

# P/A NEWS REPORT

Progressive Architecture's Monthly Digest of Buildings, Projects, People and Products

December 1968

## WHOSE FAULT WILL IT BE?

SAN FRANCISCO, CALIF. "They tell me the fault line runs right through here. So that may be; that may be. What's gonna happen is gonna happen to me." So sings Mama Cass, and with her release of "California Earthquake" on the Dunhill label, an attitude that may produce more harm than the natural phenomenon behind it has passed into song. Earthquakes, like bad breath, were a taboo subject in California for years after the giant disastrous quake of 1906. "A discussion of earthquakes was as welcome in San Francisco as a discussion of the plague," writes structural engineer Karl V. Steinbrugge; "consequently, funds for earthquake research could not be obtained. The press mentioned 'the earthquake' as little as possible." This fall, Steinbrugge published an 80-page survey pinpointing the alarming vulnerability of many Bay Area structures to earthquakes. His paper comes at a time when a major shock along either the San Andreas or the Hayward faults is thought by many geologists to be long overdue, and people are now talking about it. But no one seems to be doing anything about it. "They say it's gonna happen; it's gonna happen at last. That's the way it appears."

"Atlantis will rise. Sunset Boulevard will fall. Where the beach used to be will be nothing at all."

Steinbrugge mentions housing projects built on shifty alluvial soil in sections of the

fault zones. The Bay Area Rapid Transit District tunnel is being constructed through the Hayward fault zone in the East Bay, and, as he points out, "a significant portion of the buildings in the Bay Area are not earthquake resistive," largely because most Bay Area cities did not enact strong earthquake bracing laws until around 1950.

Steinbrugge offers four main proposals to correct the misuse of land and the ill-controlled building practices in earthquake prone areas:

(1) Don't build buildings such as apartment houses and public buildings along major earthquake faults.

(2) Either remove or reinforce parapets and ornamentation that are likely to fall during a quake. These unanchored trimmings can greatly endanger persons both inside and outside a structure when it is shaken violently.

(3) Establish systems of safety zoning that account for geologic hazards: poor ground, landslides, and faulting. The zones of greatest danger could be used for sites of parks, golf courses, or roads.

(4) Start to determine economic and social reactions to the future science of earthquake prediction.

"Hopefully," he concludes, "all construction will eventually be highly earthquake resistive. Then an earthquake could be an exciting experience, unsettling perhaps, but not necessarily hazardous."

snail's pace during evening and morning rush hours. But that, evidently, is the way residents in those metropolises like to get around — by car.

In the Washington area, they like cars too. But there is something attractively appealing about the thought of those brisk overland and underground air-conditioned trains discharging passengers at 86

air-conditioned stations. A prototype station, which will be in operation together with the first segment of the system in downtown Washington by 1974, was recently approved by the Washington Fine Arts Commission. Harry Weese & Associates are consulting architects for the Metro system. DeLeuw-Cather are structural engineers.

## PEI TO PLAN FOR COLUMBIA UNIVERSITY

NEW YORK, N.Y. Early last month, Columbia University, whose real estate plans in the Morningside Heights neighborhood of Harlem have been the cause of dissension both on and off campus, announced the retention of I.M. Pei to develop the university's first master plan since the original version was presented in 1894 by McKim, Mead & White. The plan will be comprehensive, attempting to deal with all of Columbia's needs for the next two or three decades.

One provision of the contract with Pei encountered considerable resistance from the school's Board of Trustees: the stipulation that community, students, and faculty all be given a voice in the planning process. Despite trustees' objections to "delegation of responsibility," an arrangement was approved that calls for the establishment of task forces, under the architect's supervision, to work specifically with the three groups. In any case, it is difficult to understand why the stipulation should be a pill too bitter for the trustees to swallow, since they retain all authority to approve or reject the final plan. Columbia's troubles with its neighbors are far from unique; they are, rather, typical of large and expanding institutions in crowded urban communities. Its approach to the situation is worth the attention of planners in all major cities.

According to John D. Telfer, Assistant Vice-President for Physical Planning (see p. 41), there are presently very few construction projects of such urgency that they must go ahead before the master

plan is developed, and those that must be begun within the next year will occupy already owned campus land. However, one very delicate question involving the possibility of immediate construction will also come in for consideration as part of the master plan: the controversial gymnasium in Morningside Park. It was already there last spring when protests resulted in a request by Mayor Lindsay that Columbia halt construction. Although Pei will be asked to review the project and the possibilities of finding another site, the Board of Trustees will continue to seek community approval for the present location. The trouble is that the university already has an estimated \$3-5 million sunk in the project, with fabricated steel sitting on New Jersey docks waiting to cross the river. A recent proposal to develop the park site with recreational facilities for the community, prepared for the West Harlem Community Organization, which represents the neighborhood adjacent to the park, by the Architects Renewal Committee in Harlem, received scant attention in the Columbia offices, and it seems likely that the university will press for completion of the gym on existing foundations. Nevertheless, according to Telfer, if West Harlem's objection is too strong, the gym's program will be broken up and moved to scattered sites further from the undergraduate school's main campus. Related to the gymnasium issue is another that was made much of last spring by students and faculty at Columbia's School

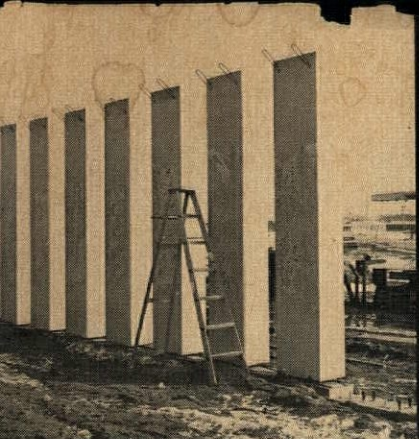
## TRANSIT AT THE POLLS

WASHINGTON, D.C. Three major U.S. communities voted on bond issues for rapid transit systems on Nov. 5. And only one, the Metropolitan Transit Authority of Washington, D.C., came home a winner. Perhaps significantly, the Washington, D.C., vote was the most complicated of them all. It needed the approval of voters in five communities in Virginia and Maryland. And it got it. Now the communi-

ties can issue bonds, when they feel conditions are right, to support their share of the 97-mile, three-track electric train system. The Federal Government will put up \$2 for every \$1 put up by the communities, for a total of \$1,670,000,000.

Bond issues on the ballots in Atlanta and Los Angeles failed. As everyone knows, the freeway systems in both those cities carry commuters at a





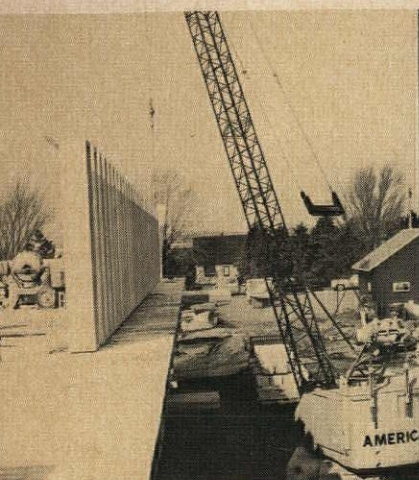
March 21, 1968



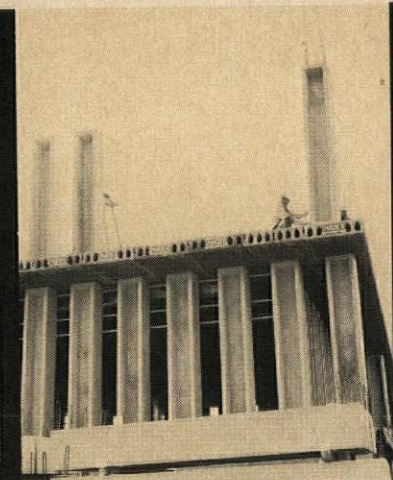
March 28, 1968



April 10, 1968



April 21, 1968



April 27, 1968



May 3, 1968



May 10, 1968



May 22, 1968

# Spancrete cuts construction time from 9 to 5 months

■ With the use of Spancrete, four months were gained over estimated construction time, saving more than half in interim financing costs and providing a four month gain in rentals.

■ Construction proceeded right through 20-below-zero weather. Spancrete was stockpiled at the factory and shipped to the job site, where it was quickly and easily erected, eliminating expensive and risky forming and curing of concrete during freezing winter weather.

■ The Spancrete planks provided an immediate work deck. No scaffolding was necessary, making it possible for other trades to finish their work sooner.

■ Thirty-nine-foot clear spans allow for freedom of office arrangement and economical changes later.

■ Spancrete offers quality construction, with measurable savings for your clients.

Pentagon Park Office Building / Edina, Minnesota  
Rauenhorst Corporation / Engineers, Contractors  
Developers — Minneapolis, Minnesota  
Owners: Dunn & Curry Properties  
Precast components by Spancrete Midwest Co.

**SPANCRETE**  
PRECAST, PRESTRESSED CONCRETE HOLLOW CORE PLANK FOR ROOFS AND FLOORS





## SPANCRETE®

PRECAST, PRESTRESSED CONCRETE HOLLOW CORE PLANK FOR ROOFS AND FLOORS



### Spancrete Manufacturers

#### EAST

Formigli Corporation  
6 Penn Center Plaza  
Philadelphia, Pennsylvania 19103  
Phone 215 563-6378

San-Vel Concrete Corporation  
Littleton, Massachusetts 01460  
Phone 617 486-3501  
Boston Phone 617 227-7850

Spancrete Northeast, Inc.  
General Office  
South Bethlehem, New York  
Sales & Plants  
South Bethlehem, New York 12161  
Phone 518 767-2269

P. O. Box 4232  
Rochester, New York 14611  
Phone 716 328-7626

#### MIDWEST

Pre-cast Concrete Products Co.  
P. O. Box 215  
Marysville, Michigan 48040  
Phone 313 364-7451

Spancrete Illinois, Inc.  
4012 Route 14  
Crystal Lake, Illinois 60014  
Phone 815 459-5580

Spancrete Industries, Inc.  
10919 West Bluemound Road  
Milwaukee, Wisconsin 53226  
Phone 414 258-4110

Spancrete, Inc.  
Valders, Wisconsin 54245  
Phone 414 775-4121

Spancrete Midwest Company  
P. O. Box 308  
Osseo, Minnesota 55369  
Phone 612 339-9381

#### WEST

Spancrete of California  
13131 Los Angeles Street  
Irwindale, California 91706  
Phone 213 962-8751

#### SOUTHWEST

Arizona Sand & Rock Company  
P. O. Box 959  
Phoenix, Arizona 85001  
Phone 602 254-8465

#### CANADA

Spancrete, Limited  
P. O. Box 20  
Longueuil, Quebec  
Phone 514 677-8956

#### UNITED KINGDOM

Truscon Limited  
35/41 Lower Marsh  
London, S. E. 1, England

of Architecture — the issue of faculty involvement in physical planning for the university. With some of the country's best designers (Aldo Giurgola, for example) on its faculty, ought not the university to take advantage of their professional judgment by including them or a representative on a design review panel? Columbia argues that, if faculty members are to devote themselves in a satisfactory manner to their teaching duties, they cannot afford to become involved in administrative decisions, which require full-time attention, and so no provision has been made for their inclusion in the review process. It may be unreasonable, however, to suppose that at least one member of the architectural faculty (the head of the department, say) could not serve on such a panel without neglecting his students.

Completion of the new master plan is expected to take from 12 to 18 months.

### PERSONALITIES

When Columbia University announced last month the retention of I.M. Pei to prepare a master plan, it made clear its intention to include both students and community representatives in the planning process. The man primarily responsible for this change in the university's policy is **John D. Telfer**, Assistant Vice-Pres-



ident for Physical Planning.

Both Telfer and the administrative position he fills are new to Columbia. A tall, rangy man in his early forties, with plenty of Midwestern charm, Telfer was appointed to the position in April, just before the outbreak of the campus riots, and arrived on campus July 1. His arrival coincided with an emotion-charged turn-

ing-point in the school's history, and his position perhaps symbolizes that turning point.

Part of his agreement with the university was the assurance that he would have a free hand to go out into the community and coordinate Columbia's expansion with the needs of the people who live around it and are affected by its plans. This involvement represents a new approach for Columbia, which over the years has developed an almost total dichotomy of interests between town and gown "That gray stone wall has to go," says Telfer, gesturing toward the barrier that separates the university from Broadway. Sitting in his office on the second floor of McKim's Lowe Library, he keeps the blinds drawn to avoid a view of the Uris School of Business Administration next door, and gazes instead at a drawing of the University of Michigan as it was in 1903.

With a background in architecture and planning, he holds a bachelor of architecture degree and a master's degree in city planning from the University of Michigan. Telfer came to Columbia from the University of Michigan, where he was university planner. While serving in Ann Arbor, he was also active in planning outside the groves of academe. He has been a member of the Washtenaw County, Mich., Metropolitan Planning Commission, and has served as chairman of the City Planning Commission of Ypsilanti, Mich. It will probably be this experience that will make him particularly suited to direct Columbia's future physical planning.

Telfer gives the impression that he would like to see Columbia spread out into and become a part of the community, much as the University of Michigan has. The difficulty may be, however, that in Ann Arbor, the university *is* the community; Columbia cannot claim the same distinction...

**George J. Hasslein**, dean of the School of Architecture at California State Polytechnic College, has been appointed to the 11-member Committee on Environmental Design and Urban Studies of the California State Coordinating Council for Higher Education. The committee's purpose is to study potential needs within the state for programs in city



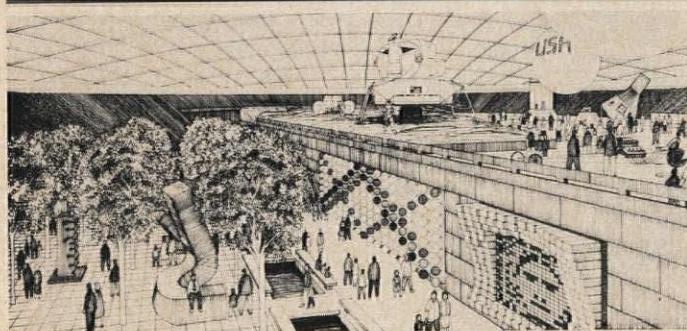
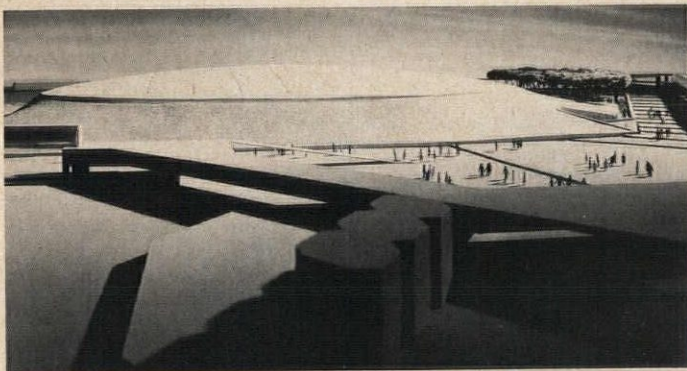
and regional planning, architecture, and landscape architecture and to report these needs to the state . . . **Darrel D. Rippeteau**, partner in the firm of Sargent, Webster, Crenshaw & Folley of Syracuse, N.Y., is the new president of the New York State Association of Architects.

