Moore Takes Yale Post

NEW HAVEN, CONN. Charles W. Moore will succeed Paul Rudolph as Chairman of the Department of Architecture at Yale University. Moore, 39, moves to Yale on July 1 from the University of California in Berkeley, where he has been Chairman of the Department of Architecture since 1961. Rudolph is opening his own architectural office in New York City.

Despite his relative youth, Moore has already had a distinguished career both as architect and teacher. Following graduation from the University of Michigan in 1947, Moore went to work in San Francisco, first for Mario Corbett, later for Joseph Allen Stein, and then Clark & Beutler. In 1949, he won the George W. Booth Traveling Fellowship from his undergraduate alma mater and toured through Europe and the Near East, taking photographs for use in teaching architectural design and history. Getting his pedagogical feet wet as an assistant professor at the University of Utah in 1950-52, Moore began to formulate his philosophy of architectural education. "I had become convinced of the value of architectural history as a core discipline in the teaching of architecture," he says. After two years service as a Lieutenant in the U.S. Army Corps of Engineers in this country and Korea, he matriculated at Princeton, receiving his M.F.A. in architectural design and history in 1956 and his Ph.D. in architecture in 1957. He stayed at Princeton from 1957-59 as assistant professor, then returned to San Francisco as a senior associate of Clark & Beutler and associate professor at the University of California. In 1962, Moore won a P/A Award Citation for the design of his own house (pp. 146-149, JANUARY 1962 P/A). When he moves to New Haven in July, Moore will set up an office of his firm there. His associate, William Turnbull, will probably remain in charge of the office in Berkeley. The other two associates have left the firm: Richard R. Whitaker is in Washington, D.C., as the Education Director for the AIA, and Donlyn Lyndon was named recently Chairman of the architectural department at the University of Oregon.

Holmes Made Managing Editor

Burton H. Holmes, AIA, who joined P/A in 1949 as Technical Editor and was made Senior Editor, Materials and Methods, in January, 1965, has been named Managing Editor of PROGRESSIVE ARCHITECTURE. Holmes received his B.A. from Oberlin College and his Bachelor of Architecture from Yale University, and was a major in the U.S. Army Field Artillery in World War II. He worked in the architectural firm of Hulsken & Strong, Lima, Ohio, then in design development of porcelain enamel structures with Davidson Enamel Products. Moving to New York, he was affiliated with Lockwood-Green, Engineers, Inc., serving in both the architectural and structural design divisions. Holmes has for some years considered the most significant voice on technologically matters in the architectural press. The P/A "theme" issues prepared under his direction have become invaluable references for the profession. They include "The Design of Building Products," "Air Conditioning and Architecture," "Wood in Architecture," "The Aesthetic and Technology of Pre-assembly," "Tectonic Steels," "Contemporary Masonry," and a number of others.

As Holmes moves into the Managing Editor's position, he will continue his interest in technology, as well as other aspects of architectural design and practice. His experience, and contributions to, the magazine for the past 16 years are expected to make his new role an even more importantly contributory one.
Remember Styrofoam.

(It's the roofing insulation we made
to last and last and last. And it does.)

Once Styrofoam® RM brand roof insulation is installed, it's in for good. Same as Styrofoam FR for masonry walls and Styrofoam SB for slabs and foundations. Wherever you specify Styrofoam, you're using an insulation that won't absorb water from inside or outside. One that doesn't need a vapor barrier. And is extremely light in weight. No matter what its age, Styrofoam doesn't rot, or collect mold, or deteriorate. There's even more to remember about Styrofoam in Sweet's Architectural File 10a/Do and 8a/Dow. Or we'll send the information to you. Just write. The Dow Chemical Company, Plastics Sales Department 1310EB6, Midland, Michigan. Styrofoam is Dow's registered trademark for expanded polystyrene produced by an exclusive manufacturing process. Accept no substitutes... look for this trademark on all Styrofoam brand insulation board.

On Readers' Service Card, circle No. 345

OK. Now forget it.

(It gets along by itself just great.)

Dow
transportation act of 1964. The disappearance of the EL will alter the physical appearance of downtown Chicago, as much as the destruction of the Third Avenue El altered New York City's East Side. It will also change the feeling of the Loop. What the new feeling will be is up to Chicago.

In 1959, Hartford wrote Commissioner Moses proposing an esplanade, a "Gibbs Elysées," running from Columbus Circle at the southwest corner of the park to the Reservoir in the upper part, lined with outdoor cafés. Moses pointed out that such a grand-scale onslaught of cafés was not likely to make money, and he suggested situating a single pavilion at the southwest corner of the park, opposite the Plaza Hotel. There, in a busy corner of the park, traffic could be brisk, patrons could arrive and depart by car, and a concession-operated restaurant might turn a profit. Hartford said he would be glad to donate such a café. And Moses, accepting, suggested it be named the Hartford Pavilion. But there was no joy at Fifth Avenue and Central Park South, the corner picked for the honor. Four neighbors — 795 Fifth Avenue Corporation; Fifth Avenue and 59th Corporation; Andrew Y. Rogers; and Tiffany and Company — brought suit against the city in 1960, shortly after the proposed gift was announced. For five years, the case dragged through the New York courts, until this spring the New York State Supreme Court handed down a decision, without an official opinion, ruling against the café's opponents. Suit was brought under a New York State statute stating that no building may be put up in a park unless it has a park use. This spring's decision came at the end of the case's third retrial, granted on procedural grounds. The court found that the proposed Hartford Pavilion was indeed a park use building, even though two-thirds of the building's space will be on the upper level, entered from the street. Four entrances are from the street; one on the lower level from the park.

Hartford's desire to have a sidewalk café in Manhattan, referred to by then-commissioner Moses in a staff memo as the "advice of a friendly but questionable character" came from seeing such cafés in London and Paris. But New York offers a different set of circumstances. The sidewalks of New York are narrow, offering little protection to anyone seated in a café from the roar of traffic or the exhausts of buses and trucks. Besides, land prices in mid-Manhattan are prohibitively expensive — often as high as $3,500,000 an acre, and while a café built on park land would circumvent the latter problem, it would not solve the former.

Hartford believed that his pavilion would bring more persons into the park. That seems hardly likely, or desirable, at that already heavily trafficked corner. And he thinks of it as giving persons a place to sit quietly and contemplate the park. But why not sit in the park, on benches or on the grass and have the contemplating done there? The area is always filled with persons doing just that in good weather. And a building there only reduces the amount of available land.

As the city grows and land prices soar, speculators and "benefactors" look eagerly at park land. It is vacant; it is often centrally located. Why not build on it? Because you gradually strangle what a city has. Because a city must have park space as surely as it must have housing, business, and transportation. Remove the parks and you kill the desirability of living in the city. In Manhattan, which lost 200,000 residents between 1950 and 1960, the desire is waning already. Olmstead and Vaux saw the problem clearly over 100 years ago, before the skyscraper or the motor car. They put it this way: "As the city grows larger, projects for the public benefit multiply, land becomes more valuable, and the park more and more really central, applications for the use of ground upon it for various more or less plausible purposes, are likely to become increasingly frequent and increasingly urgent, and there will thus be a strong tendency to its conversion into a great, perpetual Metropolitan Fair Ground, in the administration of which no general purpose need be recognized, other than to offer for the recreation of those who may visit it, a desultory collection of miscellaneous entertainments, tumbled together by a series of crooked roads and walks, and richly decorated with flowers and trees, fountains and statuary.

"The only solid ground of resistance to dangers of this character is to be found to rest in the conviction that the park throughout is a single work of
art, and as such, subject to the primary law of every work of art, namely, that it shall be framed upon a single, noble motive, to which the design of all its parts, in some more or less subtle way, shall be confluent and helpful."

Building a café and pavilion at 59th Street and Fifth Avenue in Central Park would be no more "confluent and helpful" to the park or to Manhattan than would the building of a Rockefeller Center be to Paris.

Unfortunately, plans for the Hartford Pavilion are moving ahead. Although the estimated cost of the building has soared from an original estimate of $750,000, to $1,712,000, with architect Edward Stone receiving a 15 per cent commission of $256,000, Hartford says he is ready to put up the money. Hartford's financial position, though, is reportedly unstable. He recently sold Show, his money-losing magazine of the arts; he is trying to sell Paradise Island, a resort venture in the Bahamas, and his Gallery of Modern Art at the southwest corner of Central Park is seeking contributors. It looks indeed as if the pavilion project is the stepchild of the misguided munificence of a cultural Casanova. The proposal is in its way as silly as earlier suggestions for the park, defeated by the citizens, who evidently must protect themselves against their own city government. One early proposal suggested the park be turned into a burial ground for the distinguished men of this country. Another called for the launching of a ship in the reservoir to train the merchant marine; and a third suggested turning the whole park into a topographical map of the United States.

If the Hartford saloon can be built in Central Park legally, what will come next? And who will protect the park? Certainly not Hartford, nor the city government, nor the courts. It is still not too late to reconsider.

Missed Chance in Boston

BOSTON, MASS. The high hopes that were raised when Back Bay Center by Belluschi, Bogner, Keck, Stubbins, and TAC was announced in 1953—it won the First Design Award in the first annual P/A Design Awards Program in January 1954—have long since dissipated. Part of the promise disappeared in the failure of that scheme to be built. It was wiped out entirely by the subsequent erection of Los-Angeles-Style commercial buildings by Charles Luckman, the Prudential Tower, the recently opened Sheraton-Boston Hotel, and their related facilities. The same theme was adopted by the local firm of Hoyle, Doran & Berry when they designed the War Memorial Auditorium for Prudential Center, recently dedicated. One is tempted to speculate that the Luckman firm had a hand in this design, too, so closely does it parallel the feeling of monumental blandness engendered by Luckman's Madison Square Garden and office building designated for Manhattan's Pennsylvania Station site. In both cities, the opportunity for a truly memorable public facility has been lost, and a routine, "functional," large-capacity center substituted. Architects might ponder the lessons taught by such examples in reading this issue of P/A on "major spaces"—what they are, how they are attained, and how not.

Mies Apartment Opens in Baltimore

BALTIMORE, MD. Highfield House, at 4000 N. Charles Street in Baltimore, brings to that city a Mies van der Rohe design executed in concrete. Like most Mies buildings, Highfield House is distinguished by the orderly progression of its façade. Its tinted glass windows do not go from floor to ceiling in each room, but they do stretch from supporting column to supporting column, giving the building a feeling of horizontality, which makes its 13-story height less noticeable in an area of smaller buildings and individual homes. Beneath each window is a buff-colored brick sill, which gives the façade a punctuated rhythm. This effect is reiterated by gradations in the exterior concrete columns, stepped back every few floors, as Mies did with the columns in his Chicago Promontory apartment house in 1949. At the rear of the building is a sunken garden with a swimming-pool fountain, opening off a recreation room.

A "City" Is Not a Home

THE BRONX, N.Y. Fourteen times the size of Clover, South Carolina, seven times the size of Fair Plain, Michigan, and three times the size of Bountiful, Utah, Co-Op City will soon raise its head in the Bronx. The "city," which will house about 60,000 people in 15,500 units (about the size, all told, of White Plains, New York) will be built on a 300-acre site—the grave of Zeckendorf's bankrupt Freedomland.

