940s, has hardened considerably to the south of the University, where Chicago would like to get more land for expansion and coincidentally upgrade one of the city's most congested blighted areas, Woodlawn. The University worked closely with the city in developing a plan last year, but the plan has not been adopted by the city yet. A critical factor is

Negro opposition, now organized in The Woodlawn Organization (FORUM, May '62).

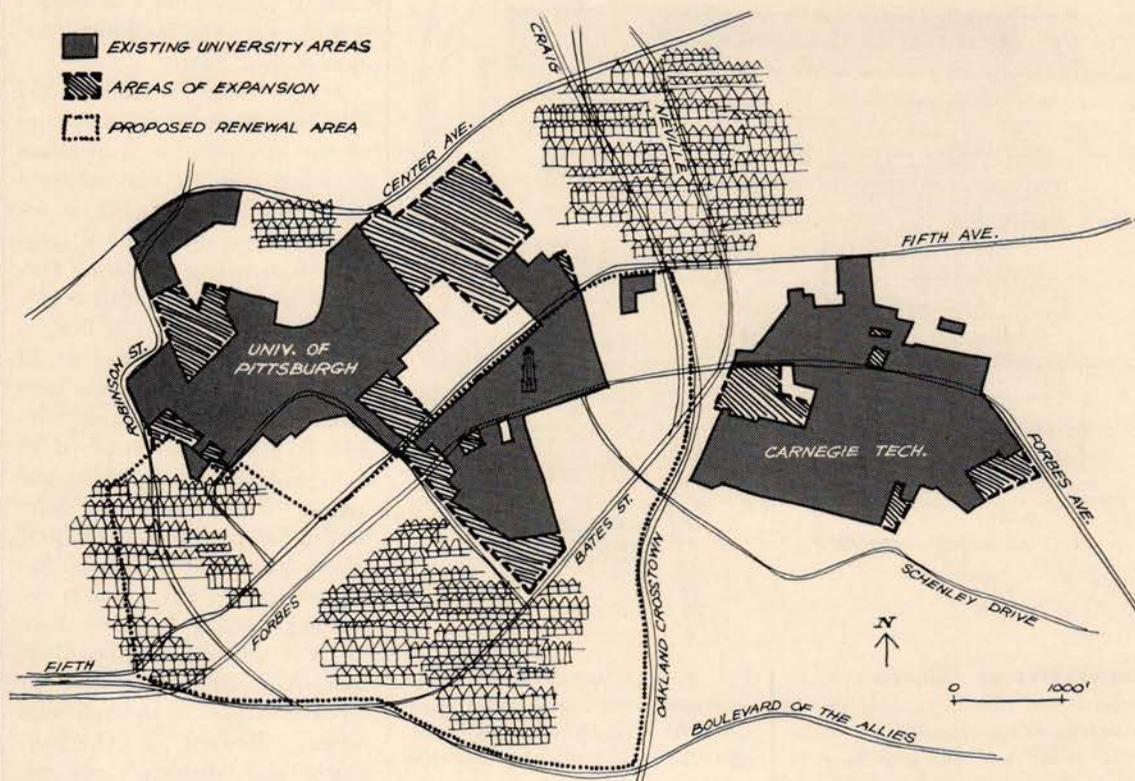
The University of Chicago seems to have failed in its community efforts largely because it directed its pressures at city-hall politicians to gain its ends, rather than first achieving agreement with its neighbors on goals and then confronting the city with a united effort to gain them.

Opposition in Pittsburgh

Every urban university today is wary of getting into the same sort of tangle of community hostility—with racial overtones—as the University of Chicago has. But sometimes, in the evolution of ambitious expansion programs, Chicago's experience seems to have been lost. In Pittsburgh, the University of Pittsburgh and Car-

negie Tech are principal sponsors of the construction of the Oakland Cultural District, a 572-acre area scheduled to become one of the nation's largest and most potent cultural centers. The plans are big (Pitt alone will spend \$250 million) and the Oakland Corporation, which was created to coordinate all non-institutional programs in the area, is well healed with funds from Pittsburgh's wealthiest interests.

But the Oakland plan has already encountered some opposition and is sure to run into more. Residents and merchants justifiably fear displacement—the plan aims to oust 40 per cent of the area's present residents, and the 3,000 to 3,800 new apartments scheduled to be built are obviously not suited for them economically. The two universities want



UNIVERSITY OF PITTSBURGH, with Carnegie Tech and other institutions, plans a huge \$450 million cultural district. But there has al-

ready been opposition to its plans for an industrial research park which would have cleared part of an existing residential area. In the

expansion, the universities hope to consolidate their respective facilities, which are now scattered throughout the district.

to include an industrial research park in their plan, but the first site announced happens to lie in the midst of a crowded Negro area. In a city with a shortage of Negro housing, this was bound to create opposition, and it did. The city's politicians quickly squashed any notions of massive clearance in the area.

Progress in Philadelphia

One of the most significant examples of coordinated university expansion in the nation is in West Philadelphia, where the University of Pennsylvania and Drexel Institute are the leaders in a program which is directed not at walling off the area's institutions from the community, but rather knitting them more closely into its texture. As the West Philadelphia Development Corporation (WPDC) says, "We do not wish to create a single-class community, sterilized of all the cultural, ethnic, and racial differences that make urban society dynamic."

WPDC was established in 1959 to coordinate the programs of five institutions, of which Penn is the most influential. It intends to create a University City within the West Philadelphia area, but with a minimum of dislocation of the existing community. For instance, while some 800 acres in the total of nearly 2,000 are subject to some form of urban renewal, only 165 acres are slated for clearance.

The emphasis in West Philadelphia is on rehabilitation and conservation, all with strong citizen participation. The man who heads WPDC, Leo Molinaro, is admirably suited for his role. He had previously been the top trouble shooter and generator of many community redevelopment programs at ACTION, Inc. Molinaro is a firm believer in the future of the city, and devotes most of his time to achieving a solid foundation of community consen-

sus on which the institutions can then build.

In the first three years of its existence, WPDC has held over 120 citizens' meetings to discuss boundaries, costs, relocation, clearance, and land re-use proposals. The Philadelphia Redevelopment Authority has played a key role in prodding residents of one renewal site to articulate their needs and interests, and both Drexel and Penn have held many other meetings with residents of the areas immediately adjacent to their campuses.

The school program, plus increasing evidence of the physical rehabilitation of the University City area, has already succeeded in drawing university staffers back to the area. Just in the short lifetime of WPDC, the number of Penn staffers living in University City has doubled, from around 600 to over 1,200. By 1970, Molinaro estimates that a total of 3,500 staff personnel will be living in the area.

New housing, however, is still something of a problem, although some momentum is building up. One developer, who quickly sold nine new row houses (two to university faculty) is now building 46 more houses near Penn. They are attractive and well-planned and priced (at just under \$25,000) within the reach of most faculty. One concern, as the private housing market does begin to see opportunities in the University City area, is that prices of new housing might rise so quickly that the faculty is shut out of the market. At the moment, this possibility is remote, but becoming a little worrisome.

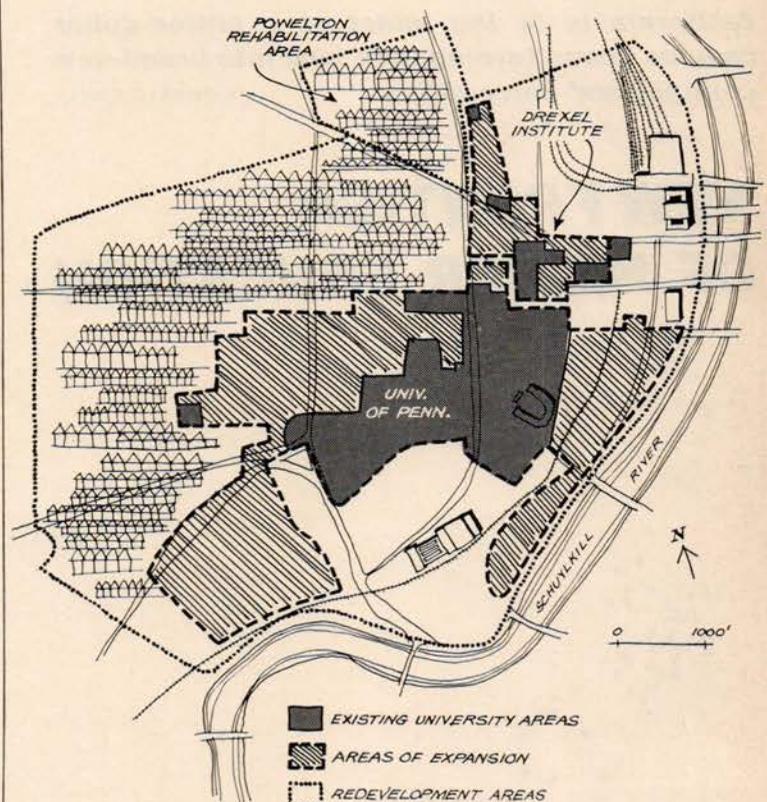
Rehabilitation of existing housing in the area is picking up noticeably, although efforts in the Powelton Village rehabilitation area are sluggish, mostly because of mortgage financing difficulties with the FHA's languishing Section 220 program. If this snarl

can be unraveled, and large-scale rehabilitation becomes feasible in such crowded areas of older housing as Powelton, University City—and all of Philadelphia—will be the richer for it.

The key point about Powelton, and the areas to the west of University City, is that they are not being subjected to university pressures for displacement, but rather, that present residents are being encouraged to see in the University City an opportunity to better their own lot. Through the school programs and the evidence of WPDC's real interest in its neighbors, the opportunity is beginning to be realized.

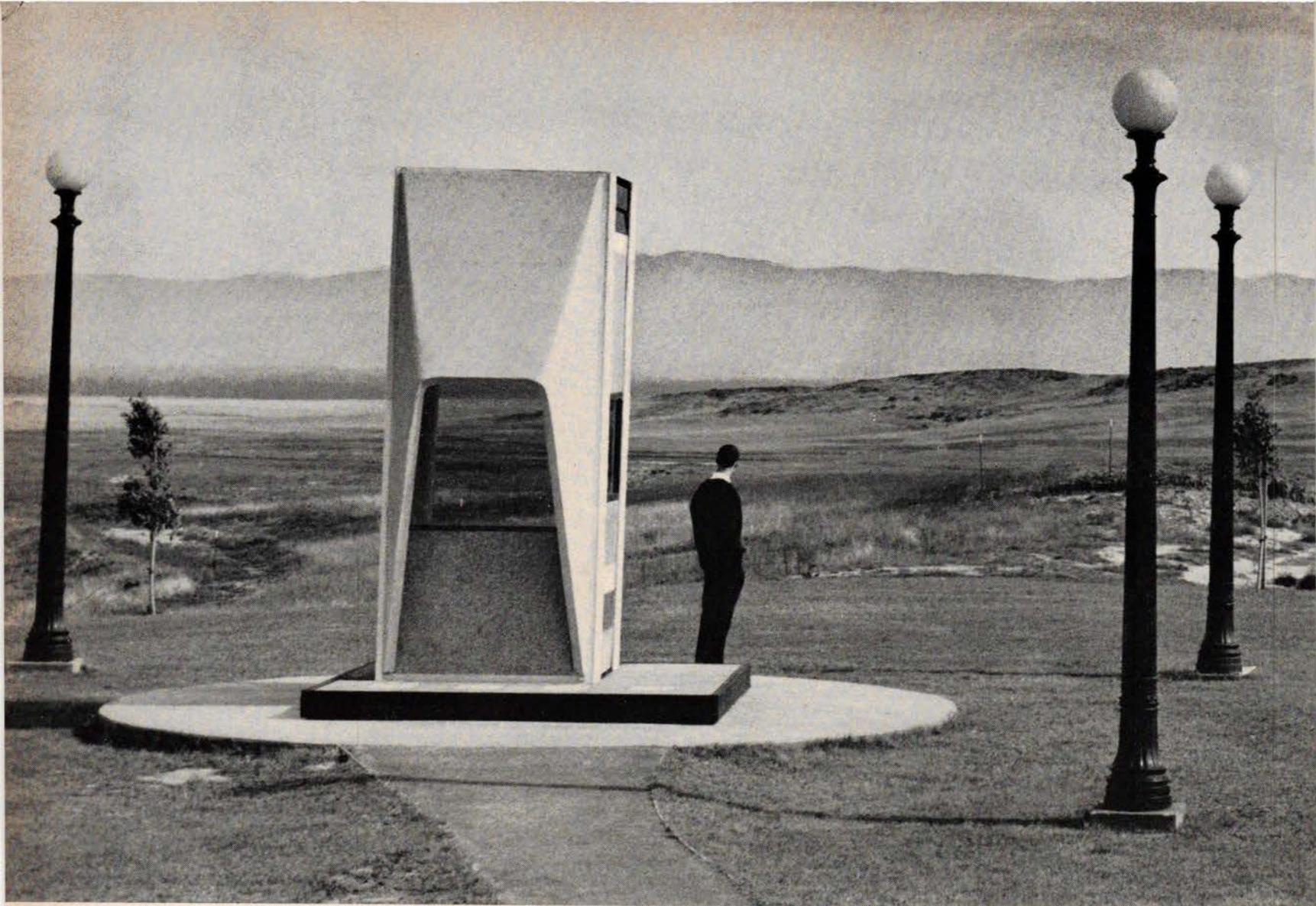
Philadelphia is pointing the way to the growth of great universities commensurate with the growth of a great city. Through-

out the nation, the potential for such growth presents a provocative challenge. But planning and economics are not alone sufficient to create greatness. The urban university has been an indifferent neighbor for too long, and now that it has a chance to rectify many past mistakes it cannot afford to bungle it. As George W. Beadle, present Chancellor at the University of Chicago, where it all started, said in his inaugural address: "Until we have learned to rebuild and prevent slums, restore beauty to our cities, and provide education and social opportunities to people who have not had them—largely because of the color of their skins—we will not have justified the faith of those who laid the foundations of our nation."



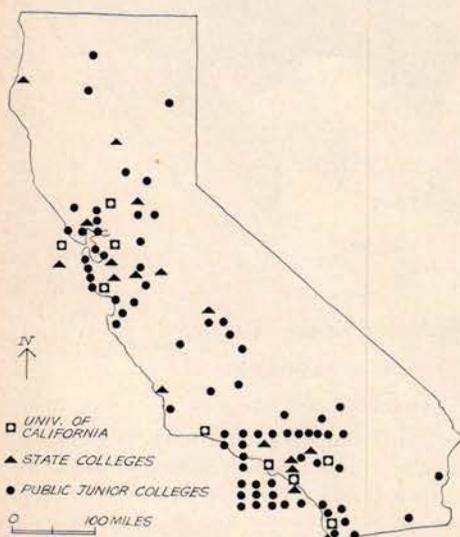
IN WEST PHILADELPHIA, the University of Pennsylvania and Drexel Institute have coordinated their development plans with those of

hospitals in the area. Working with city agencies, these institutions are taking steps to relate their plans to those of nearby residents.



California is in the midst of a billion-dollar campus boom, turning bare land into brand-new colleges and universities. BY DONALD CANTY

NEW FRONTIER OF HIGHER EDUCATION



The young man by the surrealist monument is looking out on what will be, in a little over two years, a new university. Another three decades, and the vast, barren landscape will be transformed into a bustling campus of 27,500 students, the University of California at Irvine, in the heart of a whole new community. The monument is, in reality, a mock-up of a precast concrete hood, variations of which will wall some 90 academic buildings rising as high as eight stories.

Irvine is only one of three 27,500-student campuses for which the University of California is about to break ground. There are, in addition, four new California state colleges in the works, and a push is on to build 30 more junior colleges. As the war babies come of age, a nationwide boom is developing in brand new campuses. It has already reached explosive proportions in California (see map).

Expanding the Western world's biggest academic empire

In the next 12 years, Gov. Edmund G. Brown announced recently with a mixture of pride and panic, the number of Californians in the 18 to 21 age group will increase an even 100 per cent. Of their number, nearly half—or 691,000—will be enrolled in a state-run college or university. The upshot is that California, already possessed of the largest coordinated academic empire in the Western world, will spend

a cool \$1 billion on its expansion between now and 1975.

This massive program, moreover, will be guided by a three-year-old educational master plan that is widely recognized as a model of achieving order out of academic chaos. In the postwar years, California's four-year state colleges and two-year junior colleges grew even faster than the university, to the point where they were able to compete success-



STUDIO ONE

fully for the attention of the state legislature. Their ambitions grew apace: some of the state colleges were covetous of university status, and many junior colleges wanted four-year curriculums.

Separate approaches

Each had its own approach to campus development. The university, run by a constitutionally autonomous Board of Regents, gradually developed into a sophisticated client with a large supervisory office of architects and engineers (but not in time to stop the overcrowding of its major Berkeley and Los Angeles branches). The state colleges were under the Department of Education, and thus were forced to use the design and planning services of the giant state Division of Architecture. The junior colleges, operated by local districts and feeling a financial pinch, approached building programs the way public schools do.

The master plan, adopted in 1960 by a combination of legislative and administrative action,

attempts to bring a high degree of coordination to the entire system, and to set commonly-agreed-upon goals for the somewhat frightening years ahead. The university is the sole dispenser of doctorates and the prime institution of academic research; the state colleges, given their own Board of Trustees, are to take an increasing share of the undergraduate load; the junior colleges are to be given more state aid, but will remain two-year institutions with close community ties. The legislature approved the new state college and university campuses with highest priority, but directed that emphasis be placed on expansion of the junior-college system after they are completed.

For California architects, the master plan has meant two things: first, a clearer definition of program requirements for campus design; and second, an unprecedented opportunity to prove that the profession is equipped to practice on a scale larger than the individual building. Their response is shown on these pages.

UNIVERSITY OF CALIFORNIA: PLANNING A MEGACAMPUS

In the case of the new university campuses, the prime problem facing their planners is scale—a vastness that sometimes must seem beyond the rational processes of architecture. Overall guidelines for the first two, Irvine and Santa Cruz, already have been approved in principle by the Regents (the San Diego plan was to be submitted late last month). They could scarcely be less alike.

The open land on which U. C. Irvine will rise is part of the Irvine Ranch, 93,000 acres of Orange County between Los Angeles and San Diego, whose integrated residential, commercial, and industrial development is being planned by William L. Pereira & Associates. The 1,000-acre campus site, in the coastal sector of the ranch inland from the boating center of Newport Beach, was donated to the university by the Irvine Company.

U. C. Irvine will be a great heterogeneous academic city following the generalized educational pattern of the Berkeley and Los

Angeles campuses. Initial enrollment in 1965 will be 500, increasing to 7,500 in 1975, 13,000 in 1980, and 27,500 in 1990.

Pereira, also engaged to master plan the campus, was realist enough to recognize that development over so long a time span could not be controlled by a single rigid document. Although the campus's eventual form can be summarized on a single drawing, the chief guidelines are contained in a series of dicta on such matters as land use, circulation, and building heights and masses—markedly similar to municipal planning and zoning controls.

The drawing shows the campus as a giant wheel, with six main quadrangles radiating out from a 30-acre central park. From the park, along existing drainage channels, strips of native trees and shrubs will wind between the shelves of land reserved for buildings. Within each quadrangle, by contrast, will be more formal squares and plazas.)



The principal quadrangle, to the north, will contain such general facilities as the library, administration building, and student center. From its great plaza a pedestrian mall, lined with shops, will lead to the town square of the new community of Irvine.

The other quadrangles will be joined by "the ring," a circular path around the park crossing the gullies of the site on viaducts. Undergraduate buildings will be closest to the ring, within an easy walk of each other, then related graduate schools and research facilities, housing, high-priority parking, and athletic fields.

All of this will comprise the 450-acre central campus, defined by a loop road, from which the arms of the outer campus jut irregularly. Between these projections will be three "inclusion areas"—university-related micro-communities intended to serve as buffers between town and gown.

This concentric scheme will allow development to proceed outward from a strong center, giving the university a "sense of place,"

in Pereira's words, from the beginning. The first units (designed by Pereira, Jones & Emmons, and Blurock, Ellerbroeck & Associates) will include the park-site nuclei of three quadrangles.

The Santa Cruz site

The 2,000-acre site of the U. C. Santa Cruz campus is as beautiful as the Irvine land is bare—a sloping plateau above the coastal city, looking out over Monterey Bay to the Pacific. It is alternately forest and open meadow, with a magnificent stand of redwoods at the center.

On this terrain, the university has set out to create an intimate intellectual environment totally unlike that of its other immense branches. U. C. Santa Cruz will consist of a series of residential colleges of 250 to 2,500 students grouped around a central campus of university-wide facilities. The emphasis will be on teaching, and the hope is that students will take the bulk of their courses in small seminars within their own colleges.

The task of interpreting these

aims in a physical plan has fallen to a blue-ribbon group of Bay Area architects, with John Carl Warnecke & Associates as architects and planning consultants; Robert Anshen, William Steven Allen, Theodore Bernardi, and Ernest J. Kump, consulting architects; and Thomas D. Church, landscape architect. Their first premise, as might be expected, is veneration for the site.

The university center will be in a great park, surrounded by redwoods, entered through "a structure of noble proportions" (shown in the plan, opposite, as an arc) that will be the gateway to the campus. The buildings here are to "express the dignity and ceremony of university life."

'Diversity within unity'

Beside and beyond this core are the colleges, less formal in character, on a series of scattered knolls separated from each other by trees, ravines, and open glades. Cars are kept on the campus perimeter; the colleges

U. C. IRVINE will be a highly concentrated campus, but with large areas of open space reserved to prevent congestion. The six linear groupings of academic buildings, segregated by discipline, converge strongly on the central park and its surrounding ring (1). The resulting pattern, rather than being arbitrarily imposed, evolved from the educational program and from consideration of the principal views and buildable shelves on the bumpy site. The light areas in the plan above are the campus proper; the bow-shaped cluster just above is the town center (2), and the other three dark zones (A, B, and C) are the surrounding "inclusion areas."

are linked mostly by paths for pedestrians and bicyclists.

A basic principle of the plan is that each college should have its own environmental character: "Diversity and variety within unity, rather than uniformity, is the goal. . . ." But all must be in harmony with the site. The campus, says Thomas Church, "must be magnificent in conception, daring and forthright in its design—but gentle in the hand it lays upon the land."

U. C. SANTA CRUZ will be as diffuse as Irvine is concentrated. Its residential colleges occupy a series of knolls scattered irregularly throughout the heavily wooded, 2,000-acre site. The buildings and

the spaces they create are likewise loose and informal in their arrangement. Instead of formal squares, the open areas of the campus, big and small, will be treated as highly naturalistic parks.





GEORGE KNIGHT

SAN JOSE STATE COLLEGE gives aggrieved testimony to the planning methods of the California State Division of Architecture: Build as fast and as cheaply as possible, without concern for such minutiae as architectural character, the need for open spaces, or the relationship between one building and another. The kind of chaos bred by the Division's approach was one reason why the college trustees were given authority to retain private architects.

SONOMA STATE COLLEGE will, by contrast, grow within a framework of notable order, beginning with the campus center and academic complex (right) and proceeding outward along two clear axes. The state college program is still feeling its way, so master plans must be somewhat general, even defensive, in nature at this point. Sonoma's initial enrollment will be 200 students, but the plan, by John Carl Warnecke & Associates, anticipates a total of 12,000 by 1985.

THE STATE COLLEGES: POLITICS, PRUDENCE, FLEXIBILITY

At the moment, the prime requirement for the planning of a new state college campus in California is flexibility. The entire program is still in the transitional stage that began when it was placed under an independent board of trustees by the 1960 master plan.

For the state colleges, the plan was an architectural emancipation proclamation. Until its enactment, the colleges (like all other state building programs) were firmly in the hands of the state Division of Architecture, an organization of legendary insensitivity. The master plan gave the trustees "full power" over campus planning and design—and thus the authority to use either the Division or private firms.

That such a provision should pass the legislature was something of a minor miracle. For years the Division, backed by the huge and politically potent State Employees' Association, had beaten back all attempts to loosen its monopoly on state building design. The

AIA in California made an all-out effort in 1956 to pass a constitutional amendment allowing use of private architects for state work, but was soundly defeated.

The architects based their campaign partly on the claim that the state simply did not belong in the practice of architecture on so imposing a scale. But their deeper quarrel was with the quality of the Division's work. California's state buildings boast a sterility that even the Bulgarian architectural collectives (or the U. S. Architect of the Capitol, for that matter) might envy. A sample is shown above.

One more chance

Although the master plan was passed in 1960, the state college trustees did not take office until July 1, 1961—giving the state employees one more shot at the new law. In the 1961 legislature, therefore, they pulled out all stops in an attempt to keep state colleges exclusively in the Divi-

sion's purview. It failed in committee. Principal witness at the key hearing was Architect Charles Luckman, a member of the state college board. Admitting the effectiveness of the legislative groundwork laid by the savvy California Council of AIA, those close to the scene credit Luckman's persuasiveness with being the clinching factor in defending the trustees' authority to use private architects.

The victory, however, put both the trustees and the architects on the spot. In such a politically ex-

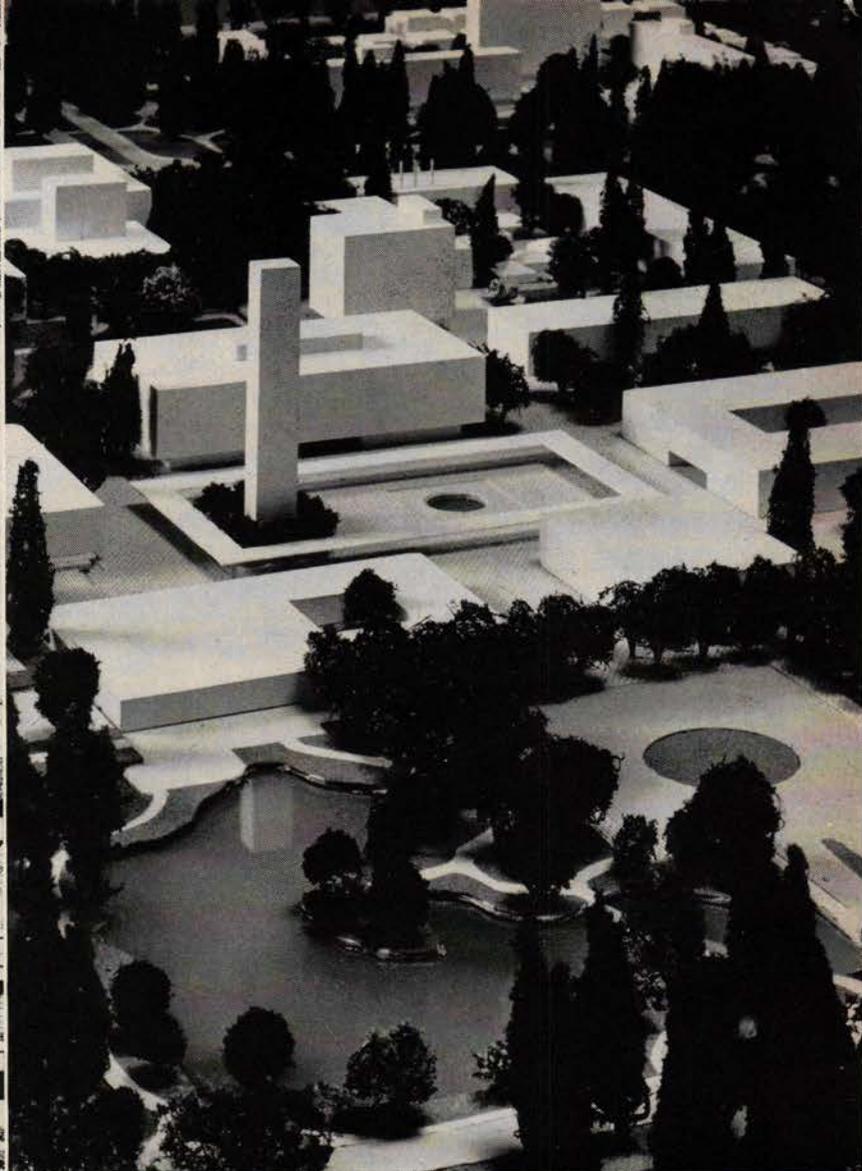
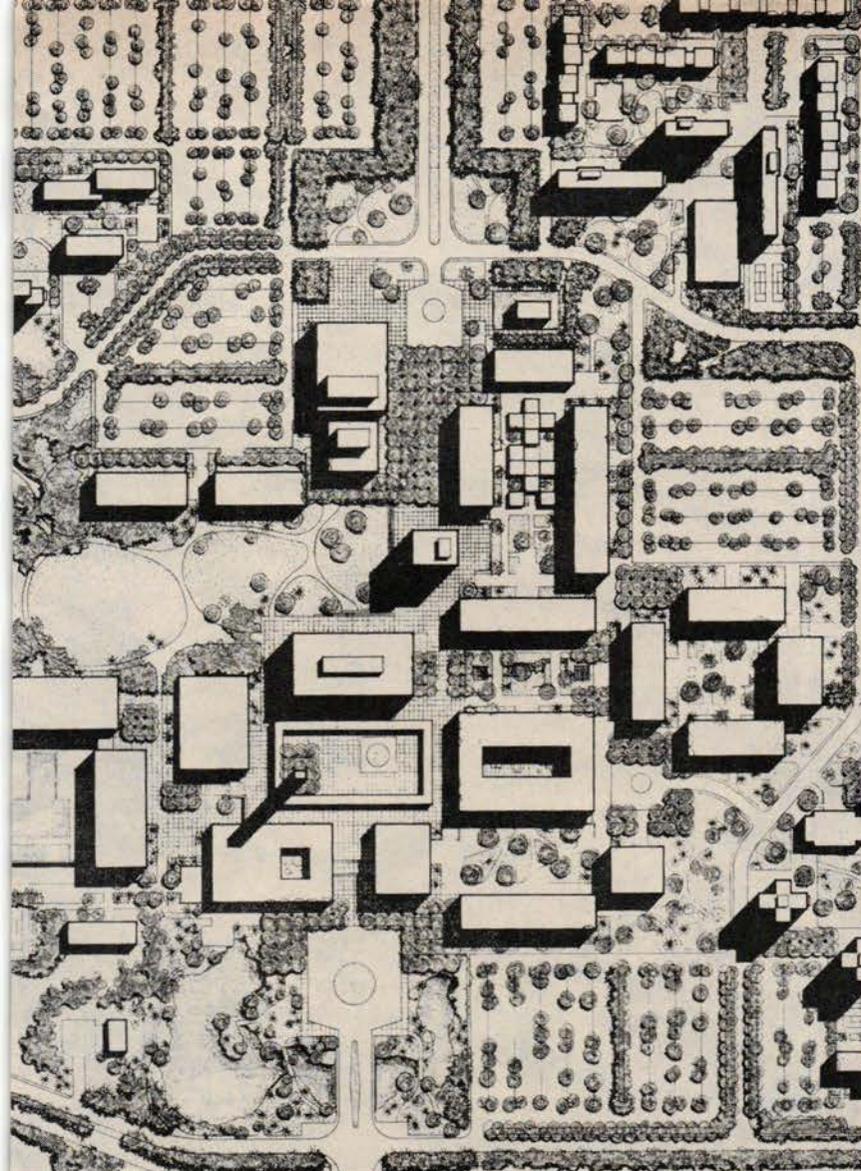
plosive situation, the easiest way out would have been to continue using the Division almost exclusively until the heat was off. It is to the credit of the trustees (with Luckman again playing a significant role) that they decided to give a healthy body of work to private firms.