## ARCHITECTURAL SONGS?

PITTSBURGH, PA. "Ladies beware of an architect with blueprints under his arm. Unless you hanker to be betrayed like Nellie of Meadow Farm" goes

the song. For \$5.50, you can find out what happened to poor Nell and Hyacinth Harry and Lorenzo Il Magnifico and Walter and Mies and Corbu. "Walter and Mies and Corbu still cause a lot of to-do." Tunes and lyrics are the work of Robert Schmertz, long a fixture, with his banjo, of the Pittsburgh Architectural Club. Now, for its seventieth anniversary, the club has reissued Schmertz's record, "Ladies Beware of an Architect: Songs for Architects and Their Girl Friends." Copies are available from the Pittsburgh Architectural Club, 246 Third Avenue, Pittsburgh, Pa. 15222.

## U.S. PAVILION FOR EXPO 70: VERSION II



OSAKA, JAPAN. Redesigned after a severe budget cutback, the U.S. Pavilion at Expo 70 may well have profited from the change. As designed by Davis, Brody, Chermayeff, Geismar, de Harak Associates under the direction of the U.S. Information Agency, the pavilion has quiet strength, simplicity and daring. It will have the first air-supported cable roof structure ever built. Rising above an earth berm, the ellipse of the slightly domed roof gives the structure the appearance of the Yale Bowl filled with slowly rising white yeast. The roof will be 462' x 270', and is claimed to be the lightest roof of this span ever put up, weighing less than 1½ psf.

The roof consists of a translucent glass-fiber fabric skin tensioned between a rectangular grid of high-strength steel cables that are anchored to a floating concrete ring. Four air compressors will keep the roof taut 20' above the concrete ring, forming a large, clear-span, translucent, hollow dome that, by day, will permit sunlight to pass through into the enclosed parklike environment below. By night, it will glow with light from within. Inside the pavilion, ground-level excavations will make possible almost five stories of exhibit space. In all, there will be almost 100,000 sq ft of exhibition space, more than twice that enclosed by the U.S. dome at Expo 67.

## RAPID REHABILITATION RUNS INTO BUREAUCRATIC ROADBLOCKS

NEW YORK, N.Y. They called it instant rehabilitation. Actually, it took a few minutes less than 48 hours. And that was after more than a year of product development and test runs. At the end of that time (a year and 48 hours), they had a refurbished 15-unit tenement on New York's lower East Side (see p. 46, JULY 1967 P/A). The idea was that residents of the building could be moved to a hotel for a couple of days while their building was being worked over, then move back into bright, clean apartments. At the time, in April 1967, Conrad Engineers, the West Coast firm that did the rehabilitation (with the aid of a \$1 million HUD grant), estimated the rehabilitation cost at approximately \$11,000 per unit, about half the cost of new construction. Now, a year-and-a-half later, the Institute of Public Administration, the nonprofit organization that conducted the experiment with HUD funds, says that the program was too costly to be feasible. In juggling numbers, the Institute says the process cost \$45 per usable square foot, or about \$22,000 per unit—twice the original estimate and significantly more than comparable new construction, which today, in New York, may run as high as \$30 per sq ft.

The report notes that the year-long experimentation boosted the cost estimate, as did the overtime pay necessitated by working around the clock, as well as the purchase of small lots of materials for the one-shot job. Boosters of this type of rapid rehabilitation are now thinking in terms of projects taking from two to four weeks. This would get rid of the inefficiencies of round-the-clock work and presumably allow time to take prefabricated bathrooms and

kitchens in through the entrance to the building rather than dropping them by crane through the roof. Use of the crane proved needlessly expensive, according to some observers. By doing the work over a three-week period, officials feel the cost could be brought down to \$24 per sq ft or less for one building. Of course, as the number of buildings rehabilitated increased, so would the cost efficiencies. Ideally, a contractor would work with an endless chain of buildings, rehabilitating them in, say, groups of threes until all the buildings in a city were refurbished. By then, presumably it would be time to start again.

Another factor that boosted costs was the need for subcontractors, who were unable to give firm contracts on unfamiliar techniques, to operate on a cost plus basis. As these techniques become better established, firmer contracts can be established, and at least one source close to the experiments says that straight cost contracts are now feasible.

The Frederick W. Richmond Foundation in New York is planning to underwrite rapid rehabilitation of 13 buildings in Harlem. In June 1967, the Federal Government said it was ready to give the go-ahead to the project, which would try to correct some of the mistakes of the lower East Side project. But a year-and-a-half after saying they were ready, city and Federal agencies have still not given permission.

Rapid rehabilitation is one of the few experiments so far that can keep neighborhoods intact. If this is a valid aim, and many believe it is, then the wisdom that came from one brief experiment should surely be given a chance to prove itself.

## CALENDAR

Representatives of the American Congress on Surveying and Mapping, The American Institute of Architects, the American Society of Civil Engineers, and the National Society of Professional Engineers, comprising a Joint Committee on Employment

Practices, will hold a conference on "Alternatives to Unionization: An Examination of Modern Employment Practices." The conference is scheduled to take place in St. Louis, Mo. on December 6. Write: Thomas R. Hollen-

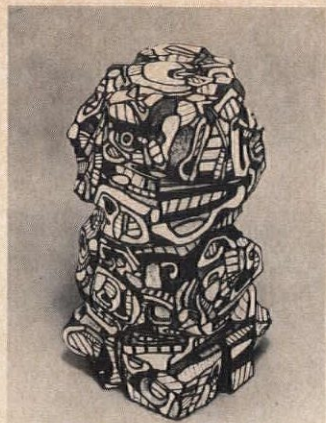
*Continued on page 44*



## TUNE IN, TURN ON, PUT ON: ART 1968



Robert Morris's "Earthwork, 1968" is the title of the mound of earth, peat, steel, aluminum, copper, brass, zinc, felt, grease, and brick that covered a large area of the carpet at the Dwan Gallery in New York last October. Also on view were Walter De Maria's "Painting, 1968," a deep yellow mural inscribed, "The Color Men Choose When They Attack The Earth" and photos of the same artist's installation "Pure Dirt" at the Heiner Friedrich Gallery in Munich.



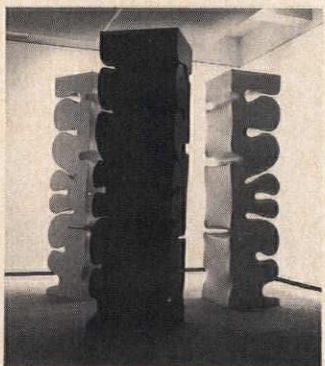
Earlier this fall, an exhibit of works by Jean Dubuffet had a turn at MOMA. It included several of the artist's new works, such as this 10' construction in cast polyester resin and vinyl paint entitled "La Tour I."



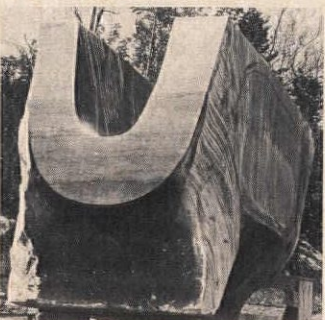
Some 6340 lb of black-painted weathering steel have been turned by sculptor Clement Meadmore into a "Curl" that now lies helplessly in the midst of a plaza in front of Uris Hall (like so many of the school's newer buildings, no architectural delight) at Columbia University.



The most breath-taking exhibition of traditional art in Manhattan this fall was far and away "The Great Age of Frescoes" at the Metropolitan Museum of Art. The show—in a discreetly evocative mounting of white, stretch-fabric arches—included 70 frescoes, many accompanied by their underdrawings, from religious and ducal buildings in and around Florence executed between the 13th and 16th Centuries. It was a powerful reminder of the time when art and architecture were firmly united—the progenitor of today's Supergraphics, someone said. Shown here is a fresco detail (1527) by Jacopo Pontorno. Also shown were many wall panels, a complete tabernacle, ceiling bands, friezes, and a giant, touchingly human tryptich of the Last Supper.



Towering sculptures of painted canvas (1) dominated a corner of the Howard Wise Gallery in New York in October. The artist, Minoru Niizuma, works primarily with stone, as he did this summer at the International Sculptors' Symposium, and produces remarkable polished surfaces (2).

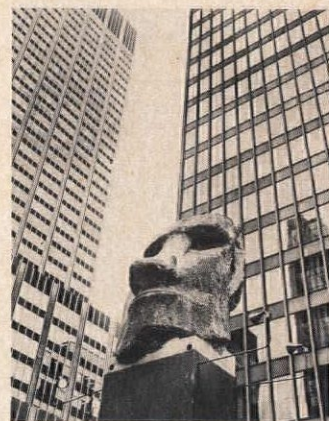


Robert Rauschenberg has a wall-sized piece of turned-on art called "soundings" on exhibit through February at the Museum of Modern Art. Lamps installed between panels light up in response to sound, illuminating silk-screened images of chairs behind silvered panels. The day we saw it, a group of hippy teen-agers kept the art turned on by enthusiastically talking to it while a two-year old gleefully stamped his foot.



Photo: Peter Fink

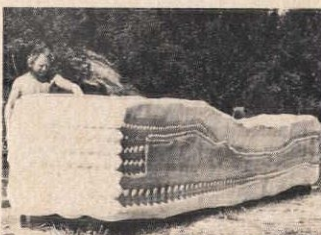
"Merce C." by Franz Kline was on display this fall at the National Collection of Fine Arts in Washington, D.C. (see p. 48.) It is typical of Kline's more recent work—large, bold, almost violent, full of sudden contrast. Also this fall, a large retrospective of Kline's work hung in the Whitney Museum in New York in one of the best art shows of the season. The Whitney's marvelously flexible spaces were arranged to show Kline's early representational oils and water colors in small spaces, his early abstract experiments in intimate spaces, and his later explosive, almost urban abstract work in large, airy open spaces.



Sternly gazing forth from a 12' pedestal directly in the middle of the Seagram Building's plaza last month was an 8', 5-ton stone head from Easter Island. Although the stated purpose of its exhibition was to call attention to an Easter Island restoration program directed by the International Fund for Monuments, the head looked for all the world as though it had been created specifically for the 1968 Presidential campaign.



Brightly-colored banner scrolls—a new application of silk-screen printing—could be seen last month at Etchings International, a New York gallery that specializes in contract work for architects and interior designers. The banners are printed in editions of 75 each and are designed by English artists for The Canonberry Banner Company, Ltd.



Marble sculpture by Karl Prantl of Austria was one of the works produced during this country's first International Sculptor's Symposium held late this summer in Proctor, Vt. The National Endowment for the Arts and the Vermont Council on the arts sponsored the symposium and the Vermont Marble Company put 227 tons of marble at the disposal of 10 sculptors.



bach, AIA, 1735 New York Avenue, N.W., Washington, D.C. 20006 . . . **The International Conference on Shear, Torsion, and Bond in Reinforced and Prestressed Concrete** will convene January 14-17 at the PSG College of Technology, Coimbatore, India. The conference is sponsored by the PSG College of Technology, University of Madras, and the Structural Engineering Research Center of the Council of Scientific and Industrial Research of the government of India. Address inquiries to: Dr. V. Ramakrishnan, Organizing Secretary,

Head, Department of Civil Engineering, PSG College of Technology, Coimbatore 4, India . . . **The Winter Meeting of the National Society of Professional Engineers** will be held January 15-18 at the Stardust Hotel, Las Vegas, Nev. The Society's address is 2029 K St., N.W., Washington, D.C. 20006 . . . **A 13-day Seminar Tour of Mexican Architecture and Interior Design** will be conducted by T. H. Hewitt in cooperation with the Sociedad Arquitectos Mexicanos this February. T. H. Hewitt, P.O. Box 2292, San Francisco, Calif. 94126.

## URBANE FACADE TO HELP COMPLETE THE METROPOLITAN



Photo: Ezra Stoller

NEW YORK, N.Y. In 1970, the Metropolitan Museum of Art celebrates its one-hundredth birthday. By then, if plans move according to schedule, it will have completed construction of its front façade. Designed by Richard Morris Hunt in 1894, the central portion of the front façade still has a temporary wooden vestibule at the main entrance and piles of stone above the front portico that were meant to be carved into trophies. Both the stone piles and the temporary vestibule will disappear. In a design by Kevin Roche John Dinkeloo & Associates, an air curtain will replace the vestibule, and spreading beneath it will be a wide, three-tiered pyramid of steps, bringing the front staircase into scale with the museum's extended 1000' façade. In 1907, McKim Meade & White added the two flanking wings, giving the mu-

seum a much greater capacity. Now that visitors flood the museum at the rate of 6,500,000 a year, the old steps are not only out of scale but also out of touch with reality. To make way for the new staircase, the curved automobile drive at the main entrance will be taken out and replaced by dual auto-pedestrian entrances, at the north near the Costume Institute and at 81st Street to the south.