The site was purchased for $15,000,000 from the National Development Corporation by the United Housing Foundation, who will sponsor the project. (The Foundation, begun in 1951 and headed since 1959 by Abraham E. Kazan, has sponsored seven other such cooperative developments.
Centralized Schools for Kindergarten Through 14th Grade

EAST ORANGE, N.J. This New Jersey community of approximately 80,000 persons, located within a 3.9 sq mile area, is thinking of building a school plaza that would accommodate all the city’s school children. Abandoning the neighborhood school and locating all school buildings (from kindergarten through junior college) in one large complex is a solution many cities have considered. It seemed an especially appealing idea to East Orange, which was faced with the possible need for a new junior high and the definite need for renovations and additions for 10 other school buildings.

To help the people of East Orange decide on such a radical approach and to aid the city’s Board of School Estimates in approving it, architect Emil A. Schmidlin presented the school board with this rendering of what the school plaza might look like. The complex would be built over a 15-year period; if started soon, a middle school for about 3000 fifth-to-eighth-graders could be ready in about three years. Added after that would be a “resource tower” for a curriculum center, a junior college, and central offices. Next would come a high school for 3600 students. Step four would provide a primary school for 3850 children in the first through the fourth grades. The last stages would add a gymnasium, a stadium, an arts center, and a parking area.

Other communities, notably New York City, have been considering such centralized schools to aid integration.

Architecture Exhibit at MOMA

NEW YORK, N.Y. In 1932, the Museum of Modern Art’s newly established Department of Architecture, headed by Philip Johnson, introduced the concept of a large, architectural retrospective with the show, “Modern Architecture, International Exhibition.” Every 10 years or so, since then, the museum’s expanded Department of Architecture and Design has presented a sizable review of “modern” architecture. The latest one, entitled “Modern Architecture USA,” opened there on May 18. Selected and installed by department head Arthur Drexler, it includes some 71 buildings, built since 1900, by approximately 38 architects.

According to Drexler, “Some of the buildings shown are unique masterpieces; others are primarily of historical significance. Some buildings are shown because they launched an idea; others because they carried an idea to its conclusion. All of them remind us that architectural excellence has many forms.”

Drexler’s introduction to the exhibit goes on to say: “The exhibit begins with an early...”
work by Frank Lloyd Wright (Unity Temple, 1906, shown), illustrating some characteristics of his architecture much admired in Germany and Holland. What follows is the emergence of a new architecture for an industrialized world. Its principles were meant to be internationally valid, but its European aspects were emphasized at the end of the 'thirties when refugees, converging on the United States, made major changes in the teaching of architecture as well as its practice.

The post-war building boom provided ample opportunity for contending schools of thought, but through the late 'forties and most of the 'fifties the American imagination was dominated by the inspired method of Ludwig Mies van der Rohe. The great French architect Le Corbusier has been an acknowledged influence everywhere since the 'twenties, and in recent years his use of complex sculptural form has coincided with a world-wide restlessness—a suspension of dogma that has led to new freedom as well as disorder.

Throughout this American story Frank Lloyd Wright appears in numerous guises. His work may be called a sustained explosion. Aspects of his architecture once rejected as naive—mass and solidity, for example—again seem relevant and curiously "modern."

Younger generations of architects are now building with brilliance and virtuosity. Indeed, modern architecture in the United States abounds with distinguished buildings and more than a few masterpieces. But however splendid this achievement may be, it does not begin to cope with the great problems of urban planning—not because the social and economic procedures that would make their ideas a reality do not yet exist. There are other problems as well: we do not yet have an effective means of preserving important buildings, and we have not yet educated all our public officials to a just appreciation of what building as an art can do to enhance our lives. But we can look forward to finding solutions to these problems that will rival and perhaps surpass our recent achievements."

"Modern Architecture USA" has been designed to travel here and abroad: all buildings are shown in large color transparencies, each mounted in its own prefabricated light box. These boxes are set into prefabricated, free-standing panels of varying heights, supported by square aluminum tubing.

The exhibit, which is under the joint sponsorship of the Museum and The Graham Foundation for Advanced Studies in the Fine Arts, will remain in New York through September 6.

Sculptural Control Tower

MALTON, ONT., CANADA The control tower of the new Toronto International Airport has a more striking form and texture than the terminal buildings it services (p. 46, December 1962 P/A). The control cab is supported on three legs of reinforced, patterned concrete containing—respectively—elevator, stairs, and ductwork. The tower rises from a Y-shaped, one-story building housing telecommunications, air traffic control, and service area in as many wings. Exterior materials used in the base, which blend with the concrete of the tower, are gray brick for the walls and precast concrete panels for the fascia. John B. Parkin Associates of Toronto, architect of the terminal, performed the same services here.

FDR Memorial Put on Ice

WASHINGTON, D.C. When Francis Biddle resigned last month as chairman of the Franklin D. Roosevelt Memorial Commission, it looked as if plans for the controversial memorial were indeed, as Biddle said, "put on ice." Biddle's resignation capped a long struggle against opposition from the Roosevelt family, notably from commission member James Roosevelt, who felt that his father would not have liked the proposed memorial. Most recent disappointment to those who hoped the competition-winning design could be put up (see pp. 47-50, February 1961 P/A; p. 59, August 1964 P/A) was an indication that funds for the $4,500,000 structure would be virtually impossible to raise. Biddle had waited to start fund raising until a group headed by Adlai Stevenson raised money for a memorial to Eleanor Roosevelt. When Stevenson's group, even with the blessing of the Roosevelt family, had difficulty, Biddle believed that efforts for the FDR memorial would be fighting insurmountable odds. The commission still has the site, in Potomac Park between the Jefferson and Lincoln memorials, and at least one commission member, New York Senator Jacob Javits, who vigorously backs the FDR plan, hopes that the site can still be used, perhaps with a less ambitious scheme. Suggestions for saving the site propose landscaping, fountains, maybe a statue of the late President, and in the meantime signs proclaiming that the site will be used. Biddle plans to write the Smithsonian Institution in hopes of having the winning design kept by the Government for possible future use. On architectural grounds alone, it would be a shame to see such a stately proposal come to naught.

Come Alive

NEW YORK, N.Y. For about one month, from March 11 to April 7, Park Avenue executives, women with shopping bags, children old and young,
could throw a dart, roll a marble, spin a tail, or spin a wheel (shown) at a new exhibit—all in the spirit of fun and games. The exhibit, in coordination with the American Merchandising Council, is now traveling to major department stores throughout the nation. The “come alive” games, most of which are no more than dyed, crayoned, and shellacked carvings on wood, are colorful, simple, and, above all, inviting.

Behind the banners, marbles, plaques, and wheels at the Pepsi Cola Building was the moving spirit of del Sol Productions, of which Norman Laliberte is director of creative design. The organization, a small one with 10 employees, is based 43 minutes outside of New York, in Ossining, under a liquor store. The studio was started in 1962 as Sol Productions at St. Mary’s College (Notre Dame, Indiana), where Laliberte and del Sol executive vice-president James Cronin were teaching at the time.

The next year saw a move to New York and the beginning of del Sol’s exhibit design capacities. At the suggestion of architect and designer Charles Eames, Laliberte was made design consultant for the Vatican Pavilion at the New York World’s Fair. There, some 88 of his needleworked banners, ranging in size from 12” x 12” to 5’ x 12’ and decorated with “found” objects (daguerreotypes, bells, medals, tassels), portrayed various Biblical subjects.

The final stage of development came in the summer of 1964, when, under the instigation of George Beverley, owner of a New York crafts and accessories shop, del Sol turned to the commercial production of toys, games, banners, silk-screened items, and wooden plaques. The rugs are not to be tread on lightly—they retail at F. A. O. Schwartz for $5.95; plaques used as decorative accents run from $5 to $12 and Pin-a-Tail on the unicorn is an inexpensive $2.50. Many of the del Sol designs also made the rounds in the Manhattan galleries; in September of 1964, the Osborne Gallery featured Laliberte's banners; the toys found their way into the Museum of Contemporary Crafts' show “Amusements Is.” At present, del Sol is retained by Official Films as a consultant on creative ideas, and by the Boston Arts Festival as creative consultant. Soon a Durst Organization Building in New York will sport Laliberte banners.

Laliberte’s art is a natural outgrowth of his background. A Roman Catholic and former teacher at the Rhode Island School of Design, Laliberte obtained his bachelors degree and masters degree in art education (his thesis was on the iconography of the Cross) at the Institute of Design in Chicago (before it was incorporated into the Illinois Institute of Technology). His art, whether in banner, plaque, or game form, abounds with symbolic and is both timely and timeless. A Reinhold book on his banners and plaques is in the works.

Merit Scholars Choose Architecture

EVANSTON, ILL. In late April the National Merit Scholarship Corporation announced results of the tenth annual Merit Scholarship competition. Open to high-school seniors throughout the nation, the competition awarded college scholarships to more than 1900 students. Of these, eight announced their intention to study architecture. And of the eight, two will study at Rice University. The eight and the colleges they will attend are: William N. Scott, Fort Smith, Ark.; Georgia Institute of Technology; Elliott Kaikée, Palo Alto, Calif.; undecided; Patrick R. Hayes, Washington, D. C.; Rice University; Larre H. Nelson, Jamestown, N.Y.; Rensselaer Polytechnic Institute; Robert M. Martin, Duncan, Okla.; Oklahoma State University; Chris A. Carter, Oklahoma City, Okla.; Rice University; Woodrow W. Hammond, Fort Bliss, Tex.; University of Texas; Evelyn M. Stevens, Charlottesville, Va.; Massachusetts Institute of Technology.

 LOS ANGELES, CALIF. Out-of-town professional buyers visiting Los Angeles were long faced with time-consuming freeway dashes in pursuit of product showrooms. Now their problem is at least partially alleviated by the opening of the 462,000-sq-ft California Mart, where many manufacturers have taken display space; and it will be further lessened by the completion of the recently started second building that is rising on the site to the left. A third stage—construction of a hotel and convention center—will follow shortly.

The second building, identical to the first, will be linked to it by a glass-enclosed escalator tower.

Victor Gruen Associates are architects for the structures, which, when completed, will be grouped around an open landscaped pedestrian mall.

The site encompasses a full city block, bounded by Mann, Los Angeles, and 9th Streets and by Olympic Boulevard.

The completed building, and the circular bank building in front of it, are of steel construction, with columns about 27’ o.c. and 12’ between floors. Most of the exterior surfaces of these steel supports are faced with precast concrete panels, which form a prowlike projection the height of each support, making the building look taller than its 13 stories. Dark-gray glass spandrels separate window areas. Beneath the complex is a three-level parking garage with a 600-car capacity.

New Design on New Site Is Winner in Winnipeg

WINNIPEG, CANADA. Green Blakstein Russell Associates of Winnipeg won an architectural competition in 1960 for the design of a new Winnipeg City Hall (p. 74, February 1960 P/A). The competition design was for a site on Broadway and Osborne Streets, and when the site was changed to Main Street, where the old City Hall then stood, the design had to be changed, too. GBR did the redesign, but the recently completed building, which cost $5,900,000, in no
close off Main Street from the intersection of Winnipeg's two main streets, Portage and Main. This condition is further emphasized by the framing effect of two older high-rise office structures, one on each side of the street. The strong horizontal emphasis of the group of new buildings effectively closes and completes this composition, and the pedestrian approach is fittingly terminated by the courtyard.

Both buildings are faced with Manitoba Tyndall stone and Quebec granite; bronze is used for framing elements, screens, and hardware. The bold roof line of the legislative building is echoed by the spandrels of the administration structure. And the strength of Main. This condition is further emphasized by the framing effect of two older high-rise office structures, one on each side of the street. The strong horizontal emphasis of the group of new buildings effectively closes and completes this composition, and the pedestrian approach is fittingly terminated by the courtyard.