The selection problem

With the AIA's advice, moreover, they set about selecting the private firms in a highly professional way. George Hasslein, respected head of the architectural



Stanislaus State: An emphasis on space and the uses of landscaping



GERALD RATTO

school at California State Polytechnic College, was appointed advisor to the board and chairman of a three-man architectural panel (the other members are currently Donn Emmons of Wurster, Bernardi, & Emmons and Whitney Smith of Smith & Williams). All architects in the state were invited to submit brochures to be considered for either master planning or building design.

Triple screening

More than 500 came in, and were screened by Hasslein, the architectural panel, and the Board's own Campus Planning Committee, headed by Luckman. The trustees then selected 14 firms as consulting architects to guide the development of present and future campuses, leaving five to the Division. Another 14 firms (some of them young but promising offices) were given individual building projects, which still left the Division with 60 per cent of the state college work by dollar volume. Since then about the same prudent ratio has prevailed.

During the long political fight preceding the 1960 master plan, the State Employees' Association newspaper delighted in publishing cartoons depicting the architectural profession as a hog slaughtering at the public trough. The multiple screening system, and the caliber of the trustees' choices of both advisors and architects, has left little opportunity to cry patronage. To date, moreover, only some 34 of an estimated 1,500 architectural offices in California have gotten state college work. The master plan has been no bonanza for the architectural profession.

The real beneficiaries have been the state colleges themselves. Before 1960, it can be accurately stated that the colleges were allowed to grow entirely without benefit of sophisticated master planning. The work done by private architects so far gives promise of a new quality in the environment of these increasingly important segments of the California higher-educational system.

The supercharged political con-

text recited above puts great pressure on the planners of new state colleges, however. For one thing, their performance will be closely scrutinized by the state employees and their allies, who haven't given up yet. For another, the elements of their plans may be executed either by a talented private firm—or by the Division of Architecture.

Master plans already have been completed for Stanislaus County State College at Turlock (left), by Reid & Tarics, and for Sonoma State College at Cotati, by

John Carl Warnecke & Associates. Both place major emphasis on space and landscaping.

The Sonoma plan (above) splits the campus into a series of six clusters along two intersecting axes, with housing at the periphery. Stands of eucalyptus, redwood, pine, and cypress define this strong basic framework. It is a plan that will allow considerable latitude to the architects who follow, whoever they may be, without destroying the unity and character of the composition.

THE JUNIOR COLLEGES: A STEPCHILD COMES OF AGE

The junior college has always been somewhat of a stepchild among educational institutions. But now the stepchild is growing up at a rate which outstrips her siblings, and in the process is achieving a new identity. The central problem of planning California's new junior colleges is the establishment of architectural character expressing this identity.

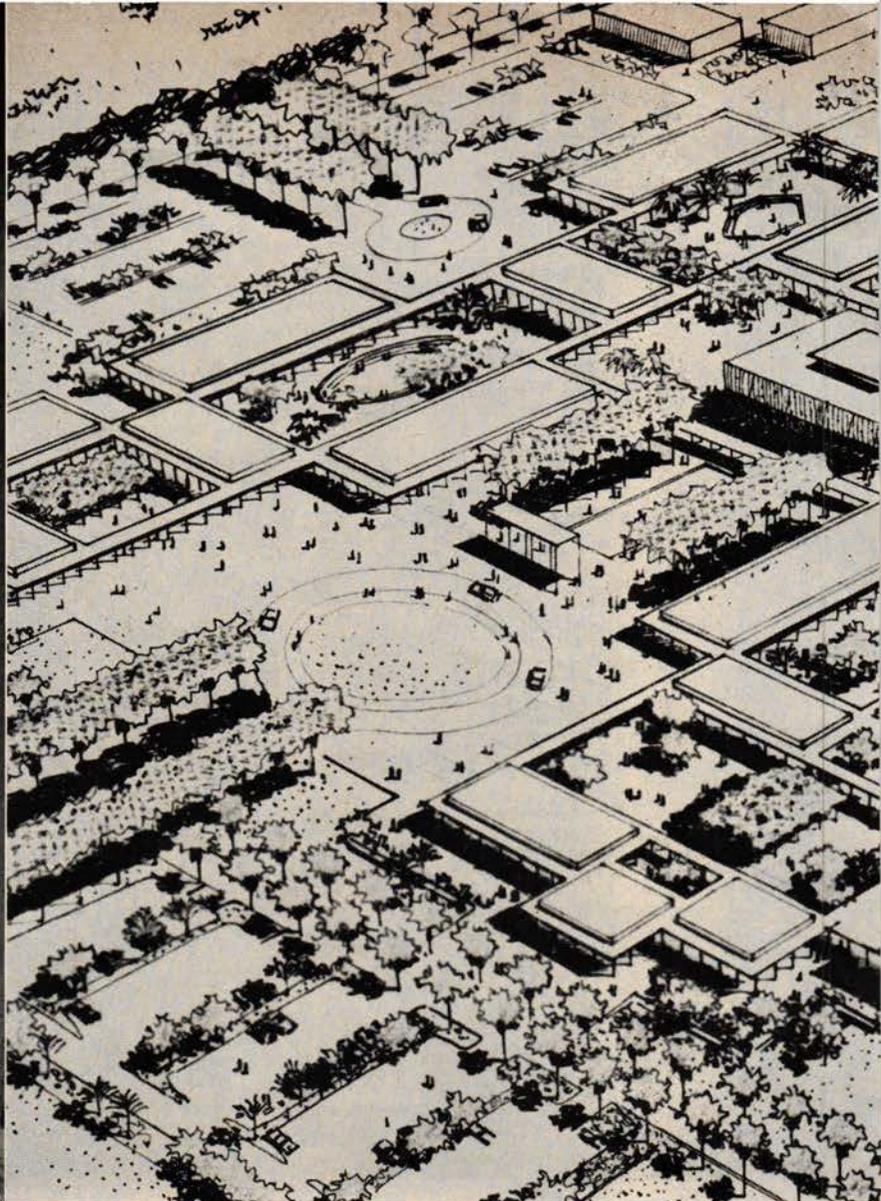
In giving a green light to expansion of the junior-college sys-

tem, the master plan had in mind that it should take much of the pressure of increasing lower-division enrollments from the university and the state colleges. Its chief effect was to alter the status rather than the substance of junior-college education.

A consistent 40 per cent of junior-college students go on to other institutions, the remainder taking vocational courses or a two-year general academic course



MARVIN RAND



that is all the higher education they will ever have. The mix is expected to remain much the same, but there will be far more students and, if present trends continue, loftier standards.

In the stepchild days, the common conception of a junior college was part trade school and part glorified high school. It was somewhat demoralizing to an administrator who had the idea he was running a bona fide institution of higher learning. More important, it made the job of finding good teachers a difficult one.

The master plan gave formal recognition to the junior college's essential function in the overall academic scheme of things, placing the emphasis on the term "college" rather than "junior." And by its pledge of increased state aid, it painted an encouraging picture of brighter days ahead.

The master plan also spotlighted the junior college's special relationship to the community. Unlike the university or the state college, in fact, the junior college is the creature of the community, run by the local school board.

This fact can create some problems—many school districts have tax rates perilously near the legal maximum—but it also opens wide opportunities for cultural and educational interchange with the world immediately outside.

Walking a fine line

No one has sensed the architectural implications of the junior colleges' special qualities more acutely than Ernest J. Kump, first at Foothill (FORUM, Feb. '62) and now at Cabrillo College, just completed south of Santa Cruz. In the past, a good many California architects, perhaps misled by similarities of size and program, have designed junior colleges that look exactly like big high schools. Foothill and Cabrillo look exactly like what they are — institutions of higher learning with strong links to their communities.

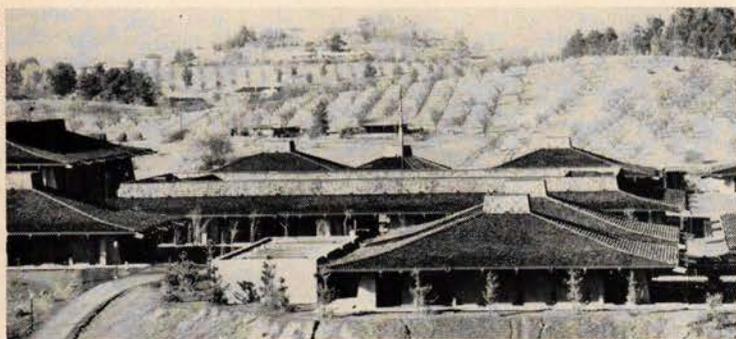
To achieve this, Kump has had to walk a fine line. "The environmental quality sought in the design should combine the dignity and maturity associated with an educational program distinctly at

the college level, together with an atmosphere of friendly informality," his master-plan program for Cabrillo stated. "Extremes of ponderous monumentality or impermanent flimsiness should be avoided equally."

Foothill and Cabrillo are very much at home in their surroundings. Foothill's buildings, like the exurban houses nearby, are clad in redwood and organized around patios. Cabrillo's represent an even more ambitious attempt to reflect the nature of the area, in this case the fine indigenous architecture of early Monterey. The form of the shake roofs, the rough slump-block walls, the tall windows, the wide porches, all reflect the strength of the Monterey adobes.

In his two exercises, Kump has relied on scale and proportion to provide the desired degree of dignity. In the College of the Desert, near Palm Springs, the ubiquitous John Carl Warnecke has achieved similar results with a pervasive orderliness of plan and building form.

College of the Desert brings



Foothill Community College: More than just an overgrown high school

RONDAL PARTRIDGE

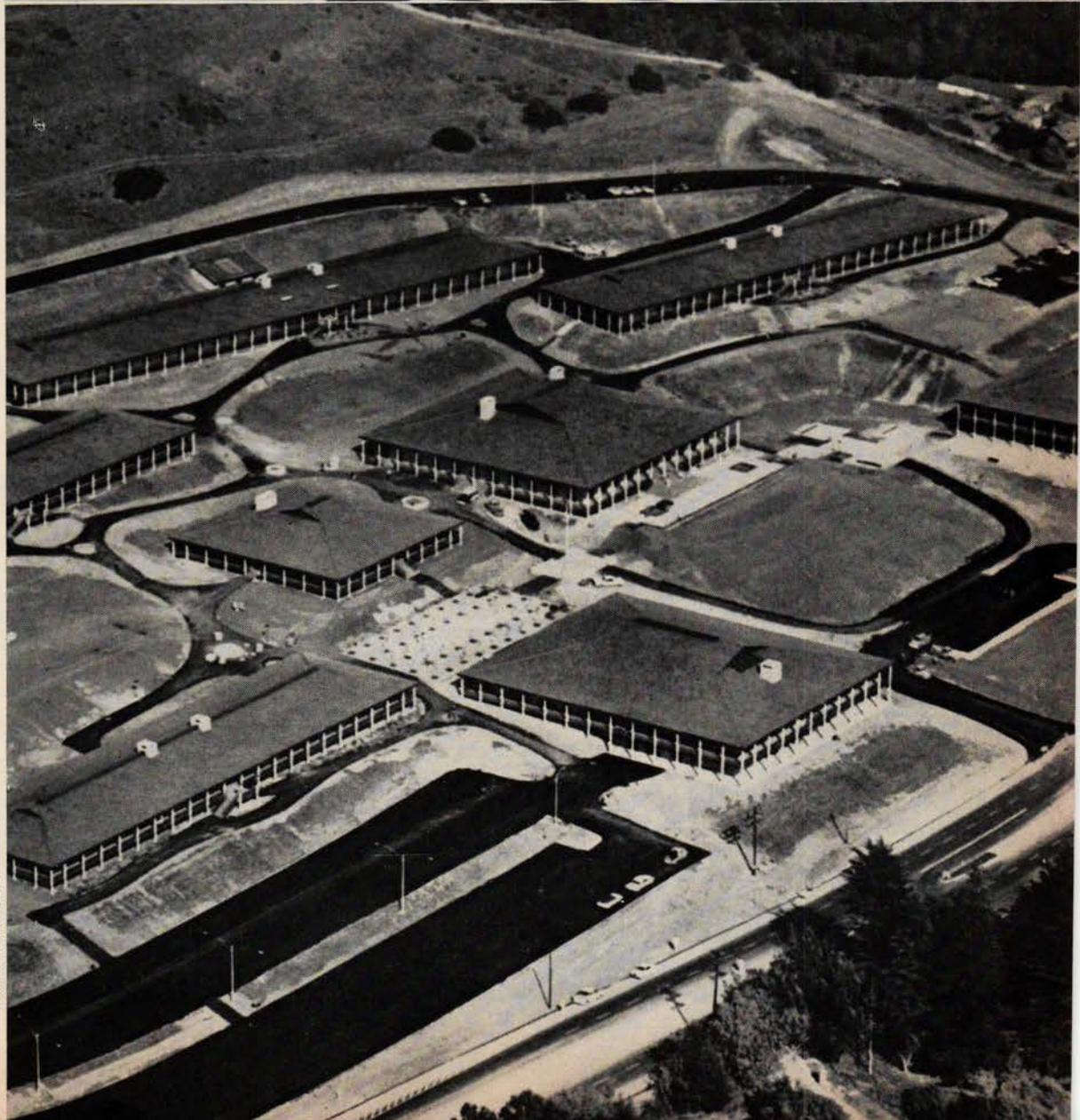
COLLEGE OF THE DESERT (left) by the Warnecke firm is a dignified composition of low concrete buildings organized around water courts. The arches and flared columns are carried consistently throughout the small campus in covered walkways which surround the buildings and join one to another. The college, whose first units have just been completed, has a formality beyond its size, reflecting the program's stress on its academic mission.

CABRILLO COLLEGE (right) by Ernest J. Kump consciously—and successfully—reflects the early adobes of nearby Monterey. Its quiet, straightforward buildings are ringed by wide porches whose plain columns continue down to accommodate the slope of the hillside site. Buildings to be used by the community—a little theater, the large library, the gymnasium—are at the lower level, with the long classroom buildings above.

higher education to the sands and date palms of the Coachella Valley for the first time. The program contained an academic emphasis somewhat stronger than in most junior colleges, so the plan is organized around a large central library. Covered walkways join it to two long arms in which the simple, somewhat-romantic concrete buildings are organized around a series of rectangular courts. The campus was consciously made an oasis: most of the courts contain reflecting pools, and the whole composition is outlined by palms.

The hopeful future

Only the first units are completed, serving 1,000 of an eventual total of 2,500 students, but already there is a marked feeling of serenity and protectiveness to the campus. College of the Desert, like the Kump campuses, gives a hopeful demonstration of the kind of architecture which California's higher-education program, redefined and expanded, can be made to yield. END



PHOTOS: VESTER DICK

THE NEW ARCHITECTURE OF COMMUNIST EUROPE

This is the second of two reports on the surprising new look in Communist Europe. The first appeared in September 1962.

In 1948 the late Soviet architect, A. V. Vlasov, had this to say about Western architecture: "It has reached a dead end of formalist sophistication and box-style soulless construction, but Soviet art is always going forward along the road indicated by the Party and the government." Thirteen years later Mr. Vlasov proclaimed: "We should regard the creation and use of standard design as our vital duty." Obviously, the road had changed direction. "Box-style" construction was now the vogue (photos opposite).

The man responsible for the change was Khrushchev. In 1954 he triggered a revolution which swept the Communist world, eliminating the waste of Stalinist monumentality and instead pursuing the job of building the Socialist State through all-out indus-

trialization of building methods.

Ironically, though the Soviet Union calls the architectural turns for all bloc members, she has failed to set the pace except in the area of prefabrication. Her recent buildings have tended to be less venturesome than those of, say, Rumania or Czechoslovakia, though she, herself, initiated the artistic "thaw." One explanation may be simply that Soviet architects, under the yoke so much longer, were less prepared than their satellite colleagues to meet the new freedom.

U.S.S.R.

Soviet energies have been directed primarily at housing and industrial plants. However, the U.S.S.R. has found the time and money to construct a few impressive showpieces. Foremost of these is the new Palace of Congress inside Moscow's Kremlin (below and right). Imposing from outside, the Palace has an



JAMES WHITMORE—LIFE



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even more arresting interior which features a vast, column-free hall seating 6,000 people. Architects: Posokhin, Mndoyantz, Stamo, Shteller, Shepetilnikov, Lwow, Kondratiev, Shkolnikov, Melik-Arakelian.

Soviet building in most cases means concrete. Occasionally, however, the Russians turn to glass—with results that are surprisingly refined: e.g., the Industrial Exhibition Pavilion by Boris Vilensky (above), the three-halled movie theater by Sheverdiaer, Gadjinskaya, Solopov, Stanislavsky, and Dikhovichny (left), or the big department store (right), all in Moscow.

But the principal business remains housing and it is here, in prefabricated, precast concrete, that Soviet building technology has made its biggest advances. Experimental housing in Moscow (left and right) prefabricates whole one-room apartments, bringing them to the site on trucks, then piling one on top of another like bricks, using mobile straddling cranes. So far, Soviet housing has been provided in huge blocks of prefabricated apartment buildings (due to haste, and a dearth of skilled labor, workmanship often leaves something to be desired). So hipped are the Soviets on using large, standardized components that they are considering reviving dirigibles to transport the components to the virgin lands in Siberia.

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YUGOSLAVIA

When the Yugoslavs recently sent an exhibit of their contemporary graphic arts on a tour through the U.S.S.R., Soviet critics denounced its "Western decadence." Said one: "It has everything a sick man's mind can invent."

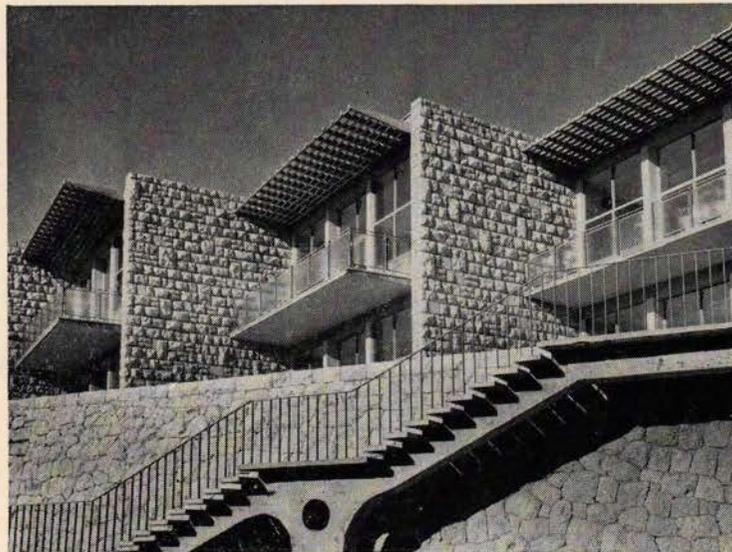
Under Tito, of course, Yugoslavia has long been having disagreements with the U.S.S.R. and it remains, in many ways, the most independent member of the Communist world. Yugoslavia is a polyglot nation composed of five nationalities, four related languages (and many dialects), two alphabets, and three main religious groups. Nevertheless, Yugoslavia has long been oriented to the West. Its new architecture reflects this strongly.

The buildings at the new airport in Belgrade (above, right) might have been lifted straight from Idlewild, except for the exterior stair tower which pays faint homage to Le Corbusier. Architects: Ivkovic, Menegelo, Paligoric-Nenadovic, Filipon-Trbojevic and Maticcevic.

Communist countries generally have not built skyscrapers. In fact, Khrushchev is known to disapprove of them. Belgrade's new Hotel Slavija (below), however, rises 17 curtain-walled stories from a Lever House-type base. Architect: Bogdan Ignjatovic.



EASTPHOTO



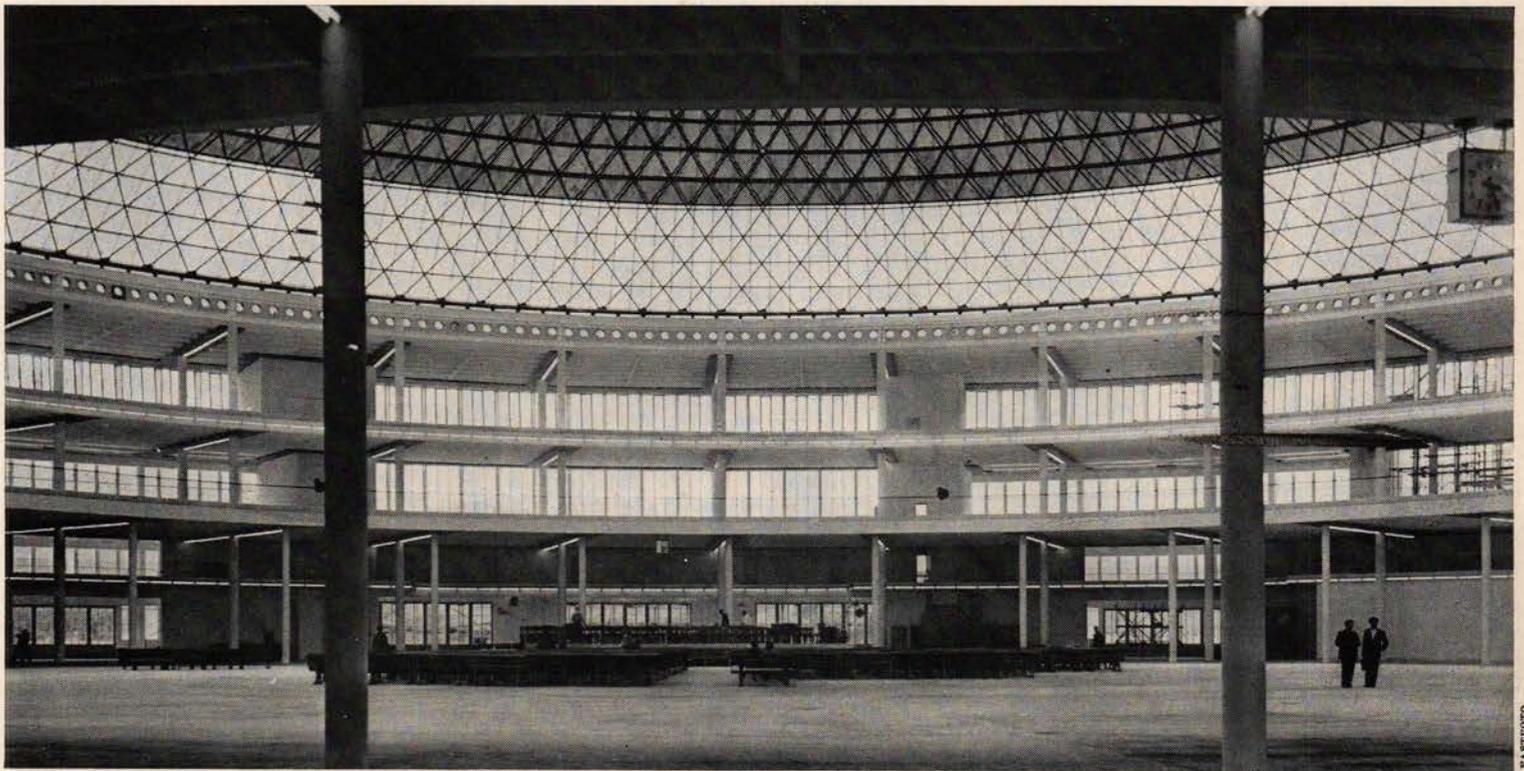
Despite the pressure for housing, Yugoslavia has not yet produced the prefabricated concrete technology of other, more industrialized Communist countries, and even has time, occasionally, to work with masonry, as in the strongly patterned school at Ulcinj (left). Architect: Leon Kabiljo.

Where the Yugoslavs have built large quantities of housing, in the new part of Sarajevo for example (below), they have poured their concrete rather than prefabricating it from precast elements, and they have sited the apartment blocks with somewhat more imagination than other Communist countries have displayed.



UPI PHOTO

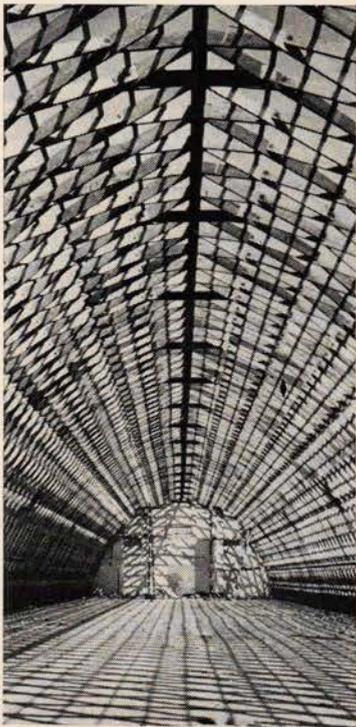




EASTFOTO

CZECHOSLOVAKIA

According to *Rude Pravo*, the official Czech Party newspaper, in 1956, "the freer a work of art is in the bourgeois-anarchist [i.e., Western] sense, the less free it is in the Marxist sense and vice versa." Undeterred by such murky guidance, Czech architects have recently been creating a good

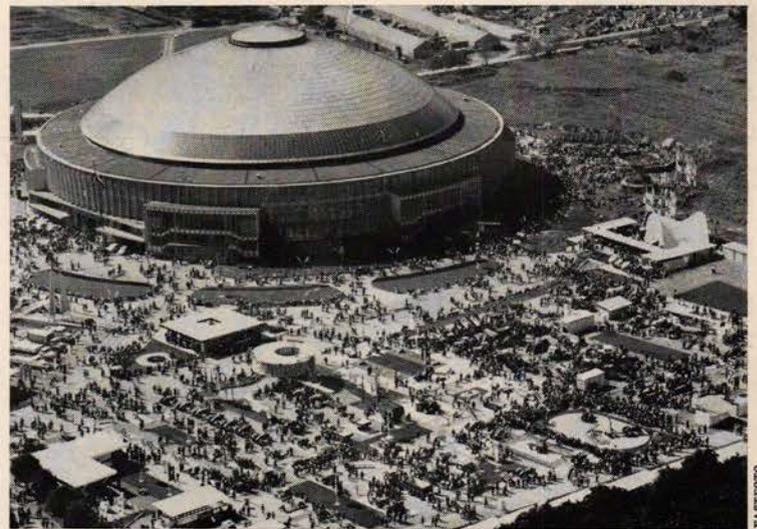


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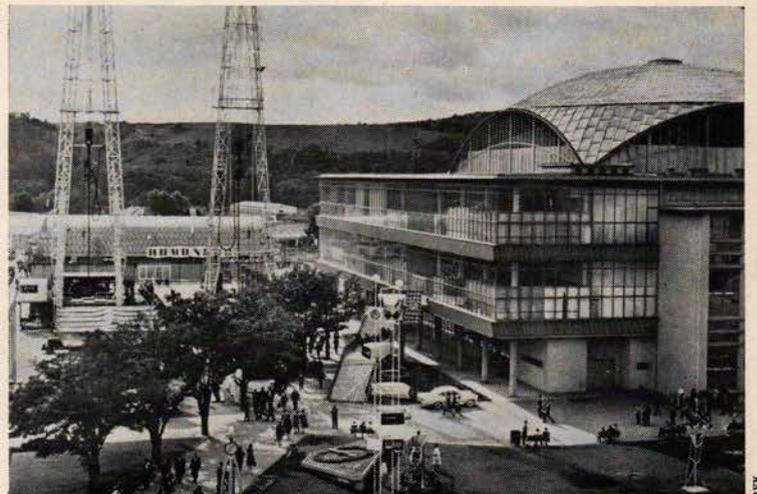
number of notable structures.