Implicit in Kevin Roche's design is a stronger relationship between the museum and Fifth Avenue, which it faces, than with Central Park in which it is sited. "The façade, facing the avenue, is first a piece of architecture, and then, most specifically, an urban façade," he says. In front of the museum, flanking the central portion, will be two fountain-pools, whose 122'-long walls of water will mask

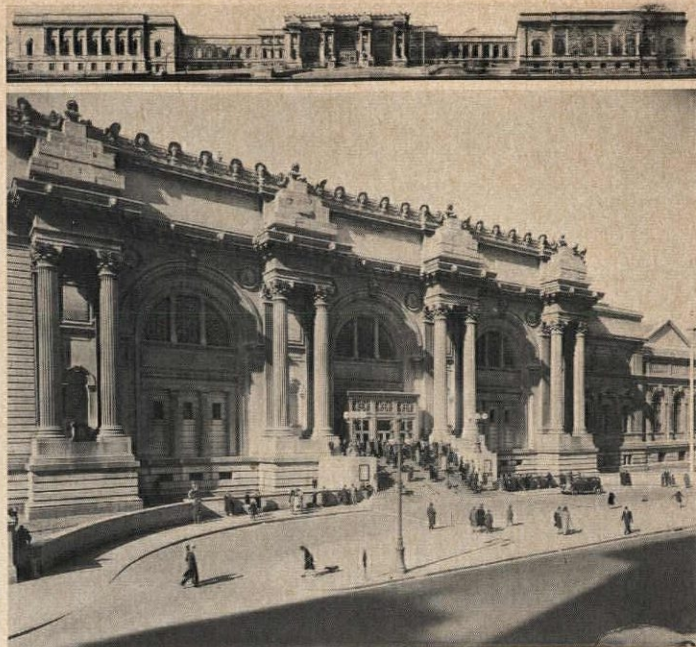


Photo: Metropolitan Museum of Art

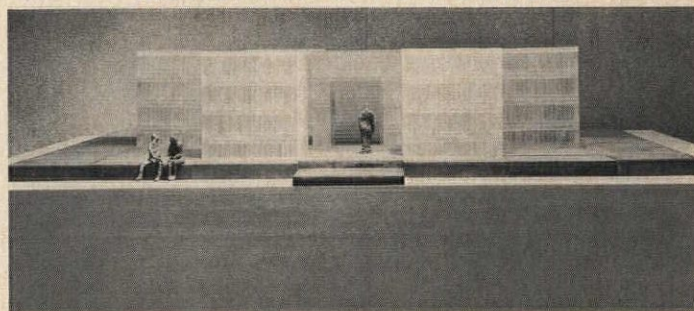
the lower portion of the wings, which extend from the center. Beyond the fountains at either end will be planting areas.

Completion of the façade is expected to cost \$1,600,000; more than \$1 million comes from an anonymous donor.

Roche Dinkeloo & Associates are working on an over-all expansion plan for the muse-

um, and the front façade completion is the first phase. It is a treatment that maintains the character of the institution and of that section of the city. Museum Director Thomas P. F. Hoving, for one, commends it: "The solution is one of pleasing elegance, of a simplicity that makes for excellence in architecture."

## MONUMENTS TO PONDER



1

Webster's defines a monument as "a structure . . . erected or maintained in memory of the dead or to preserve the remembrance of a person, event, etc." The difficulty in designing a monument is in producing a structure that conveys the essence of the person or event being memorialized. And a monument must be impressive enough, at least, to stimulate the viewer's interest in its purpose.

The making of monuments is a very delicate affair, one that, if not handled successfully, produces some of the most meaningless architecture in existence.

In his design for the Monument (still in model form) to the Six Million Jewish Martyrs

(1), which is to be sited at the tip of Manhattan Island, in Battery Park, Louis I. Kahn has relied for impressiveness, not surprisingly, on a group of great geometrical masses 10' square and 11' high. Six piers of solid glass blocks that interlock without the use of mortar surround a central pier, which, alone among the seven, contains a small chapel. When completed the monument's glass will catch reflections from passing ships, the sky, and water in the harbor. The model was on view last month at the Museum of Modern Art in New York.

The Armenian Martyrs' Memorial Monument (2), recently completed in Bicknell Park, Montebello, Calif., ap-



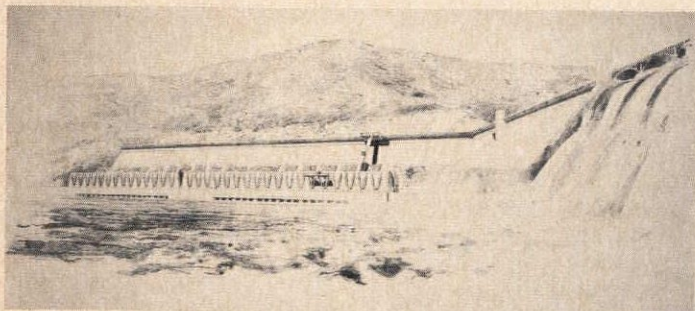


2

appears to be less successful as a memorial. What it does seem to be is an unnecessary, if pleasant, addition to the park, whose visitors are unlikely to react with appropriate thoughts on the "men of all nations who have fallen victim to crimes against humanity" to whom the memorial is dedicated.

The structure, designed by H. Hrant Agabian & Associates, consists of eight precast concrete bent columns that blend into arches and support semiconical dome sections. The memorial stands on a raised, brick-paved platform enclosed by masonry walls with cantilevered concrete seats for visitors.

### DAM DESIGN BY BREUER



GRAND COULEE, WASH. Dams are architecture. Or at least, they can be. Marcel Breuer & Associates' plans for Grand Coulee Dam prove the point.

In March, the U.S. Bureau of Reclamation asked the Breuer firm "to provide architectural design features — with particular attention to color, form, surface, choice of materials and lighting" for the dam (see p. 66, APRIL 1968 P/A). Grand Coulee is indeed a giant structure, one about to become the world's largest power producer.

The firm was asked to produce architectural design concepts for the 200' forebay dam, which is an extension of the existing structure; a new powerhouse, which will be 20 stories high and take in an area the size of four city blocks, visitor facilities and other features. The third powerhouse eventually will house 12 gen-

erating units, each rated at 600,000 kw.

Features of the Breuer concept, which may still be modified before construction, include an inclined elevator, a glass-enclosed cab moving up and down the face of the dam's 475'-high penstocks. The elevator will stop midway along the incline to give visitors access to a platform cantilevered out of the rock cliff supporting the forebay dam, where a cross-over bridge spanning the transformer deck will lead to the powerplant. Visitors will enter the generator hall of the powerplant at a level above that of the bridge crane, and will be able to cross the gallery at this level to a balcony from which they may view the powerplants, the spillway, and the Columbia River itself. At the bottom of the inclined elevator shaft, visitors may walk to the turning shaft

areas of the huge turbines.

Visitor arrangements are to be completely separated from operating personnel.

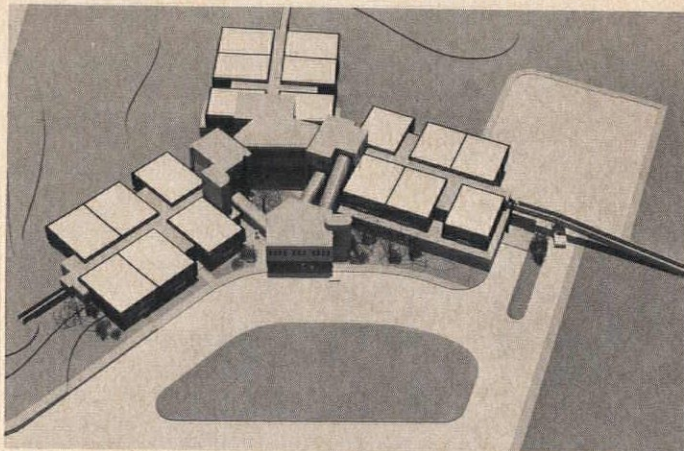
"We believe," commented Reclamation Commissioner Floyd E. Dominy, "that thousands of visitors . . . will discover its great beauty as well as be moved by the dam's staggering physical dimensions. . . ."

Concrete, the principal com-

ponent of the structure, will be featured in the construction, to give strong vertical lines to the powerplant structure.

A second architectural contract — for development of a coordinated master environmental and recreational plan for the entire Grand Coulee area — has been awarded to Kenneth W. Brooks of Spokane, Wash.

### THE CLASSROOM IS A METAL BOX



COLUMBUS, IND. The architectural showcase that is Columbus, Indiana, will gain another exhibit with the completion in 1969 of the L. Francis Smith Elementary School, designed by John M. Johansen of New Cannan, Conn.

In model form, the school building comprises three expandable classroom wings staggered both vertically and horizontally. Beneath each in fixed concrete bases, are supporting facilities such as dining rooms and kitchen, mechanical rooms, and kindergarten rooms. Wings are linked by a covered central core, which contains a play yard, as well as administrative offices and a library. In moving through the core from one

wing to another, pupils will pass through ramped halls, which are actually self-supporting corrugated metal tubes, lined inside with carpet. Each wing will have six classrooms and serve two grade levels. First and second grades are in one wing, for example, third and fourth grades in another. These classrooms are light metal boxes set into the concrete of the base. Smaller metal boxes contain toilets and storerooms. Each wing can be expanded by merely adding more of the metal classrooms. Running up and into each wing from ground-level bicycle stands are long ramped walkways.

The 50,000 sq ft of space will cost \$1,200,000.

### WORLD TRADE CENTER ON A EUROPEAN SCALE

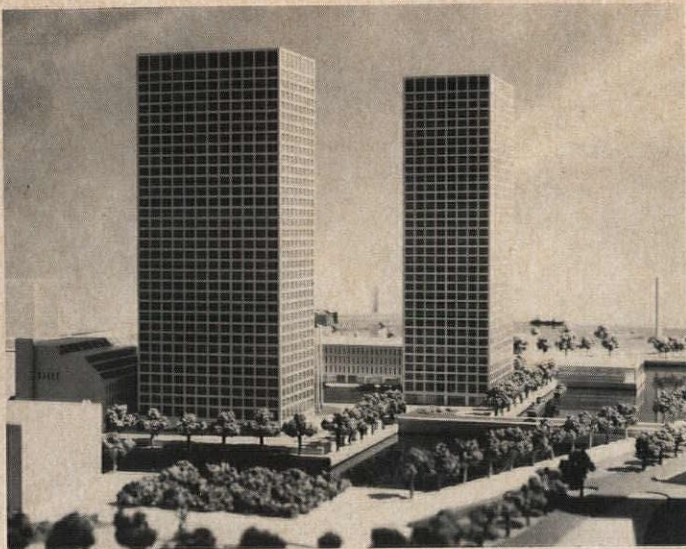
ROTTERDAM, THE NETHERLANDS. Even before the fad for cultural centers has run its course, one for world trade centers may be developing. Scheduled to open in 1972, the same year as the twin-towered New York World Trade Center, is one in Rotterdam.

Like its New York counterpart, it will have twin towers, 35 stories each instead of 110, and, like the Yamasaki-Emery Roth designed New York

structure, it will have two low, flanking buildings grouped with the towers around a central plaza.

Rotterdam is an ideal spot for a world trade center. For one thing, it is the world's busiest port (141,400,000 tons of cargo in 1967), and for another it is located at the hub of a network of rail, water, highway and pipeline traffic flowing to and from the major cities of Europe. The \$60 mil-



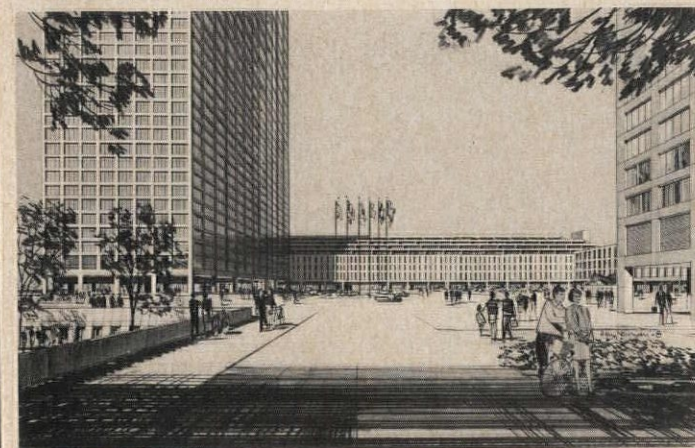
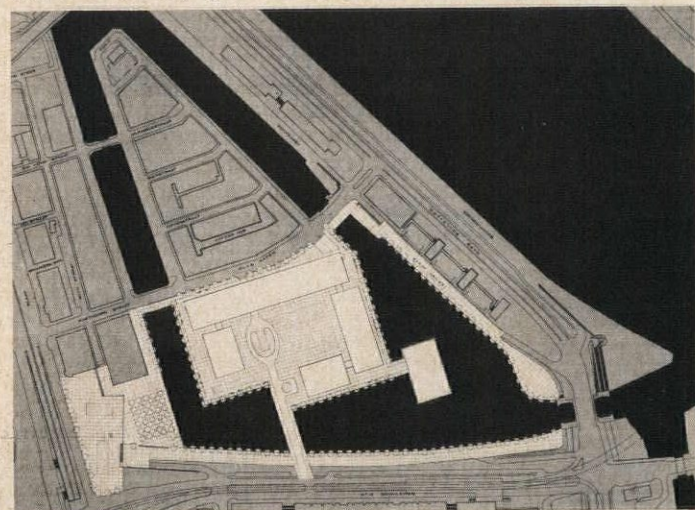


Photos: Ezra Stoller

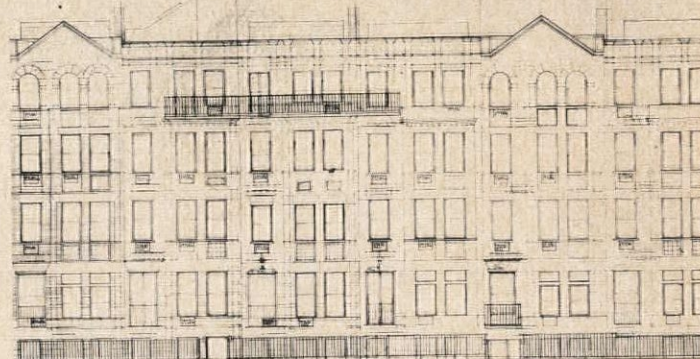
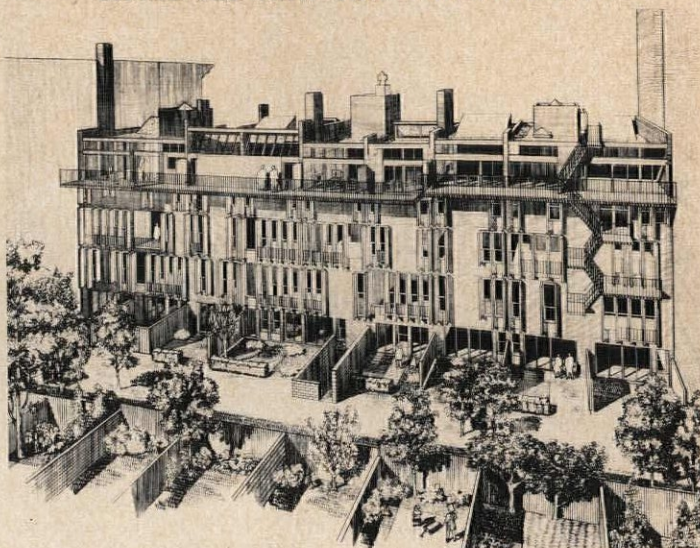
lion center will hold offices for exporters and importers and "other foreign trade oriented businesses," and it will have more than 280,000 sq ft of rentable exhibition and display space out of a total of 1,230,000 sq ft. Also included will be a 300-room hotel and an office pavilion.