Both buildings are faced with Manitoba Tyndall stone and Quebec granite; bronze is used for framing elements, screens, and hardware. The bold roof line of the legislative building is echoed by the spandrels of the administration structure. And the strength of the legislature's supporting columns is mirrored by the subdued columns on the administration building.

All things considered, it seems as if Green Blakstein & Russell Associates produced a better design on the new site than they would have on the original site with their competition-winning proposal.

First Sectional Model of Sydney Opera

SYDNEY, Australia When completed sometime in 1968, the Sydney Opera House is expected to look like the model shown here, enlarged 96 times. Built at a scale of 1" to 8', the model gives a meticulously detailed idea of how the building will look, complete with 2200 cast-metal figures depicting audience and sightseers. From the exterior, the building will be distinguished by 10 roof sections that soar beyond the building like lateen sails above an Arab dhow.

The building's interior is just as intricately striking. The main auditorium seats 2800 persons, rises steeply from the stage, and has a raised gallery on either side. A movable stage will drop out of sight, making way for the placement of the next act's scenery. Backstage are 11 platforms that move up and down electrically.

Expected cost of the structure is $39,100,000. It will be constructed on Bennelong Point in Sydney Harbour. Joern Utzon is architect for the opera house. Ove Arup & Partners, London and Sydney, are consulting engineers.

Canadian Structural Steel Design Awards Announced

TORONTO, CANADA A jury of 8 Canadian architects and engineers pored over 74 entries in Canada's first structural steel design awards program and awarded 4 citations of excellence. Initiated by the Department of Industry and the National Design Council in cooperation with the Canadian Institute of Steel Construction, the program called for submissions in four categories: buildings costing under $2 million,
and those over $2 million; bridges costing under $500,000 and over $500,000. All buildings and bridges entered had to be in use at the time of the judging. After preliminary selection of 27 structures, the submitting architects and engineers were given a month to prepare finished plans, photos, and written copy mounted on 30" x 40" illustration boards.

Winning entry in the large building category (over $2 million) was the 34 story C-I-L House, Montreal (1). It stands on 28 steel columns, has black porcelain-enamed spandrel panels and gray-tinted plate glass. It was designed by Montreal architects Henry Greenspoon, Philip Freedlander, and John Kryton of Greenspoon, Freedlander & Dunne. Structural engineers were Jack Barbacki and Pierre d'Allemagne of d'Allemagne, Barbacki Associates, Montreal.

Toronto's Lothina Mews (2), winner in the under-$2 million building category, has exposed exterior steel columns and curved roof supports, which unify the shops inside and provide a distinctive façade as well. Architects were Peter Webb, Boris Zerafa and René Menkes of Webb, Zerafa & Menkes, Toronto. Structural engineers were J. W. Bradstock and H. L. Levelt of Reicher, Bradstock & Associates, Toronto.

Award for the best large bridge went to the Port Mann Bridge (3), designed by Gerrit Hardenberg, Norman Hilton, Knud Manniche, and Guhan Willeumier of C.B.A. Engineering Limited, Vancouver. And the small bridge award went to the highway bridge at Red Deer, Alberta (4), designed by Emil Sanden, T. J. Trimble, and Robert Foster of the Alberta Department of Highways.

Judges for the competition were: James A. Murray (chairman), who is chairman, Royal Architectural Institute of Canada, and professor, School of Architecture, University of Toronto; Ignace Brouillet, president, Ecole Polytechnique de Montreal; Guy Desbarats, Dean, School of Architecture, University of Montreal, and partner in the firm of Affleck, Desbarats, Dimakopoulos, Lebensold; George H. Fournes, member, National Building Code and National Research Council, and acting chief, Structures Division, Development Engineering Branch, Department of Public Works, Ottawa; D'Arcy G. Helmer, president, Ontario Association of Architects, and partner in the firm of Balharrie, Helmer & Associates; Thomas A. Monti, partner in the firm of Monti, Lefebvre, Lavoie, Nadon; Gilles E. Sarrault, Chief Engineer, Canadian Corporation for the 1967 World Exhibition; and Robert F. Shaw, Deputy Commissioner-General of the Canadian Corporation for the 1967 World Exposition.

WASHINGTON, D.C. Visitors to this month's AIA convention may have a chance to visit Olmsted Island at Great Falls, 12 miles upstream from Washington. Known as Falls Island, until its rededication this spring, the natural beauty of the area was preserved by the National Capital Park and Planning Commission, of which Frederick Law Olmsted, Jr., was a member from 1926-32 and for whom the area is now named. Olmsted, Jr., (1870-1957) the son of America's first professional landscape architect, was credited with having "contributed more to the planned growth, orderly development, and beauty of the Federal City than any other individual since Pierre L'Enfant." Olmsted's association with Washington was a long one. In 1902, he was a member of the McMillan Committee, which revived and extended L'Enfant's original plan of 1791 for the city. From 1910 to 1918, he was a member of the first Washington Commission of Fine Arts. And in 1916, he framed the language of the Congressional Act establishing the National Park Service "to conserve the scenery and national and historic objects in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Olmsted also designed the grounds for the Washington National Cathedral.

Outside the capital, Olmsted prepared city plans for many communities, including Rochester, Pittsburgh, and New Haven. His landscape architecture enhanced such housing projects as Roland Park in Baltimore, Forest Hills Gardens, L.I., and Palos Verdes Estates, Calif. He also planned the grounds of the U.S. Military Academy at West Point, St. Paul's School at Concord, N.H., and the Brooklyn Botanic Gardens.
Soon after this, tablet reads like this:

‘It didn’t happen all at once. They did it very gradually. ‘We can’t alarm the people!’ they said. So they removed a little house here. And a great hotel there. And then a few limestone banks and all the cast-iron store fronts they could find. And very quietly one night they stole a railroad station and buried it in New Jersey.

A few people grumbled. Some found temporary shelter at The Dakota when Park Avenue disappeared. Others moved to Westchester. And some completely disillusioned out-of-towners went to Philadelphia instead. But most people were complacent. Until the day they discovered that their city had been entirely replaced with glass.

‘Then they complained. But it was too late. So the faces of the city grew grimmer than ever been before. Clocks stopped. And the glass... etc., etc.”

How to Do What You Can With What You Have

COLUMBUS, INDIANA This county seat of 25,000 souls is well on the way to becoming the New Haven of the Midwest, having erected buildings, since World War II, by Eliel and Eero Saarinen, I. M. Pei, and Harry Weese—and now, a “test” block of municipal renovation styled by Alexander Girard. This project was not a matter of “rip it all down and put up something new and bigger [therefore better],” but a carefully thought-out scheme to preserve and enhance the typical blockfront of the city (generally dating from the 19th Century and the early 1900’s).

Girard’s approach was cosmetic, to be sure—painting, sympathetic sign design, awnings and canopies, bird control—but the effect is admirable, and other merchants in Columbus have responded by bringing their buildings up to snuff in a like manner. Columbus is now planning a similar blockfront renovation in another part of town, and other towns, small and large, might well take heed.

Vanishing New York

NEW YORK, N.Y. Victims of the computer age, New York’s stately old hotels are disappearing, to be replaced by motels and other glossy, automated, glass-and-plastic hosteries that process a guest much the way a Detroit assembly line processes flivvers. But the quiet architectural grandeur of the few remaining older luxury hotels is still a solace to visiting architects and others who want grace instead of glitter. Playing on this unsettling change in the New York hotel scene, one of the statelier, surviving inns. The Plaza, whose neighbor the Savoy Plaza will soon vanish to make way for the gigantic GM office building, has been running full-page ads in newspapers and magazines fantasizing about “The day New York almost vanished.” In part their tale reads like this:

“‘It didn’t happen all at once. They did it very gradually. ‘We can’t alarm the people!’ they said. So they removed a little house here. And a great hotel there. And then a few limestone banks and all the cast-iron store fronts they could find. And very quietly one night they stole a railroad station and buried it in New Jersey.

A few people grumbled. Some found temporary shelter at The Dakota when Park Avenue disappeared. Others moved to Westchester. And some completely disillusioned out-of-towners went to Philadelphia instead. But most people were complacent. Until the day they discovered that their city had been entirely replaced with glass.

‘Then they complained. But it was too late. So the faces of the city grew grimmer than ever been before. Clocks stopped. And the glass... etc., etc.”

Bucky’s Housing Plan for Upper Manhattan

NEW YORK, N.Y. Under the title “Instant Slum Clearance,” the April issue of Esquire magazine described a Buckminster Fuller plan for Harlem as “a proposal to rescue a quarter million lives by completely transforming their environment.” Actually, the transformation would be far from instant. The first year, for instance, would be consumed in toiling up for the mass production of structural parts of the massive structures Fuller would superimpose on Harlem.

Construction would take two years after that, and would provide living space for 110,000 families (almost four times as much as New York City’s Housing Authority has provided in the last five years).

Looking more than a little like giant blast furnaces, the structures would rise 100 stories above the ground, supported by a central pillar from which circular decks would be suspended from steel supporting cables. “Open space between decks avoids a sense of
Comfort-Engineered Seating

by HEYWOOD-WAKEFIELD

Boston’s War Memorial Auditorium is handsome in design, extremely functional and well equipped. This balcony view shows most of the 1,836 Heywood (TC-477) fixed chairs.

Main floor view showing 4000 Heywood-Wakefield deluxe portable chairs (TC-290 FA) for supplementary auditorium seating.

Close-up view of TC-477 balcony installation showing well-padded foam cushion seats with concealed self-rising mechanism.

This installation of fixed and portable seating in Boston’s War Memorial Auditorium, a part of the new Prudential Center, is typical of Heywood-Wakefield’s ability to supply superior seating to meet the varied requirements of all types of auditoriums or arenas. No matter what the seating problem, or whether it involves floor or riser installation, there is a Heywood-Wakefield design to meet your requirements. Write for complete folio—or see Sweet’s Catalog, Section 36d/He.

On Readers’ Service Card, circle No. 362
ing parking areas and exterior balconies. By starting each tower's living space 10 stories above the ground, room would be left beneath for highway cloverleaf interchanges or even for existing housing.

Perhaps this plan, developed by Fuller (with Fuller and Sadao, Inc., as associates) would ease the squalid, crowded living conditions in Harlem, bringing different housing to that area. But would it work structurally or socially? Someone should find out.

**Church Plan Stresses Participation**

**Israeli Pyramid Plan Proposed**

**PARMA, OHIO** What the Holy Family Catholic Church in Parma wanted was a building that would seat 1350 persons and express, in its design, the revitalization of the liturgy (see pp. 133–137, March 1965 P/A). Since this revitalization requires that the congregation participate—visually as well as verbally—in the liturgy of the Mass, the congregation must be as close to the altar as possible. In Conrad & Fleischman’s design, the altar is the focal point, with the ceiling sloping down toward it and the congregation spreading out directly in front of it.

The church’s curved walls will be cast-in-place concrete with a white limestone aggregate. All exposed concrete will be bush-hammered. The façade is distinguished by the alternation of concave and convex surfaces and by the variations in the height and roof-slat of its facets.

The church opens this year.

**TEL-AVIV, ISRAEL** If built according to plan, the structural technique used in the Tel-Aviv Air Terminal may be the first idea Israel has consciously taken from Egypt since the Exodus. The idea comes with modifications; for although the structural shape is a pyramid, the components forming it are truncated hollow tetrahedrons instead of solid cubes, and the interior of the structure will be open instead of solid. Each


Masonry means permanence

And the key to its permanence is good mortar. Lone Star Masonry Cement is scientifically formulated to provide a good, plastic, clinging mortar—with only sand and water added at the job. It enables masons to do better work, faster, and assures a neat, uniformly strong bond. Pictured here are a few of the fine buildings built in all climates using uniform and dependable Lone Star Masonry Cement—a product to remember and specify.