At the International Trade Fair, held at Brno in 1961, even the average buildings, for example Pavilion C (bottom right), looked good compared to much of what apparently will be built at the New York World's Fair of 1964. And some of the Brno buildings were remarkable: e.g., the light and glassy great Pavilion Z (above and right). Providing over 200,000 square feet of exhibit space, the pavilion consists of a three-story galleried base surmounted by an enormous, 250-ton dome. The dome soars to a height of 130 feet at the center and is supported by a network of delicate metal pipes. Chief architect: Lederer.

More modest in scale and built of humbler materials—but nonetheless sophisticated for it—is the clear-span roof which covers a new fodder barn (left) on one of Czechoslovakia's state farms. The roof consists of an intricate, Lamella-like webwork of light wood boards over which is stretched a thin layer of plastic. The shed, which can hold 30 wagon loads of hay, was constructed in just eight days by two carpenters working with two assistants.



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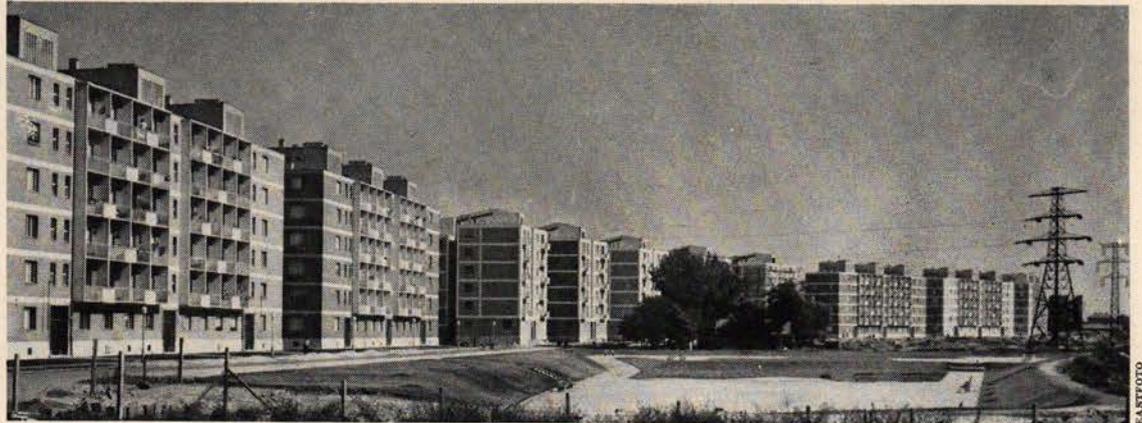


BV

HUNGARY

Hungary, which finally purged its Stalinists in 1962 under the leadership of Premier Janos Kadar, has some of the sprightliest housing in the entire Communist world. The rows of gaily balconied, six-story apartment buildings (right), designed by Lajos Boros, are part of a complete new quarter in northern Budapest.

Hungary's first suspension roof (below) forms an unusual en-



EASTFOTO



EASTFOTO

trance to underground laboratory facilities at the Ampelological Research Institute in Budapest. A double cable system supports the roof, designed by Zoltan Horvath.

The new Southern Railway Station in Budapest (right), whence vacation-bound Hungarians depart for various holiday lake resorts, is a classically Western glass box. The small structure is deeply cantilevered on three sides from a recessed base. The fourth side opens onto a sheltered passenger platform. Architect: Kovari.



EASTFOTO

EAST GERMANY

Under the Ulbricht regime, East Germany has been quickest of all the satellites to follow Moscow's lead: No sooner had Khrushchev finished denouncing Stalinist monumentality in the Soviet Union, than the East German State Academy of Building opened verbal fire on its own architecture, demanding the same all-out industrialization.

The results are evident in the new housing along East Berlin's showplace, Karl Marx Allee (right), once known as Stalin Allee. The big apartment buildings, eight and ten stories high and 275 feet long, are made of large precast panels finished in pastel-colored ceramic tile. The panels, about 9 by 11 feet, are the size of one room, and come with window frames and glass already in place. Apartments come in one, two, and two-and-a-half-room sizes, have 185-square-foot living



UPI PHOTO



rooms, 140-square-foot bedrooms. Half the apartments have balconies.

At the end of Karl Marx Allee, fronting the Alexanderplatz, a new center for education is now under construction. Its domed auditorium (left) has a hall seating 1,200 people which can also be used for concerts. In addition to the main hall, the building contains restaurants, a library, and clubrooms.

Also on the Karl Marx Allee

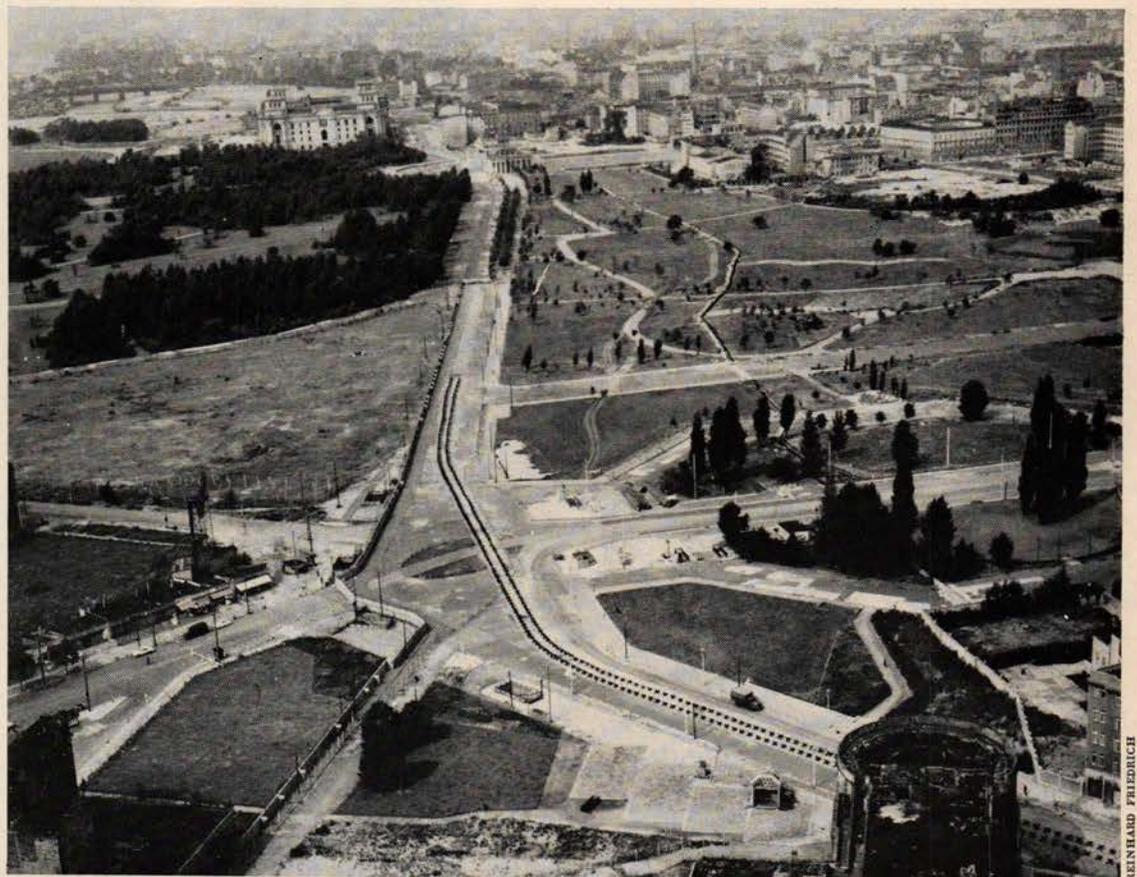


EASTPHOTO



are the Kosmos movie theater (top photo) and the Hotel Berolina (above right), both designed by The Architects Team "Kaiser." The theater, surprisingly, is in the old neoclassical section of the Allee. The 13-story Berolina, in the new part, provides 400 beds behind walls of glass and blue ceramic tile. Restaurants, conference rooms, and related services are contained in low glassy wings surrounding the hotel.

East Germany's New Towns, like Eisenhüttenstadt (above), are gayer than most Westerners might expect. But East Germany's most widely publicized building achievement in recent years has been the Wall (right), which intensified the critical housing problem by preempting concrete slabs and cinder blocks to make up its 27-mile length. Here the Wall bulges down from the Brandenburg Gate in the distance, separating West Berlin (left) from East with a complex barrier which includes a double row of tank traps cutting across a now-deserted traffic circle.



REINHARD FRIEDRICH

CRANES: HIGH STYLI IN THE SKY

Ever since the first gin pole raised a basket of mud bricks aloft, building cranes have fascinated the man in the street. There is something inherently powerful yet graceful about the way these long styli sweep back and forth, gradually etching a new building against the sky.

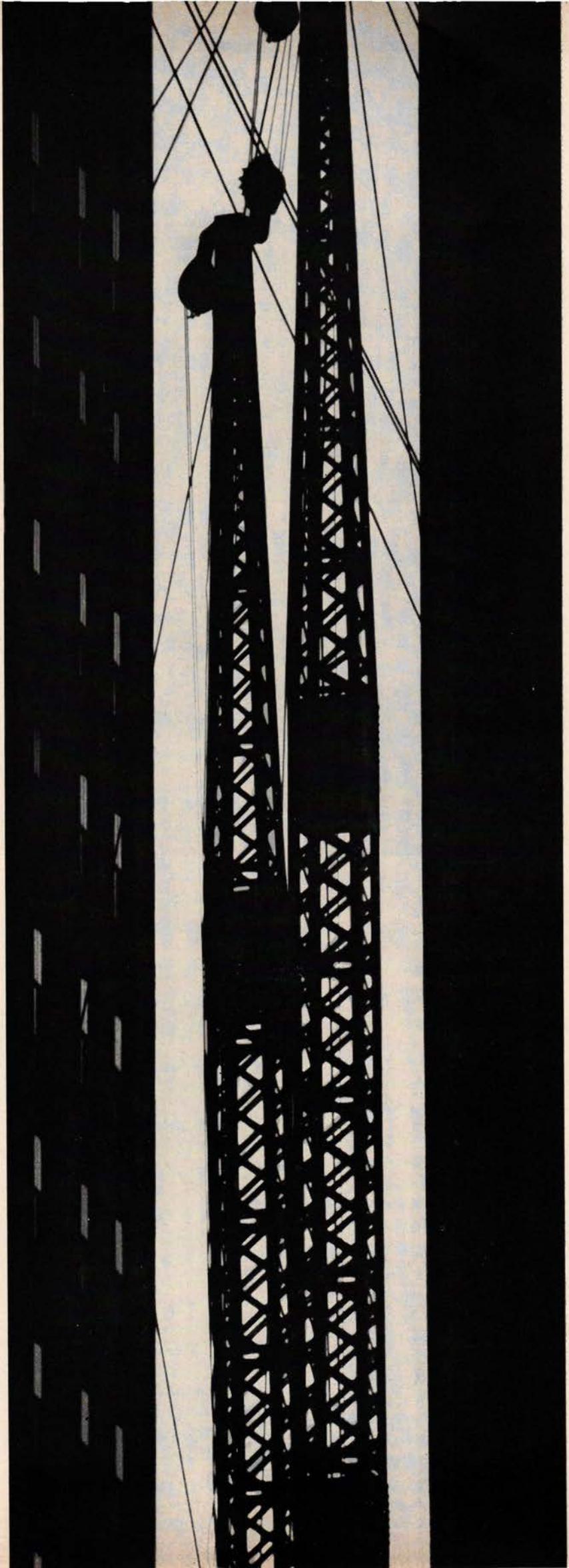
For the last 50 years or so the mainstay of the crane family has been the steel derrick (photo right), which has lifted beams and columns for countless skyscrapers. The growing use of concrete, however, coupled with a fresh urge for speed, flexibility, and lower costs, has brought new arrivals to the scene: tall-boomed crawlers, travelers, climbers, and other species of the gangling tower crane. These elegant monsters work with almost baffling strength and ease, carrying up to 200 tons on booms 400 feet long, at speeds of 300 feet a minute.

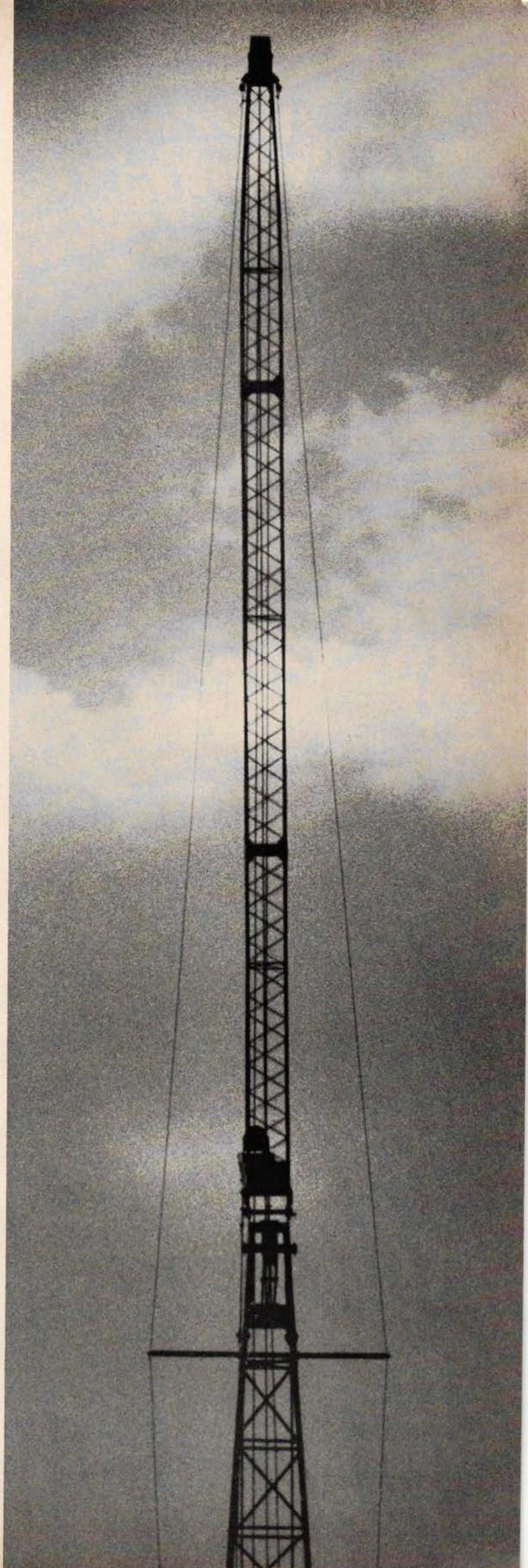
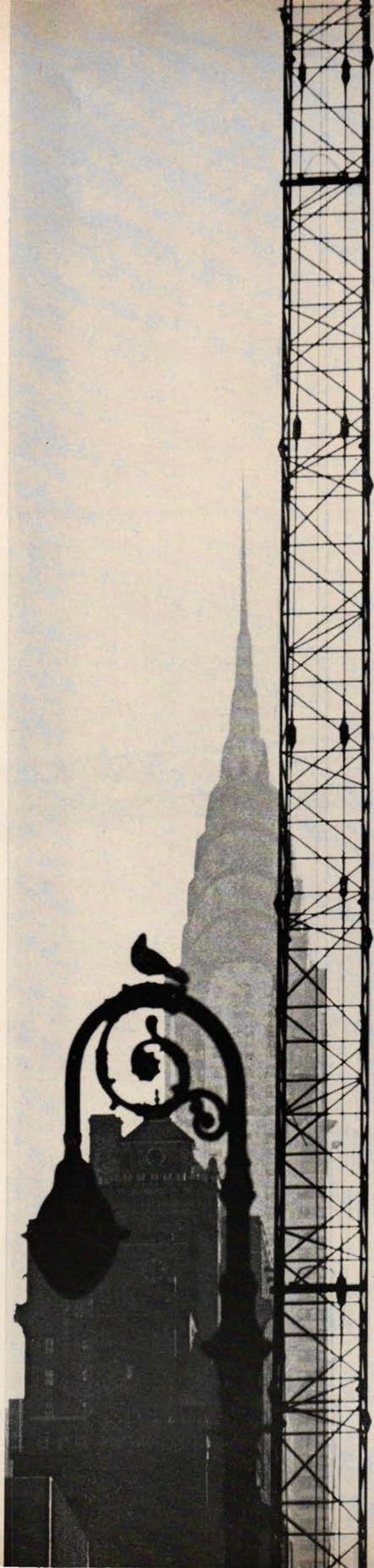
The spidery boxwork shown in the photographs on the opposite page belongs to crawlers bucketing ready-mix to new high-rise apartments and offices north of Manhattan's Chrysler spire. They can carry as much as 120 tons on their 300-foot vertical booms, and, with extensions, can top off a 30-story building. (These cranes rent for about \$3,500 a month.) The crawler often appears the most sporting of the breed: its single cable dangles loads daringly above city traffic, and though it has some 30 tons of ballast in the back of its tractor cab, an occasional shock load or windstorm has bent or buckled a boom.

Newest of the species, first developed in Europe, is the tower crane with a fixed vertical support and a movable or cantilevered crossarm. It works alongside or atop the building, sometimes traveling on rails, or climbing as the building rises, often perched atop the elevator core (overleaf). These cranes can spot loads exactly where needed on working levels aloft.

In the future, some builders foresee combining the mobility of the crawler with the load-spotting ability of the tower crane. Meanwhile, the progenitors of such hybrid supercranes are busily, and gracefully, at work.

PHOTOS BY ERICH LOCKER

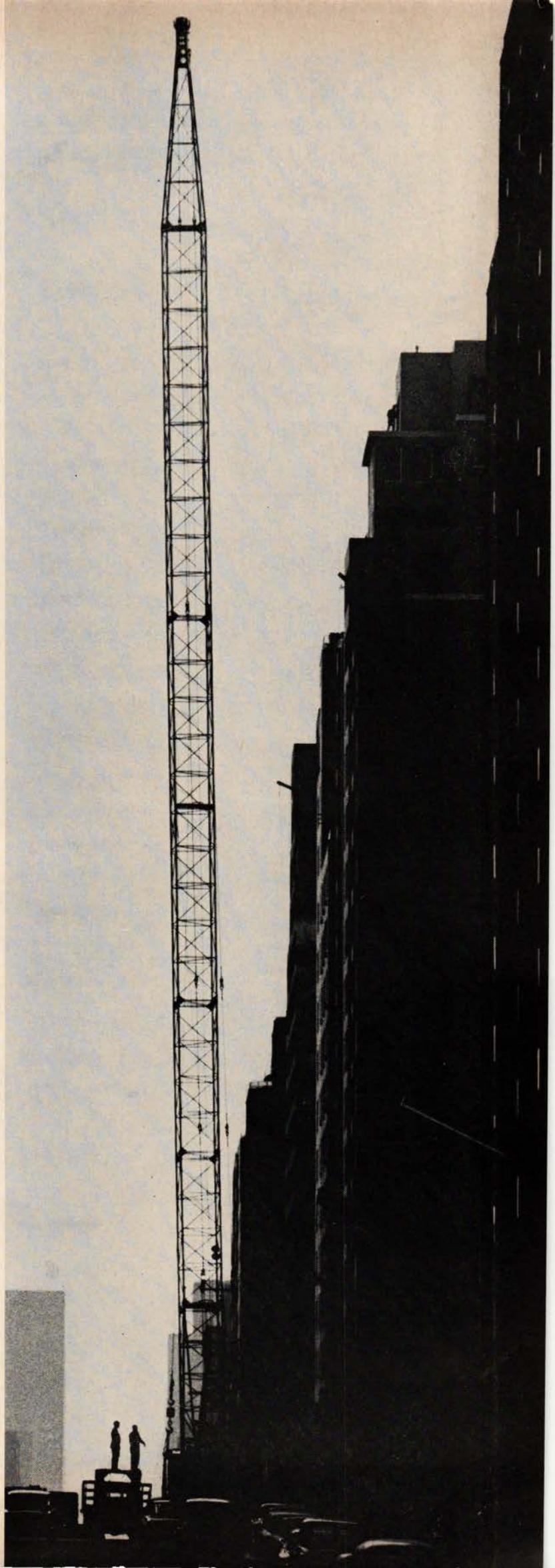
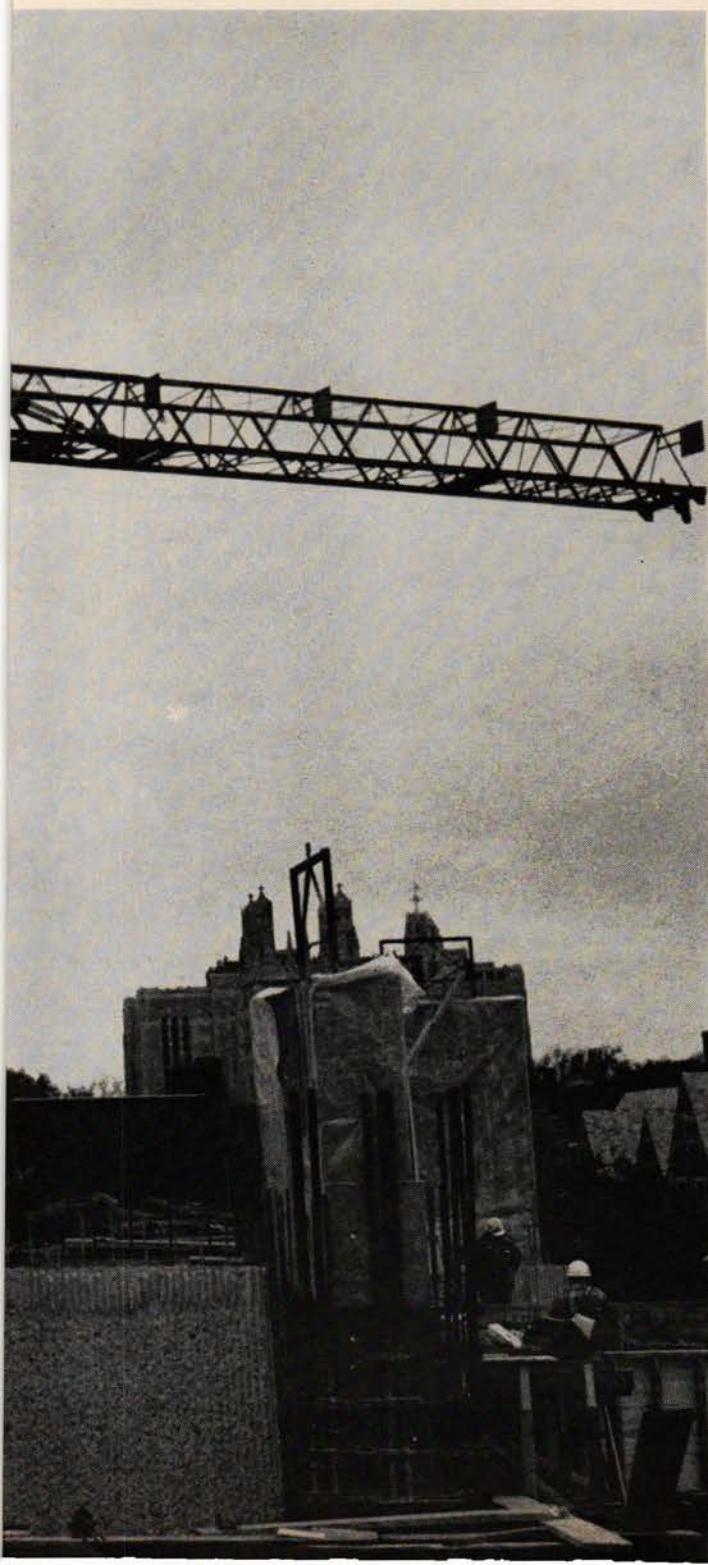


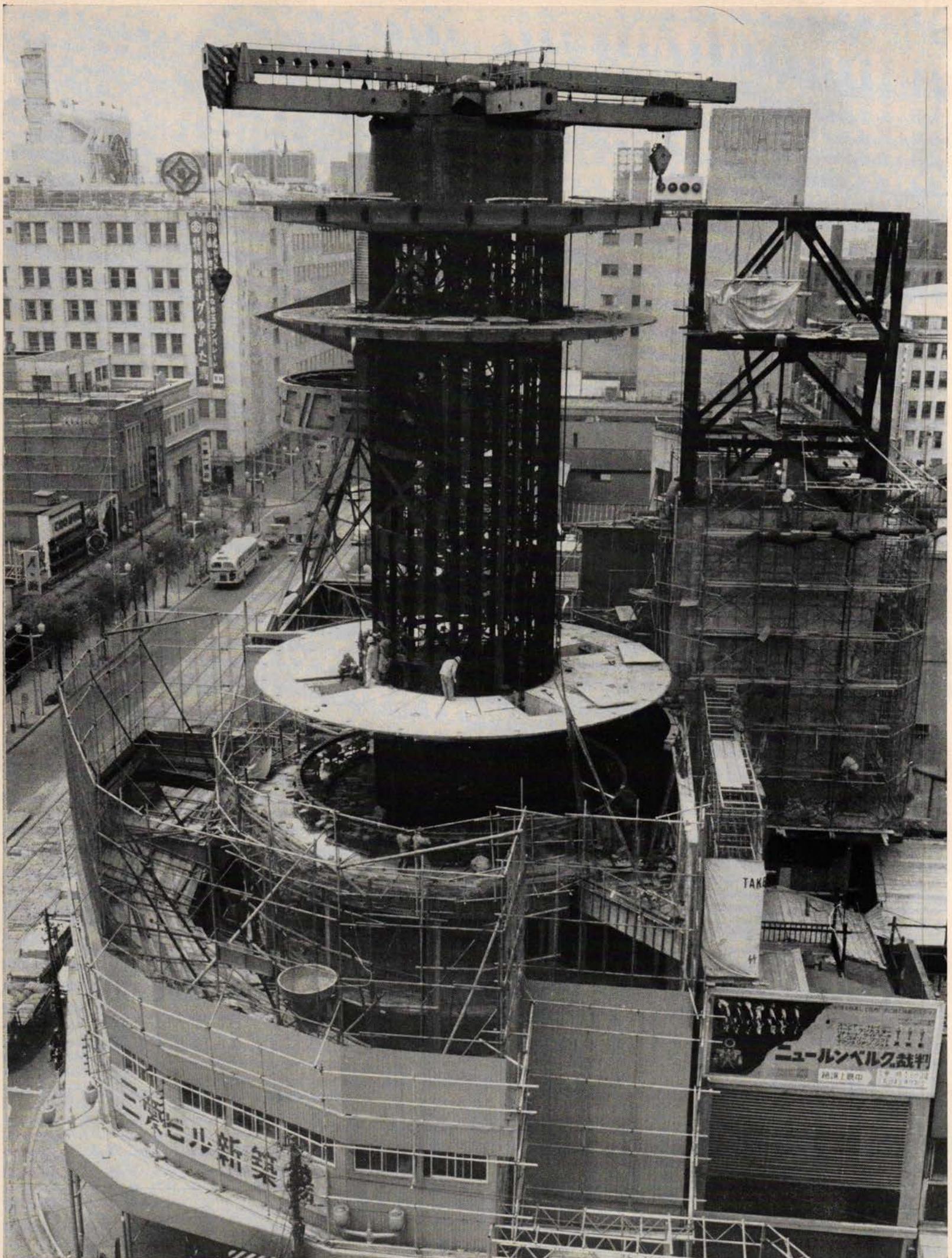


Below, a "hammerhead" tower crane atop the new Arts and Architecture Building at Yale swings a traveling bucket of concrete up to waiting workmen



Right: a crawler boom works on Manhattan's Third Avenue





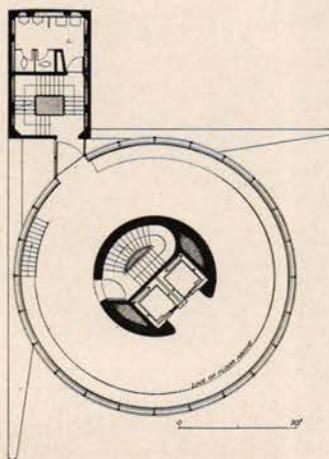
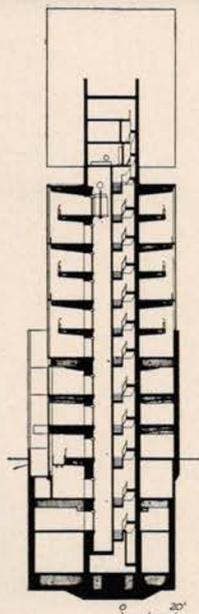
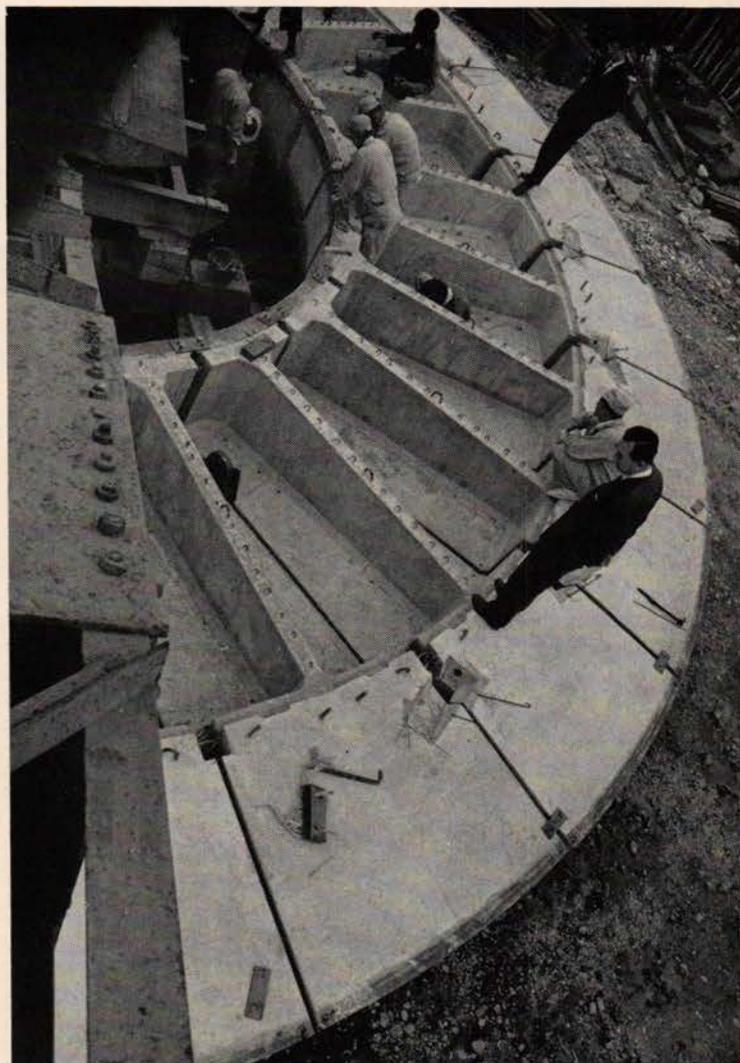
JAPANESE SHOW OFF STRUCTURAL SKILLS

The owners of Tokyo's San-Ai Tower, shown at left rising on a costly and miniscule (3,200 square foot) plot in the heart of the Ginza shopping district, really wanted their building to be a skyscraper. But Japan's national building code, mainly as an earthquake precaution, allows a maximum height of 101 feet. So to make the most of their modest nine stories, the architects and engineers of the Nikken Sekki Komu Co. combined several dramatic construction techniques to attain a dramatic result.