But if both locus and focus of the center are European, its design is distinctly American. The work of the Chicago office of Skidmore, Owings & Merrill (William Dunlap and Bruce Graham, partners-in-

charge), the center buildings are the crisp, rectilinear, curtain walled structures that characterize much of SOM's work. Nicely sited at one end of an artificially created island in a backwater of the Rotterdam harbor, the center will be connected to the city on the west by a two-level bridge (pedestrians below, autos and bicycles on top), and below grade will be parking on two levels for 200 cars. The upper level of the roadway will continue through the site, tying in with roadways to the east.



## WHATEVER HAPPENED TO THE LITTLE OLD NEW YORK BROWNSTONE?

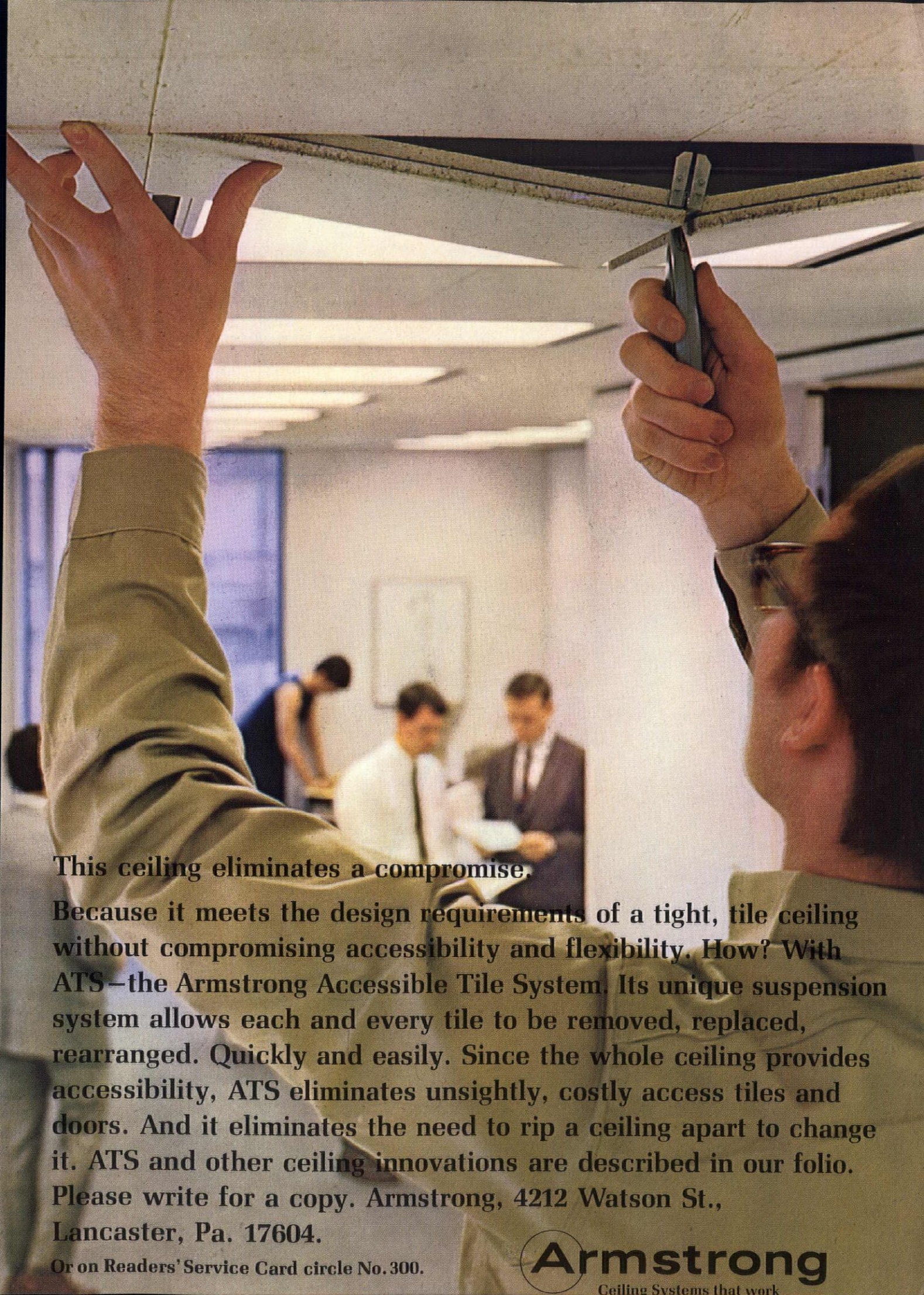


NEW YORK, N.Y. Nine brownstone buildings on Manhattan's Upper West Side, all dating from the 1880's and 1890's, have been saved from demolition by a group of area residents known as the Little Old New York Citizen's Committee. It took 18 months for the citizen's group to convince the city to alter the buildings' designation from demolition to rehabilitation, but, once convinced, city and Federal agencies provided the tax abatements and loan insurance in the hope that other groups will be encouraged to undertake similar projects. Under the city's plan for the Upper West Side Urban Renewal Area, the buildings (located between Central Park West and Columbus Avenue on 94th Street) were to be cleared away for a 10-story apartment building that would have effectively barred light and air from neighboring residences. Although other brownstones in the neighborhood are scheduled for rehabilitation, these nine were considered too small and therefore too expensive to bother with. But the citizen's committee, wishing to preserve the neighborhood pat-

tern of low-rise residences on the streets and high-rise apartments on the north-south avenues, not only protested, but came up with a plan that would make rehabilitation both feasible and attractive to government agencies involved.

Having formed a cooperative corporation, assembled tenants to fill the apartments, and acquired enough money to purchase the land from the city, the citizens retained architects Edelman & Salzman to redesign the buildings from the inside out. To begin with, the architects removed all front stoops (traditionally a characteristic of the New York brownstone) and created three entrances to serve all nine buildings. Party walls between buildings were removed, and apartments custom-designed to suit the future tenants were, in some cases, extended into adjoining buildings. Connecting hallways were provided at the first, second, and third floors. In the rear of the structures, additions were designed to bring all nine buildings out to a line 53' from the façades. When built, the structures had varying depths to avoid encroach-





**This ceiling eliminates a compromise.**

Because it meets the design requirements of a tight, tile ceiling without compromising accessibility and flexibility. How? With ATS—the Armstrong Accessible Tile System. Its unique suspension system allows each and every tile to be removed, replaced, rearranged. Quickly and easily. Since the whole ceiling provides accessibility, ATS eliminates unsightly, costly access tiles and doors. And it eliminates the need to rip a ceiling apart to change it. ATS and other ceiling innovations are described in our folio. Please write for a copy. Armstrong, 4212 Watson St., Lancaster, Pa. 17604.

Or on Readers' Service Card circle No. 300.

**Armstrong**  
Ceiling Systems that work



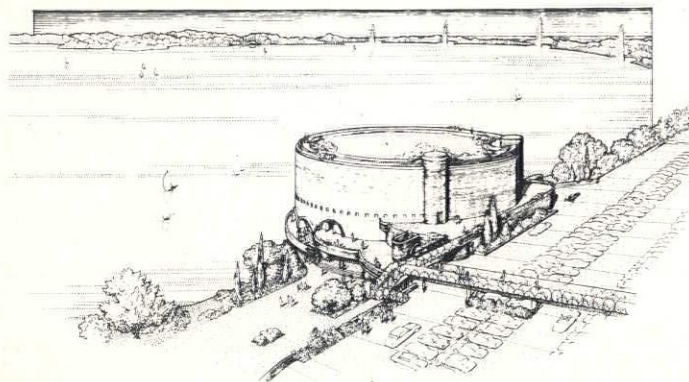
ing on Apthorpe Lane, an old path that ran diagonally across the block. New exterior walls in the rear will look better than the façades of many modern dwellings, and a large backyard will be created for use by all tenants. Common facilities including a dark-room, meeting room, and so on, are provided in the basement. Apartments, custom-designed for tenants, will vary in size, shape, and price. Several duplexes are placed on the lower and upper two stories; those on the lower floors have private gardens, those on the top stories have their own garden balconies. No two apartments are alike. All apartments, however, will have a fireplace (some two), hardwood floors, air conditioners, and electric hot-water heaters.

Considering the various amenities requested by cooperators, down payments and carrying charges have been kept fairly low for the New York market. Down payments range from \$2725 (for a one-bedroom apartment) to \$10,900 (for a five-bedroom apartment), and carrying charges will run from \$120 to \$360.



Prices will be kept down by the city's agreement to grant a 20-year tax abatement on the property. For the first nine years, there will be no real estate taxes; thereafter, for two years, the cooperators will pay taxes on the 1967-68 assessed value of the property. Legislation pending before the City Council is expected to grant additional tax benefits from the twelfth to the twentieth year. In addition, the corporation was able to obtain FHA insurance of the mortgage loan.

## DRUM ALONG MONONA



MADISON, WIS. The only thing wrong with the site for the Madison Civic Auditorium, overlooking beautiful Lake Monona, just two blocks from the Wisconsin State Capitol, is that it is cut off from the capitol and the city by the double barrier of expressway and railroad. Designed by Taliesin Associates as the first structure in the long-delayed Frank Lloyd Wright plan to give Madison a civic center (see p. 66, MAY, 1968 P/A), the auditorium solves its site problem largely by ignoring it and concentrating on what the site does have to offer, the

way a political speaker might ignore a heckler. A pedestrian bridge will lead across tracks and highway to the auditorium, and a parking platform for 360 cars will cover the portion of the highway directly in front of the auditorium.

Getting there will probably not be half the fun, but, once there, a visitor will have grand vistas of the lake — from the Grand Foyer out through deeply recessed arches, from the landscaped parking deck, and, eventually, after a future construction stage, from an esplanade along the lakeshore. As presently envi-



sioned (bids will be let in February), the building will resemble a large drum, faced with "soft golden brick." It will have a maximum seating capacity of 2331, which can be varied, together with the acoustics, to accommodate performances of such disparate events as grand opera and chamber music. With its terraces, balconies, and curved brick façade, it is designed to be a physical part of future structures planned for the

site: a state theater, a convention center, and an art gallery. Eventually, the entire lake-side area, known as the Monona Basin Project, will put at least this area of Madison back in touch with the lakefront.

William Wesley Peters is chief architect for the project; Dr. Vern O. Knudsen of Los Angeles is acoustic consultant; and George C. Izenour & Associates of New Haven are theater consultants.

## CLASSIC GROUND FOR AMERICAN ART



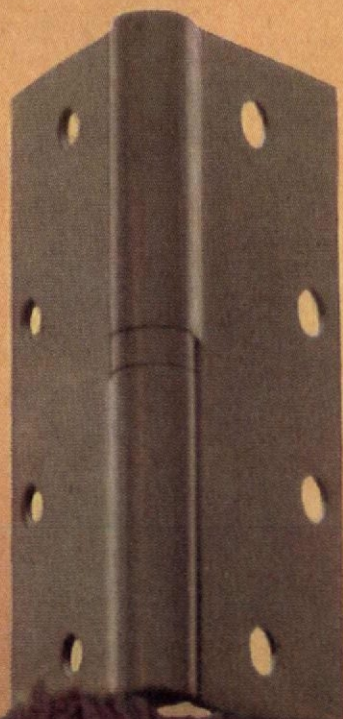
WASHINGTON, D.C. "Study your country's taste and requirements, and make classic ground here for your art." This was the advice to American artists offered early in the last century by architect Robert Mills, whose massive neoclassic Patent Office Building has recently become the nation's first Federal museum of American art. Last spring, the 122-year-old National Collection of Fine Arts moved out of the corner it shared with stuffed mammals in the Smithsonian Institution's Natural History Museum on Constitution Avenue and into the north wing of the old Patent Office Building at 8th and G Streets, N.W., in downtown Washington. And, just last month, the historically oriented National Portrait Gallery moved in to

occupy the south wing.

Washington's newest museum is a two-square-block structure of solid sandstone, granite, brick, and marble, whose plan is that of a great quadrangle surrounding a large open court where two 150-year-old elms will eventually shade sculpture. Designed in the 1830's and completed in 1867, the Patent Office (see p. 50) was built, like all Mills' buildings (others include the Washington Monument and the Treasury Building), to last for centuries, and it has survived the vicissitudes of national politics and history almost miraculously well.

Having withstood use as barracks for the Rhode Island militia during the Civil War, and then as a hospital and morgue where Clara Barton





## COLOR IT BRONZE...

McKinney has . . . with a new vinyl-acrylic lacquer finish. We call it CO-LAQ®; you'll call it great!

CO-LAQ assures color uniformity . . . it solves the problem of trying to match the hardware to the new anodic color finishes so popular in today's architecture. This tough baked-on vinyl-acrylic lacquer may be applied to steel, aluminum, brass, bronze or stainless steel. Tests for surface hardness and adhesion prove CO-LAQ to be a durable color finish. Now, in addition to beauty and performance, McKinney offers the advantage of a dependable color finish for the unique Moderne hinge. Specify Moderne with CO-LAQ for your next design. Available in three bronze tones—Light (D-1), Medium (D-2), Dark (D-3).

More than 7,000 pairs of Moderne hinges with this new vinyl-acrylic lacquer finish are installed in the new One Shell Plaza, Houston, Texas.