LONE STAR CEMENT CORPORATION, NEW YORK 17, NEW YORK

LONE STAR MASONRY CEMENT

Design roof covers

24' x 60' (16' high from base to top) Barrel Vault variation for Creighton's Garden Restaurant Winter Park, Florida. Toombs, Amisano and Wells, Architects and Engineers, Atlanta, Ga.


or skylights

or any other transparent overhead structures with the...

IBG

TOTAL RESPONSIBILITY is assured by IBG for all areas of its involvement. IBG men will work with you in whatever way possible to bring to fruition your ideas and designs. There are offices or representatives in major cities across the country and in Canada. Work is accepted for domestic and foreign projects.

PRODUCT TYPES OF IBG, SPECIFICALLY:

Geodesic Domes, supported and self-supporting
Skylights, all large shapes and sizes
Greenhouses, 6 standard styles plus custom designs
Swimming Pool Enclosures, standard or custom for residential or commercial
Architectural Facing Panels, sculptured (formed) Plexiglas

SERVICES RENDERED BY IBG, SPECIFICALLY:

Design and Engineering—your basic ideas and concepts will be analyzed and developed by IBG. Preliminary plans will be submitted for your approval.

Crafting Skill—IBG manufactures and installs its own structures under the close supervision only this type of arrangement can allow. These sophisticated structures require the hand of true artisans. Most IBG men are lifetime employees having a degree of craftsmanship unequalled in this field. Their work consistently demonstrates this fact.

Responsible follow-through—because we install that which we design and manufacture, you will find IBG men responsible to the last detail.
This name identifies the versatile, designer-oriented system which can be used to produce such structures as those pictured above as well as a multitude of other transparent enclosures and coverings.

It also identifies the single source for design and engineering services, manufacture and installation of such applications, namely, Ickes-Braun Glasshouses, Inc. of Chicago. The IBG people have been specialists in this field for over fifty years.

You may request the number of descriptive IBG DomeSystem brochures and Sweet's Catalog reprints needed for your designers and library. Save time, use the coupon.

ICKES-BRAUN GLASSHOUSES
Main office and factory
1733 N. Western Ave., Chicago, Ill. 60647

FOR IMMEDIATE ATTENTION
CALL COLLECT 312-486-0011

See our catalog in Sweets under

IBG DomeSystem

Yes, we are interested in the IBG DomeSystem's possibilities. Our request for descriptive brochures is as follows:

PLEASE SEND IBG DOME SYSTEM BROCHURES

PLEASE SEND IBG/SWEETS CATALOG REPRINTS

DATE

NAME

FIRM

ADDRESS

CITY, STATE, ZIP

On Readers' Service Card, circle No. 428

June 1965
tetrahedron will be lifted into place by a crane, and windows and doors will be formed by the openings between elements. Each tetrahedron is cast of concrete 1" thick.

The building will be a gathering place for passengers departing from the city by bus for the airport. Pedestrians enter on one side, taxis from another, and buses from the third. Offices occupy a small gallery, projecting over the pedestrian entrance. Architects are Alfred Neumann and Zvi Heker of Tel Aviv.

AISC Holds Its Largest Engineering Conference

At the American Institute of Steel Construction's 17th Annual National Engineering Conference, held in Memphis last April 22 and 23, some 700 conference heard numerous papers delivered by national authorities on various aspects of structural design and fabrication.

Of special interest to architects were two papers describing how large amounts of steel could be saved by novel design. Horatio Allison, Consulting Engineer of Rockville, Maryland, explained the achievement of unusual economy in multistory apartment framing by designing for full continuity in both directions, using regular-bay spacing and making use of high-strength steels. William J. Mouton, Consulting Engineer of New Orleans, demonstrated that a 50 per cent savings in steel could be effected in high-rise office buildings through a system of box-framed latticed trusses.

Although the present AISC design specification does not include design rules for composite design using lightweight aggregates, the conclusion of several papers presented was that it is quite possible to use aggregates of this type with composite design.

Research reports in plastic design in multistory buildings revealed the feasibility of designing both braced and unbraced frames by the plastic method.

Auto-town Trade Mart

DETOIT, MICH. Ground was broken last month for Detroit's Trade Center, long considered a needed addition to the Detroit business scene. The developers plan to spend $10 million on the project, providing displayers with 450,000 sq ft of display space. As designed by Detroit architects Smith, Hinchman & Grylls Associates, Inc., there will be two buildings joined by a general tower that houses elevators, power equipment, and other mechanical and service facilities. The undistinguished exterior has exposed concrete columns. Interior includes a restaurant, cocktail lounge, the usual supporting shops, a large auditorium, and conference and hospitality rooms.

Author Seeks Material

Architect E. Abraben is now preparing a book on franchise motels. Architects, students, designers, and motel owners wishing to submit their motels for consideration may mail the material to E. Abraben, Architect, P.O. Box 1196, Boca Raton, Fla.

ERRATA

• Joseph J. Roberto, referred to as the former University Architect for New York University in the April 1965 P/A (p. 221), is still quite active in that position. "News of my demise is greatly exaggerated," he writes P/A, and we thankfully restore him to the living.

• P/A's April announcement (p. 63) that Glen Paulsen will become head of the Department of Architecture at the Cranbrook Academy of Art did not mean to imply that he is giving up his private architectural practice. Paulsen and his firm, Glen Paulsen & Associates, will continue to operate at the same old stand in Bloomfield Hills, Mich.

The Buildings That Bloom in the Spring

CHICAGO, ILL. Nineteen Chicago buildings were laureled this spring by the Chicago Association of Commerce and Industry and the Chicago chapter, AIA.

The two honor awards went to Edward D. Dart for the Chicago Theological Seminary Faculty Housing (1, interior) and to I. W. Colburn & Associates, Inc., for the St. Anastasia Church (2).

Citations for excellence went to the Volkswagen Building by Hausner & Maesai (3); to the United Parcel Service Distribution Center and the Henrich residence by Edward D. Dart (4); to the Madison Elementary School by Cone & Dornbusch; the Jens Jensen Elementary School by Harry Weese & Associates; the Decorel Corporation by Don Erickson; to the garden townhouse by Y.C. Wong, R. Ogden Hannaford & Associates; to the Hawthorne Court Townhouses by Ralph Anderson Associates; to...
Today, in the construction field, many people are doing a "take off" on Mark Twain. "Everyone," they say, "talks about the high costs of construction, but no one does anything about it."

Well, it isn't true... and, down in Atlanta, Life Insurance Company of Georgia has a brand-new 28-floor building to prove it.

For example, by using Mahonaire Floor Systems, the architects reduced floor-to-floor height and realized substantial savings in materials. Use of the Mahonaire floors also eliminated beam penetration of air cells. They also provided ready-built, super-wide raceways for air distribution as well as for the carrying of power, telephone, signal and sprinkler systems. Results were increased efficiency and savings in time and costs.

Mahon is ideas in building equipment. When you have a tough construction problem "buck" it to Mahon for an idea that may save you space, time and money.

Write... The R. C. Mahon Company, 6565 East Eight Mile Road, Detroit, Michigan 48234.

June 1965

On Readers' Service Card, circle No. 380
CAUTION by Skidmore, Owings & Merrill; the United States Courthouse and Federal Office Building by Ludwig Mies van der Rohe, A. Epstein & Sons, C. F. Murphy Associates, and Schmidt, Garden & Erikson; the Temple for North Shore Congregation Israel by Minoru Yamasaki & Associates (S); the house on a bluff by Brenner-Danforth-Rockwell (6).

Citations of Merit were also presented to deserving projects in the area of rehabilitation and remodeling. Paul Gerhardt, Jr., was honored for his Chicago Police Headquarters; Stade, Dolan & Anderson for St. John's Lutheran Church; Brenner-Danforth-Rockwell in association with C. F. Murphy Associates for the Graham Foundation Building.

**Lloyd Warren Winner**

**NEW YORK, N.Y.** The 1965 winner of the Lloyd Warren Fellowship from the National Institute for Architectural Education is University of Illinois senior Patrick Leamy, who won the competition for the design of "A World Center for Philosophies and Ideas." He will spend several months at l'Ecole des Beaux Arts in Paris, then take a study tour of Europe.

**New Fellows**

WASHINGTON, D.C. The AIA has 654 Fellows. Thirty-seven of these are newly appointed, and their fellowships will be formally conferred in Washington at the banquet and ball on June 18, which closes the 97th annual convention of the AIA and the XI Pan American Congress of Architects. Newly honored are:

- For design: Giorgio Cavagnari, New York, N.Y.; William Francis Cody, Palm Springs, Calif.; Harwell Hamilton Harris, Raleigh, N. C.; Philip C. Johnson, New York, N.Y.; Robert Andrews Little, Cleveland, Ohio; and Arch Reese Winter, Mobile, Ala.
- For public service and service to the profession of architecture: Mario C. Celli, McKeepson, Pa.; Frank L. Hope, Sr., San Diego, Calif.; Amedeo Leone, Detroit, Mich.; and Adrian Wilson, Los Angeles, Calif.

**Personalities**

Hervey Parke Clark and John F. Beutler of the San Francisco firm of Clark & Beutler were awarded the Henry Hervey Memorial Medal by the National Sculpture Society in recognition of their use of sculpture in San Francisco's West Coast World War II Memorial. . . . Elected president of the New York Building Congress was Robert W. Culler, partner in the firm of Skidmore, Owings & Merrill . . . Dan C. Cowling, partner in the Cowling & Roark firm of Little Rock, has been elected to a three-year term as the director of the Gulf States Region of the AIA . . . Richard J. Neutra recently received his fourth honorary degree—one from Rome University, Italy. The other three come from the University of Graz, Austria; the University of Berlin, West Germany; and Adelphi University, New York . . . Mary E. Dunn was re-elected national president of the American Institute of Interior Designers for her third consecutive term. Everett Brown will also take his third term as national chairman of the board . . . Frederick J. Woodbridge will serve his second term as president of The Fine Arts Federation of New York . . . William F. R. Ballard, New York City's Planning Commissioner has accepted the resignation of Jack C. Smith, Chief of the Office of Master Planning, who is leaving to become a special consultant in the field of urban planning . . . The National Academy of Design has elected architects Lawrence B. Anderson (Boston), Waldron Faulkner (Washington), Louis I. Kahn (Philadelphia), Eldredge Snyder (New York) and Harry M. Weese (Chicago) to Associate Membership in the organization. . . . Henry Kleinkauf, of Omaha, Nebraska, and executive chairman of the board of Natkin & Co., was elected president of the Mechanical Contractors Association of America.

**Competitions**

The design of a super-highway service station is the subject of this year's architectural student competition sponsored by the Committee of Stainless Steel Producers, American Iron and Steel Institute. Further information may be obtained from the National Institute for Architectural Education, 115 East 40 St., New York, N.Y. 10016.

**Awards**

DALE MORLEY TAYLOR, a fourth-year architecture student, was one of two students at The University of Texas chosen to receive the Roy Crade Award in the Arts.
GLAZED CONCRETE MASONRY UNITS

In stairwells, 8" thick semi-solid units are loadbearing, provide the necessary 4-hour fire rating, eliminate the back-up wall and expose a finished block surface on the reverse side. Available in many sizes and shapes from 2" to 12" thickness.

See SWEET'S CATALOG 4g/Bu

Ask about NEW 8x8 and brick-size scored units.