The structure, which will house the San-Ai Department Store in its first three floors and two basement levels, and showrooms for the Mitsubishi Electric Co. above, will be sheathed with glass and topped with a giant illuminated sign and a shaft of light reaching skyward (rendering, right).

The construction techniques solved, among other things, lack of space for materials storage (this is one of the most traffic-clogged intersections in Japan). The crane was jacked to a commanding central position as the builders erected the elevator-stair tower, a steel cylinder 20 feet in diameter heavily braced against seismic forces. After the first four levels were cast in place, the 24 cantilever segments which make up each of the upper floor slabs were trucked to the site in the small hours of the night and lifted to the fourth-floor slab for assembly. Once safely out of the way, these segments—which are wedge-shaped and hollow to provide space for mechanical services near the core—were post-tensioned and grouted to form a homogeneous section. Finally, each 40-ton slab was lifted into place by four cables, at a rate of 30 feet per hour, and anchored to the core.

The wider floor slabs are cantilevered 15 feet from the core; intermediate floors are held back a few feet from the glass line to form balconies. This arrangement does not provide much selling space, but whatever is offered for sale is not likely to go unnoticed.



Lit up from top to bottom like a giant beacon (sketch above), Tokyo's San-Ai tower will occupy a tiny sliver of land on one of the city's busiest corners. The full upper floors (plan, left) have a usable area of only about 1,650 square feet; alternate mezzanine floors are even smaller. Section at left recalls Wright's Johnson Wax Tower, except for the massive penthouse sign. The 24 precast segments which make up each floor were assembled on the fourth-floor slab (above), post-tensioned with radial tendons, grouted to form a homogeneous section, and lifted into place by the tower crane (below).

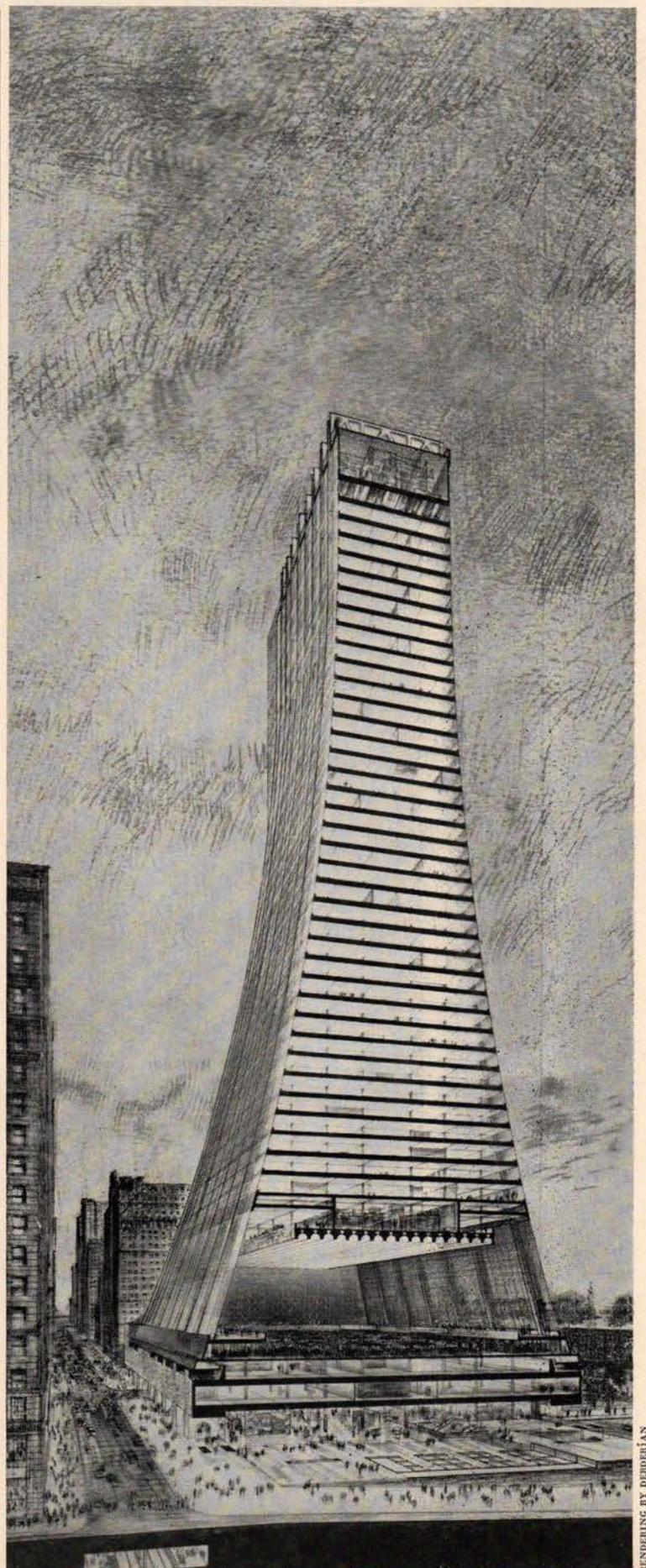
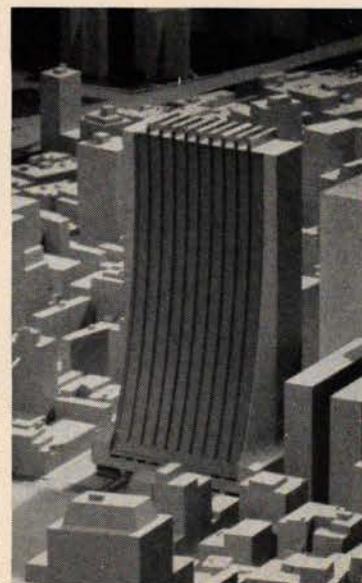
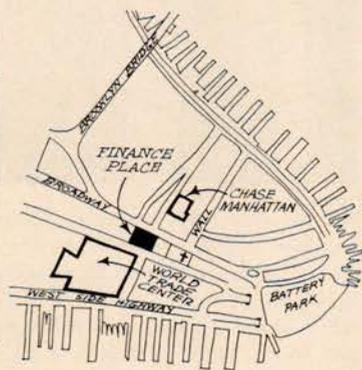
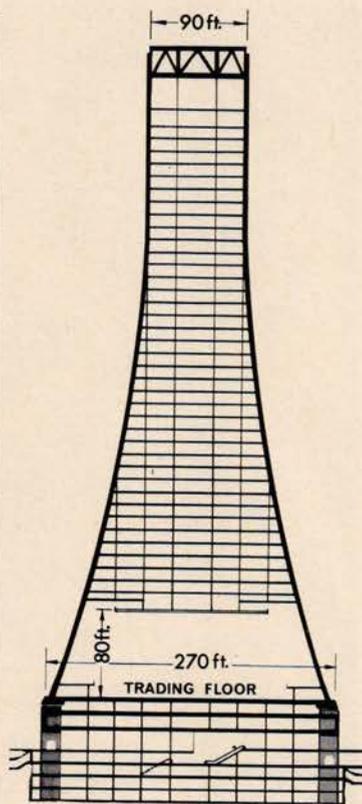


WILL HANGING TOWER ATTRACT EXCHANGE?

While the New York Stock Exchange is eyeing another site for future larger quarters (see Feb. '62 *News*), Realtor William Zeckendorf has not given up hope that it will accept his invitation to occupy the novel "hanging tower" shown on this page. The basic concept for Zeckendorf's "Finance Place," which would occupy a two-block site in downtown Manhattan, was worked out by Architect I. M. Pei & Associates (Henry Cobb, designer) and Engineers Weiskopf & Pickworth.

The 45-story building is flared out at its base to accommodate a 95,000 square foot, column-free trading area for the Exchange. Rather than span 260 feet across the trading floor with a great, bridgelike structure supporting the office levels above, the architects decided to move the trusses all the way to the top of the building, where they would only have to span 90 feet, and suspend the 40 office floors from them (see section). The nine sloping steel columns on each of the building's broad façades would spring from massive, 9 by 18 foot concrete piers rising from the foundations four levels below grade to the height of the trading floor. In the base area, pedestrian shopping concourses would link Finance Place with the proposed World Trade Center across the street, and with subways and neighboring banking headquarters, including the Chase Manhattan tower.

The 28-foot-deep trusses, set some 650 feet above street level, are seen as paired members, braced 6 feet apart for lateral stability. Each pair would support two main suspension members. Additional hangers for the increasingly wide floors would be attached to the main columns. The suspension members are likely to be ordinary wide-flange columns, since to get the truss structure into place, the entire building frame would first have to be built in compression, including conventional column framing throughout the trading floor, and finally converted to a tension structure by removing the temporary columns.



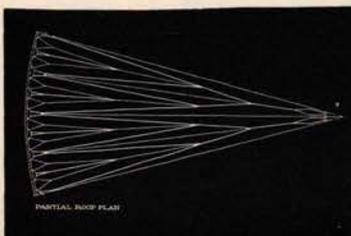
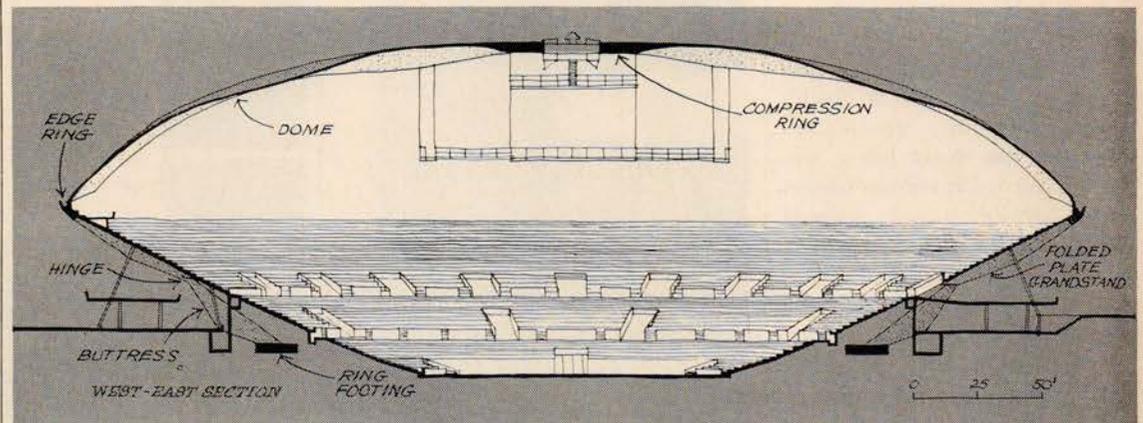
RENDERING BY DEBERIAN

GIANT ILLINOIS DOME NEARS COMPLETION

After nearly four years of construction, the University of Illinois Assembly Hall at Urbana neared completion last month. As its 3 acres of column-free interior space emerged from a dense forest of scaffolding, visitors could finally see the effect of its audacious structural balancing act (photo, below right). From outside, the 4,400-ton, folded-plate dome of concrete seems to hover 50 feet above the ground. Actually, the 400-foot span rests on an edge ring that is prestressed with 2,500 high-tensile steel wires that exert 10 million pounds of inward thrust. Thus the great forces are redirected so that they flow to the foundations through the inward-sloping structure that supports the grandstand (section).

Design of the \$7.75 million structure was the result of a close collaboration between Architects Harrison & Abramovitz and Engineers Ammann & Whitney. The pattern of branching folds (sketch, below) not only absorbs the high bending stresses in the roof by plate action (thus reducing the required thickness of concrete to an average of $3\frac{1}{2}$ inches), but also improves the acoustics of the hall by reducing the sound-focusing effect of a smooth dome, and imparts a better scale inside.

The hall can be used for various sports events, be partitioned for stage presentations, or opened up for expositions that will flow into the large concourse areas. The flexibility of use is matched by flexibility in the structure: the sloping curtain wall that encloses the lobby is framed top and bottom by bands of neoprene which allow the concrete to shift as much as 2 inches under loads without affecting the glass. Contractor: Felmley-Dickerson Co.



PHOTOS: COURTESY UNIVERSITY OF ILLINOIS

CRISP DESIGN WITH STEEL COMPONENTS

Large, mass-produced steel building components, a gleam in the eyes of industry reformers for 30 years, were pushed another step closer to the market place with the completion of the 28-unit luxury garden apartment seen at right. By using five new products of light-gauge coated sheet steel developed by Architect Carl Koch & Associates for Armco Steel (FORUM, Jan. '62), the builder of the Middletown, Ohio project was able to shave almost \$34,000 from conventional construction costs—nearly 10 per cent.

But the most intriguing new product to come out of Koch's research for Armco, the stressed-skin roof truss shown below, was not used for the apartment project where closely spaced masonry party walls eliminated the need for long-span structural members. The 28-foot truss, which uses the aluminum-coated sheet roofing panels as a top chord, worked so well in a new all-steel version of a Koch-designed Techbuilt house recently completed at Yorktown Heights, N.Y., that it was made a key element in a prefabricated dormitory package (sketch and plan below, right) that Techbuilt is now offering to colleges

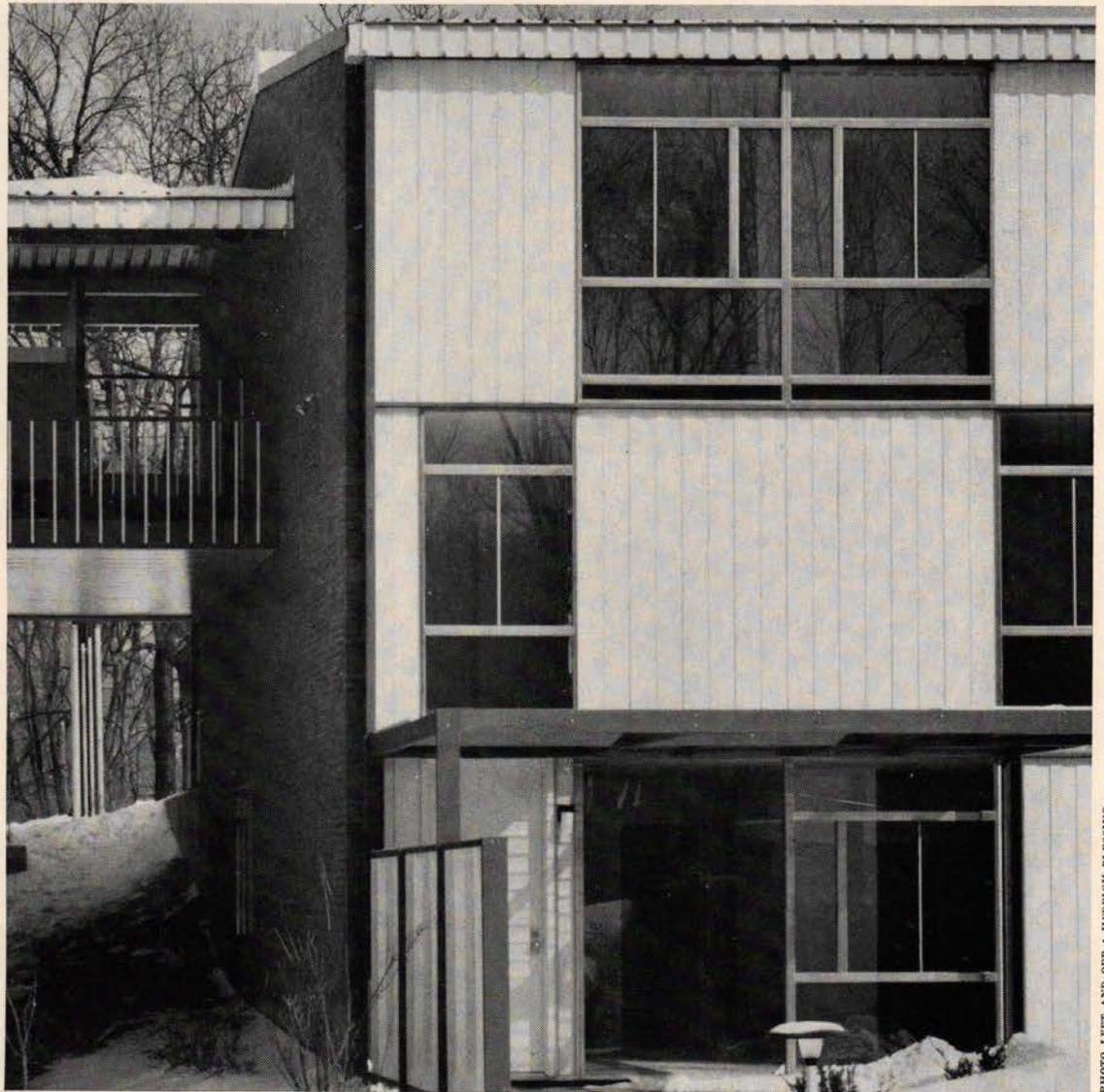


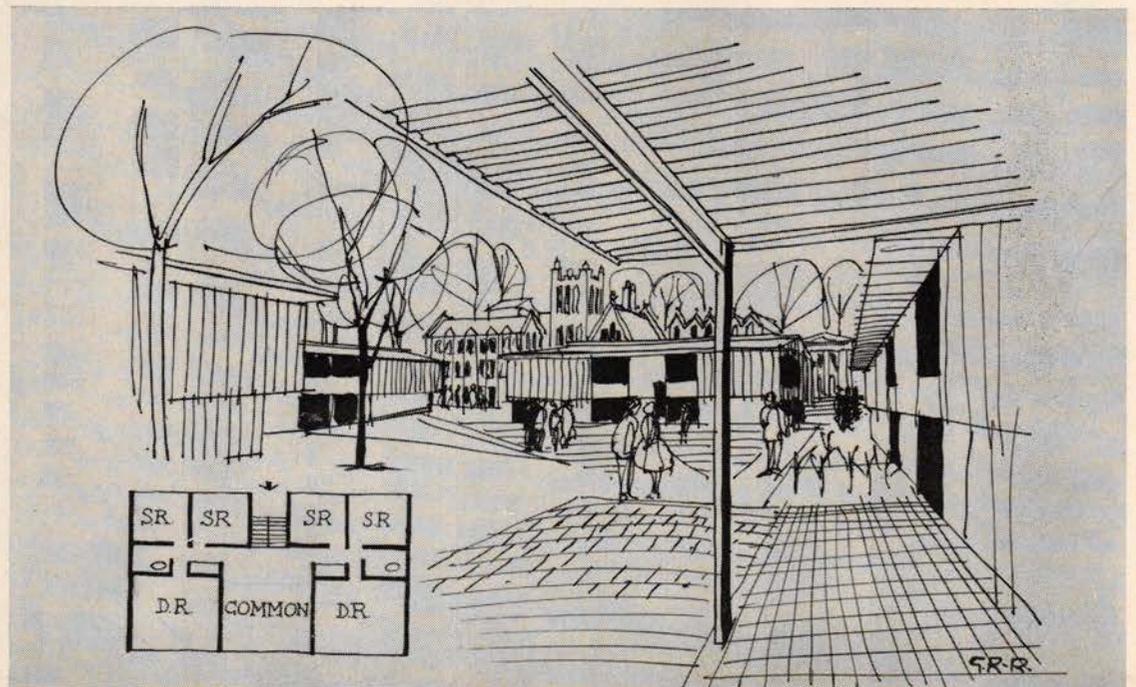
PHOTO LEFT AND OPP.: HEDRICH-BLESSING

Varied wall arrangements are possible with Koch components. Dormitory units, below, use truss (photo left).



at only \$10 to \$12 per square foot.

Koch's careful detailing of the prefinished corrugated steel wall and roof panels and channel-section window frames is founded in 15 years of study of how the industrial process can be used in building. Such low-cost, roll-formed products are often used without distinction on factories and warehouses. In Koch's hands, they achieve an elegant crispness that Armco hopes will prompt wide use by architects.







AALTO

Finland's greatest architect, and winner of the 1963 AIA Gold Medal, demonstrates in his latest work a new inventiveness and freedom.

The rather dapper gentleman blinking into the sunlight (above) is, of course, one of the world's greatest and best-loved architects: Alvar Aalto, a man who, for more than 35 years, has left his highly individual mark upon the face of modern design. Last month, as Aalto turned 65, he was informed that the American Institute of Architects had voted to add still another honor to the long list tendered him earlier and elsewhere: at the AIA convention in Miami in May, Aalto will be awarded the Institute's Gold Medal for 1963.

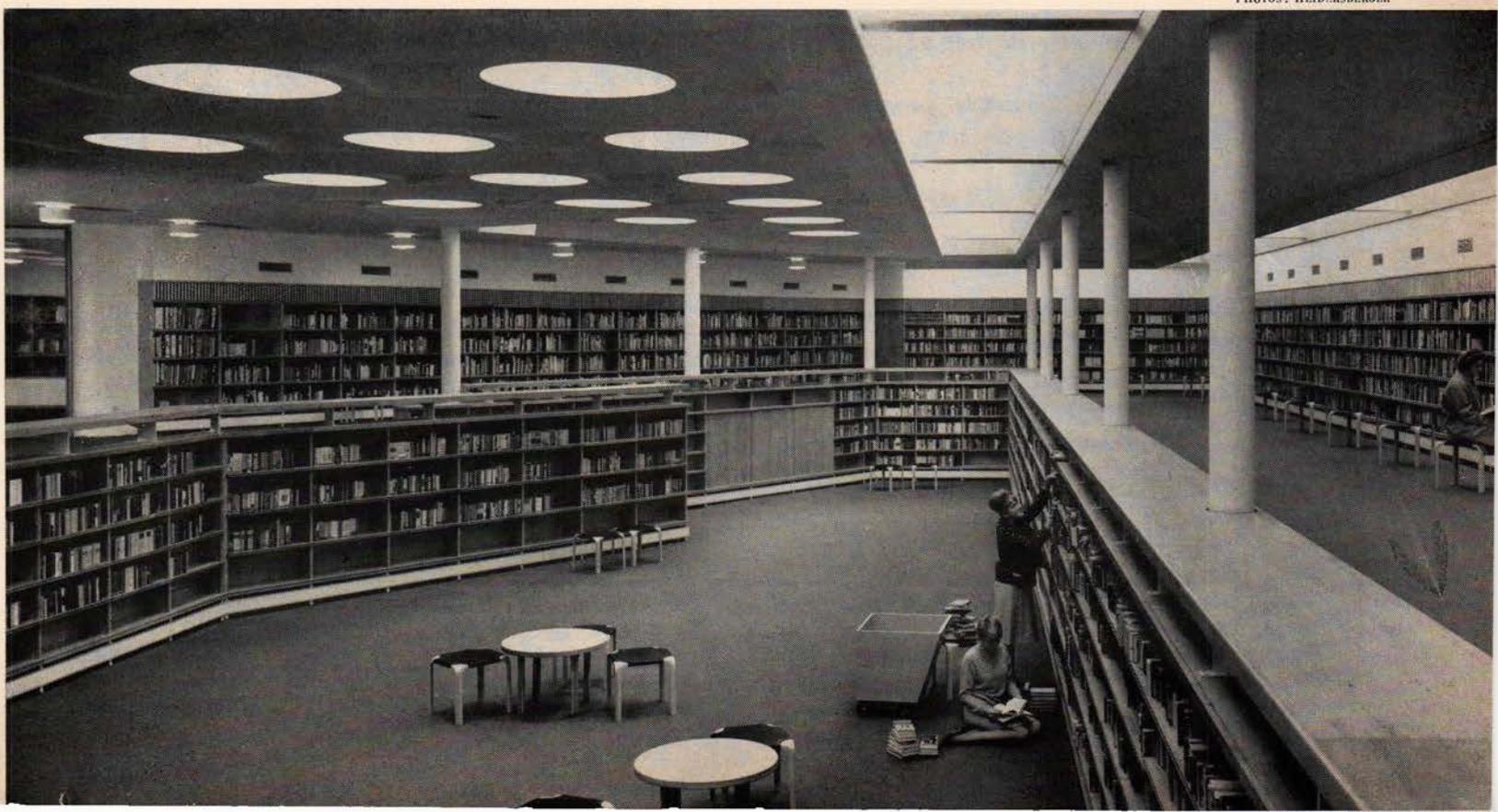
It will be a well-deserved honor by any number of standards: Aalto was one of those few who gave form to modern architecture in the 1920's, 1930's, and 1940's. If he had built nothing but his Viipuri Library (started in 1927), his sanatorium in Paimio (started in 1929), and his Finnish Pavilion at the 1937 Paris World's Fair, the honor would have been fully deserved.