# **McKINNEY**

McKinney Sales Company

Scranton, Pennsylvania 18505

San Francisco, California 94103



ministered to the wounded, the building was partially gutted by fire in 1877; it was rebuilt in the following decade under the supervision of architects William Elliot and Edward Clark. But the greatest threats to the structure occurred after the Patent Office moved out in 1921 and the Civil Service Commission moved in.

In 1958, it was doomed to demolition to make way for a black-top parking lot. Somehow, this fate was avoided, and, in 1958, the building was turned over to the Smithsonian. When renovation began, there were great corridors 17' wide and 17' high to be turned into gallery space by removing the partitions that had created myriad small Federal offices. There was an eighth-of-an-inch of G.I. Green paint to be removed from granite columns, architraves, and solid brick barrel vaults. And after the General Services Administration, which administers all Federal construction, had finished with its part in the restoration and conversion job, most of its work had to be undone by the museum staff under the direction of David Winfield Scott, director of the collections, and Bayard Underwood, the museum's architectural consultant. By the time Underwood was retained, his job consisted mainly, as he puts it, "in saving some of the basic architecture of about one half of the building." Major changes during the construction stages included removal of one elevator shaft and one mechanical duct shaft which, if built as shown, would have ruined two grand stairways and the Lincoln Gallery. To restore the Granite Gallery on the first floor, it was necessary to remove nonloadbearing brick partitions that ran through

half of an entire wing. The entrance (formerly the rear of the building) was made into an impressive space by chopping out the second floor and creating a two-story entrance lobby. Lighting was completely revised, with the help of W.M.C. Lam, consultant, after monstrous GSA-designed, all-purpose fixtures had been hung from ceilings throughout the building.

Now, the granite-columned Lincoln Gallery, so named for its use as the promenade for Lincoln's second inaugural ball, houses a three-century survey of American art; the Granite Gallery contains works by 20th-Century sculptors Alexander Calder, Alexander Archipenko, and Theodore Roszak, among others. In addition to the 16 galleries, the National Collection of Fine Arts has three public lounges, administrative offices, storage space, workshops for framing and display departments, a large library (whose ceiling is three stories high), a conservation laboratory, a photographic studio, and assembly halls. Most of these facilities are shared with the Portrait Gallery, whose director is Charles Nagel.

Of the \$6 million spent on renovation over the last 10 years, no great sum was available for interior furnishings. These are consequently installed sparingly, but with excellent taste. Furniture designed by Eero Saarinen and Warren Platner is used in rest areas, Scandinavian Design chairs for assembly halls, Laverne "Philharmonic" gallery benches in exhibit spaces.

All in all, the conversion from Federal office building to art museum has turned out quite successfully. The provision of a home for the Government's collections of American art, together with the restoration of Washington's original Corcoran Gallery, may be a sign that, at last, the Federal Government is willing to pay some attention—and money—for its art and architecture.

#### CORRECTION

The modular maintenance hangar shown on p. 88, OCTOBER 1968 P/A was designed by architects Conklin & Rosant of New York. Zetlin, DeSimone, Chaplin & Associates were structural engineers.

## WASHINGTON/ FINANCIAL NEWS

by E. E. HALMOS, JR.

**Model Cities Move Slowly** — One Federal program that will continue, regardless of the impending change in Administration, is the Housing and Urban Development department's Model Cities program.

This will happen despite cries from outgoing HUD heads that the program wasn't adequately funded. And continued work will bring HUD heavily into the matter of construction safety, despite the failure of all attempts to pass a national construction safety bill in 1968.

But architects and builders will have to recognize that the program is a long, slow affair. The distance between designation of an area as a Model City and actual design of buildings—to say nothing of actual brick and mortar—is likely to be a long one.

As of mid-October, for example, HUD had "selected" 125 "cities" for planning grants; they will share between them a total of about \$12 million available for such work in the current fiscal year.

The term "cities" is deceptive: Actually, "selections" included several counties (Florida's Dade, Maryland's Prince George's), such municipal oddities as the Gila River Indian Community in Arizona; relatively tiny communities with populations as small as 5000; segments of major cities, such as Central and East Harlem, South Bronx, and Central Brooklyn in New York; and on up to major cities like Minneapolis, Oakland, Calif., Washington, D.C., and others.

The grants themselves are aimed at seeking solutions to problems that have nothing directly to do with construction. Typical, perhaps, is a \$178,000 grant to Tucson, Ariz., which is trying to develop plans for an 8-square-mile area in its western sector, where a 21,026-person population includes 37% with family incomes below \$3000 annually and a high unemployment rate; 48% of housing is rated as substandard. Major goal of the planning will be "to relate the development of the model neighborhood to the surrounding area,

alleviate physical blight, in order to attract more privately built housing."

Similar conditions are noted in all the other "cities" selected for grants: large areas of substandard housing, low family incomes, high unemployment rates, poor health records.

Planning, in most cases, will take a year from date of initial selection; then the plans evolved must be approved by HUD; following approval, the communities will be eligible to receive "supplemental" grants, as well as other Federal moneys, to carry out actual implementation.

There's an interesting sidelight for the construction industry in general: HUD has said that, since one objective of these programs is to employ as many slum-area dwellers as possible it will have to get into the problem of construction safety with both feet, "to protect unskilled workmen from the hazards of the building work." This could mean that, despite Congress' failure to approve any nationwide safety program or authority, HUD will try to impose its own rules, anyway.

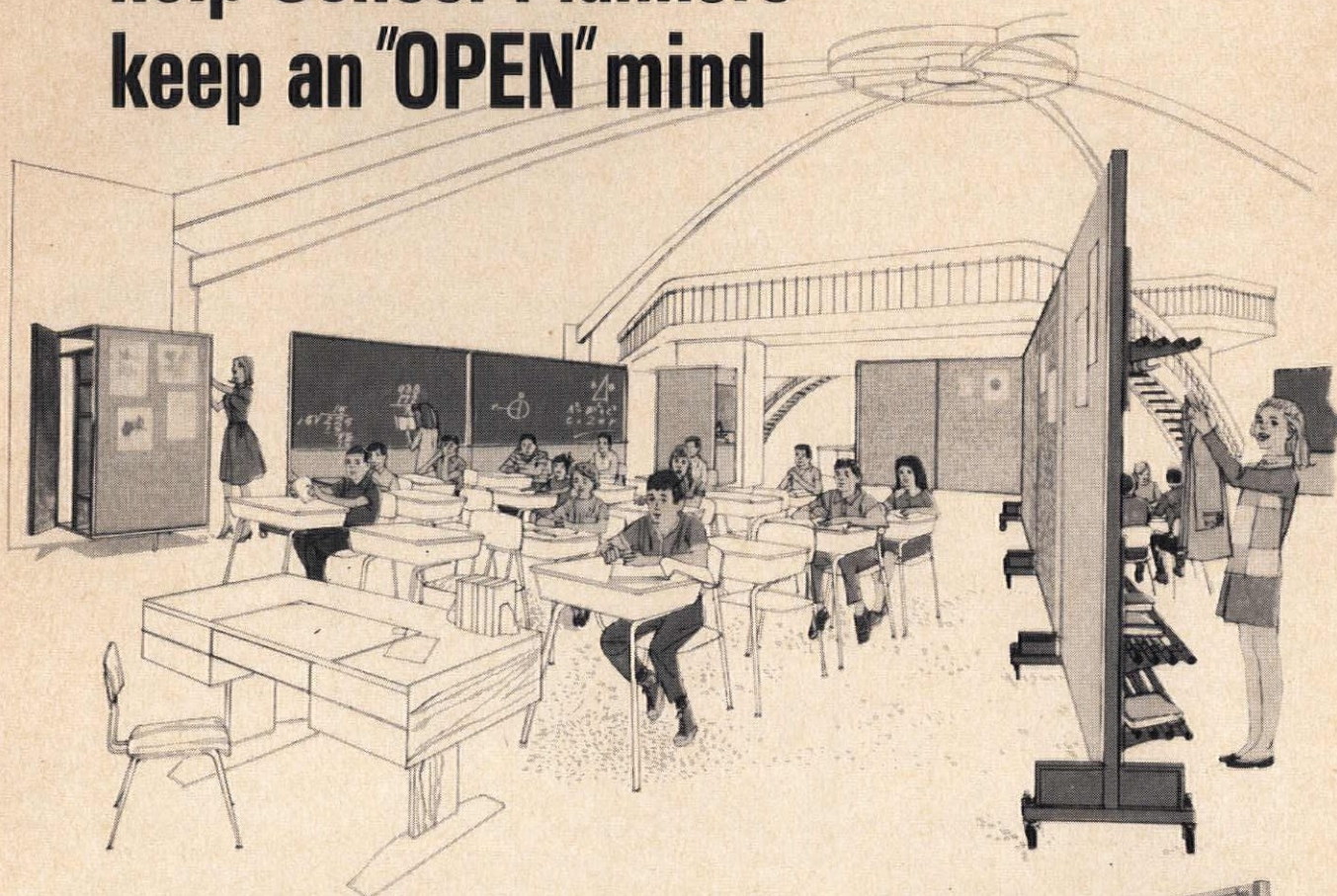
**Highways May Have Bumpy Road** — Congress imposed a couple of really stinging defeats on the Johnson Administration, as it closed up shop for the year. And the outgoing group of officials countered with a move of their own that could even bring the entire Federal aid highway program to a dismal halt.

Key losses on the Administration side were proposals permitting construction employers and unions to form joint committees to promote certain products and methods; to establish an "Airport Trust Fund" (financed by an added tax on airline tickets) to finance airport improvement programs; and, most surprisingly, a "Water Quality Improvement Act" that would have substantially raised Federal payment for pollution control works, permitted local communities to finance the projects with a guarantee of "installment" payments of Federal grants over a period of years, regulated pollution from ships in inland or coastal waters. This latter bill foundered on the House's insistence that offshore oil-drilling rigs be exempted from tight pollution-control regulation.

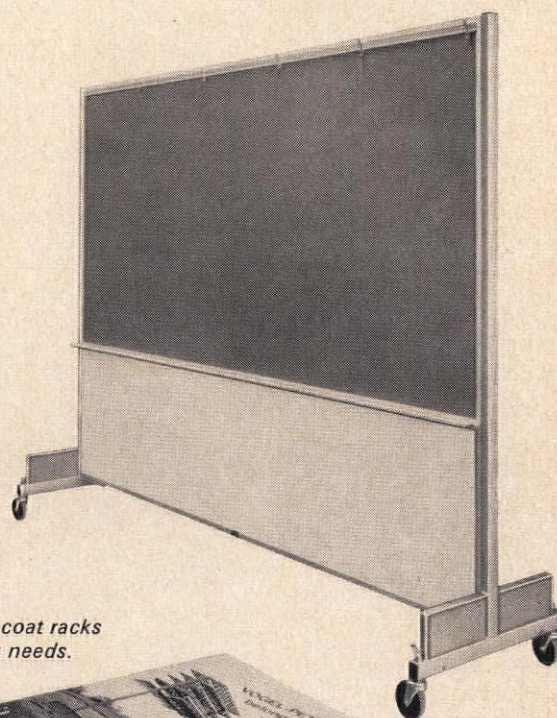




# Vogel-Peterson RDF's help School Planners keep an "OPEN" mind



One moment they're handsome wardrobe racks, chalkboards or tackboards . . . a few seconds later they've converted an open plan school room into efficiently arranged classrooms to accommodate any size class or teaching requirement! Trust Vogel-Peterson to bring you the room-making magic of dual purpose RDF (Schooline Room Divider Wardrobes) . . . 6 or 8 feet long sections that move silently and effortlessly on large rubber-tired casters . . . sturdily made, beautifully detailed and finished in colors that complement the most modern decor. Have them in any combination you wish—tackboard both sides, chalkboard both sides, or tackboard/chalkboard combination or tackboard side can be accessorized with wardrobe racks and book or boot shelves. School planners welcome their versatility . . . teachers like their efficiency and kids can't hurt them. Look into these versatile units—they're designed with you in mind.



*The RDF's are just one of a most complete line of coat racks and wardrobes designed to meet today's changing needs. Write for our complete catalog SL-510.*



**Vogel-Peterson COMPANY**  
"The Coat Rack People"  
ELMHURST, ILLINOIS



© 1968 V. P. Co.