The Burns & Russell Company
P.O. Box 6063
Baltimore, Maryland 21231

301 - 837-0720

For more information & name of licensed manufacturer nearest you, turn to Reader Service card, circle No. 311
Crane, newspaper cartoonist and father of the Bugs Sawyer adventure strip, established the award this year to encourage independent achievement in the arts. Taylor was honored for his design of a segmented hyperbolic stress-skin dome.

**CALENDAR**

June 16–18 are the dates for the convention of the Concrete Reinforcing Steel Institute (CRSI), which will be held at the Greenbrier, White Sulphur Springs, W. Va. . . . For more information on the National Conference on Higher Education Facilities, to be held July 22–24 at the University of Omaha, Nebraska, write Conference Center, University of Omaha, Omaha, Nebr.

**Schools**

Beginning in September, a traveling program of School Construction Seminars and product exhibits will be sponsored by 48 local chapters of *The Producers' Council, Inc.*, an organization of manufacturers of quality building materials . . . A symposium on New Towns is featured in the latest issue of the *Washington University Law Quarterly* (available by application to Publications, School of Law, Washington University, St. Louis, Mo., and payment of $2). The symposium, centering on the British and French experiences, included a panel of Wyndham Thomas, director of the Town and Country Planning Association of London; Shadrach Woods, partner in the Paris firm of Candids, Josic & Woods; J. R. Atkinson, County Planning Officer of County Durham, England; Dr. Daniel R. Mandelker, professor of law at Washington University; and Marshall Kaplan, assistant director of the Community Development Project, the University of California, Berkeley . . . If school environment is your problem, you may find solace in the summer courses offered at the School of Fine Arts, Palais de Fontainbleau, France, from July 1–September 1. The course offered in architecture is run by Pierre Deviny, Gérard Benoit, and Marion Tournon-Brany. The course is intended for advanced students. A special program is available for teachers and practicing architects. Also available is a course headed by René Pèchère in Landscape and Garden Design. Application blanks are available from Fontainbleau Association Inc., 122 East 58th St., New York, N.Y.

**Washington Winners**

The Southwest Washington Chapter, AIA, has recently announced the winners of its honor and merit awards. Honor awards went to the firm of Liddle & Jones of Tacoma for their Branch Bank for the National Bank of Washington in Auburn, Wash. The second and only other honor award went to the firm of Harris & Reed of Tacoma for their design of a private residence on Ketron Island. Merit awards went to: William Hocking for the South Tacoma Motor Used Car Office and for his design of the Cecantis Restaurant in Tacoma, and to Liddle & Jones for the Stewart Elementary School in Tacoma.

**Obituaries**

PAUL JONES GRUBB, official architect for Baltimore county, died at his home at the age of 54. As county architect, he was in charge of construction and remodeling of all county buildings except schools. HERBERT J. WEST died at the age of 95, 26 years after he retired as president of the West Construction Company in Baltimore, Md. The firm was begun in the early 1900's and has since built over 1,500 structures.

WILLIAM P. DUDLEY, Exeter, New Hampshire, architect and antiquarian, died at his home at the age of 73.

**WASHINGTON/Financial News**

BY E. E. HALMOS, JR.

The annual "Let's jump on J. George Stewart exercise" on Capitol Hill started just a little earlier than usual this year, with the annual introduction of a bill (S.1658) by perennial sponsor Senator Paul Douglas. As usual, the bill would require that the "Architect of the Capitol" be, in fact, an architect; and that he be appointed by Congress, not by the President.

Also as usual, the bill was accompanied by Douglas' oration attacking the inappropriateness of an "architect" who is not an architect at all (though Mr. Stewart is a graduate civil engineer), and of the President naming an official whose principal duties include keeping Congress' house in order.

And true to form, nobody seemed to pay much attention to the matter—certainly not the septuagenarian Mr. Stewart, who holds his appointment for life (he was named by President Eisenhower in 1954). Stewart incidentally, succeeded another nonarchitect, David Lynn, in the post.

The move, however, this year comes at a time when there is a mounting drumfire of criticism of architecture in the capital in general—focused in part on the great pile of stone and steel known as the Rayburn House Office Building, a huge, expensive, unhappy example of the builder's art. Blame for the building is hard to place; for Congressional committees took a major hand in the building's design during the years it was under construction.

Adding to the general criticism was, for one thing, a growing argument about what some Congressmen feel is an overemphasis on concrete for exterior finish of many Government buildings; considerable uproar over monuments to past Presidents (the two Roosevelts, for instance); for another, debate about a "grand plan" for Pennsylvania Avenue that includes demolition of several of the city's most valuable privately held real-estate parcels (including the huge National Press Building, the Willard Hotel and others). The plan for a memorial to Franklin D. Roosevelt, incidentally, was complicated by a couple of matters: placement of a small, desk-sized marble slab in front of the Archives building, despite Congressional orders authorizing the series of steles in Potomac Park approved by a special commission, confused a lot of people. Very particularly, it confused would-be donors to a $4.5-million fund to pay for the big FDR monument; most seemed to believe that the small slab at Archives ended the matter.

AIA Plays the Numbers

As in many matters in Washington, you can't tell the bills without a number, hence a series of statements by the AIA, in support of legislation, tended to be a little confusing.

First, AIA expressed unqualified support for the "Department of Housing and Urban Development Act" (HR 6654 and S. 1599), which would establish a "Department of Housing and Urban Development" on a cabinet level, to coordinate the vast and scattered Federal activity in this field.

Within a few days, AIA also announced its support for a bill to establish a "National Foundation of the Arts and Humanities" (HR 6050 and S. 1483), because AIA believes that "encouragement and support of the arts are appropriate concerns of Government."

And a few days later, AIA announced it was also supporting the bill on "Housing and Urban Development" for 1965 (HR 5840 and S. 1354)—the so-called "omnibus housing act"—but with some reservations. The reservations concerned lack of "appropriate emphasis" on the need for good design.

Problem with the announcement was that all the bills have titles that sound similar, though objectives are not at all the same. Without the numbers, it was hard to tell them apart by name.

All the bills, by the way, were in a stage of "mark up" (redrawing with corrections)
Haughton total elevator automation at the luxurious DeWitt Apartments means that elevator availability will be precisely matched to traffic demand 'round the clock.

It means that residents and guests will enjoy service so superlatively quiet and restful that every moment is a joy and a relaxation. Haughton Elevonics® achieves power flow so smooth, so finely controlled that the cars seem to float on a cushion of air as they move swiftly in response to passenger needs.

That Haughton total elevator automation should be specified for The DeWitt Apartments is supremely logical. From the very beginning, nearly a century ago, Haughton elevators have been built to uncompromising standards of excellence. Thus they command the highest honors for quality, performance, ease of maintenance.

Include Haughton Total Elevator Automation in your plans for building or modernization. Ask your Haughton Sales Office (listed in the Yellow Pages) for all the facts, or write to us.

Haughton Elevator Company / Division of Toledo Scale Corporation / Toledo, Ohio 43609
On Readers' Service Card, circle No. 360
by committees and subcommittees in early May, and didn’t seem likely to move out for floor debate before mid-June.

Win a Few, Lose a Few Professionals made a little headway in their tussles with Federal bureaucracy, though not all of what they wanted.

In one case, the long fight to gain exemption from registration as “foreign agents” when architects or engineers work for foreign clients didn’t succeed. But the floor debate in the Senate did produce a flat statement (by Foreign Affairs Committee Chairman Fulbright) that “Professional services by attorneys, architects, engineers will not require registration” unless their efforts for a foreign client constitute political activity; and a definition (in amendments finally passed) of “political activity” that effectively takes architects out of the picture.

On another front, professionals took on the General Accounting Office, which had criticized “excessive” use of consultants on Federal-aid highway jobs. Answer was a bill (HR 7113) to “provide for the utilization” of qualified engineers (and architects) in private practice “in connection with public works and other projects undertaken by the Federal Government.”

Of major importance to the construction industry (and those who must worry over costs) were hearings that started May 10 on 131 rolls of bills (HR 6363 and others) that would permit “common sites” picketing of a construction site—now barred by interpretations of the Taft-Hartley Act.

This has been a major objective of construction labor for some years—the right to close down an entire site, even if the dispute is with only one of many contractors. Similar moves have failed in Congress over a number of years, but this time there seems to be growing support.

Increase in Airports

There’s still plenty of future for designers of airports, according to latest compilations of the Federal Aviation Agency. But the outlook isn’t quite as optimistic as it may look from a quick glance at the figures.

FAA said that, as of the end of 1964, there were 9,490 air-
Stanley automatic sliding entrance... a new concept that assures a cordial and impressive reception

Stanley Automatic Sliding Entrances combine the beauty and prestige of modern clean-line appearance with the utility of efficient two-way traffic flow through a single entrance-way. They are an unmistakable sign of design excellence.


Model 5000 — SLIMLINE automatic sliding entrance. Lighter, more compact. Especially suitable for small shops and lower traffic applications. Priced within virtually any client's budget. Write for Folder No. M74. And a complete line of famous MAGIC-DOOR® operators (pneumatic, hydraulic, electric), controls and accessories for doors that swing, slide or fold. Write for Folder No. M67-COM, or look us up in Sweet's.  

STANLEY DOOR OPERATING EQUIPMENT Division of The Stanley Works, New Britain, Connecticut.

On Readers' Service Card, circle No. 413
ports in its files—and they've been increasing at an annual rate of 623. But the increase reflects not only new airport construction; it also shows a more extensive reporting service by FAA, which now is strictly enforcing requirements that airport operators notify the agency before establishing a new field.

**GSA Conference**

General Services Administration is expecting top-drawer attendance at a top-drawer conference for Federal architects early this month. The meeting will be a "Symposium on Environmental Design and Productivity"—a five-day session moderated by Dean Harlan E. McClure of Clemson University's School of Architecture.

Speakers will include Herbert Swinburne of Philadelphia; Vincent Kling, Philadelphia; Marcel Breuer, New York; William Gordon Lyles, Columbia, S.C.; and Karel Yasko, of the U.S. Public Buildings Service.

Idea is to study relationship between individual buildings and the total environment; understanding of interdependence of function and the organization of space; and analysis of fundamentals of visual and scientific design.

**Financial**

The construction industry seemed to be rocking along about as expected early in the year, showing modest but steady gains over 1964. But housing continued, as it has for more than a year, to be a worrisome area.

Total construction put in place in March, according to the Census Bureau, was $4.7 billion—up about 2 per cent over 1964. But housing was recorded at an adjusted annual rate of 1.549 million units—7 per cent below a year ago. Big boost came—as has been true all year—from private industrial and commercial work, and increases in public projects.

There was still the worry over rising costs, too. One indicator—the Sewage Treatment Plant and Construction index of the U.S. Public Health Service—climbed another small notch in April, to reach 111.07—up .04 from the previous month. Note: Since it was first compiled a little more than a year ago, this index has never shown a downturn.

---

**MANUFACTURERS OF**

**AUTO-Matic Parking Equipment**

Phone your Cincinnati parking sales engineer near you—he is listed in The Yellow Pages under "Parking Equipment" and/or "Time Recorders," or write for "Parking Control File."

On Readers' Service Card, circle No. 429
Mo-Sai® goes international with “T”-shaped insulated column and beam covers for Canadian Centre.

Architects for the Bata International Centre at Don Mills, Ontario (near Toronto) chose Mo-Sai with a glistening white quartz exposed aggregate texture for their new international headquarters, which serves Bata Enterprises in 79 countries.