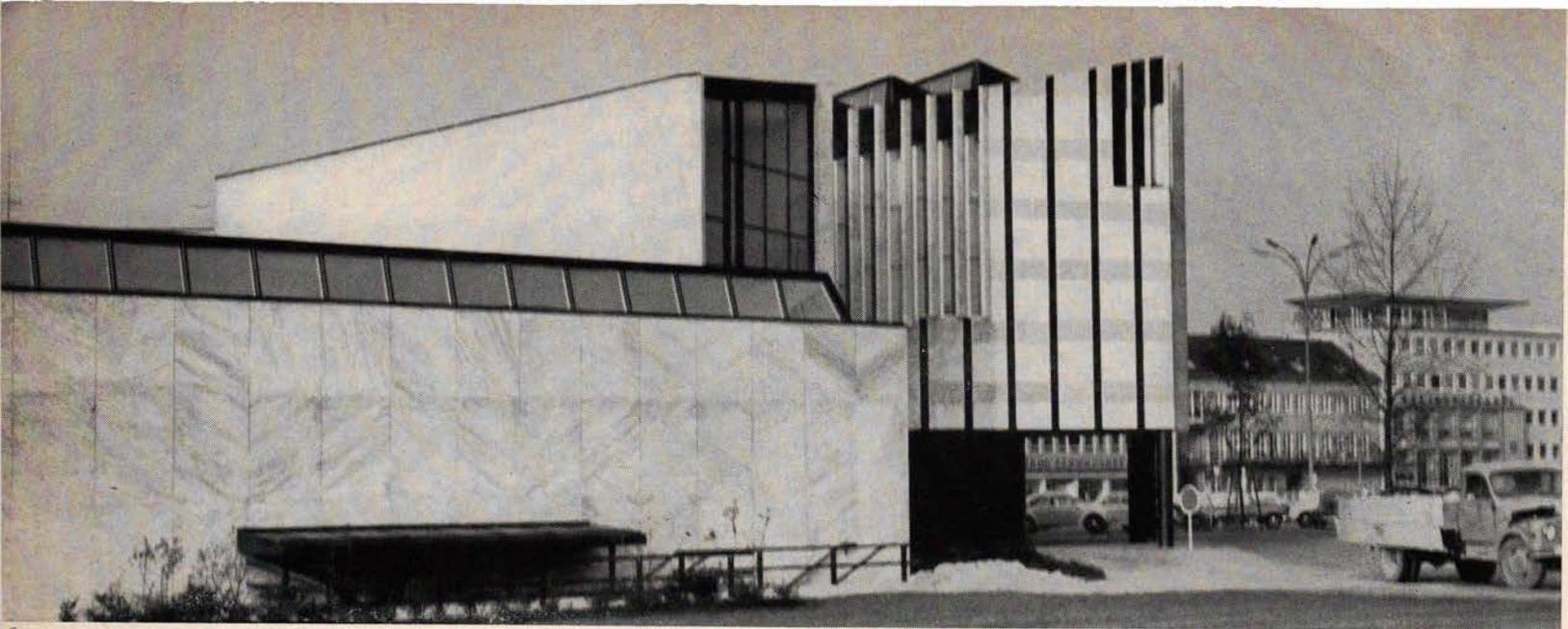
But Aalto has gone far beyond these early buildings, and his most recent work is evidence of a high creativeness and imagination matched in the postwar years only by another "veteran" of the modern movement, Le Corbusier, who received the AIA's Gold Medal in 1961. A sampling of Aalto's recent work in West Germany is shown on the next five pages.



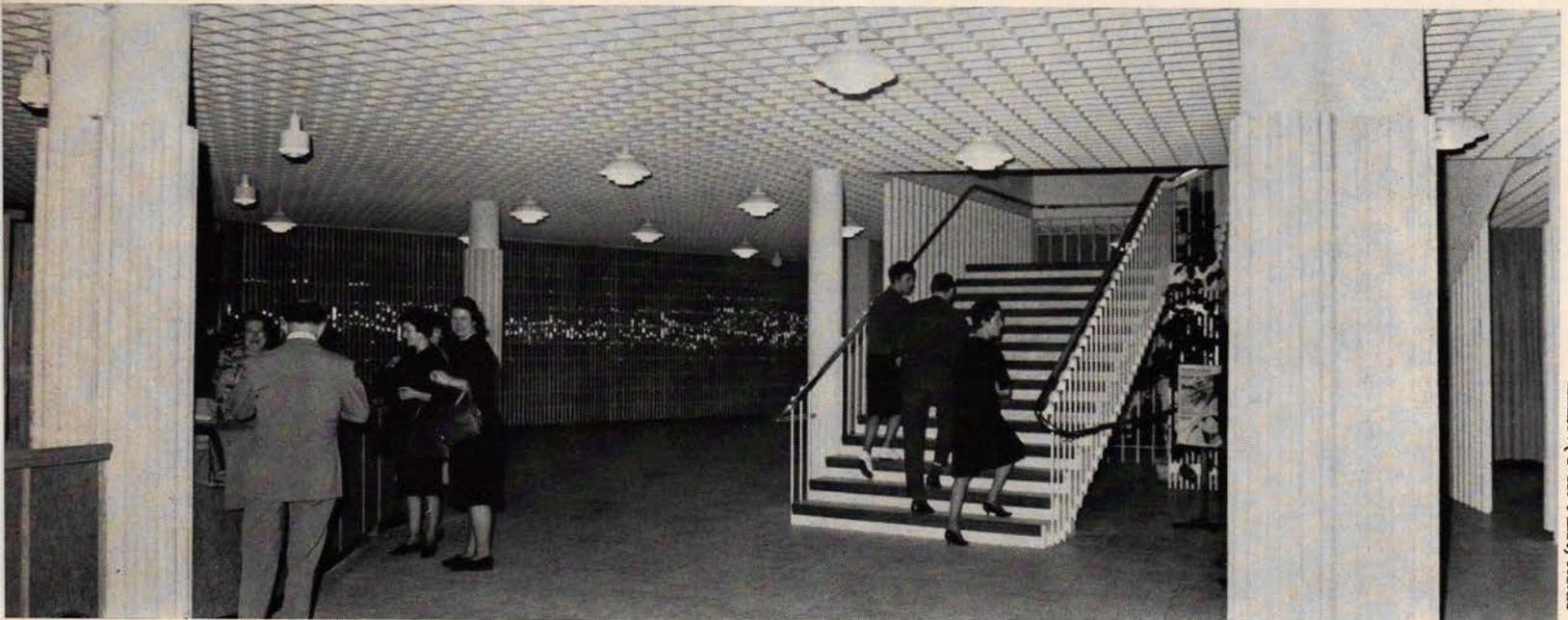
The new Cultural Center in the Volkswagen capital of Wolfsburg is Aalto's latest building in Germany. The top-lit public library is seen below.

PHOTOS: HEIDERSBERGER





The 100,000-square-foot building is finished in various shades of marble. Columns are clad in copper. Below is the main entrance lobby with stairway.



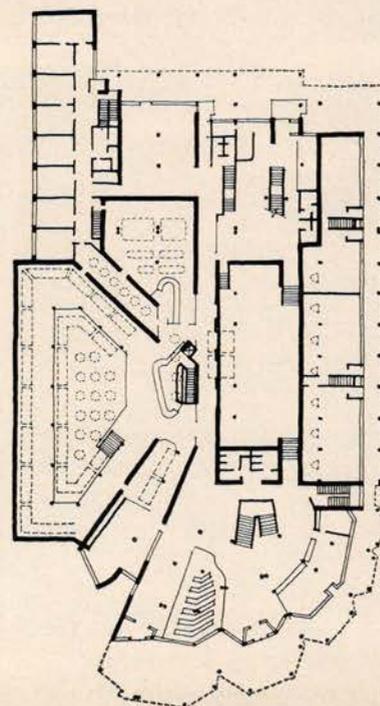
PHOTOS (LEFT & OPP. P.): LUTHER

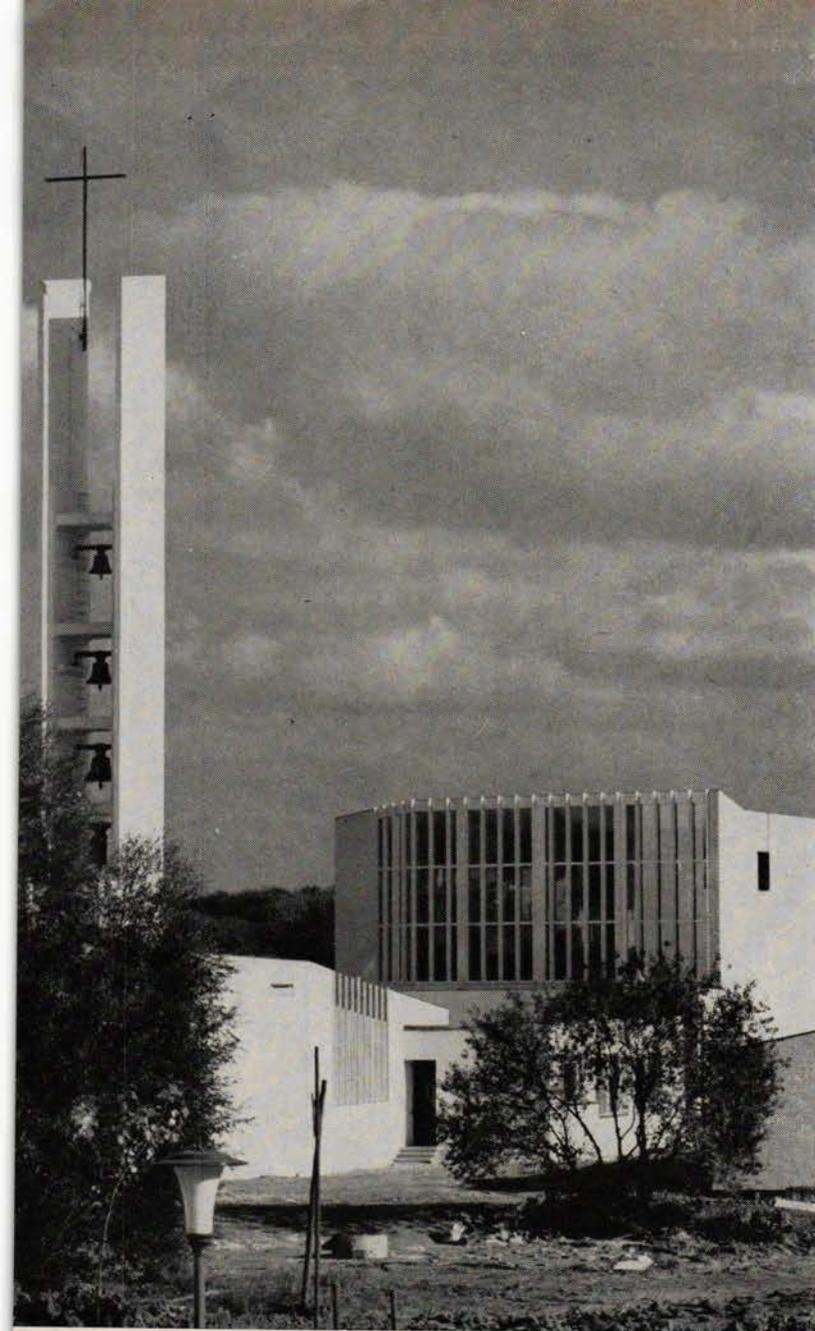
Wolfsburg's Center is a building of many parts

There are perfectly good, functional reasons for the irregular form of the Cultural Center that Aalto built for the Volkswagen town of Wolfsburg: the irregular, fan-shaped projections reflect an arrangement of small seminar rooms (see previous page and above); and the rectangular forms that contrast with the fan shapes come naturally to offices, libraries, and clubrooms.

Still, Aalto's *true* motivations for giving his buildings their irregular forms are to be found in poetry rather than prose: to Aalto, buildings are living organisms rather than flow diagrams; and their forms are chiefly determined by certain poetic notions about the kind of life the buildings will harbor.

The Cultural Center, for example, is meant to be much more than a box containing books, studios, and lecture halls (though it does contain all these). It is meant to be the counterpoint to the businesslike city hall next door, and a focus in the town's market place. It may be a very odd-looking building (and it is); but no one could mistake it for anything but what it is meant to be—a small, gentle poem in marble, spoken in the market place of this very sober town.





Interiors of church are white stucco and natural birch. Bell tower (left) is freestanding and visible through the glass walls of the auditorium.

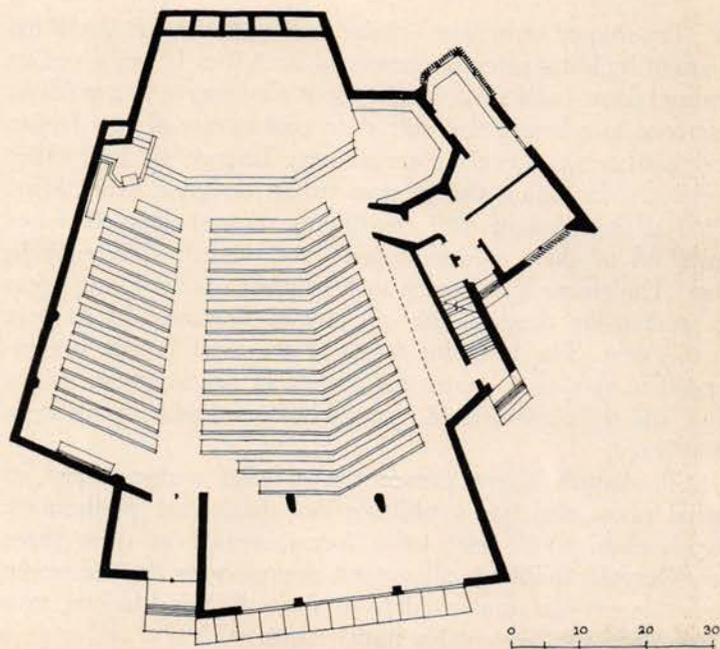


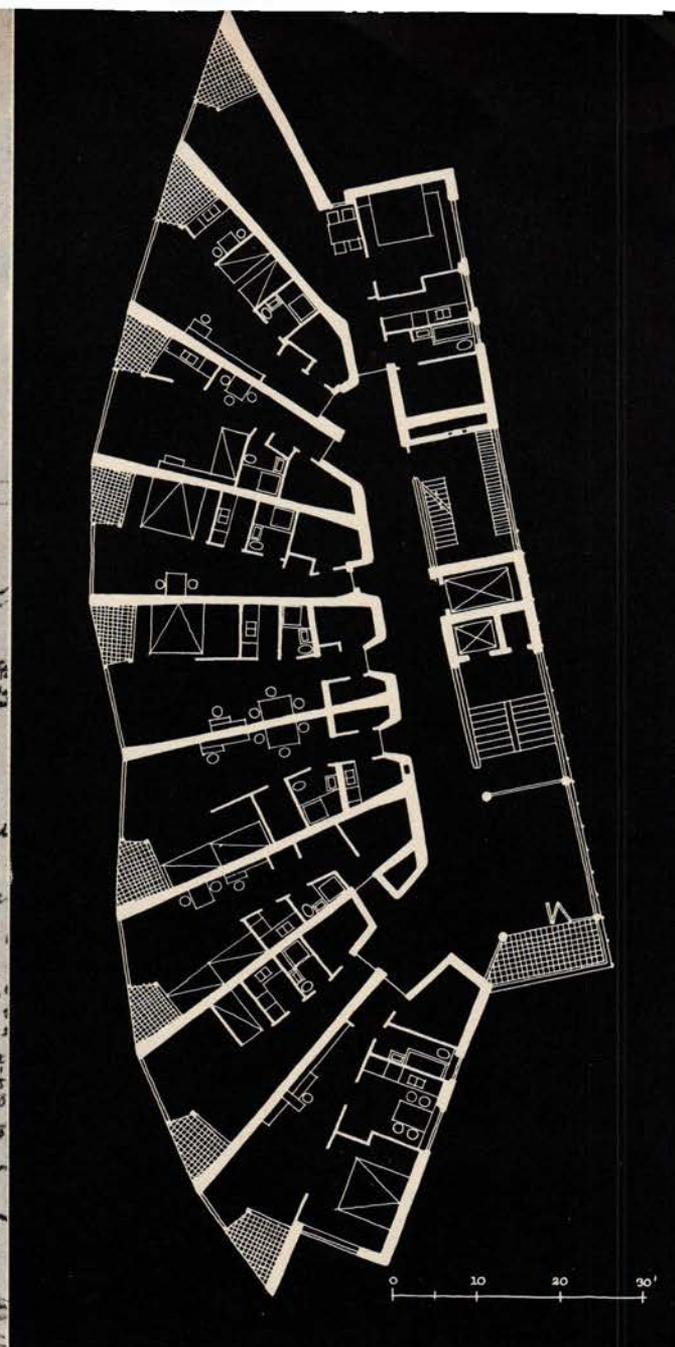
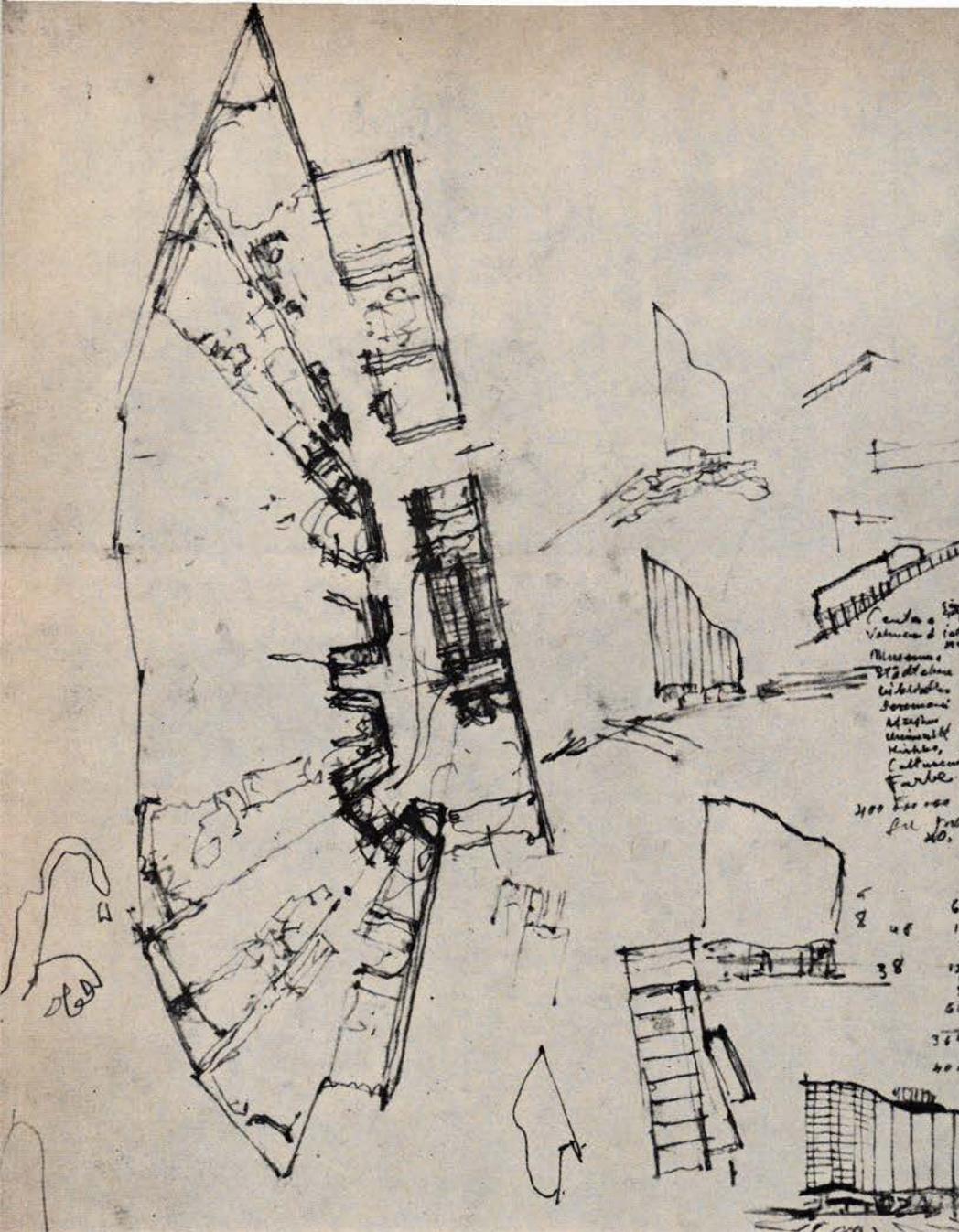
Lutheran Church of the Holy Ghost, also in Wolfsburg, is a simple statement of a strong faith

Aalto's second building in the Volkswagen capital is this plain, white little church with a seating capacity of 350 to 500 congregants. Completed late last year, the church also has a small parish house and related facilities.

It is not an "important" building in the sense that the Wolfsburg Cultural Center is important, but it was designed with just as much loving care: the plan is wedge-shaped and so arranged that the view from the altar or the pulpit is never down an empty aisle; similar consideration was given to light, for neither the congregants nor the minister are blinded by excessive glare—each natural light source is balanced by another one to make sure of that. (Here, as in the Cultural Center, Aalto's masterful use of skylights and side lighting is again demonstrated to perfection.) The structure of the church consists of six concrete bents that radiate from a point behind the altar (above, right).

Like other European and American corporations, Volkswagen has long found good architecture a useful tool to create an attractive public image. In commissioning Aalto, the company has made its wisest decision in this area to date.





Aalto's 22-story apartment tower near Bremen is the "campanile" in a new, 10,000-unit suburb

The fan-shaped structure (above and opposite) is the third German building recently completed by Aalto. It was given its unusual form (and great height) so it could serve as a point of reference in a brand-new suburban community of row houses and garden apartments planned near Bremen by four other architects, including the veteran urban designer Ernst May. The building contains 189 apartments, most of them efficiency units, all of them wedge-shaped (and slightly different) in plan. The shape was chosen to help open up the living areas to spectacular views of the old city of Bremen and its port to the west. The irregular facets of the west façade are intended to give each apartment a sense of privacy from neighbors, and the placement of recessed balconies adds to this sense of privacy.

Still, Aalto's recent preoccupation with wedge-shaped or radial plans also has a philosophical basis (see preliminary sketch plan, above left). The forms created in these three new German buildings all suggest organic growth from some central core—an analogy derived from Aalto's life-long love affair with the trees of his native land.

By American standards, the organization of this apartment building is almost sinfully luxurious: more than half the periphery of each floor is windowless, and the service "core" of the building occupies exterior frontage that could have been translated into valuable, rentable space.

Yet, in Aalto's scale of values, there are considerations more compelling than maximum rentals: the public areas on each floor are planned as community facilities, with a big balcony at the southern end available to all the tenants on each floor. On the roof is a tenants' club.

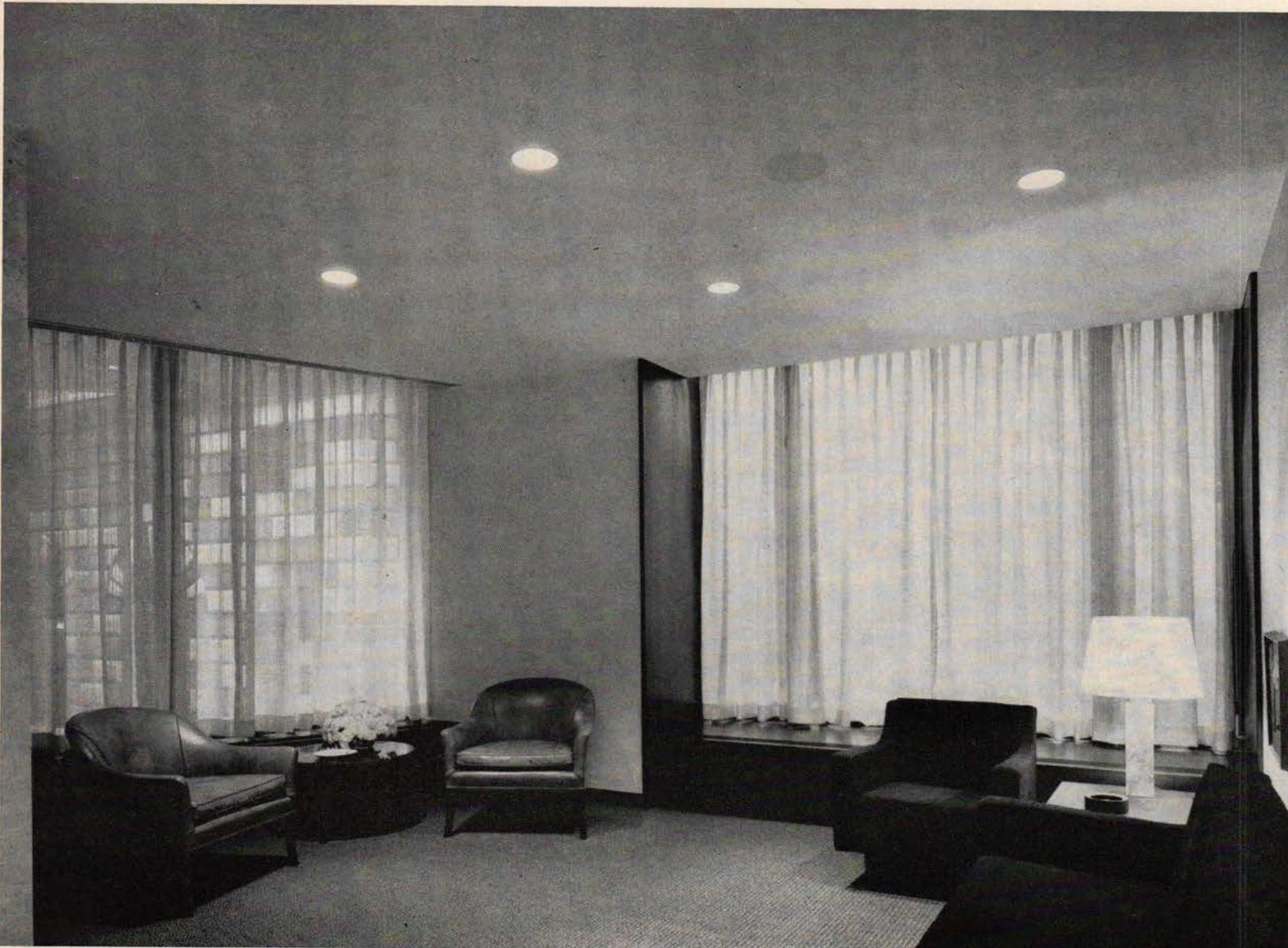
At 65, Alvar Aalto is busier than he has ever been before: he has completed a fascinating master plan for the center of Helsinki; his Opera House in Essen—a commission he won in a competition, as he did the one for the Wolfsburg Center—is under construction and promises to be one of the architect's most imaginative structures; and there are other churches, cultural centers, and theaters in the works. All of them bear the unmistakable imprint of Aalto's hand; but all of them are distinctively different creations, intended to reaffirm the importance of the individual in our day.

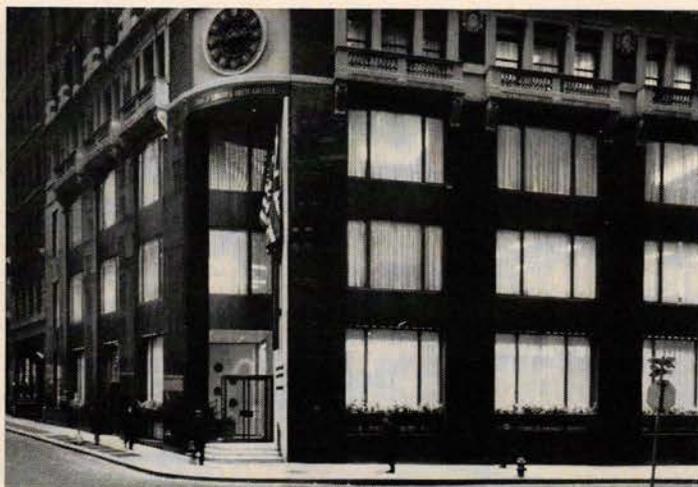


Sackgasse



Corner office had small windows, hung fixtures. Similar space, now a reception area (below), has ample glass, downlights in a new hung ceiling.





Old corner entrance shown above was notched out for new entry into luminous-ceilinged bank lobby (below).



PHOTOS: (ABOVE LEFT) PAUL PARKER; (TOP OPP. P.) HANS VAN NIES; (OTHERS) GEORGE CSERNA

OLD OFFICES MADE NEW

Like old slippers, a well-worn office undeniably offers a rumpled sort of comfort (top photo, opposite). It does not, however, offer the large spaces and window areas, integral lighting, air conditioning, and bright, orderly lines that most modern office tenants have come to demand.

On the first seven floors of a multistory building in Manhattan's financial district, Maria Bergson Associates were challenged by two affiliated companies—the Bank of London & South America Limited, and Balfour, Williamson Inc.—to preserve this feeling of old-fashioned warmth, while creating modern work space in small, awkwardly shaped floors. The new spaces have a clean look without being stark "modern": e.g., the third-floor reception area (bottom photo, opposite), which opens up a corner similar to the old office shown above it, and the luminous-ceilinged banking lobby on the main floor (photo, left).

Outside, the first three stories have been refaced in quiet black granite, with warm bronze spandrels and mullions, flags at the new corner entrance to the banking lobby, and bronze planting boxes (top photo).

The old entrance to the building was right on the corner, with a corridor to the elevators splitting the floor in half. To gain sufficient open space for the new banking lobby—and to give this lobby an important entrance—the designers expropriated the corner, providing a new entrance to the building proper just up the street. The corner was then notched out to a height of three stories to

protect the exposed entrance from wind and to accentuate the three floors occupied by the bank.

The two clients divide the seven floors evenly: a shared employee lounge on the fourth floor separates the bank's space below from that of its affiliated firm above. Interiors, which are similar for both firms, are softened by a wide selection of South American and African woods, a gamut of lighting systems, rich fabrics, and generous, varied planting areas.