# PRODUCTS

## AIR/TEMPERATURE

**Rooftop conditioner.** The Sun-line 5-ton, year-round conditioning unit has a 2-ton cooling and 80,000 Btu heating capacity. The self-contained gas unit is assembled on mounting rails, and has an over-all size of 46" w, 68" l, 33" h. Said to be compartmentalized for quiet operation, the unit was designed for dwellings and small commercial operations. York, Division of Borg-Warner Corp., York, Pa. Circle 100, Readers' Service Card

## CONSTRUCTION

**Sealing masonry joints.** Silicone Sealant 1300, specifically developed as a concrete and masonry sealer, is said to yield maximum adhesion without need of a primer, and may be applied simply with a hand caulking gun. The material is claimed to resist sunlight, ozone, and moisture, and will retain a pliable consistency from temperatures of -60 F to +250 F. This consistency is said to facilitate year-round application. General Electric Co., Silicone Products Dept., Waterford, N.Y. 12188. Circle 101, Readers' Service Card

**Facing brick.** Kiln-fired clay brick in 1/2" thickness is said to be easily applied to a scratch coat with mortar. Footings are said to be unnecessary. Straight and corner bricks are available in three types: Antique; 'Used' (70% red, 20% white, 10% black); and 1/2" Face Brick. Monterey Clay Brick Corp., 1000 Towne Ave., Los Angeles, Calif. 90021. Circle 102, Readers' Service Card

## DOORS/WINDOWS

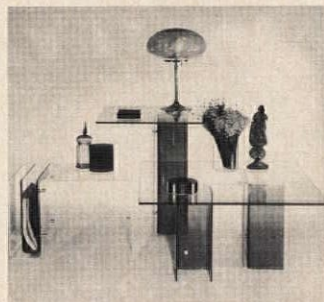
**Framed, and double-hung.** Replacing its Narroline predecessor, the Perma-Shield Narroline double-hung window is designed to eliminate the need for exterior painting and to reduce maintenance. PVC-clad exterior frame and sill are said not to require painting; a factory-applied sash finish will not need painting for 10 years or more, claims the manufacturer. The Perma-Shield Narroline is made in 42 sizes, and may be hung singly, or in multiples. Andersen Corp., Bay-

port, Minn.  
Circle 103, Readers' Service Card

## FINISHES PROTECTORS

**Topping the weather.** A weatherproofing material for balconies, patios, and poolside areas, Weather Topping may be trowel-applied to either concrete or exterior plywood. Said to cure in 24 hours, the topping will resist temperatures from -60 F to 350 F; in addition, it is claimed to resist the effects of sun and moisture. Available in neutral, gray, red, or green, the topping is recommended for light traffic areas. General Electric Co., Silicone Products Dept., Waterford, N.Y. 12188. Circle 104, Readers' Service Card

## FURNISHINGS



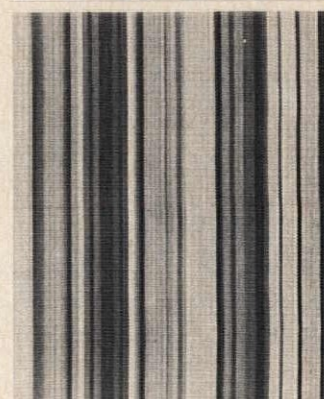
**Semi-see-through tables.** Tables designed by Kenneth Brozen range in size, shape, and use from coffee and end to occasional tables and magazine holders. Brozen selected a dusky bronze tone as well as a clear acrylic sheet to use with chrome hardware. The larger pieces of the collection have polished glass tops; the small magazine tables are continuous "ribbons" of acrylic. Called "Highlight" because of the bronze tone, the collection combines well with wood interiors. Raymor, distributed by Richards, Morgenthau & Co., Inc., 225 Fifth Ave., New York, N.Y. 10010. Circle 105, Readers' Service Card

**Custom carpets in shag.** Long, shaggy pile Designer Series rugs and carpets now have a "corn row" effect, achieved by combining up to three colors of the designer's choice. The "corn row" effect is available in the Coquin, Fabrique, and Brigitte textures, all of Acrilan acrylic pile. The carpeting



may be seamless up to a 25' width. Philadelphia Carpet Co., 295 Fifth Ave., New York, N.Y. 10016.

Circle 106, Readers' Service Card



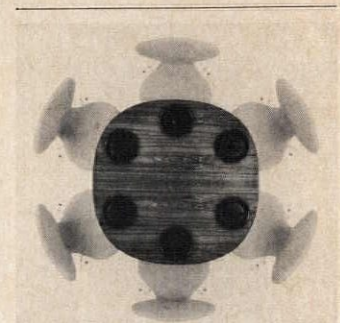
**A stripe is a stripe is a . . .** The Embassy 54" width vertical stripe fabric is blended of wool, nylon, and viscose yarns with a light acrylic backing. The heavy texture of the fabric balances the striped pattern, which is further muted by color progressions within the pattern. Six colorways are offered, and the ten predominating colors are also available as solid colors in a companion fabric. F. Schumacher & Co., 58 W. 40th St., New York, N.Y. 10022.

Circle 107, Readers' Service Card



**In my garden.** "Hyacinth," one of 22 textile designs from the Marimekko collection, is

described as a "bold, opulent floral print." As are all of the designs, "Hyacinth" is best suited for large-scale applications. Available in four colorways (black/white; greens; browns; lavenders), the pattern is silk screened on 100% heavy cotton. Available through Design Research, Isabell Scott Fabrics, 979 Third Ave., New York, N.Y. 10022. Circle 108, Readers' Service Card



**Perimeter advantage.** The supercircle table designed by Piet Hein is said to seat more people more comfortably than would be possible at either a strictly circular or square table. The steel span leg support, which joins at the floor and spreads under the table, may be assembled without tools. The tabletop is available in teak, rosewood, oak or standard painted colors, with a diam of either 39 1/2" or 45 1/2". Table heights: 28 1/2" and 18 3/4". Fritz Hansen Inc., 979 Third Ave., New York, N.Y. 10022. Circle 109, Readers' Service Card



**Receptive seating.** Designed especially for business and professional reception areas, the System 900 seating series gets both its styling and support from a polished chrome base. Two chair styles are featured: one with a shaped arm rest; the other with its sides on a diagonal from back to seat. Madison Furniture Industries, Canton, Miss. 39046. Circle 110, Readers' Service Card

## LIGHTING

**Exposure-proof lighting.** Featuring "totally-enclosed" construction, the 97 Line lighting



# Freedom to plan imaginatively . . . with versatile Southern Pine



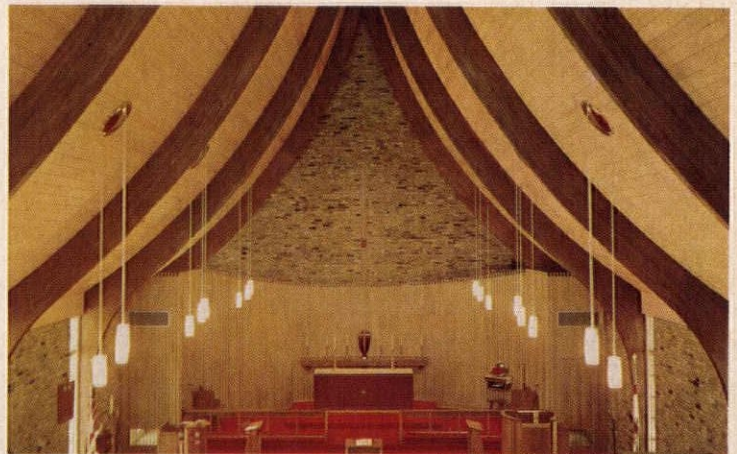
Architects: Desmond Miremont & Associates, Inc., A.I.A.

The modern applications of Southern Pine laminated beams, decking, siding and paneling open new dimensions for design creativity. Here, in this striking library foyer one immediately senses a promise of tranquility and permanence. The inspiring sweep of maximum spans achieved by the high stress value of Southern Pine affords unique and economical planning latitude.



Architects: Marshall M. Burton & Associates

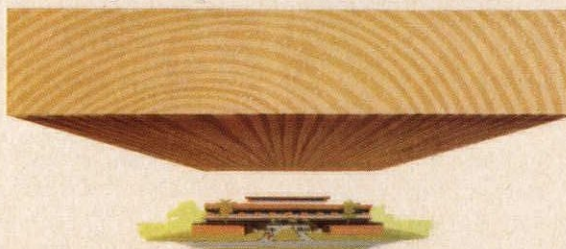
Pre-shrunk to *full* American Lumber Standard sizes, Southern Pine provides stability and precision essential to engineered construction, as in this country club. Standard grades can be utilized for cantilevered and continuous members without special grading.



Architects: Roberts & Barksdale, A.I.A.

In this church, you see how the warmth and beauty of Southern Pine create a truly spiritual feeling in contemporary setting. Its enduring qualities provide economy for today's modern construction programs, with extremely low maintenance cost assured through the years.

## Specify Southern Pine



From the member mills of the Southern Pine Association, P. O. Box 52468, New Orleans, La. 70150

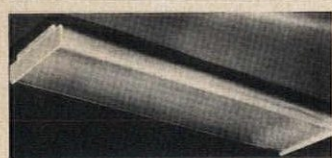
On Readers' Service Card, Circle No. 403





fixture is designed for wet locations, such as around swimming pools, and in labs, subways, and garages. Constructed of aluminum, the housing can accommodate thru-wiring for installation of continuous fixture runs. Unit has optional mounting brackets for pendant, ceiling, wall, corner and slope mounting. McPhilben Lighting, 270 Long Island Expressway, Melville, N.Y. 11746.

Circle 111, Readers' Service Card



**Let there be low brightness light.** A low brightness fluorescent luminaire for direct lighting of interiors, the Vicar

may be surface- or pendant-mounted. Two styles are offered: one houses two lamps and is 12" wide; the other houses four lamps and is 18" wide. Both styles use 40-w rapid-start lamps, and come in 4' and 8' tandem lengths. Various refractor construction materials are available. Westinghouse Lighting Div., Interior Lighting Dept., Vicksburg, Miss. 39180.

Circle 112, Readers' Service Card

#### OFFICE EQUIPMENT



**Message units retrieve data.** Libraphone is claimed to be

the first piece of data retrieval equipment to utilize the public telephone system; it is a telephone hook-up that attaches to an ordinary microfilm reader-printer. The Libraphone was designed for use with a prepackaged information system: a complete microfilm library of data is provided to subscribers; in addition, the machine has a direct connection to the nearest central information center for special services. Specialized Business Services, Inc., 620 Trolley Blvd., Rochester, N.Y. 14606.

Circle 113, Readers' Service Card

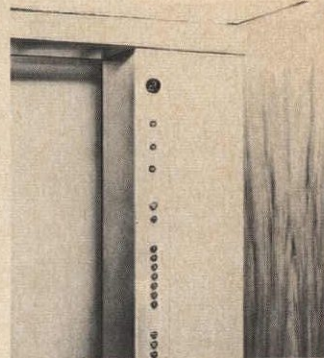
#### SANITATION PLUMBING

**Flood control valve.** Designed to operate under city water pressure rather than by electricity (thus unhampered by power failure), the StormGuard valve is said to prevent sewer back-ups from flooding basements. Valve is automatic, with a reported force of 25 times that of normal city water pressure; when the valve closes, it triggers a remote

monitor warning system. Cherne StormGuard Inc., Hopkins, Minn. 55343.

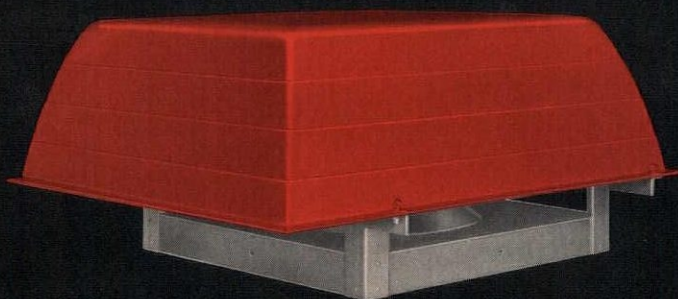
Circle 114, Readers' Service Card

#### SPECIAL EQUIPMENT



**Elevating design.** The trend to shiny, uncluttered interiors has reached elevators in the form of an operating column with integral control buttons and signal equipment. The unit also includes digital readouts, indicating floor numbers. This single unit design eliminates the need for a separate faceplate. Otis Elevator Co., 260 Eleventh Ave., New York, N.Y. 10001.

Circle 115, Readers' Service Card



## a red ventilator?

**WHY NOT!** New Exitaire PERMA-VENT Roof Exhausters come in 14 striking colors that are permanently molded into the durable all-fiberglass hood.

**HIGH PERFORMANCE AND HOT PINK, TOO!** But let's not get so enthralled with PERMA-VENT's colorful good looks that we ignore its extraordinary performance. For example: Model FG4806, with 5 hp, produces 28,000 cfm (and it's only 37½" high). Companion gravity units also available.



Performance CERTIFIED with AMCA SEAL

Write today for literature:

EXITAIRE CO. P.O. Box 276 Pacoima, California 91331



SEND FOR FREE CATALOG

## MODEL MATERIALS

LANDSCAPE MATERIALS  
AUTOS  
SCALE PEOPLE  
PRINTED SURFACES  
SCALE FURNITURE

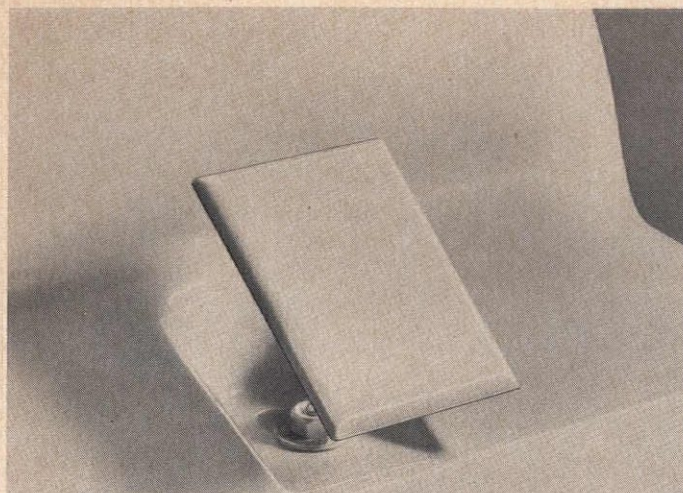
produced by  
ARCHITECTURAL MODELS, INC.  
361 BRANNAN STREET  
SAN FRANCISCO, CALIFORNIA  
94107

On Readers' Service Card, Circle No. 404

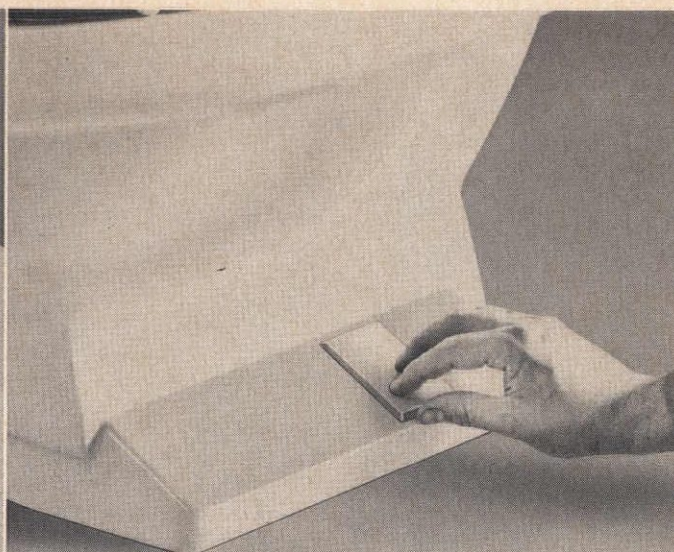
On Readers' Service Card, Circle No. 343

December 1968





**This is a flat bolt cover.**



**It's easy to install.**



**It's easy to clean.**



**It will stay put.**

## **It's an Eljer original.**

From a design standpoint, you can't top the Eljer toilet with its patented flat bolt cover. But there's more to the story. Because it takes less time to install, it reduces your total project costs. And it keeps saving money for your client because it reduces maintenance time in cleaning, since dirt and bacteria won't collect around the cover as they do around other bolt caps.