Moulded into inverted double “T”-shaped units, the Mo-Sai panels cover structural steel columns and beams creating the striking windowall silhouettes. The Mo-Sai units are bolted and welded to the steel structure. Insulation is provided by a foam glass back-up.

Mo-Sai has been custom-manufactured under factory-controlled conditions to individual job requirements for distinguished buildings of enduring beauty for more than twenty five years.

MO-SAI INSTITUTE, INC., 110 Social Hall Ave. / Salt Lake City, Utah 84111

BADGER CONCRETE CO.
P. O. Box 1068, Oshkosh, Wisconsin
BEER PRECAST CONCRETE, LTD.
110 Marelle Road, Toronto, Ontario, Canada
BUEHNER & CO., INC.
P. O. Box 936, Mesa, Arizona
CAMBRIDGE CEMENT STONE CO.
P. O. Box 41, Alton, Mass.
ECONOMY CAST STONE CO.
P. O. Box 3-P, Richmond, Virginia
FORMIGLI SALES CO.
6 Penn Center Plaza, Philadelphia, Pa.
GEORGE RACKLE & SONS CO.
Newburgh Station, Cleveland 9, Ohio
GOODSTONE MFG. CO., INC.
470 Hollenbeck Street, Rochester 21, N.Y.
GRASSI AMERICAN CORP.
111 South Maple Avenue, South San Francisco, California
HAMILTON CONCRETE PRODUCTS CO.
1401 East 39th Street, Chattanooga, Tennessee
HARTER CONCRETE PRODUCTS, INC.
1628 West Main Street, Oklahoma City 6, Oklahoma
JACKSON STONE COMPANY, INC.
330 West Mayes Street, Jackson, Mississippi
OLYMPIAN STONE CO., INC.
1415 N. W. Ballard Way, Seattle 7, Wash.
SUPERCRETE, LTD.
P. O. Box 80, St. Boniface, Manitoba, Canada
TEXAS INDUSTRIES, INC.
P. O. Box 400, Arlington, Texas
THE RACKLE COMPANY OF TEXAS
P. O. Box 15008, Houston 20, Texas
WAILES PRECAST CONCRETE CORP.
2901 Los Feliz Blvd., Los Angeles, California
WILSON CONCRETE CO.
P. O. Box 56, Red Oak, Iowa
P. O. Box 268, South Omaha, Nebraska

On Readers' Service Card, circle No. 391
Moistop® won't rip and tear like polyethylene film

Specify these other construction papers and vapor barriers for maximum protection in critical building areas

Copper Armored Sisalkraft®
For concealed flashing with pure copper at 1/5th the cost of heavy copper. COPPER ARMORED SISALKRAFT, a combination of electro-deposit copper and reinforced Sisalkraft that provides lifelong protection against moisture penetration at vulnerable points in the structure.

Pyro-Kure
Permanent, noncombustible vapor barriers for pipe jacketing, air conditioning duct insulation and industrial insulation facing. PYRO-KURE®. A line of flame-resistant, reinforced laminations with a U/L flame spread rating of "25 or less." Complies with National Building Code standard for noncombustibility.

Curing Papers
For maximum protection and curing of concrete. SISALKRAFT® CURING PAPERS. Reinforced, waterproof papers prevent damage and soiling of newly placed concrete slabs. Retards hydration, provides a maximum cure for harder, denser concrete floors.

Pyro-Kure® 600
Flame resistant, abrasion resistant vapor barrier for Class roofs. PYRO KURE 600. More than twice the moisture resistance of vinyl film. Will not burn when hit with hot asphalt. Approved by Factory Mutual for use with asphalt and Fiberglas® insulation on metal decks.
Place a sample of polyethylene film and a sample of Moistop side by side. Take a nail and scrape it across both . . . as hard as you want. You'll find that polyethylene ruptures but Moistop remains undamaged. Moistop was made this tough because Architects found that too many moisture barriers failed on the job, with moisture and water penetration resulting. Moistop combines the inert properties of polyethylene film with the strength and body of tough, reinforced, waterproof paper. This multi-ply construction makes Moistop a stronger, better moisture-vapor barrier than any other available product, assuring your client of a permanent barrier to keep floors dry.

Specification: The vapor barrier shall be unrolled directly on top of the base fill, parallel with the direction of pour. Joints may be unsealed if lapped a minimum of six inches. Any damage to the vapor barrier shall be repaired before placing concrete. The vapor barrier shall be Moistop, as manufactured by the Sisalkraft Division, St. Regis Paper Company. Check Sweet's File 8h/Si.

Send for physical property data and sample of Moistop. Write: "Moistop Data": Sisalkraft, 56 Starkey Avenue, Attleboro, Massachusetts.
To **MULTIPLY** Space

**DIVIDE**

with

**Brunswick**

**FUNCTIONAL FOLDING PARTITIONS**

---

**Just Published!**

**ART IN LATIN AMERICAN ARCHITECTURE**

by PAUL F. DAMAZ  Preface by Oscar Niemeyer

A comprehensive, critical analysis of architectural art in Latin America, this new book is the one all-inclusive source on this subject. The author brings a penetrating insight to the special qualities of the Latin American temperament—a dynamic fusion of European-Indian culture, contemporary political and social forces, and sensuous response to color and form—which is responsible for the uninhibited collaboration between artist and architect. This handsome, visually exciting book considers this collaboration both in the text, and in the perceptive introduction by Oscar Niemeyer, and illustrates the extraordinarily imaginative results this union has produced.

Part I: A bird’s-eye view of the culture and heritage of art and architecture in Latin America. Part II: The finest examples of Latin American murals, sculpture, stained glass and mosaics, mainly through illustrations and captions. 400 illustrations, 24 in color. 84 x 10½. 224 pages. $15.

---

**ART IN EUROPEAN ARCHITECTURE**

by PAUL F. DAMAZ  Preface by Le Corbusier

This beautiful book describes the integration of the arts in modern architectural design with superb examples showing the use of color, mural painting, sculpture, stained glass, and mosaics in office buildings, factories, churches, gardens and steamships. The works of 130 architects and 150 artists are shown in this companion volume to ART IN LATIN AMERICAN ARCHITECTURE. 450 illustrations, 15 in color. 8½ x 10¾. 242 pages. $10.95.

---

**Planning a new project? a remodeling job?**

Get full utilization out of every square foot of that costly space. Minimize fixed walls that limit area function and increase both construction and operating costs. Plan the job around versatile Brunswick Folding Partitions. Seven types to choose from, including the new 700 Series Acoustic Dividers with sound retarding qualities as good as or superior to a permanent wall. Send for details today.

---

**Brunswick Corporation**

2605 East Kilgore Road, Kalamazoo, Michigan 49003

We'd like to know more about Brunswick Folding Partitions.

---

**On Readers' Service Card, circle No. 335**
Air/Temperature

Cooling Tower Has Design Flexibility

“Ceramic Cooling Tower” provides a permanent, trouble-free heat transfer system for air-conditioning or industrial water-cooling equipment. Tower, both fireproof and waterproof, uses chemically inert “Perma-Grid” vitrified clay tile fill, which does not deteriorate. Exterior walls may be made of face brick or any permanent material. All other structural features are handled by the architect. Adjacent buildings may be designed and integrated with the cooling tower. It is not necessary to have any element of the tower extend over the rooftop. Tower includes reinforced glass-fiber eliminators that allow installation anywhere by stopping water carry-over, permitting parking areas to be utilized as tower sites. Three sizes are available in 19 models each. All sizes and models are in two series, for both absorption and motor-driven air-conditioning systems. Ceramic Cooling Tower Co., Div. of Acme Brick Co., P.O. Box 425, Fort Worth, Tex.

On Readers’ Service Card, Circle 100

High Efficiency Radiant Ceiling

According to the manufacturer, “Hi-Performance” radiant ceiling panel delivers up to 250 per cent higher efficiencies than a ceiling composed of metal panels attached or bonded to separate water pipes or grids. Panel has noise-reduction coefficient up to .55 and a sound attenuating ceiling rating of STC 40. It combines a radiant ceiling with integral water channels. Panel consists of two layers of steel brazed together, with internal voids in the form of a water-carrying grid. Grid is raised on the top surface of the panel, leaving the bottom surface flat, except for the embossed design. Panel eliminates conductive heat barriers between the system’s water and exposed ceiling surfaces. Only a single thickness of steel (.0478”) acts as both water grid and ceiling surface. Panels are 2’x4’ and fit standard lay-in ceiling support grids. They are easily combined with lighting panels and integrate well with modular partition systems. Inland Steel Products Co., P.O. Box 393, Milwaukee, Wis.

On Readers’ Service Card, Circle 101

Steel Wire Glass

For the first time, high-strength steel wire, spaced ½” o.c., has been imbedded into glass for use as interior partitions. “Pinex” glass in “Pinex” pattern (finely engraved on one side and smooth on the other) meets FHA im-

Composite Joist System

Recent line of composite “C” joists are used with concrete slab construction to produce composite floors. Joists handle loads applicable for standard open web steel joists of the same size designation. Joists have the top chord inverted to provide a flanged support or shelf for a deck form. Extent...
Santos's "Lustra-Span" rigid vinyl spandrels, making the roof 500 lbs lighter than it would be with other materials. Roof can withstand a minimum load of 40 psf; it is a laminate of a coated plywood exterior, 6" of insulating foam, and white opaque .068 interior vinyl panels. Walls are also made of laminated panels and are available in variety of colors. Classroom unit can be air conditioned. Structure also has an individual fire alarm system. Monsanto Co., 800 N. Lindbergh Blvd., St. Louis, Mo.

Relocatable Classrooms

Low-cost, relocatable classroom unit has recently been designed by Neoplastics Structures of Osseo, Minn., to meet the needs of expanding educational space. Structure weighs 18,000 lbs or 12¼ psf and provides two 700-sq-ft classrooms per building. Each classroom, which will provide space for 70 students, can be erected in less than two weeks for as little as $12,000 to $15,000 per classroom. Roof and wall panels consist of Monotec's "Lustra-Span" rigid vinyl spandrels, making the roof 500 lbs lighter than it would be with other materials. Roof can withstand a minimum load of 40 psf; it is a laminate of a coated plywood exterior, 6" of insulating foam, and white opaque .068 interior vinyl panels. Walls are also made of laminated panels and are available in a variety of colors. Classroom unit can be air conditioned. Structure also has an individual fire alarm system. Monsanto Co., 800 N. Lindbergh Blvd., St. Louis, Mo.

Electrical Equipment

Sunken Street Lights

"Magdisc" pancake lights are used in off-street installations. System employs 8" cylinder-shaped units, set in 2¼" of the pavement with only a 3½" rise of the conical-shaped top protruding above the ground level. System has a high intensity of over 600 ft-c "on sunny days as well as at night." Light beam can be uni- or bidimensional and color coded by filters. Continued operation of the other lamps is unaffected by failure of any bulb. Strong Electric Corp., 524 City Park Ave., Toleda, Ohio.