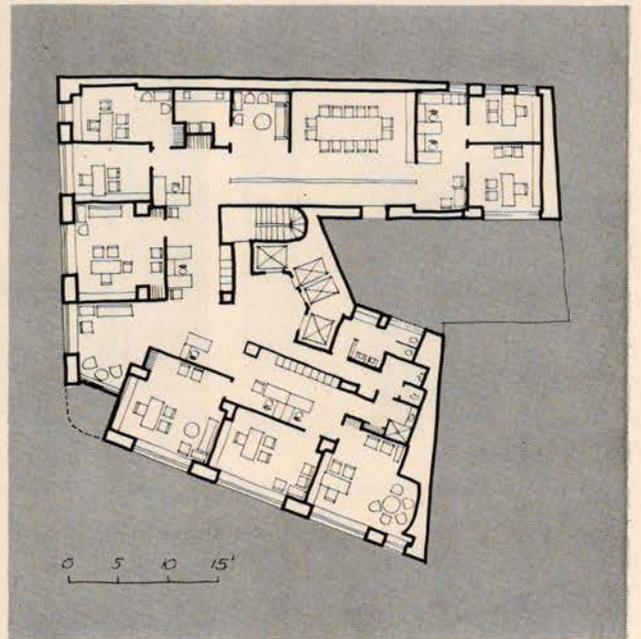
Both firms put employees in open pool areas (right) as well as in private executive offices. One of the larger offices is tucked into an acute-angled corner (lower right in plan, and photo below). A gently curved travertine wall behind the sitting area squares up the corner, leaving room behind it for some of the ductwork involved in the new air-conditioning system, which services all seven floors from a basement installation.

The board room is located on the interior of the third floor. To give it light, and to connect an isolated, back-office area with the main part of the floor, the designers separated the board room from a long corridor with a sound-deadening double wall of glass, paned in decorative colors on the board-room side and back-lighted by troffers in the corridor ceiling (photo opposite).

FACTS AND FIGURES

Offices of Bank of London & South America Limited and Balfour, Williamson Inc., 84 William St., New York, N.Y.

Designer: Maria Bergson Associates. Consulting architect: Fred L. Liebmann. Engineers: Purdy & Henderson (structural), Sears & Kopf (mechanical). General contractor: Barr & Barr, Inc.



Above: executive secretary and pool areas. Below: a private office with cove lighting, curved travertine wall.



PHOTOS: GEORGE CSERNA





© EZRA STOLLER

CITIZENS AND ESTHETICS

Buffalo's Albright Museum (seen above and described in the March '62 issue) is itself a tasteful combination of the new and the old in architecture.

Conducted last month in the museum auditorium, an "esthetic responsibility" symposium organized by AIA chapter president Milton Milstein and program director John Highland was an innovation. Leading citizens were invited to participate as "esthetic amateurs" along with professionals such as good teachers of art. Mayor Chester Kowal, too, joined the panel.

Some of the "amateurs" were so impressed with esthetics that they gave the word a special strained pronunciation, but there was nothing fuzzy about the ideas in this crowd, among whom many were highly placed industrialists. Their contribution was big, because their very presence indicated, first, the concern of all thoughtful citizens with the beauty of their city, and second, that effective things could be done about it.

The "elite" in esthetics who are altogether too elite are likely to undervalue such participation. For although the American businessman is likely to err in equating "the value of d for design" solely with the "value of d for dollars"—rather than to value design for the enrichment which it contributes to life itself—yet a broad view is possible to the business-

man because, in America, business draws the very highest talents. There is neither the social inferiority feeling that the aristocrat of older countries can have about being "in trade," nor the hesitancy that this engenders in the trader in dealing with broad national and cultural issues.

More than a century ago a young French nobleman named Alexis de Tocqueville commented that "in democracies nothing is greater or more brilliant than commerce; it attracts the attention of the public and fills the imagination of the multitude; all energetic passions are directed toward it." The first step toward esthetic competence is taken by those who in themselves are passionately creative, not yet knowledgeable in art matters but ready to become so.

PROGRESS WITH PRESERVATION

A happy little story comes out of Norwalk, Conn., where opposition developed among historical preservationists against a modest modern store which, it was feared, would clash with its neighborhood facing Norwalk Green, which is Colonial in flavor though not in detail. The so-called Common Interest Group of Norwalk, already most successful in preserving the Charles D. Mathews Mansion, was enlisted for advice. Very intelligently it sought out Professor Christopher Tunnard of Yale and, with the completely unofficial cooperation of planning officials,

an informal meeting took place on a Saturday afternoon at the University Club.

The meeting was attended by Builder Norman Shapiro and his wife; by his architect, Jack Schecter of Bridgeport; by Carroll Calkins, the president of the Common Interest Group, and Mrs. Douglas Smith, an architect-member. It was also attended by Tunnard, by Professors Henry Miller and John Hogue of Yale as art historians, by invited New York Architect Robert Weinberg, and by William Atkin of Whitney Publications.

Most sensibly, no one tried to impose a Colonial mold on the new building, thus freezing forever one good system to corrupt the world. Instead, the question was—as in all civilized countries with a past and a future—how the architecture of one period (ours) should be related to the architecture of an earlier period.

The upshot is that Architect Schecter is putting into his building details that may harmonize better in the area. Builder Shapiro and his wife have gained greater acceptance and protection for their enterprise, and they are both joining the Common Interest Group. And the entire group is studying how to obtain historical zoning for this and similar areas under existing Connecticut legislation.

This question is delicate because fundamentally the problem is how any architect can do his work of creating the world ever new and still avoid totally disrupting existing patterns; while those who love the old protect it but avoid stifling new creation. The best results flow, I think, when such discussions, as in this case, are voluntary and unofficial.

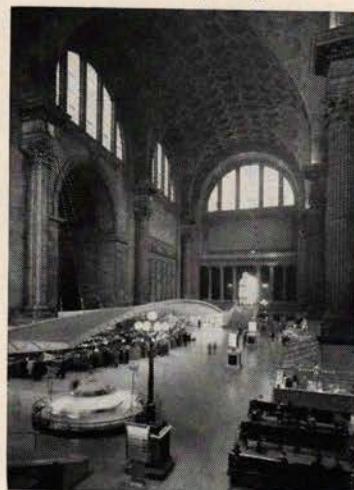
FOOTNOTE ON PRESERVATION

The editorial page this month suggests methods of making preservation of architectural monuments more effective. A footnote is deserved for the case of Pennsylvania Station in New York. Demolition of those fine halls should have been resisted, and not only by architects. J. P. Morgan, on whose insistence both Penn

Station and Grand Central Station were built as "worthy gateways to a great metropolis," was not only the foremost culture vulture of his time but also the foxiest banker. He knew how a noble hall, besides gracing the city, would work on the spirits of all travelers, raising their sense of *themselves*, opening their pores, stirring their enterprise in all directions.

How many millions this coined for stores like Gimbel's and Macy's, which grew up close to Penn Station, no one will ever know. No one knows what commerce it generated for the entire city, but the amount must have been enormous.

The young architects who virtually alone protested the proposed demolition of the Penn's great halls were perhaps viewed



J. ALEX LANGLEY

by the public as culture vultures only. They should have had stout business allies.

For the record, New York still needs a magnificent gateway, for rapid, interurban, ground transportation, over that existing right of way, through that existing terminal, whereas any number of other locations would be perfectly suitable for a palace of sports. The long-range judgment of history on today's business leadership in New York for letting Penn Station go low, and letting people be treated more like animals than like citizens as they enter a once great city, is likely to be harsh.

Douglas Haskell

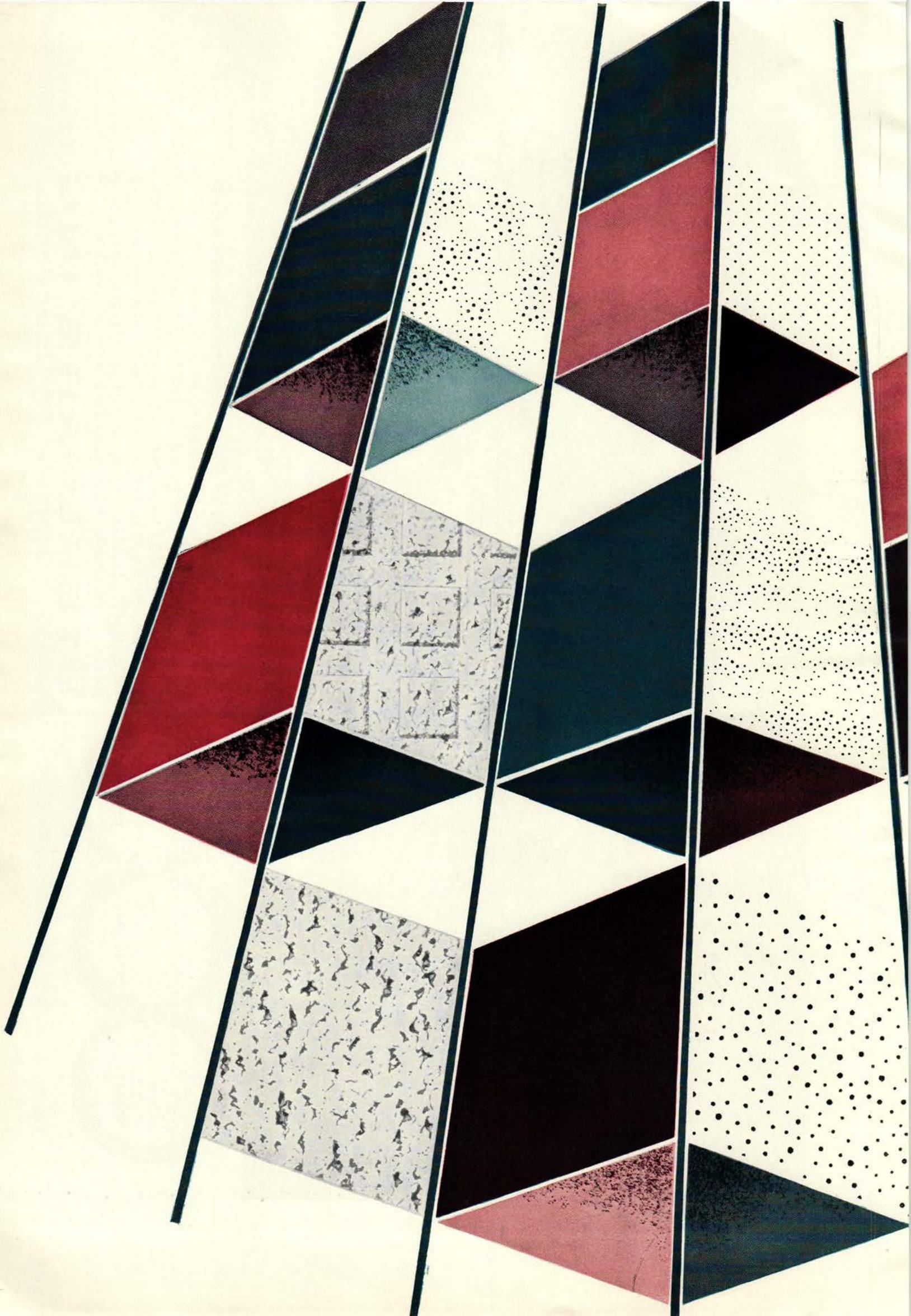


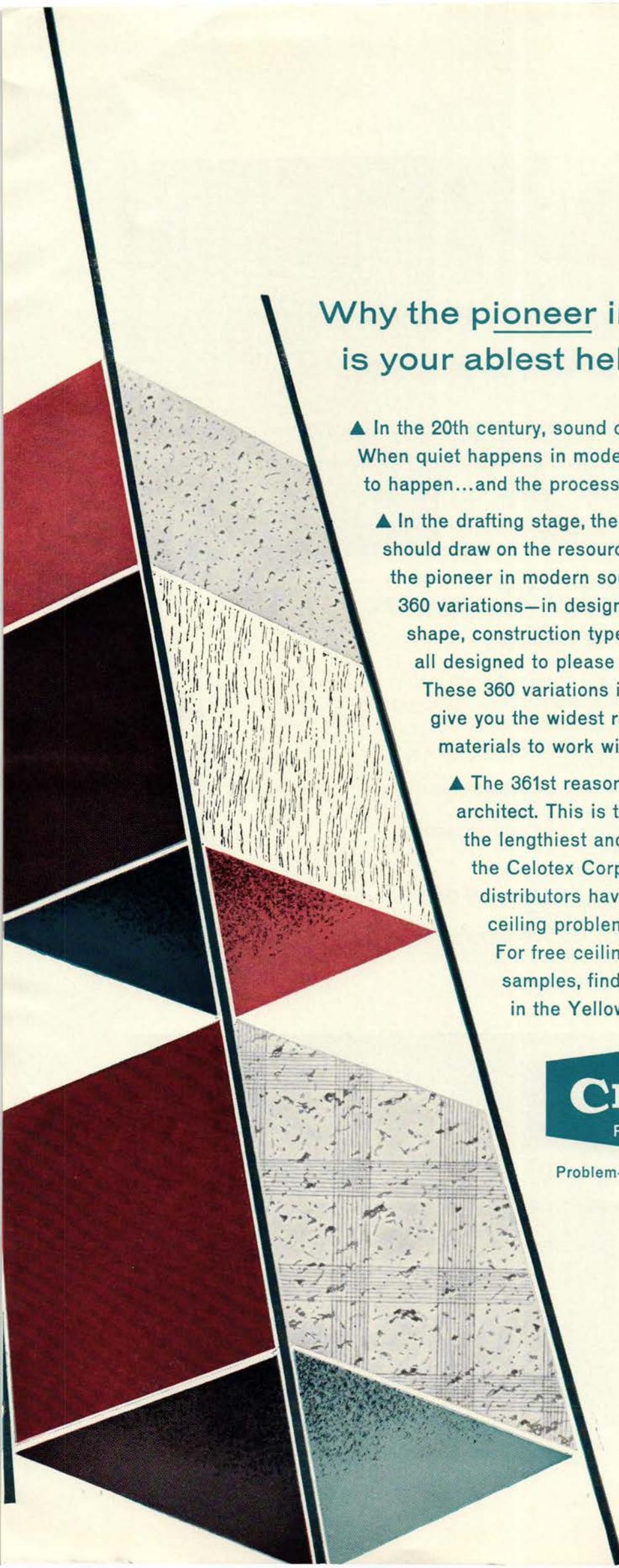
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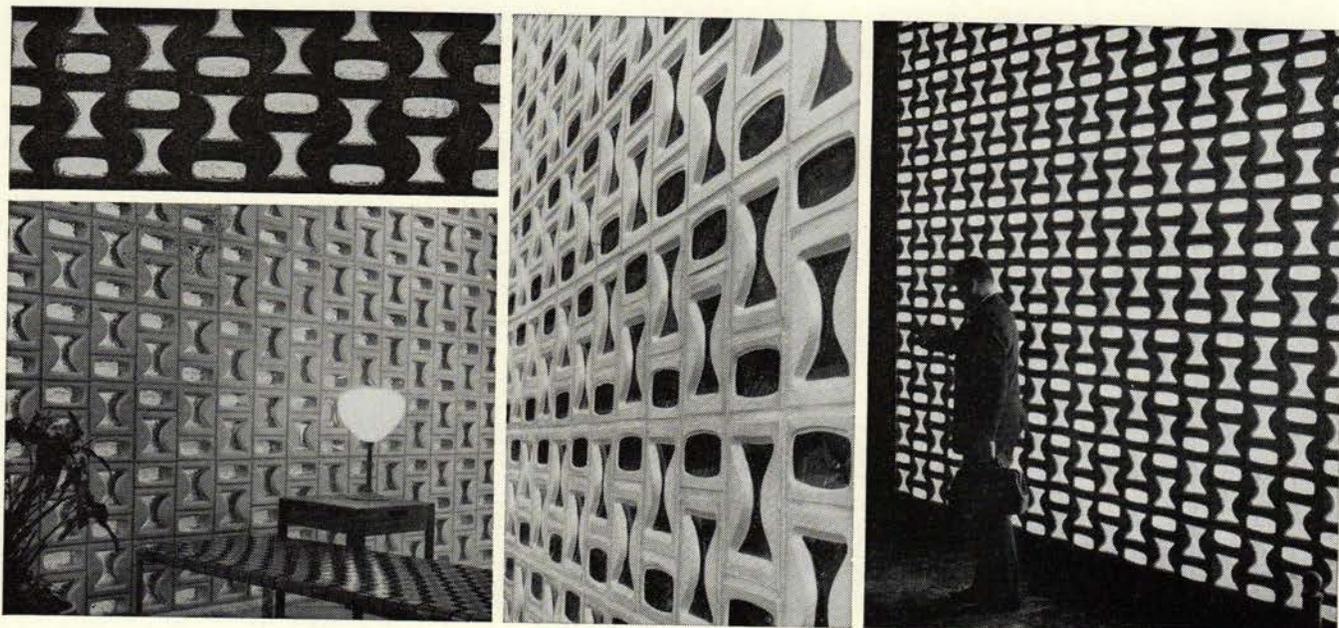
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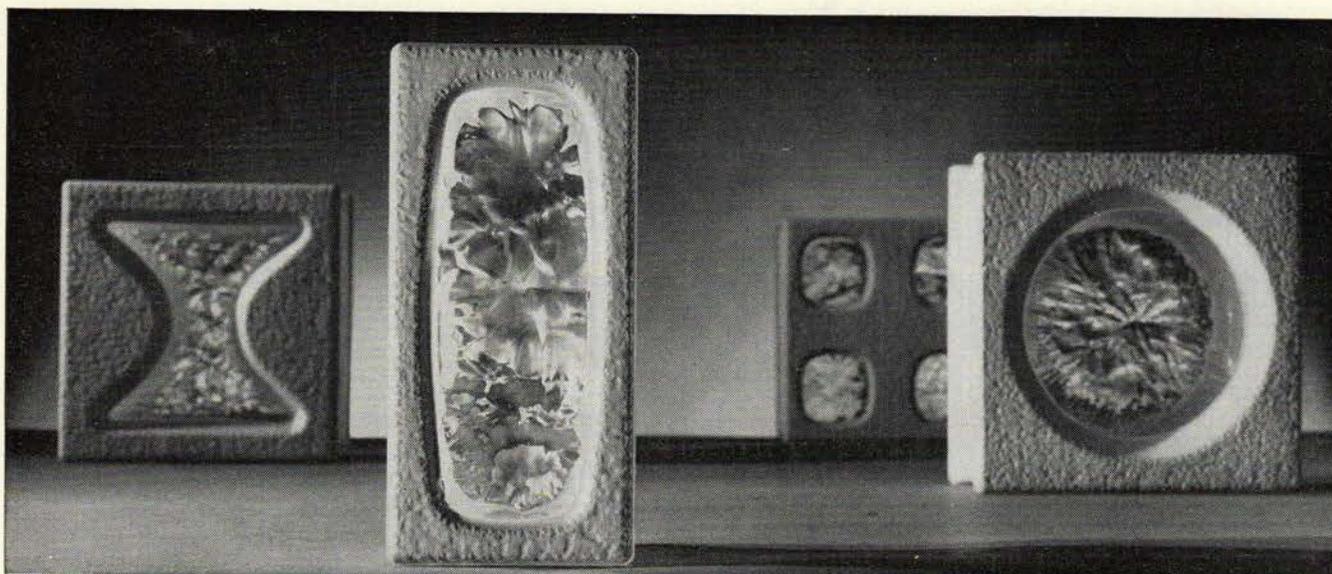
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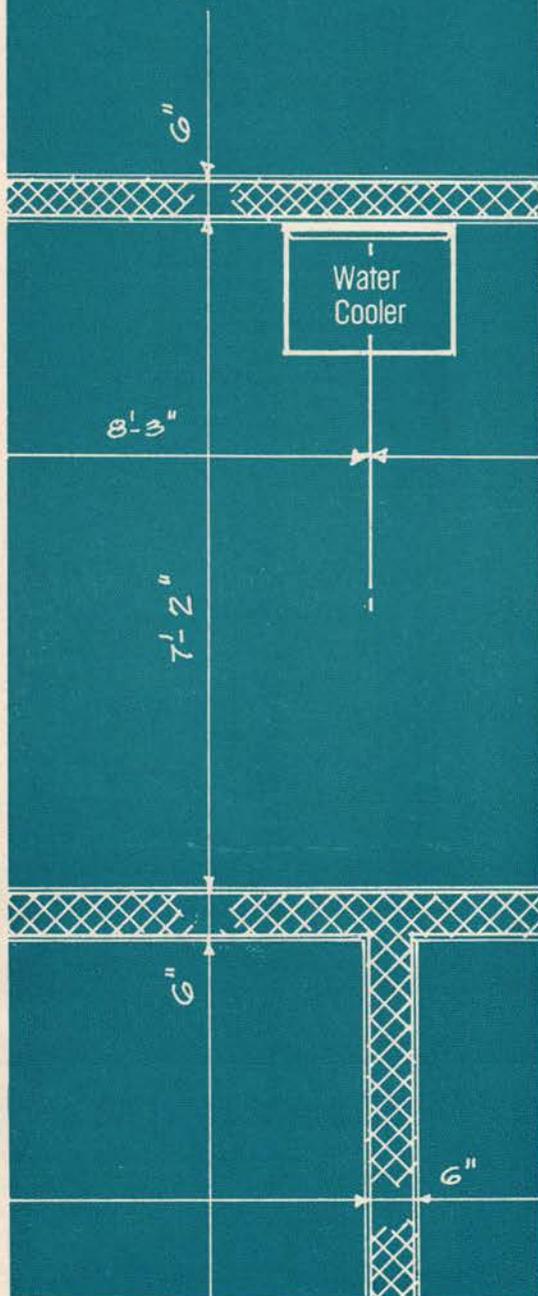
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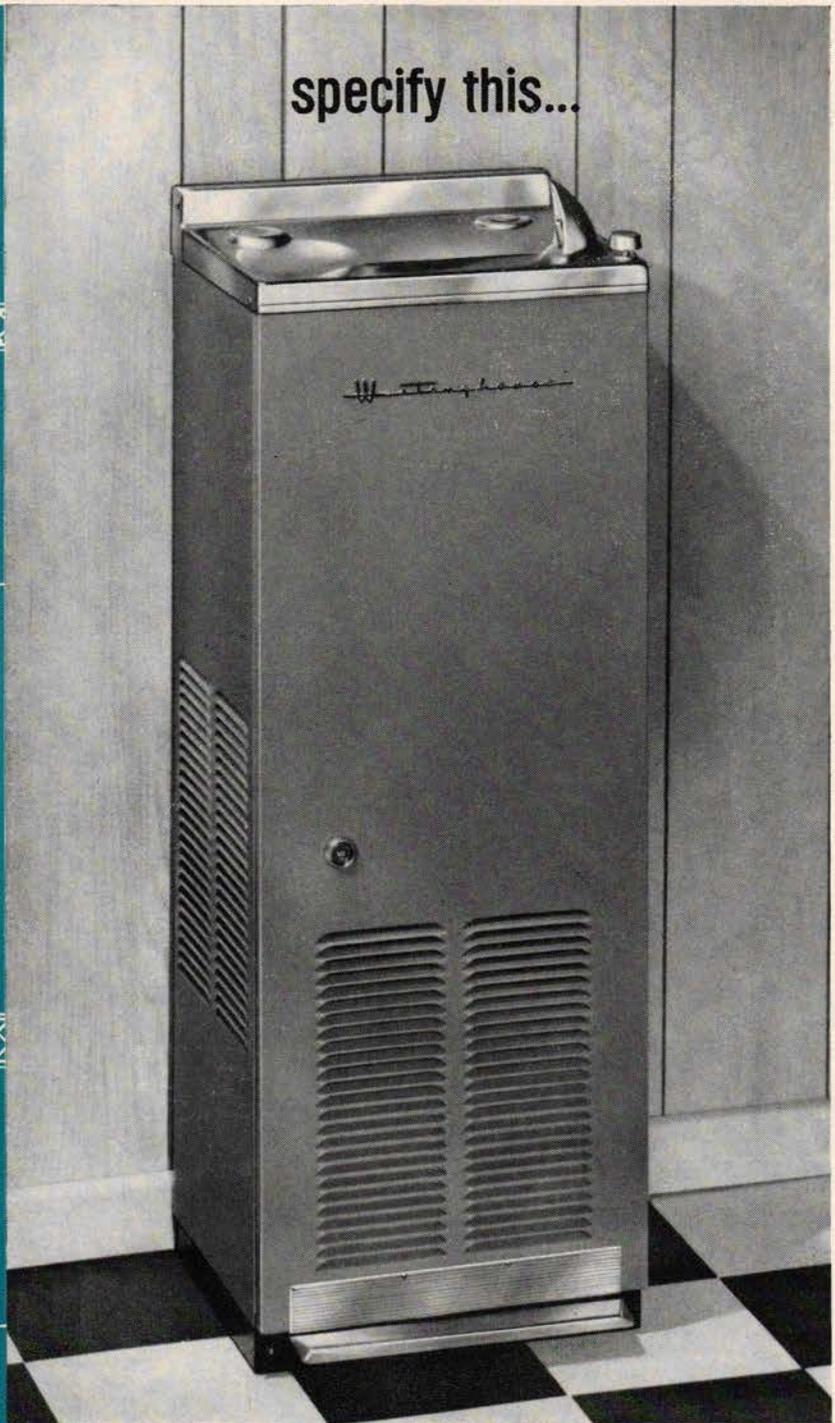
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Banham appraised, "doughnut" cities, renewal guide

GUIDE TO MODERN ARCHITECTURE. By Reyner Banham. Published by The Architectural Press, 9-13 Queen Anne's Gate, London S.W. 1. 159 pp. 7 1/2" x 7 1/2". Illus. 25s. (Note: all U.S. rights sold to D. Van Nostrand Co., Inc., 120 Alexander St., Princeton, N.J., who will make the book available to U.S. readers this summer.)

Reviewed by Serge Chermayeff

Mr. Reyner Banham's handy little guide to modern architecture is pleasing and irritating at the same time. It is the author's apparently chronic purpose to make public issues, the province of criticism and history, out of his self-indulgence, a matter for privacy.

The comments on the now classic modern masters and their masterworks illustrate this. Discussing Frank Lloyd Wright's masterwork, the Robie House, the author harps on the allegedly "suburban" accoutrements—vases, flower boxes, *et al.*—of this small close relative of the Midway Gardens, which reveals little of the Middle Western background of the architecture but perhaps throws some light on the author's inhibitions.

The theme of the acceptance by modern architects of motion as a common experience and architecture as kinetic space is not developed, and the phrase: "spacial manoeuvres," however memorable, becomes meaningless and tinged with probably unintended contempt.

Banham describes Le Corbusier's Swiss Pavilion in Paris as a "seminal building," which it is indeed, for the very reasons he reveals. As the first design to separate the functional components and to give each their separate formal integrity, it anticipated by many years Kahn's "inhabited" and "service" spaces. But the description ends with: "a slab of logic raised on a base of free invention"—again a meaningless, vaguely clever phrase.

Mr. Banham obviously looks at any new piece of architecture with his mind made up and his eyes tightly closed. As a result, many comments read as rationalizations contradicted by the visual evidence (some of which is provided right there for the reader). Two cases in point: first, in speaking of Lever House in New York he quotes the designer as having "dedicated to public use" the street-level court: this leaves the reader with the impression that this admirable purpose has been fulfilled. But Mr. Bunshaft, the designer, knows better than Mr. Banham: the intention was not satisfactorily implemented, and the space remains deserted.

Second, he describes the vast, high-density housing of Park Hill in Sheffield as having "a pedestrian circulation conceived as holding the gigantic structure together." Programmatically, this is evidently true of the imaginative concept. He then goes on to say: "that

Mr. Chermayeff, architect, painter, and a Fellow of the Royal Institute of British Architects, is currently a professor at Yale's School of Architecture.

is for men and women and children, walking along on the scale and at the pace of the human race," again implying that the good intention has been realized, whereas it is quite clear that Lewis Mumford's objection to the actual physical result is well taken. Again, Mr. Banham provides the visual evidence to support Mumford. The place, in "human" terms, is even worse than Stuyvesant Town. Mr. Banham has confused a most sophisticated architectural handwriting, which the project undoubtedly has, with the achievement of social purpose. This social failure is identical to the "shopping street" in the vertical center of "l'Habitation" in Marseilles, where, of course, no one has shopped; or its "playground roof," where no children play but architectural student-tourists abound. Children somehow still prefer the ground, where other sorts of living things may be surprisingly encountered.

Like a brilliant but bad teacher, Mr. Banham leans toward favoritism which even his ingenious rationalization can hardly disguise. Why include Bruce Goff's architectural Halloween pumpkin house at all in a compressed and seriously intended commentary? Why do a disservice to an excellent architect, Denys Lasdun, by praising his apartments for the wrong reason? The exciting spaces of the two-three section developed first by Wells Coates nearly 30 years ago in Prince's Gate (not mentioned by Mr. Banham), which Lasdun uses again with great skill, would be as good if the "luxurious materials *et al.*" Banham makes so much play with were omitted.

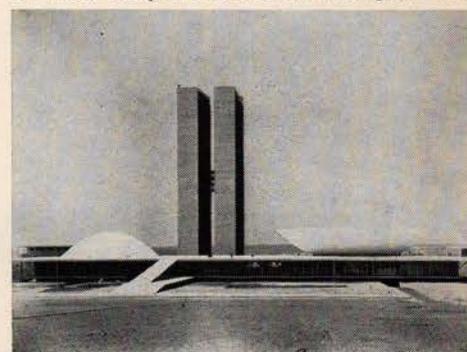
Why, for that matter, in a selective catalogue include the somewhat run-of-the-mill ordinariness of Terragni or the willfull shapes of Moretti or the questionable prefab unit of Schein? And omit the serious new talents in both the U.S. and Latin America, acknowledged by serious architectural critics everywhere?