Specify and design washrooms with Eljer floor-mounted toilets that have flat bolt covers. For more, call your Eljer representative or write Eljer, Dept. PA8, P.O. Box 836, Pittsburgh, Pa. 15230.



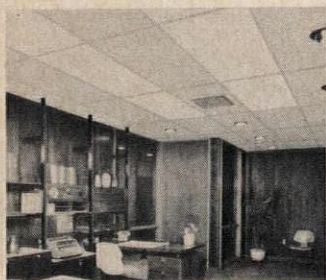
**ELJER**  
SINCE 1904 FINE PLUMBING FIXTURES®

Eljer Plumbingware Division / Wallace-Murray Corporation



# MFRS' DATA

## ACOUSTICS



**Sound control.** Omnidirectional fissures are said to give Spintone 360 acoustical ceiling panels a randomly flecked appearance. Designed for use in exposed grid systems, the panels are constructed of mineral wool fibers; a standard white finish is said to resist stains, and diffuse light without reducing its fire-resistance or acoustical properties. ASTM test methods, results; attenuation and noise reduction ratings; sizes; installation methods. Brochure. 4 pages. Johns Manville, 22 E. 40th St., New York, N.Y. 10016. Circle 200, Readers' Service Card

## AIR/TEMPERATURE

**Diffusing industrial air.** Low-cost diffusers, constructed entirely of aluminum, may be installed in new or existing duct work. Having a built-in volume control and air-seal gasket, the three diffuser models are designed for exposed-duct and suspended egg crate ceiling applications. These Industrial Air Valves provide for many air changes per hour. Brochure contains drawings, dimensions, performance charts and characteristics. 8 pages. Pyle-National Multi-Vent Div., 1334 N. Kostner Ave., Chicago, Ill. 60651. Circle 201, Readers' Service Card

**In hot water.** This line of electric commercial water heaters has a tank capacity range of 66, 82, 100, and 120 gals., with kw ratings of from 6 kw through 45 kw. For use in commercial and industrial areas, heaters can be used singly, or in multiple manifolds to form a free-standing system, or in conjunction with a storage tank as a circulating tank heater. UL- and ASME-approved. Drawings, dimensional chart, recovery rate

charts, sample specs. File sheet for each of 4 Atlas models. Republic Heater Co., Inc., 6600 E. 15 Mile Rd., Warren, Mich. 48092. Circle 202, Readers' Service Card

**Gas fired heat.** A complete line of gas make-up air heaters and steam/hot water models featuring "draw through" design, are said to insure uniform air passage and distribution. Contents include diagrams, cutaways, performance data table, accessory selection tables, dimensions, and specs for roof-mounted and ceiling-suspended models. Catalog. 14 pages. Modine Mfg. Co., 1500 DeKoven Ave., Racine, Wis. 53401. Circle 203, Readers' Service Card

## CONSTRUCTION

**Siliceous rock insulation.** Perlite, a form of natural glass, reportedly contains countless air cells, which are said to account for its light weight and excellent thermal insulation properties. In aggregate form, combined with portland cement, it is said to produce a lightweight concrete for use as roof and floor fill, structural roof decking, and in curtain wall systems and insulation applications. Data includes: physical and spec properties; density selection guide; thickness and load charts; design data; application details. Catalog. 20 pages. Perlite Institute Inc., 45 W. 45th St., New York, N.Y. 10036. Circle 204, Readers' Service Card

## DOORS/WINDOWS

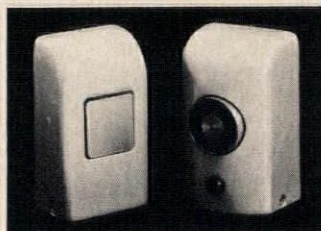


**Special doors.** Four flexible rubber doors that can be pushed open by carts and other equipment are described in a brochure. The doors, 1 $\frac{13}{16}$ " thick, feature cushioned nosing, heavy-duty

transparent window panels, and self-closing apparatus. Illustrations, sections, and brief descriptions. 4 pages. Stic-Klip Manufacturing Co., Inc., 60 Regent St., Cambridge, Mass. 02140. Circle 205, Readers' Service Card

**How to swing.** Easy Swing doors feature "fingertouch" opening, and a safe time delay closing. All doors are available in a variety of construction materials and opening sizes; they are said to be ideal in any application where visual, temperature, or sound barriers are required. Included are drawings, dimensions, construction and installation details, parts diagrams, jamb details, and general specs. File/folder. 36 pages. Eliason Easy Swing Door Div., P.O. Box 2128, Kalamazoo, Mich. 49003. Circle 206, Readers' Service Card

## ELECTRICAL EQUIPMENT



**Sensitive door control.** Electromagnetic system devices for door controls may be adapted to any type of sensor, or may be controlled by push-button for manual operation. The Challenger 1440 door stop and holder is said to provide instant closing of fire and security doors in schools, hospitals, and other public buildings. Each door requires a separate unit, but all may be controlled from a single source. Dimensions, schematics, installation details for wall, floor, and door units. File. 4 pages. Challenger Lock & Hardware Div., Eaton Yale & Towne Inc., 2349 W. La Palma Ave., Anaheim, Calif. 92803. Circle 207, Readers' Service Card

## FINISHES PROTECTORS

**Opaque oil stain.** For use on exterior horizontal or vertical siding, Cabot's Ranch House Hues are said to produce best results on porous lumber, and

to be especially suited to rough-sawn wood surfaces. Data contains color samples, intermixing formulas for interior applications, covering capacity information, and application specs. Folder. 5 pages. Samuel Cabot Inc., 246 Summer St., Boston, Mass. 02210. Circle 208, Readers' Service Card

## FURNISHINGS



**Seat of wisdom.** Classroom comfort is offered in the Seminar seating series, said to be proportioned for the young adult. Series consists of: seminar and pedestal chairs, with or without tablet (or folding tablet) arm and book rack; instructor's chair; pedestal table, of varying widths and lengths. Data includes drawings, details, dimensions, options, construction and finish information, general specs. Brochure: 4 pages; general specs; 6 pages. Peabody Seating Co., Inc., N. Manchester, Ind. 46962. Circle 209, Readers' Service Card



**Component cabinetry.** Henry Kann designed the Omni Plus storage, work surface, display and organizer systems. Both his design and the manufacturer's precise engineering result in cabinetry systems that are highly attractive, and are claimed to enhance function as well as material savings. Component modules, and





## *LP-gas supplies the comforts of home away from home*

Call it a summer place, a hideaway or a second home. If it's beyond the reach of the pipeline, you can bet it's equipped with LP-gas. Versatile LP-gas is available to people *wherever* they live—providing heat, cooking food, heating water, powering generators. It's even found at pool side where it takes the nip out of a dip. Wherever heat and power are required, LP-gas does the job. *And gas makes the big difference.* Safe. Clean. Dependable. Modern.

*Of America's great sources of energy, only LP-gas serves you in so many ways.*

NATIONAL LP-GAS MARKET DEVELOPMENT COUNCIL, Chicago, Illinois 60603

FOR HEAT AND POWER  
ANYWHERE



On Readers' Service Card, Circle No. 371





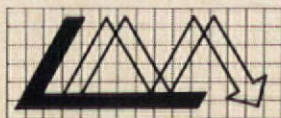
## See-through mirrors solve a problem at an unusual school.



How do you let student teachers observe training techniques used with insecure preschoolers without making them more insecure?

Here at the George Peabody College for Teachers in Nashville, they use see-through mirrors of *Mirropane*®. Student teachers sit in a semi-darkened gallery and watch experienced teachers work to dispel fear and uncertainty common among deprived children. The children in the brighter room don't know anyone is watching them because they see nothing but mirrors.

Use *Mirropane* wherever there's a need to watch people without being seen. Ask your L-O-F Distributor for booklet TM-2 for design data. He's listed under "Glass" in the Yellow Pages.



**LIBERTY MIRROR**

A DIVISION OF LIBBEY-OWENS-FORD COMPANY

82128 L-O-F Building, Toledo, Ohio 43624.

On Readers' Service Card, Circle No. 362

ganging and stacking enclosures are claimed to provide unlimited combinations of closures and open areas that may be dis- and re-assembled. Specifier selects frontal components and stack arrangements; manufacturer supplies corresponding frame and track requirements. Brochure: 17 pages; also spec and price booklet. OMNI/Aluminum Extrusions Inc., Charlotte, Mich. 48813.

Circle 210, Readers' Service Card



**Contour chairs.** Designed by Robin Day for residential, institutional, public, and educational use, this chair series is constructed of one-piece molded polypropylene, with leg bases of mirror chrome steel tubing. Basic chair seat has various mounting options, as well as multiple seating uses. Available in six colors, the chair surface is said to have a fabric-like finish. Drawings, dimensions, photos, and specs. Catalog. 17 pages. John Stuart International, Inc., 205 E. 58th St., New York, N.Y. 10022.

Circle 211, Readers' Service Card



**28 by 1.** Twenty-eight executive area contract furnishings designed by Kipp Stewart are cataloged; furnishings include executive and secretarial desks, conference room table and chairs, end tables and a coffee table. Illustration of a "Series 5" cabinet with knee-hole and with filing recessed in the top also shows hexagonal shaped steel legs; stretchers; and a choice of



Batteries of solid oak and glass doors; a commanding feature of a contemporary church designed to serve the generations of tomorrow. Concealed door control by Rixson Closers; specified with the future in mind.

Rixson's No. 27 Series offset hung, with exclusive full control panel adjustment, for interior or exterior doors.

Four of 20 Rixson floor closers in St. Regis Church, Birmingham, Michigan.

Details? Request "A Short Course In Door Control" from:

**RIXSON CLOSERS**

A DIVISION OF RIXSON INC.  
FRANKLIN PARK, ILLINOIS  
In Canada: Rixson of Canada, Ltd.



enduring

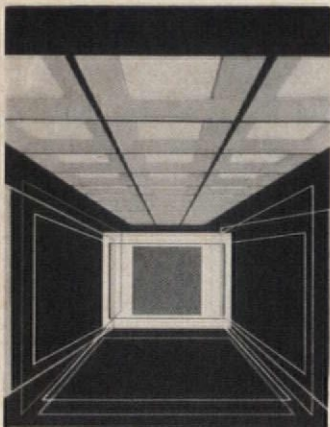




three finishes ranging from a dark brown to amber. Directional Contract Furniture Corp., 979 Third Ave., New York, N.Y. 10022.

Circle 212, Readers' Service Card

## LIGHTING



**Ceiling Dynamics.** Booklet introduces new Compac ceiling system, which provides illumination, ventilation, and has high sound-absorption (NRC) and attenuation (STC) ratings, as well as a handsome ceiling design. Schematics illustrate air supply, return, and heat-transfer connections. Includes charts and performance data; modi-

fications; variations. 16 pages. Day Brite Lighting, Emerson Electric Co., 5411 Bullwer Ave., St. Louis, Mo. 63147.

Circle 213, Readers' Service Card

**Profiles in lighting.** Contemporary table, standing, and wall lamps in Contract Group No. 234 are suitable for use in hospital, motel, school, and office interiors. Line also features swing arm table and wall lamps, reflector lamps. All models are available in a variety of finishes and shade materials. Drawings, dimensions, installation details. Catalog. 28 pages, also (net) price sheet. Nessen Lamps, Inc., 3200 Jerome Ave., Bronx, N.Y. 10468.

Circle 214, Readers' Service Card

**Recess arrangements.** "Wide Lite" recessed lighting systems for mercury vapor lamp fixtures are said to have specially designed mounting equipment adaptable to any type of ceiling. The system boasts a host of luminaire capacities and reflector combinations. Installation drawings, construction, frame, and panel descriptions,



new look in indoor lighting efficiency, from Wide-Lite

lamp life data. Brochure. 8 pages. Wide Lite Corp., 4114 Gulf Freeway, Houston, Tex. Circle 215, Readers' Service Card

## ROOFING

**Reinforced gypsum-concrete.** Revised standard, when strictly adhered to, is claimed to result in permanent, safe roof deck. Contains: definitions; materials; water ratio; allowable stresses; design; installation procedures; mixing operations for varying weather conditions; spec suggestions. Booklet. 6 pages. Gypsum Assoc., 201 No. Wells, Chicago, Ill. 60606.

Circle 216, Readers' Service Card

## SANITATION PLUMBING

**Rain drains and strainers.** Wide range of roof drains accommodates variations in roof

design as well as rain removal needs. Also catalogued are optional features for drainage control and modified installations. Includes description, schematics, dimensions, and capacity data. Catalog. 12 pages. Blake Div. of Hoffman Specialty Mfg. Corp., 1700 W. 10th St., Indianapolis, Ind. 46222.

Circle 217, Readers' Service Card

**Water, water everywhere.** Electric drinking fountains and water coolers for industrial and office use are available wall-mounted or free-standing. Bulletin contains illustrations, dimensions, capacity and cooling data; specs. 4 pages. Halsey W. Taylor Co., Warren, Ohio.

Circle 218, Readers' Service Card

## PROGRESSIVE ARCHITECTURE NEWS REPORT

**REINHOLD PUBLISHING CORP.**  
430 Park Avenue, New York, N.Y. 10022

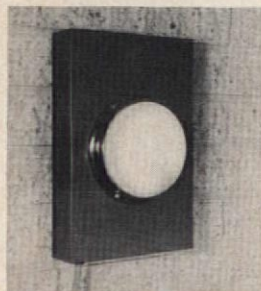
Editor.....Jan C. Rowan  
Associate Editor.....E. K. Carpenter  
Publisher.....P. H. Hubbard, Jr.  
Advertising Sales Mgr.....W. H. Johnson  
Production Mgr.....Joseph M. Scanlon



for dependability...

SCR-200X  
Inspect every 5 years

specify **SENTRY-LITE**



SCR-525HL — Decorator Model

Patented solid-state circuitry guarantees that the battery is **always** at full charge, never undercharged, never overcharged! That's why Sentry-Lites operate instantly every time the power fails, year after year! Completely automatic. Seven models, one to four lamps. Light to 10,000 square feet for up to 12 hours. Guaranteed 5 years. Maintenance never oftener than once a year. Some models only require inspection every 5 years. Get complete information now.