Colored/Acoustical Surfacing Veil

"Pellomac" is a nonwoven surface coating for use in exterior and interior building construction. Coating prevents hairlines, wind, and other related cracks in newly plastered walls. When applied to existing walls previously painted, cracked, or with poor substrates, Pellomac prevents cracks from showing through after application of the paint. Prevents humidity and moisture penetration and impregnable" tilelike finish. It is said to resist industrial fumes and chemicals, dirt, grime, and scuff marks. Coating may be applied to wood, plaster, concrete, cinder block, etc. Pitt-Glaze is made by a patent process of combining various chemicals, and water. It has neither particle fall-out or flaking. Material can be applied directly to monolithic concrete or poured on concrete with no special preparations. Finish can be applied to acoustical plaster, ceiling tile, sheetrock or portland cement base coat, plywood, galvanized duct, aluminum, etc. It may be colored and textured before application to match any décor. Application of diamond dust or metallic flake can be added. Specified Ceilings & Walls, Inc., 770...
Even the shopping centers themselves come packaged* these days for controlled economy

ARCHITECT: COX & FORSYTHE A.I.A., CANTON, OHIO
CONTRACTOR: GIBBONS-GRABLE COMPANY A.G.C., CANTON, OHIO

All framing—long and short-span steel, joists, composite system, V-LOK, columns—decking and ribbed steel centering—compatible in every way, sold, serviced and shipped from a single source—it's saving builders dollars, time, and headaches everyday.

The latest to take advantage of the benefits of the single source is the Gibbons-Grable Company, general contractors who are putting the finishing touches on the $10,000,000 Mellett Mall (pictured above) a shopping center complex in Canton, Ohio.

More than 965 tons of steel were used in the shopping center—all of it perfectly mated at Macomber with coordinated delivery that permitted most efficient construction. "It cut days off our field labor costs," stated Herbert G. Barth. "One source of responsibility makes sense when you're dealing with a quality house like Macomber."

* All Steel Framing Components and Steel Roof Deck.

MACOMBER INCORPORATED
CANTON, OHIO 44701
SUBSIDIARY OF SHARON STEEL CORPORATION

On Readers' Service Card, circle No. 468
Adapted from his famous chair, the "Swan" sofa by Arne Jacobsen has molded sides and back, is upholstered with foam rubber, and covered in fabric or leather. Base is aluminum. Dimensions are 30" x 57" x 29". Fritz Hansen Inc., 305 East 63 St., New York 21, N.Y. On Readers' Service Card, Circle 112

Guidelines For Interior Consultants
Architects should know that three pamphlets are available to guide interior designers not accustomed to working with architects on a fee basis. Included is "The Path to Professional Interiors," a procedural pamphlet that notes some pitfalls peculiar to interior design specifications. A second item, "Standards of Professional Practice for the Interior Design Consultant," is based on corresponding AIA Document J330. The third one, "Check List for Interior Furnishing Specifications," lists both general and specific conditions for writing specifications covering moveable furnishings. The pamphlets are offered by Products for Professionals, a group that is trying to resolve some of the working problems of interior furnishing. Trefzger's, Inc., 3014 Woodburn Ave., Cincinnati, Ohio 45206. On Readers' Service Card, Circle 113

Lilliputian Lamp
Latest Tensor high-intensity lamp, known as "The Bouguer" (model no. 5000), provides a gentle, more diffused illumination than the concentrated spotlight of former models. A 12-w frosted bulb under a conical, translucent-plastic shade is reflected at approximately 30 and 50 fl-c, depending on position of high-low control. Lamp is only 13" high. Tensor Corp., 1873 Eastern Parkway, Brooklyn, N.Y. On Readers' Service Card, Circle 114

Sanitation/Plumbing

Ventilated W/C
Built-in toilet ventilator, called "Vent-Away," eliminates w/c bowl odors. Device, operating in the toilet tank, is noncorrosive and has no moving parts. It employs the venturi principle: water falls in a tube inside the tank, thereby creating air suction behind it; odors are drawn through the rim punchings in the bowl and carried with this water to the normal discharge outlet. Lifting the regular trip lever on the tank activates the ventilator. Ventilating action stops when the lever is depressed for flushing. Flushing of the closet bowl can take place without using Vent-Away by normal operation of the trip lever. American Radiator & Standard Sanitary Corp., 40 W. 40 St., New York, N.Y. On Readers' Service Card, Circle 116

No Handle Jiggling
"Adjust-A-Flush" is a recently developed tilt valve for w/c. By turning adjustment lever to the right or left, a 3" range of
It's BFG ONE-PLY, a complete self-flashing roofing system from B.F. Goodrich. ONE-PLY is made of Hypalon® synthetic rubber backed with neoprene-bound asbestos. Black or white. It's rugged, durable, quickly and easily applied. For roofs of nearly any shape. Lightweight? Nine squares of 4-ply, gravel-surfaced conventional roofing, in place, weighs nearly three tons. Just 365 pounds of ONE-PLY will cover the same area. And ONE-PLY offers big savings in on-site handling and installation costs. Performance? So good it's guaranteed watertight... free from leakage... for five full years under normal conditions. Want complete information? Just write Building Products Department PA-19, The B.F. Goodrich Company, Akron, Ohio 44318.
water will remain in the tank at the end of the flushing cycle. When flushing the bowl in a normal manner with the water supply shut off, a level of 0" to 3" of water is drawn in the tank. There are five snap positions and openings for water control in this lever arrangement. Buoyant chamber replaces a counterweight cap and makes it much easier to direct water into the overflow tube. According to the manufacturer, valve completely eliminates the number of rows of strands, the spacing of the strands and the density of the droplet system. Given the required time, Siroc penetrates range of media, makes the required strength depends on the make-up of the soil and concentration of the Siroc solution.

Furthermore, it does not conduct electricity. Clear liquid can be colored with vegetable or fluorescent dyes. Liquid collects in the lower tank of the system. Gas or electrical lighting can be easily incorporated into the system. Display can be stopped by switching off the pump. Nylon strands can be angled up to 30° from the vertical. Density of the droplet flow can be varied by adjusting the spacing of the strands and the number of rows of strands. WaterFall system can be used for shopping centers, stores, galleries, etc. Navan Products Inc., Subsidiary of North American Aviation, 1320 East Imperial Highway, El Segundo, Calif.

“Modelscope,” a hand-held optical instrument, allows architects or clients to examine scale models in perspective, as they would look if actually constructed. The Modelscope can be moved among a cluster of models or even inside a particular model to give the viewer an illusion of seeing these models from ground level. Wide-angle lens with short focal length is fitted to the end of a slender repeater-system telescope 12" in length and 3/16" in diameter. Modelscope has a depth of field from about zero to infinity. It can be adapted to photography and television cameras. Viewer is supplied with a detachable eyepiece in a wood case. Modelscopes range in price from $250 up. HCI Sales Corp., 141 East 33 St., New York, N. Y. On Readers' Service Card, Circle 118

“WonderFall” is an animated method of creating the motion of rain, waterfalls, and waterfountains. Droplets of a special liquid flow down taut nylon strands. Droplet sizes and flow can be varied. Liquid is nontoxic, nonvolatile, noncorrosive, and noncombustible.

Water-Like Falls

“WonderFall” is an animated method of creating the motion of rain, waterfalls, and waterfountains. Droplets of a special liquid flow down taut nylon strands. Droplet sizes and flow can be varied. Liquid is non-toxic, nonvolatile, noncorrosive, and noncombustible.

Stabilizing Soil

“Siroc” grout, a one-shot modified silicate-base solution, is used in soil stabilization or moisture-control problems. It strengthens soil under foundations, stops water seepage into basements and stabilizes soil during construction. Siroc works in any groutable soil and provides strengths ranging from 30 to 1000 psi. Actual strength depends on the make-up of the soil and concentration of the Siroc solution. Given the required time, Siroc penetrates range of medium gravel through all grades of sand and into coarse silt. Diamond Alkali Co., 300 Union Commerce Bldg., Cleveland, Ohio.

On Readers' Service Card, Circle 121

Thin Epoxy Floor

Thin, hard topping of epoxy resin, bonded to underlay of "Marbleloid" cement, produces durable flooring system that can be poured over wood or concrete substructure. Consecutive layers of metal lath, a 1/4"-deep cushion of Marbleloid cement and 1/4"-topping of epoxy are built-up over wood subflooring; lath can be omitted when decking concrete. Seamless, colored epoxy composition (Trowelled-on) as well as the terrazzo surfacing are available. Epoxy floor is said never to spall, fragment, or pry loose from its substructure. It has impact strength of 23.3 psi and compressive strength of 7450 psi. Marbleloid Corp., 2040 88 St., North Bergen, N. J.

On Readers' Service Card, Circle 122

Linotile is a resilient tile used with pedestal floors that support heavy equipment such as computers. Floor is mounted on pedestals so that large electronic cables can be installed beneath them. Cables can then be reached by lifting sections of the floor. Special manufacturing process gives tile greater density. Linotile supports up to 200 psi without permanent indentation. Material resists stains, grease, burns, and cleaning agents. It costs less than plastic flooring and provides greater resiliency.

On Readers' Service Card, Circle 123

June 1965

On Readers' Service Card, circle No. 373
The new Cominco Product Research Centre in Sheridan Park near Toronto, Canada, has put lead quite literally on top. On top of the laboratory roof, to be exact. Only time will tell if this particular lead roof will pass all the tests of long use. However, many lead roofs have served for over 500 years, so no one is very worried.

Cominco's reasons for choosing lead roofing may well relate to your needs, too: 1) Lead will outlast the building it shelters. 2) With modern thinner, lighter, stronger lead-alloy sheets, lead installation costs are competitive with other metals. There's no "spring-back". Lead conforms easily to the workman's will and the roof's irregularities. 3) The beautiful natural grey patina of lead only improves with age. 4) There's never any staining of adjacent stone, concrete, or light-colored painted surfaces. 5) Lead has high sound-proofing performance. 6) If building becomes outmoded, lead has high salvage value.

Ventilator/School Designs

"Architects Are Ingenious People" is the title of a booklet that discusses the integration of unit ventilator air louver systems with the design of schools. Introduction describes development, characteristics, and advantages of unit ventilator systems. Unit ventilators prevent overheating by introducing cool air (in winter, cool air from outside the building), without causing the stratification or drafts usually associated with under-window ventilation and poor air distribution. Plans, sections, and photos illustrate 30 installations integrated with school planning. Four sections are shown: Sherwood, Mills & Smith's Turn of River Junior High School in Stamford, Conn., (1) shows how brick grillwork conceals outdoor air intakes. Knapp and Johnson's Plainedge Junior High School in Long Island, N. Y., (2) shows how ceiling-type units located in a continuous soffit allows low-silled window and continuous subsill radiation. The Giffels & Rossetti, Incorporated, Classroom Building for St. John Fisher's College in Rochester, N. Y., (3) shows how ventilators are integrated with soffit of the cantilevered second story. Reid, Rockwell, Banwell & Tarics' Crestmoor High School in San Mateo, Calif., (4) shows how concealed, ceiling-mounted units deliver air to ceiling diffusers in modular, loft-plan school. American Air Filter Co., Herman Nelson School Products Dept., 215 Central Ave., Louisville, Ky. On Readers' Service Card, Circle 200

Sketches and section details. Johns-Manville, 22 East 40 St., New York, N.Y. On Readers' Service Card, Circle 201

Air/Temperature

23 for 1

Gas or oil fired "Commercial-Aire" central station multizone unit can handle up to 23 zones with simultaneous heating and cooling through separate ducts with local zone thermostats. By using dual ducts with heating and cooling controlled at local diffuser outlets, temperatures may be controlled in any number of zones consistent with the capacity of the unit selected. Units have heating up to 2.5 million Btu, refrigeration up to 95 tons, and air delivery up to 38,000 cfm. Four-page brochure includes specs and charts. Mammoth Industries, Inc., 13120-B County Road 6, Minneapolis Minn. On Readers' Service Card, Circle 202

Acoustics

Acoustical Materials Study

Acoustical Materials Association has just published its 1965 manual (90 pages) entitled "Performance Data of Architectural Acoustical Materials." Recently, the AMA won a 1964 Certificate of Merit for the previous issue of the manual from a competition sponsored by the AIA and the PC. Manual is divided into two types of tables: "Summary Tables" classify acoustical materials according to appearance and composition; "Producers' Tables" contain all the listed acoustical materials of each of the 13 member companies and detailed data concerning them. Performance data includes: thickness of materials; types of mounting used in the sound absorption tests; light reflectance values based on the average of five tests on three different samples; flame-resistance, flame-spread, and fire-resistance; surface appearance; sound absorption coefficients; noise reduction coefficients (NRC) and NRC spec range; size of units on which sound absorption tests were made; nominal weight of the product as designated by the manufacturer; and ceiling attenuation factors. Study is available at $1 per copy. Acoustical Materials Assn., 335 East 45 St., New York N.Y.