Evidently seduced by the fine Italian hands, Banham writes about the Nervi-Ponti Pirelli tower, after a very good categorization of Ponti's talents as "a tough-minded business building but not a rent box." This will come as a surprise to American skyscraper architects and probably to Nervi himself, whose engineering brilliance is certainly displayed in a tough-minded concrete "structure" which, as it happens, provides least rentable space nearest the ground, a most important rent return immediately at city level, and puts exaggerated pressure on the elevator system upon which the upper-level rent success of the skyscraper business depends.

Mr. Banham is evidently not at home in technical and social issues. He speaks of Le Corbusier's "structural preoccupation"—which was true of the early "programmatic" master and never of Le Corbusier, the builder—but does nothing to point to the deliberate, disdainful attitude toward structure and the art of building generally of the later "sculptor."

Banham's book has enough brilliant in-

sights and witty comment to be entertaining. It is not for serious students of architecture and may prove misleading to the layman. Yet one must be grateful for much excellent guidance in so small a volume. This reviewer thought that the peroration—a critique of Brasilia (photo below) and Chandigarh, two capital cities designed as wholes—was particularly rewarding. The work of the disciples, Niemeyer and Costa in Brasilia, comes off worse in spite of Mr. Banham's guess that



PAULO MUNIER

this design corresponds to a modern, automobile-using civilization. To many city planners the city is already obsolete in concept, plan, and scale. In any case, he raises the question, even if he does not develop the theme, that such gigantic undertakings are portents of the immediate architectural future—with architectural responsibility and design on an unprecedented scale, for which, on the available evidence, architects are quite unprepared.

The inclusion, again in the peroration, of Gropius' Bauhaus and Mies's Crown Hall, comparable in purpose as schools of design, makes the point, perhaps unconsciously, of the superiority of the old masters. Gropius' early "masterpiece" (Banham's words), and "manifesto" which still holds good today, and Mies's typical, exquisite, uninhabited space, the refinement of something known and deeply felt, are complementary parts in a healthy expanded spectrum of modern architectural purpose and process—two central ideas indispensable for the understanding of modern architecture.

THE TWILIGHT OF CITIES. By E. A. Gutkind. Published by The Free Press of Glencoe, a division of The Macmillan Co., 60 Fifth Ave., New York 11, N.Y. 201 pp. 5 3/4" x 8 1/2". \$5.

"The modern city," says the author, a professor of urban studies at the University of Pennsylvania, "is not a social community. At best it is an association of different classes of society on an economic basis, at worst an agglomeration of human atoms. . . . Though they are the characteristic expression of our time, they have neither organic structure nor definite architectural form."

The villain of the piece is, as ever, the market economy, and its companion, the class society: "The power of money is the fictitious center [of the modern city] while the residential and industrial zones surrounding the center house the modern 'slaves' who

continued on page 148

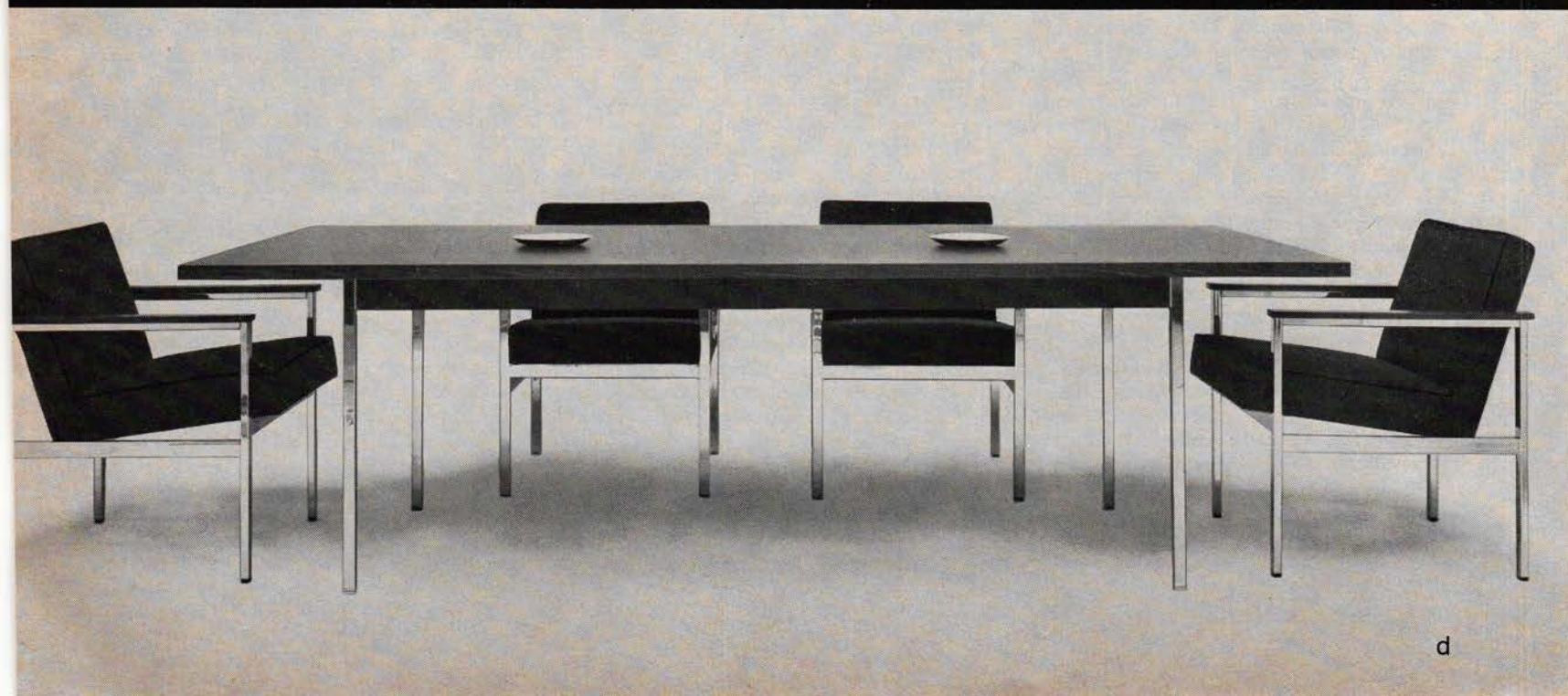
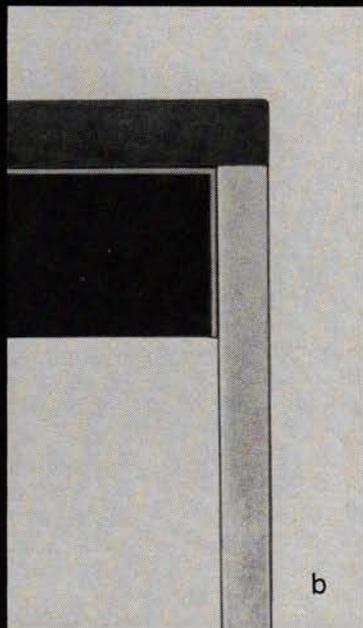
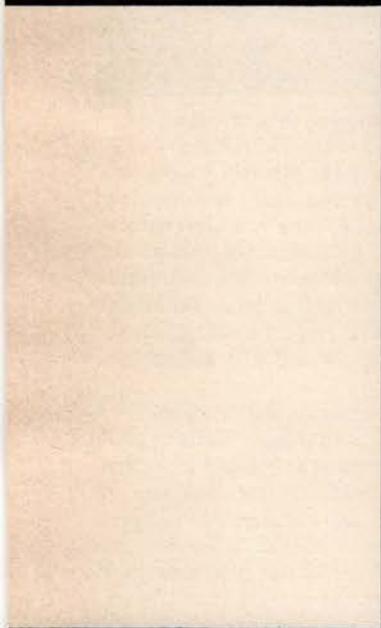


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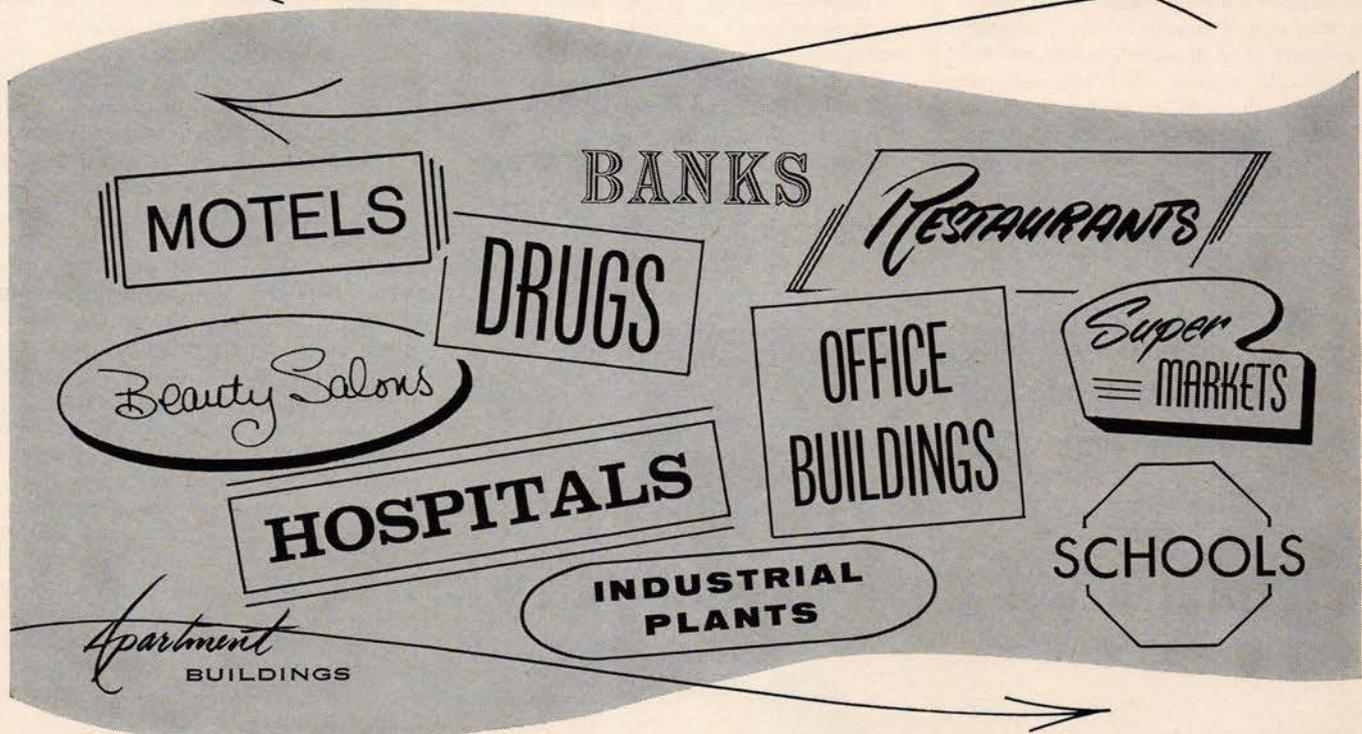
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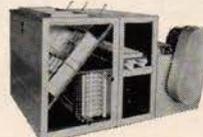
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are governed by this new despotic force." And money has not only corrupted U.S. cities. Even the Paris so dear to the hearts of Frenchmen (and American city planners) is the product of a decadent, profit-minded chap, Baron Haussmann, who "not only put the Emperor's finances on a healthy basis but provided ample opportunities of enrichment to a corrupt and parvenu society that

did nothing to improve the housing standard of the masses."

This book is a cry to Americans to throw off the chains of modern, despotic urban society and create new, healthy environments. But in the process of throwing off the chains, Gutkind says we should also throw away the cities.

Gutkind's revolution would abandon pal-

lid programs such as urban renewal, which "still relies on the old pattern of cities, slightly improved in detail but hopelessly lagging behind what it could be." Ignoring political and economic realities, he offers instead what might be called The Gutkind Theory of Ordered Scatteration, "a centerless region in which numerous small communities are joined together in a densely knit social and economic structure"—sort of like Levittown, Scarsdale, Montclair, Staten Island, and Red Bank all joined together, with Manhattan and Brooklyn turned into one big park. These new "conurbations" would have no slums, no temples of high finance, no messy industrial areas, no nothing, in fact. And it can all be brought about simply by a continual tearing down of central city areas as their functions dissolve (under various market forces which Gutkind only hints at), and by turning the cleared areas into parks. Eventually, *voilà!*: a nationwide chain of doughnut-like conurbations with a subsequent "transfer of energies, hitherto concentrated in the cities and unable to develop freely, to small communities, and their integration with the social and economic structure in all its manifestations."

While deploring what the market economy has done to cities, Gutkind somehow seems to rely on it as the principal engine of his own scheme. At least he proposes no specific means whereby his decentralization might be attained by fiat. The fact is, however, that it is the market economy which is creating megalopolis, and which is intensifying uses of the central city, if not expanding them.

Gutkind's theory also suffers from the notion that if the form of the metropolis is changed somehow, the culture of which it is a part will automatically be richer. This is, indeed, putting the tail fins before the V-8, for he has already kissed off our culture as being stagnant and one in which the "forces of sterile tradition are very strong." It is hard to imagine the dynamic new semi-urban forms Gutkind proposes in such a milieu. If, as Gutkind says, our greatest difficulty is "our innate reluctance to abandon the millenia-old concepts" of cities, then it seems unlikely we can kick the city habit without first convincing ourselves that something like Gutkind's doughnuts might really be better. And the argument is just not that convincing.

—DAVID B. CARLSON

THE CITIZEN'S GUIDE TO URBAN RENEWAL.
By Alfred P. Van Huyck and Jack Hornung.
Published by Chandler-Davis Publishing Co.,
West Trenton, N.J. 160 pp. Paperbound. 5 1/2" x 8 1/2". \$3.

At last there is a handy little compendium of the many laws and programs relating to urban renewal. This one is written clearly, and, although directed primarily at city officials, it makes valuable reading for "citizens" as well.

continued on page 150

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Perhaps the most striking thing about this paperback is the assumption by the authors that renewal is primarily an economic program. It has become that, of course, but there were, in its early stages, many serious social considerations. That these have been gradually shoved into the background is one of renewal's most curious developments. But this guide makes it clear to city admini-

strators that they should structure their programs around economic criteria, and hope that social goals can be fulfilled at the same time.

The book suffers somewhat from treating many facets of the complex urban renewal picture with equal attention, and from being laconic where it should be expansive. Relocation, for instance, is given no more

attention than the mechanics of survey and planning, yet it is today the program's most critical stumbling block. This guidebook would have profited from some concrete examples of good relocation programs in several cities, and from a more direct recital of the specific problems that arise. —D.B.C.

AMERICAN ARCHITECTS DIRECTORY. Edited by George S. Koyl, FAIA. Published by R. R. Bowker Co., 62 W. 45th St., New York, N. Y., under sponsorship of The American Institute of Architects. 917 pp. 8½" x 11". \$25. (\$15 to AIA members if payment accompanies order, \$17 if billed.)

There are more than 15,000 listings in this second edition of architecture's own *Who's Who*, an increase of nearly a third over the first edition, published six years ago. But there are still limitations: with a few carefully screened exceptions, only AIA members are included, and nearly 4,000 of the listings contain no biographical data (the subjects failed to return their questionnaires). A notable improvement is the inclusion of firm names.

AMERICAN ARCHITECTURAL BOOKS. By Henry-Russell Hitchcock. Published by University of Minnesota Press, 2037 University Ave., S.E., Minneapolis 14, Minn. 130 pp. 5¾" x 8¾". \$4.75.

The body of this work, together with the prefaces, constitutes the mother lode of architectural bibliography. Scholars who have been unable to acquire it when first published in the 1946 limited edition will rejoice at this fine collection of important references to America's architectural publications.

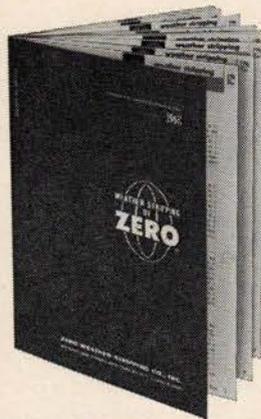
There are over 1,400 separate entries, beginning with the first architectural publication in this country (in 1775), and going down to 1895. It is a work of superb scholarship, and forms the basis from which all other architectural bibliographies of this period are built.

THE CHURCHES OF MEXICO, 1530-1810. By Joseph Armstrong Baird, Jr. Photographs by Hugo Rudinger. Published by University of California Press, Berkeley and Los Angeles, Calif. 126 pp. Illus. 8½" x 11¼". \$12.50.

Author Joseph Baird is an associate professor of art at the University of California, and the scholarship behind this study is impressive. Readers who like their art histories leavened with a touch of anecdote or *bon mot* had better look elsewhere.

In selecting more than 50 monasteries, cathedrals, and parish churches to describe and illustrate, the author has given preference to those not extensively published elsewhere. Many are well off the beaten track for travelers to Mexico and serve as good examples of regional architectural variations. The photographs (both black and white and color) are excellent, and are well balanced between general and detailed studies. END

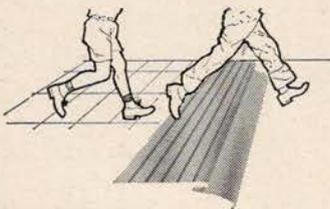
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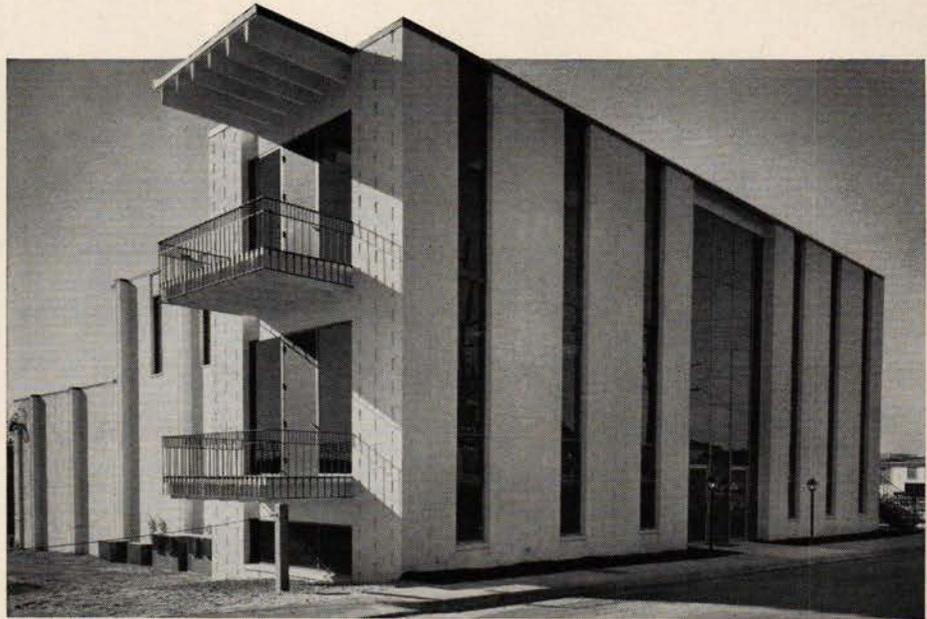
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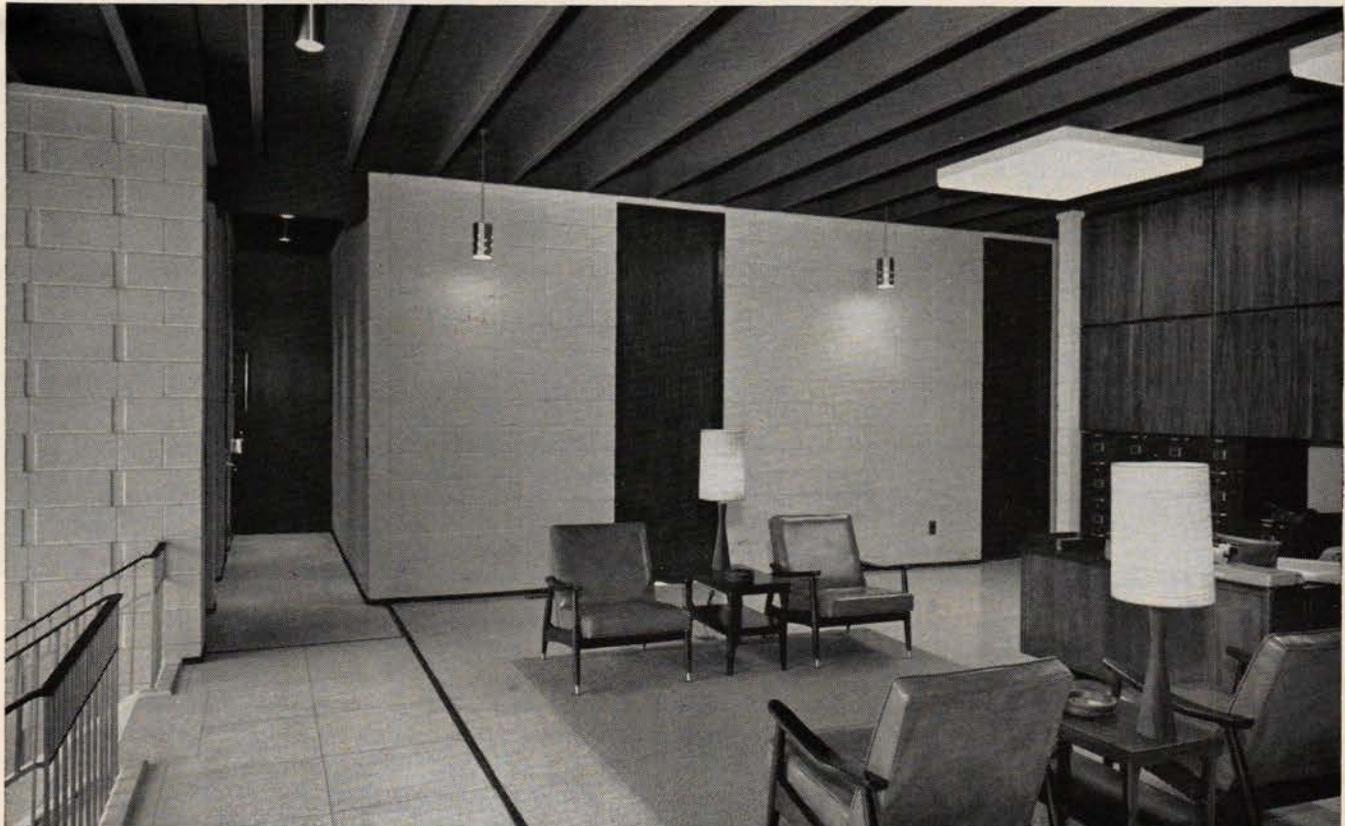
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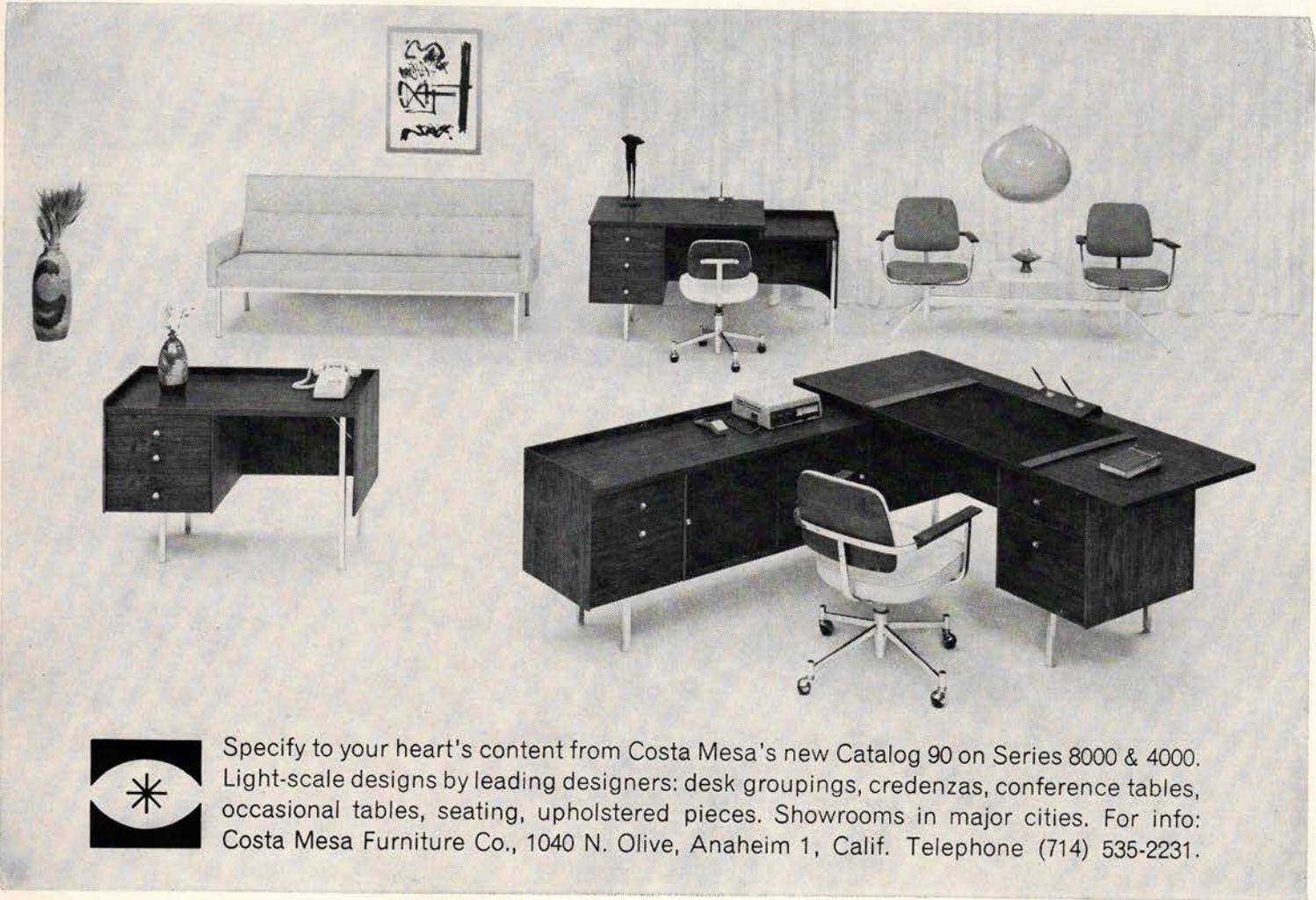
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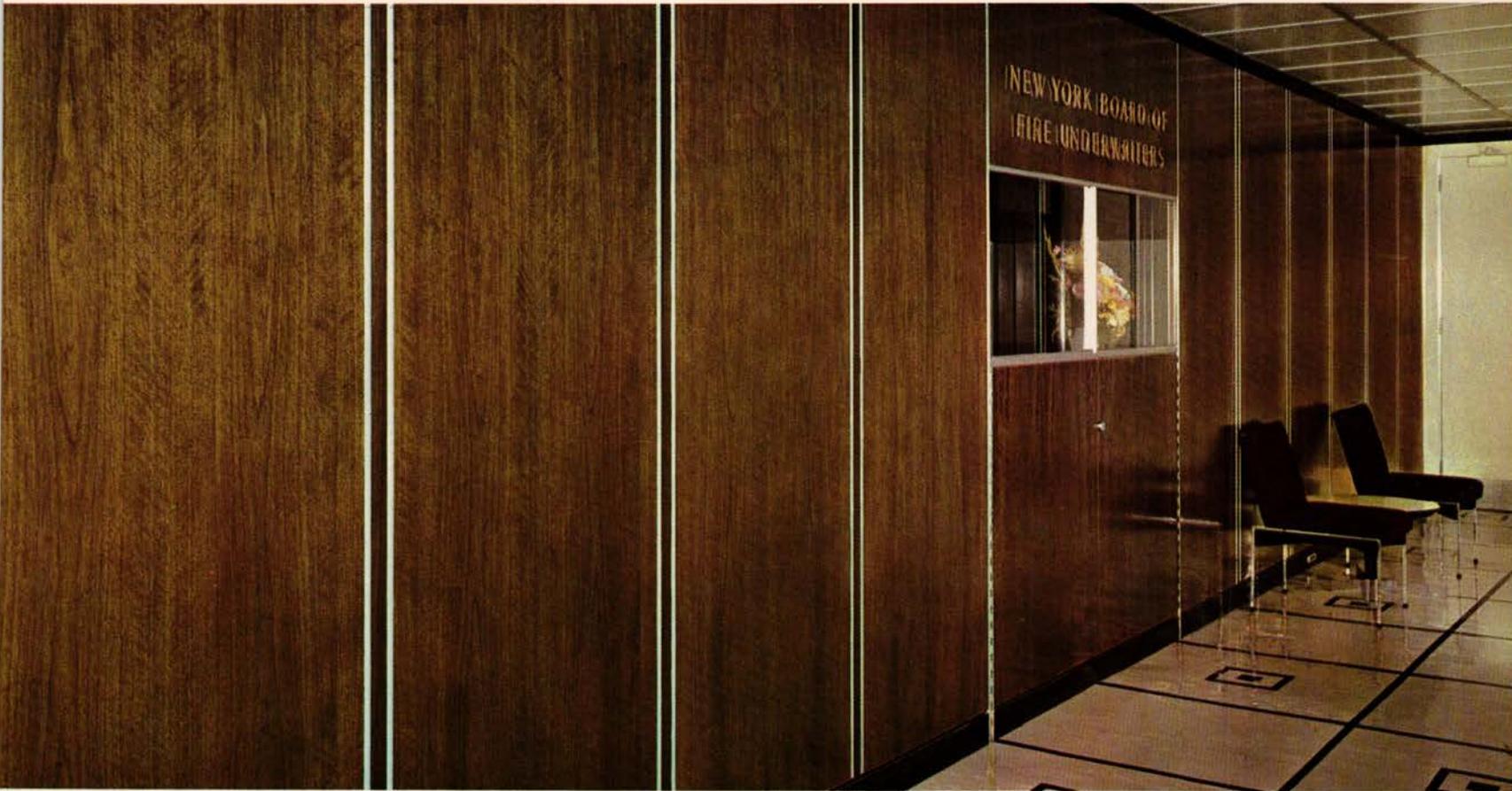