Sentry-Lite and Battery Division

**HOBBY & BROWN ELECTRONIC CORPORATION**  
15 ST. MARKS AVENUE / ROCKVILLE CENTRE, N.Y. / 11570

On Readers' Service Card, Circle No. 397

# ChemComp®

THE SHRINKAGE  
COMPENSATED CEMENT

Shrinkage Cracks in Concrete  
CAN Be Eliminated

Available Throughout  
The United States

Write to: CHEMICALLY PRESTRESSED CONCRETE CORP.  
14656 Oxnard St./Van Nuys, California 91401

On Readers' Service Card, Circle No. 335



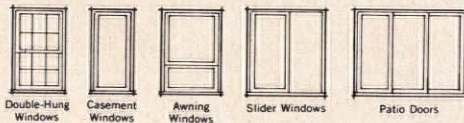
The Better Homes in Every  
Neighborhood have WOOD WINDOWS.

Have You Noticed?

## C200' CASEMENT WOOD WINDOWS



For the ultimate in windows, C200's are double weatherstripped, are available with insulating glass and vinyl glazing — a combination that's leakproof, permanent and maintenance-free.



**CARADCO, INC.**  
Dubuque, Iowa

Subsidiary: Caradco Eastern, Inc.  
Pemberton, N.J.

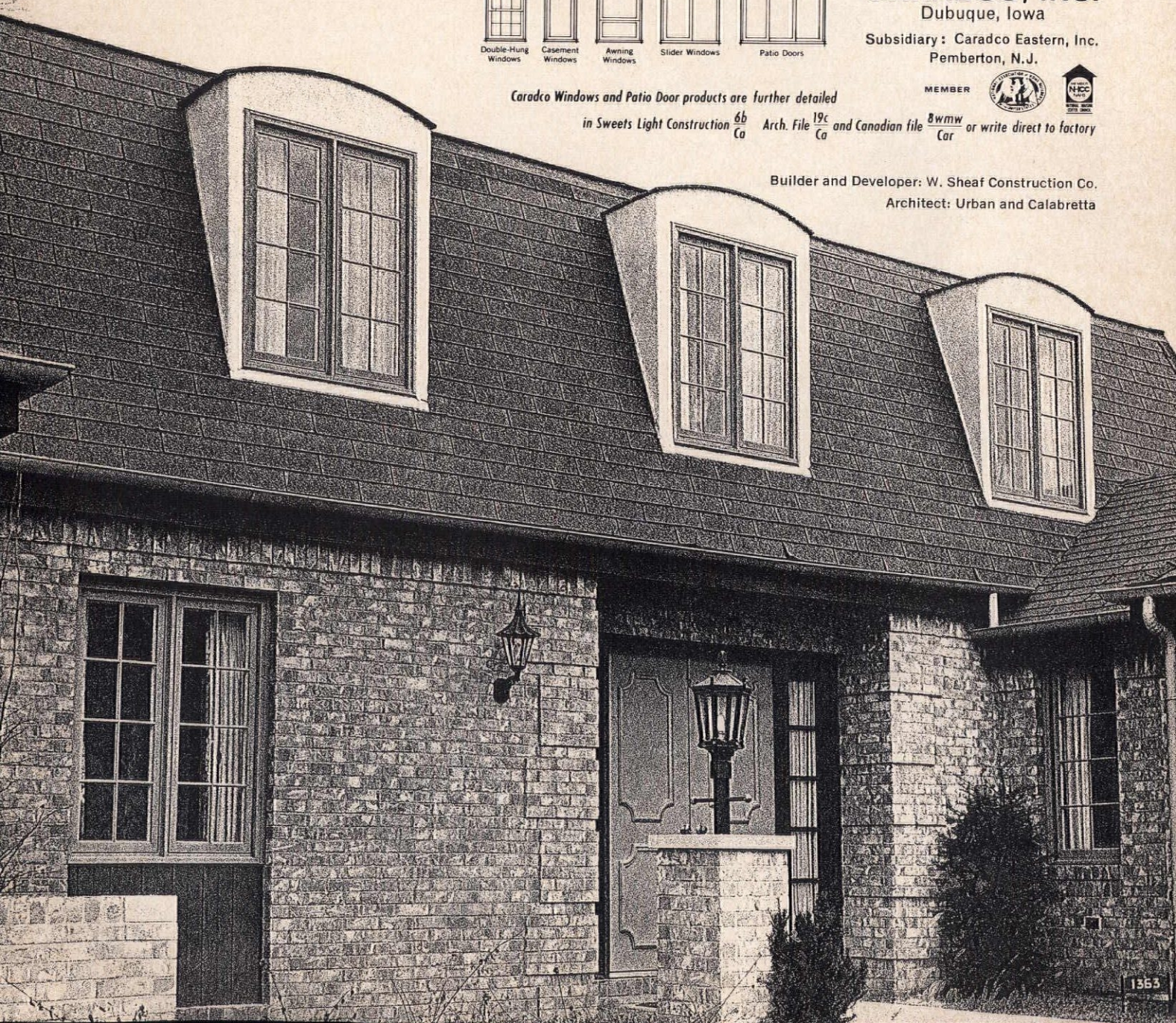
MEMBER



Caradco Windows and Patio Door products are further detailed

in Sweets Light Construction <sup>6b</sup>/<sub>Ca</sub> Arch. File <sup>19c</sup>/<sub>Ca</sub> and Canadian file <sup>8wmw</sup>/<sub>Car</sub> or write direct to factory

Builder and Developer: W. Sheaf Construction Co.  
Architect: Urban and Calabretta





# Pentel

**PENCILS—always found  
in the "Best Circles"!**

**0.5mm 12 LEAD**

**AUTOMATIC  
CONTINUOUS FEED**

**"\*CPA  
Sharp 5"**

**\*CONSTANT POINT ALWAYS  
MECHANICAL  
PENCIL**

**\$2.98**

Individually  
Boxed

TOP  
LOAD  
PUSH  
BUTTON



ERASER  
UNDER  
CAP



**12  
LEAD  
CONTINUOUS  
FEED  
MECHANICAL PENCIL**

**GRAPH**

Perfect for fine line  
reproduction

**0.5mm (.020")**

Refill leads for  
CPA Sharp 5 &  
Graph Pencil  
H-HB-2H-4H  
50¢ package of 12

**\$4**

Individually  
Boxed

**Pentel** OF AMERICA, LTD.

333 N. MICHIGAN AVE. CHICAGO, ILL. 60601

PLEASE SEND THE FOLLOWING:

\_\_\_\_ CPA Sharp 5 @ \$2.98

Pentel Refill Leads 50c Pkg. of 12

\_\_\_\_ Graph Pencil @ \$4

☐ HB ☐ H ☐ 2H ☐ 4H

TOTAL \$

NAME

ADDRESS

CITY

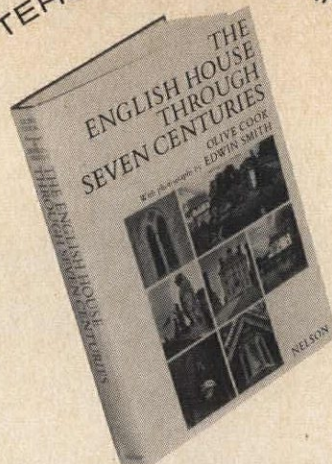
STATE

ZIP

PA-1268

On Readers' Service Card, Circle No. 395

FOR GLOBE-TROTTERS • HOMEMAKERS • ANGLOPHILES



## A gift of lasting delight!

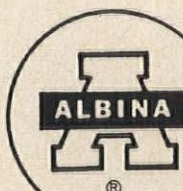
This magnificent new book portrays the English home throughout history as a work of art . . . reflecting the tastes, aspirations and ideals of the people. Superbly illustrated with color and black and white photographs. Text by Olive Cook with photographs by Edwin Smith.

At your bookstore. / Prepublication price  
\$19.95 until Dec. 31.

**THOMAS NELSON & SONS**

Copewood & Davis Sts., Camden, N.J. 08103

On Readers' Service Card, Circle No. 372



**"UNI-TRACK"**

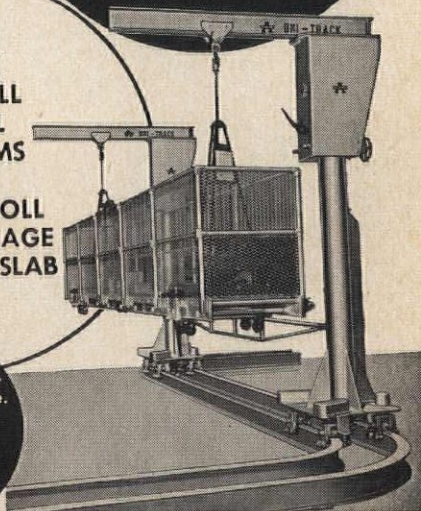
and

**"CLIMBER"**

**POWERED WINDOW  
WASHING SYSTEMS**

• Illustrated  
**ROOF DECK  
PARAPET WALL  
GUARD RAIL  
TRACK SYSTEMS  
and  
FOUR WHEEL ROLL  
AROUND CARRIAGE  
FOR CONCRETE SLAB**

Write for 12-page,  
illustrated brochure.  
ARA W-54-CC  
AIA-35-J7  
Specifications  
included



**ALBINA ENGINE & MACHINE WKS.**

2100 N. Albina Avenue • Portland, Oregon 97227

On Readers' Service Card, Circle No. 321

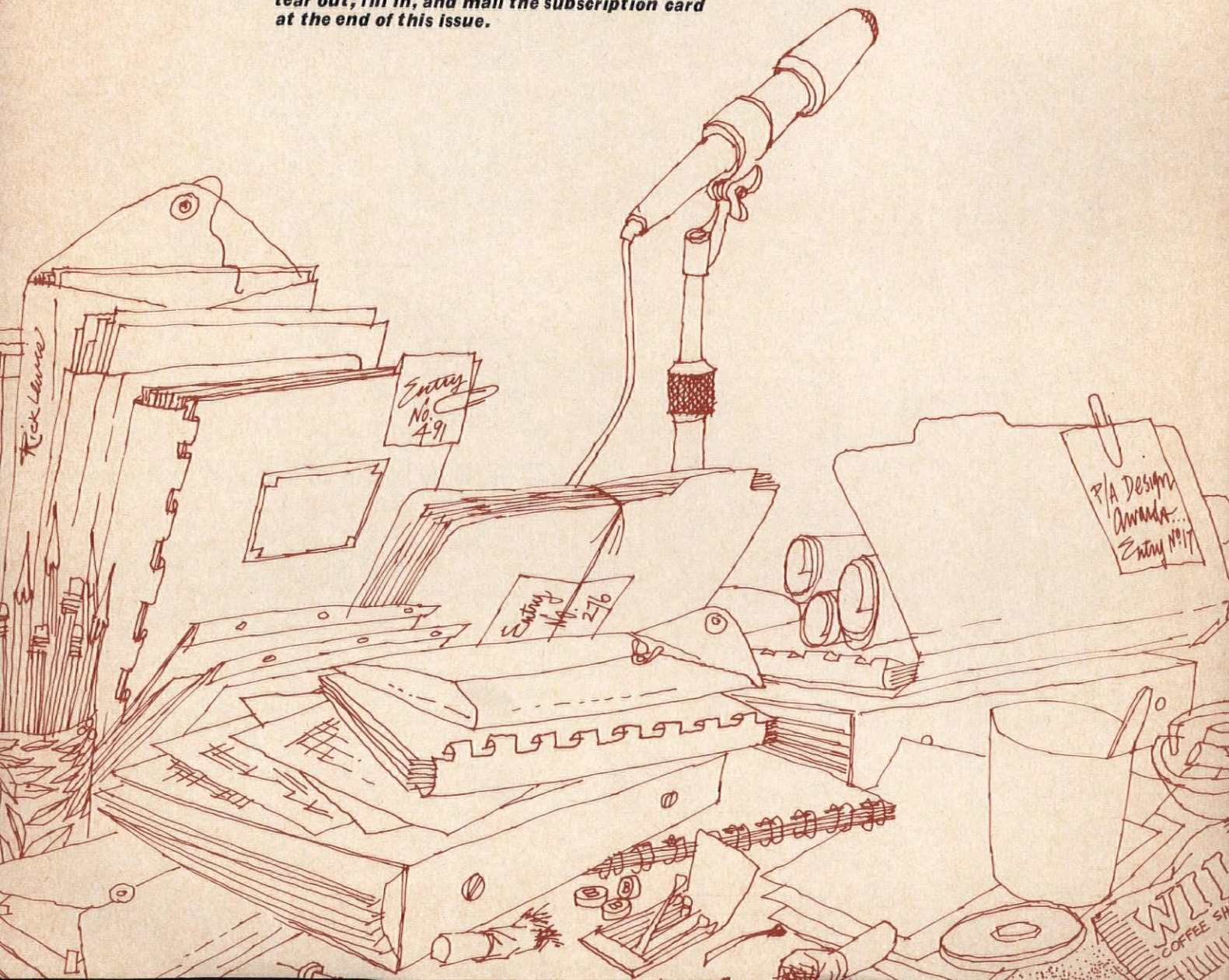


## NEXT MONTH IN P/A

**Winners of the 16th Annual P/A Design Awards Program selected by Henry N. Cobb, Lewis Davis, R. M. Gensert, Roger Montgomery, and Cesar Pelli.**

**If you are interested in pace-setting design and planning developments, this issue is imperative reading. If you're not, you're not.**

**To receive the January Design Awards P/A and 11 more issues packed with ideas, excitement, controversy, and ways to better architecture, tear out, fill in, and mail the subscription card at the end of this issue.**





# Bright idea



## Beautiful way to cut building costs: Bradley Washfountains!

Bradley Washfountains come in a wide variety of attractive colors and compositions. But the real beauty of Washfountains is the money they save. For example, Washfountains serve up to 8 people with one set of plumbing connections, cutting installation costs as much as 80%. They use less space than ordinary fixtures (up to 25% less). They reduce water consumption 45-80%. And they cut maintenance costs, too. Wherever you specify Washfountains—offices, schools, plants, institutions, public and commercial buildings of all types—you secure a handsome saving! See your Bradley representative. And write today for complete information. Bradley Washfountain Co., 9141 Fountain Boulevard, Menomonee Falls, Wisconsin 53051.

# from Bradley!