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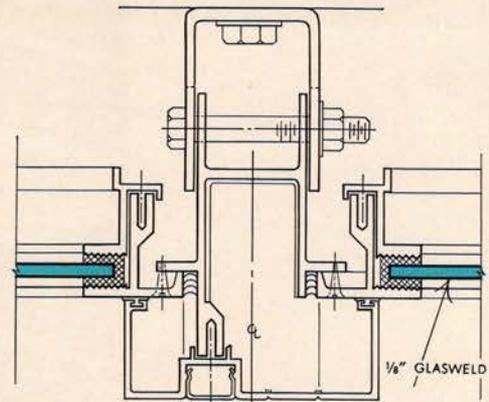
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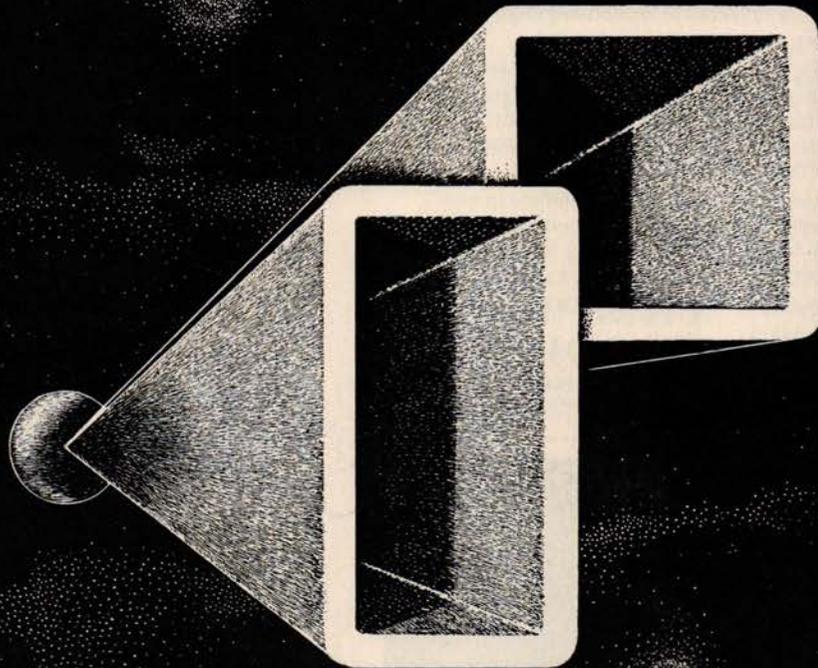


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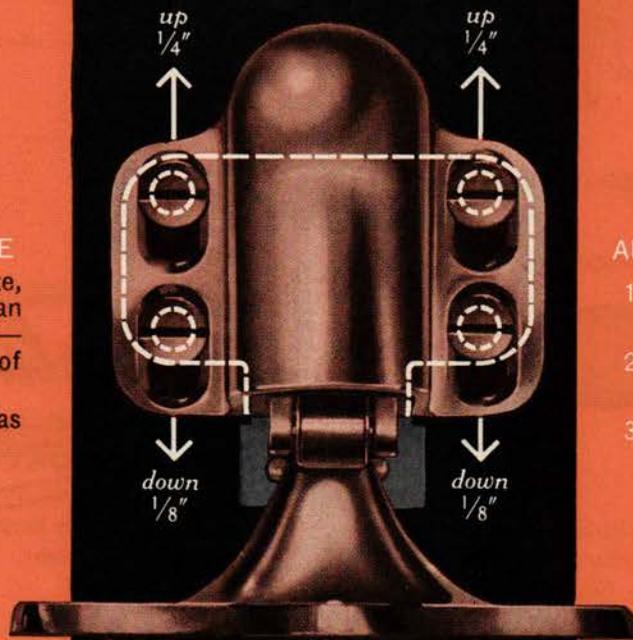


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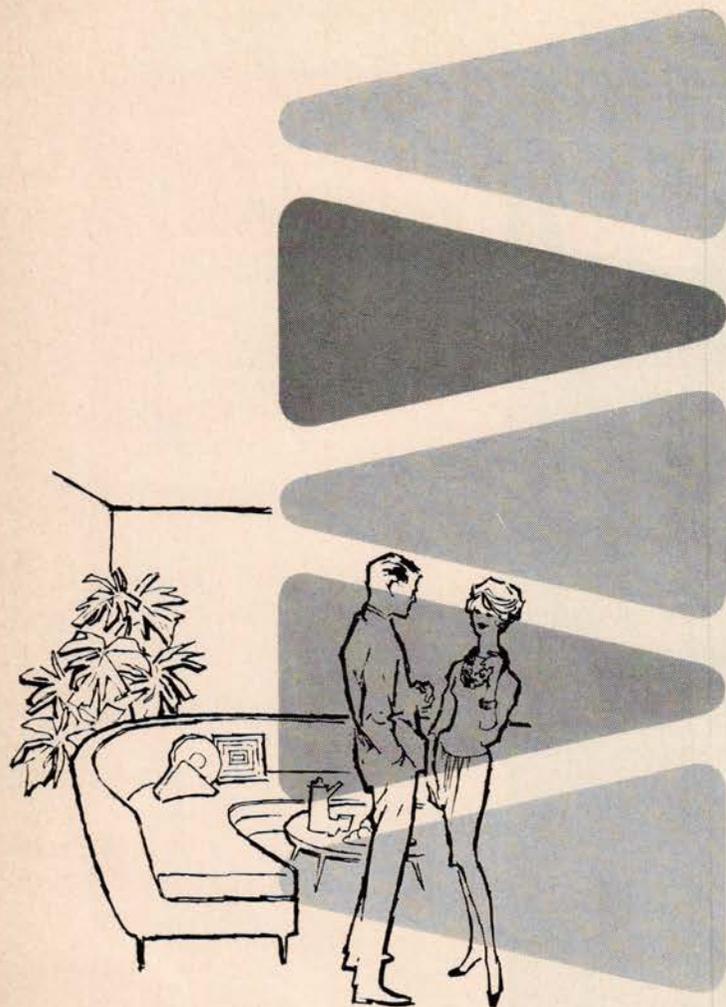
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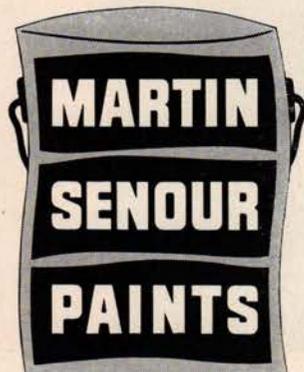
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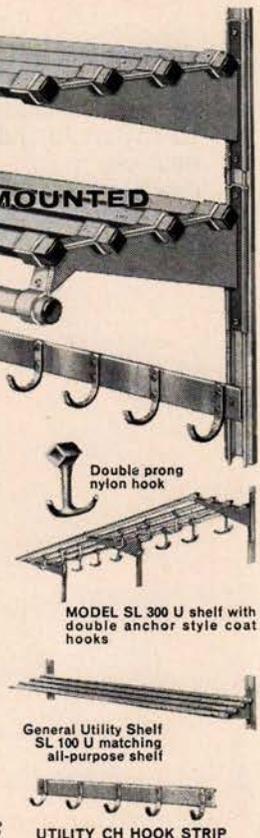
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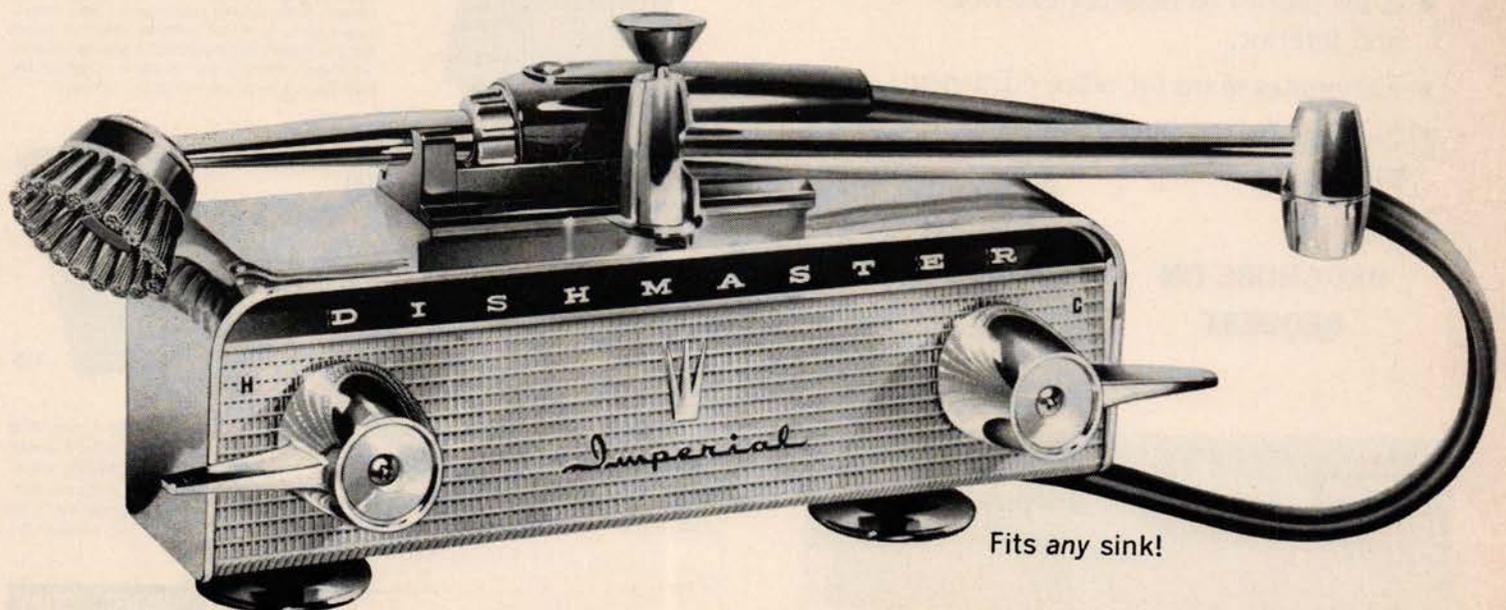
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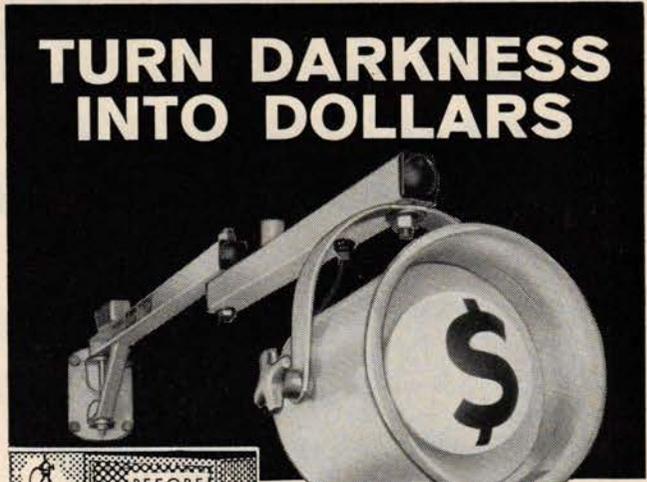
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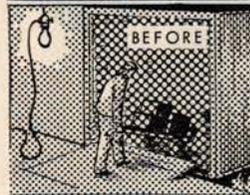


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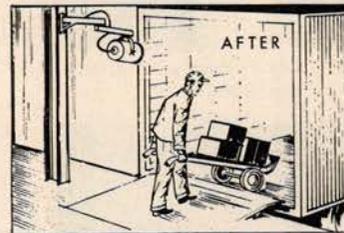


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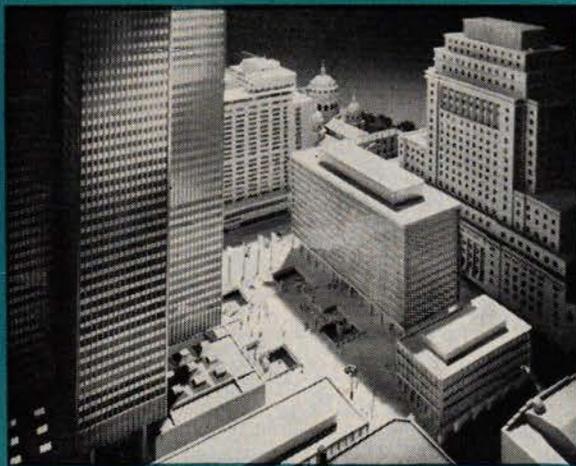


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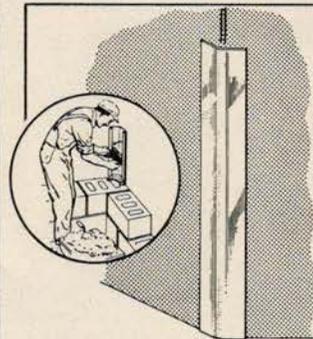
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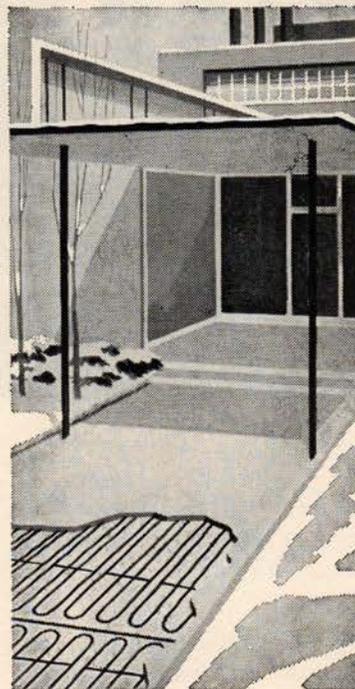
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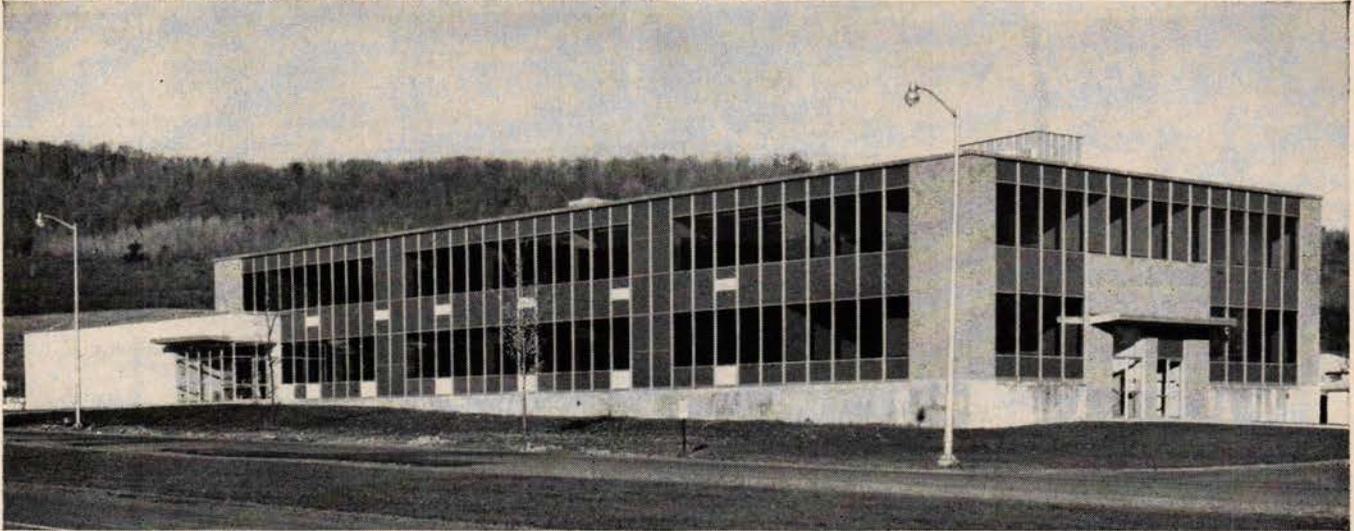
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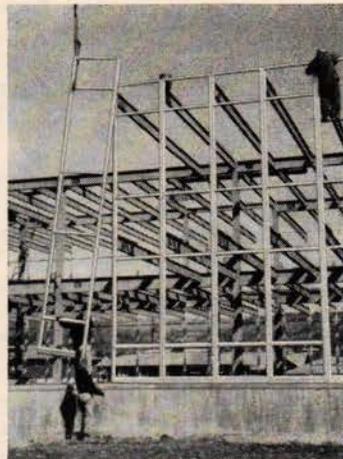
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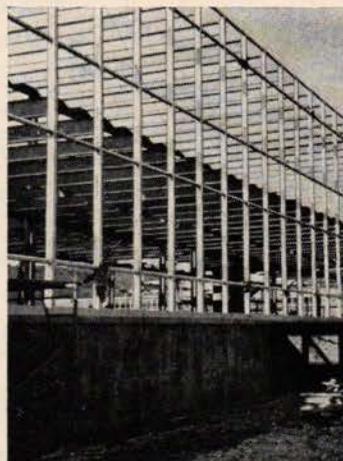
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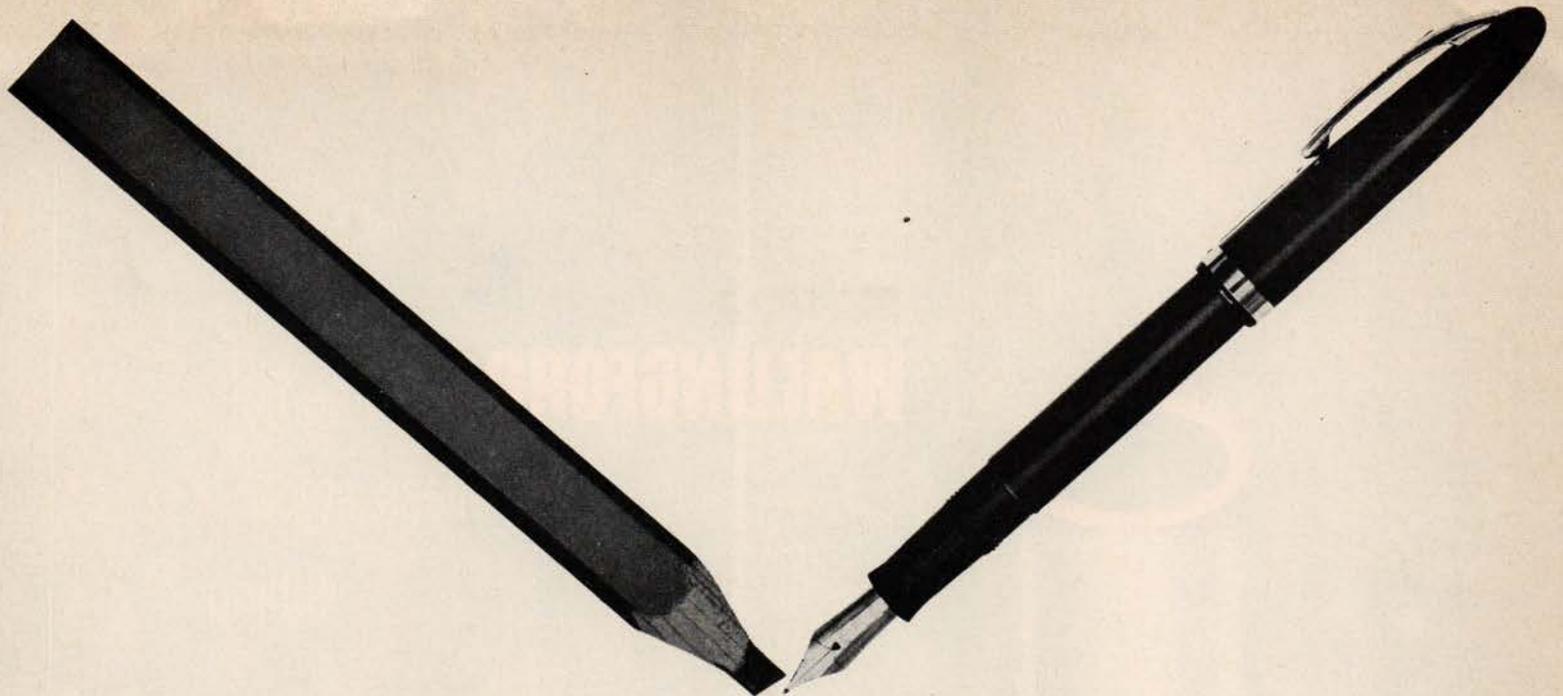
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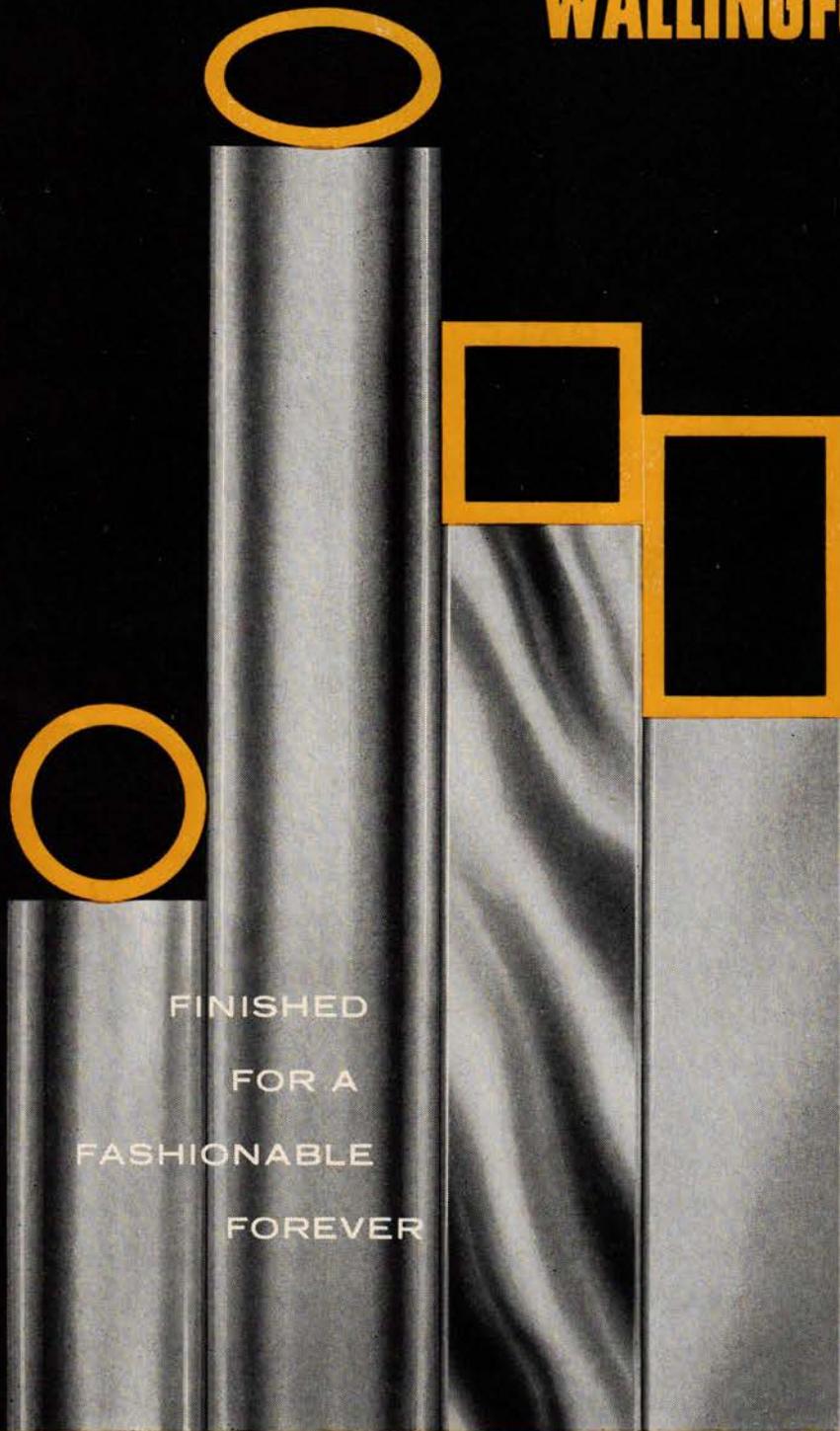
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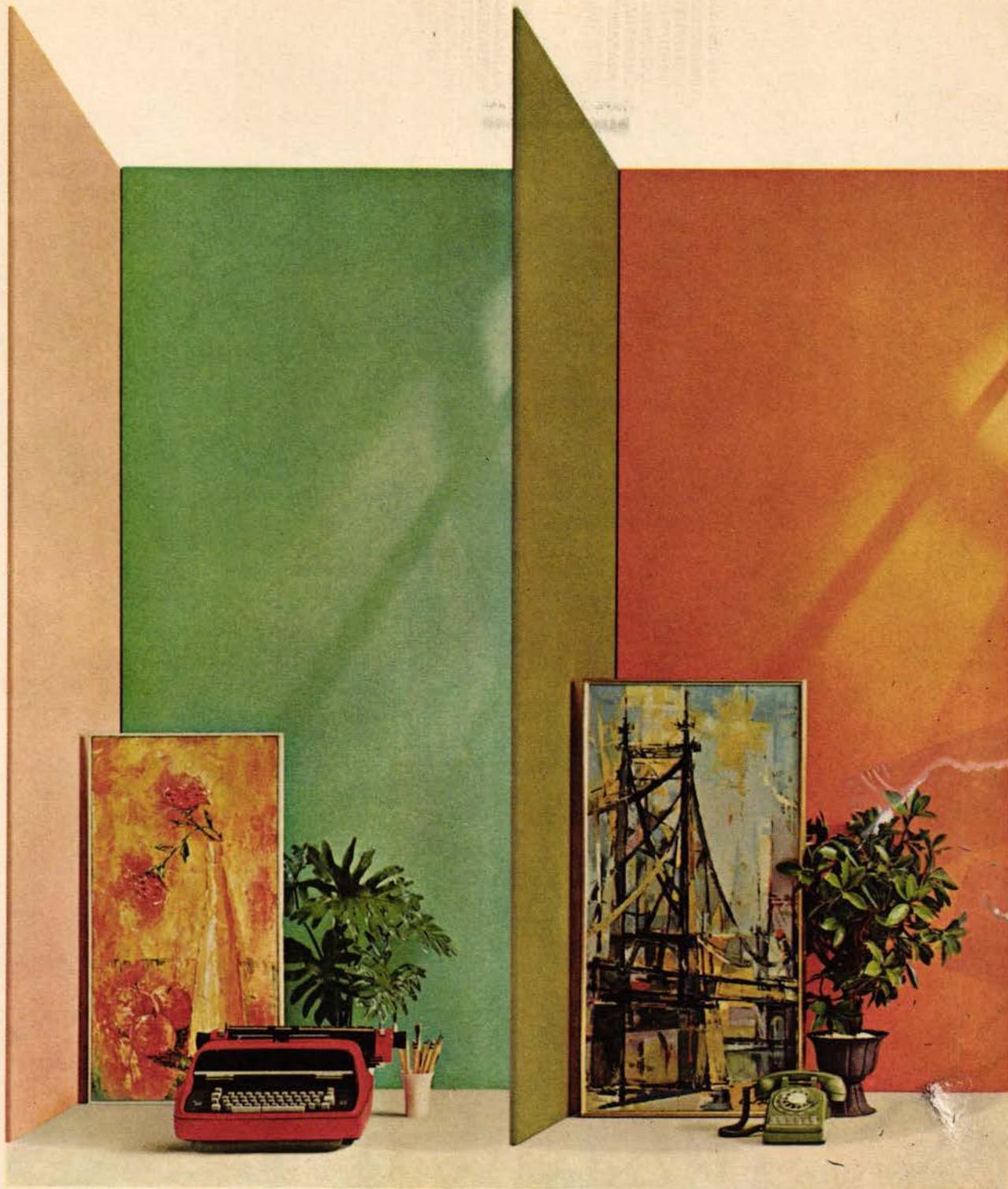


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