Year-Round Chiller-Heater

"Arkla-Matic" is claimed to be the first oil-operated absorption chiller-heater for year-round residential central air conditioning. Liquid traps and changing pressure levels within...
a vacuum-tight system produces circulating water as low as 40 F or as high as 70 F. Water is delivered to chilled-hot water coils in conjunction with air handling equipment for year-round conditioning. Three-and-a-half-ton unit has heat input of 120,000 Btu that provides a rated heating capacity of 96,000 Btu. Cooling input of 82,000 Btu produces a chilled water capacity of 43,000 Btu. Number of hand-welded joints required in chiller-heaters fired from other energy sources had previously been 216, but by coiling these tubes the number was reduced to 18. Low weight per ton ratio was achieved by combining within one shell the three tanks housing the absorber, condenser, and evaporator. Unit stands 69" high and is about 21 1/2" x 21 1/2". Brochure diagrams the unit. Oil Air Conditioning Co., Div. of Arkla Industries, Inc., P.O. Box 475, Evansville, Ind.  

Film Depicts Concrete in America

"Twelve Decades of Concrete in American Architecture" (from 1844 to the present) is the subject of a 16-mm sound-color film series in four separate parts. Part I is entitled "The Long Years of Experiment (1844 to 1920)"; Part II, "The Search for a New Architecture (1920 to 1950)"; Part III, "The Material That Can Do Almost Anything (1950 to 1964)"; and Part IV, "The Architect's Material," which shows the work of 21 well-known American architects. Film, lasting a total of 73 3/4 minutes, is available on a free-loan basis from any PCA district office in the U.S. and Canada. Portland Cement Assn., 33 W. Grand Ave., Chicago, Ill.  

Revolving Doors

Selected details of revolving door entrances are contained in 16-page booklet. Doors are made of aluminum, bronze, or stainless steel. They are equipped with a panic-proof collapsing mechanism that permits the wings to fold together when excessive pressure is exerted against any two opposing wings. Photos illustrate various models available. Crane Fullview Glass Door Co., 1201 Crane Drive, Deerfield, Ill.  

Aluminum Finishes

Reynolds Metals Company has published a study of the application of various types of their finishes to aluminum. Each type is fully explained and includes color photos of an actual installation as well as samples. Also provided are a "Guide to Aluminum Alloys For Architecture"; hard-coat color-chart comparing Reynolds, Alcoa, Kaiser, and Kawneer aluminum; specs; and Aluminum Association Designation System for Aluminum Finishes that covers mechanical finish, chemical finishes, anodic coatings, resin coatings, vitreous coatings (porcelain and ceramic types), electroplated and other metal coatings, and laminated coatings. Booklet, 37 pages, illustrated. Reynolds Metals Co., 530 E. Main St., Richmond, Va.  

Acrylic Emulsion Paint Problems

Comprehensive review of acrylic emulsion paint technology has been obtained from an extensive metal doors. Covered are flush steel, stainless-steel, porcelain-steel, and aluminum and textured steel doors; stile/panel and stile/roil doors; UL label doors and frames; profiles of door frames and how they are adapted and connected to various wall construction; and details of the metal frames designed to be installed in drywall construction after the wall is up. Steelcraft Mfg. Co., 9017 Blue Ash Rd., Cincinnati, Ohio.  

Welding Concrete

"Uniweld" is a concrete structural welding agent consisting of epoxy and synthetic resin alloys. It can join fresh, wet concrete to existing cured concrete. This feature allows contractor to schedule phased, progressive casting or pouring, and greater use of precast designs. Uniweld is unaffected by aging, alkalis, and most acids or chemicals. Once cured, it does not soften, saponify, or emulsify. Photos illustrate application procedure and chart gives performance data and product uses. Permaglue Corp. of America, Commercial St., Plainview, N.Y.
It's a Mirror... (from the brighter side)

Template Aid for Dormitory Designers

To help architects plan dormitory interiors, Simmons has developed “Work-Saver” transparent plastic stencils of its entire dormitory line. All items—wardrobes, chests, desks, and beds—built-in and freestanding—are drawn to ½” scale; materials and spec data included. New to the line: several new sizes, a large wardrobe with bi-fold doors that may be ordered in custom sizes, and a double chest of drawers with continuous top. Simmons Co., Merchandise Mart Plaza, Chicago, Ill.

On Readers' Service Card, Circle 212

Steel Furniture

John Vesey has released his first furniture catalog, which illustrates both traditional and elegantly modern tables, desks, chairs, and stools, all framed in steel. Much of the seating combines polished stainless-steel with tufted leather; the tables have glass tops and stainless-steel bases, some with brass accents. One new design, a well-proportioned chair by George Ray, contrasts lush suede upholstery with base and arms of flat steel bars. Rubber web supports down-filled cushions; suede comes in seven rich colors and is “Scotchguarded.” John Vesey Inc., 969 Third Ave., New York, N.Y.

On Readers' Service Card, Circle 213

Lunning Supplements

Two supplements from the Lunning Collection have been made available for placement in Catalog 63. First illustrates four-seater sofa, table, lounge chair, couch, tea cart, dining table and chairs, side board, and double sofa-bed. Second
ANOTHER INDUSTRY FIRST! Norton door closers are guaranteed in writing for a full five years. Norton closer aluminum shells are guaranteed in writing for the life of the building.

YOUR WRITTEN ASSURANCE
Now, you have in writing, assurance that the Norton door closers you specify and install will give you the long trouble free service you have come to expect. Here’s a guarantee architects can pass along to clients to assure them of quality products that give dependable service. Here is a formal policy building owners and managers can keep, knowing Norton door closers will perform.

SPECIFIC PRINTED POLICY
It has always been the policy of the Norton Door Closer Division to assure the satisfactory performance of Norton products; even beyond the terms of our former guarantee. Now, we have put this policy in printed form so that hardware distributors, architects, and owners will have a written statement of our guarantee policy.

WHY A LIFETIME GUARANTEE ON ALUMINUM SHELLS
Naturally, Norton closers could be manufactured from any metal. However, we have chosen aluminum because we believe it to be the best metal for door closers. It offers the obvious benefits of better looks, better styling, lighter weight and longer life. We want everyone to know, specifically, that we not only believe aluminum door closer shells to be best, but also guarantee it. We simply state they will last as long as the buildings in which they are installed.

A GUARANTEE WITH BACKING
You will receive this guarantee on all types of Norton door closers. This warranty is backed by the integrity earned by the Norton 80-year old reputation for quality and dependable products.
supplement shows lighting: several ceiling and wall fixtures, including ceiling fixtures designed by Lisa Johanssen-Pape in metal, amber finish (size is 17" diameter). Lunning Collection, 667 Fifth Avenue, New York, N.Y.

On Readers' Service Card, Circle 214

Tables Galore

Catalog includes folding, dining, conference, occasional, and library tables. Tops are round, square, oval, and boat shapes, with conference sizes up to 40' in length. Bases and tops are priced independently. Study carrel to right in photo is a table unit with one of three carrel adaptations on top. Table to left in photo has comparable base that folds. Hugh Acton Co., 588 Brookside, Birmingham, Mich.

On Readers' Service Card, Circle 215

Pole Storage System

Storage system, called "Accent," is designed to be sold in prepriced, prearranged, two-pole bays, which can be purchased individually or in...
MARBLE PATTERNS
including Travertine for luxurious walls in any decor, any building.

DECORATOR PATTERNS
including four Chantilly designs plus Fleece, Lace and Nugget designs.

MARLITE MURALS
including Ponta Roma, River Landing and Williamsburg for custom-decorated walls.

Beautiful decorating ideas come easy with Marlite!
Now more than ever, Marlite plastic-finished paneling offers infinite decorating possibilities to help your customers plan distinctive and luxurious interiors. With Marlite’s 1965 line of smart Decorator Paneling, no other material gives you such a wide selection of colors, patterns and designs.

Unique decorator patterns, rich marbles, authentic Trendwood® reproductions, bold new designer colors, and striking new Marlite Murals make this soilproof paneling at home in any decor.

And wash-and-wear Marlite resists heat, moisture, stains and dents. It’s easily installed over old or new walls, never needs painting or further protection. Marlite stays like new for years with an occasional damp cloth wiping.

Get details on Marlite Decorator Paneling from your building materials dealer, consult Sweet’s File, or write Marlite Division of Masonite Corporation, Dept. 614, Dover, Ohio.

New Marlite Decorator Paneling

Marlite®

plastic-finished paneling

An additional product of Masonite® Research

On Readers’ Service Card, circle No. 382

June 1965
permits one-hand operation and continuous readings. Slide rule has Pythagorean and Eis scales and is available in 3", 4", and 5" diameters with scale lengths up to 15.7". Manufacturer states that Roto-rule costs less than 50 per cent of comparable slide rules. Scientific Instruments Co., 2126 6 St., P. O. Box 224, Berkeley, Calif.

On Readers' Service Card, Circle 218

1965 Car Sizes

Parking dimensions for 1965 cars have been tabulated in chart form. Dimensions were obtained from measurement of representative standard vehicles under full design load conditions that include water, oil, gasoline, 300-lb passenger load in front seat, 450-lb passenger load in the rear seat, with tires inflated to recommended pressure. Crawford Door Co., 4270 High St., Ecorse, Mich.

On Readers' Service Card, Circle 219

Tube Communications

Pneumatic tube systems can result in more efficient communications. Difference between automatic and nonautomatic tube systems as well as three basic types of systems are explained. "Single loop automatic tube system is generally used to connect up to 10 stations. Carrier is placed in "send" chamber at any station. Address is selected on station-mounted selector. "Multi-loop automatic deflector" tube system has two or more loops of tubing. Each loop has two tubes, one for sending and one for receiving. It is usually used when more than 10 stations are required, or where peak load traffic is high. "Multi-loop automatic diverter" tube system is used for hospital communications because it is quieter than preceding systems. Photos and descriptions of spacers, switches, diverters, exhausts, stations, control
PRODUCT NAME: **HILLYARD CEM-SEAL®**

DESCRIPTION:

CEM-SEAL is a modified chlorinated rubber in a volatile aromatic solvent. It forms a clear membrane surface barrier that holds the moisture in the mix for a prolonged curing period to complete hydration. Produces water-tight, dense, hard concrete. At the same time, it protects against the penetration of moisture, stains or other soil as other trades complete construction. CEM-SEAL can be used on vertical installations.

SPECIFICATION AND HOW TO APPLY:

One man, who need not have special training, can apply CEM-SEAL with a sheepskin applicator or ordinary sprayer. CEM-SEAL can be applied as soon as the slab can bear weight, and dries traffic-ready in four hours.

COVERAGE:

500 to 700 square feet per gallon. Only one coat needed.

ADVANTAGES:

Resilient floor tile, paint or surface finish may be applied when slab is thoroughly dry (free from moisture) and providing that preparatory steps are carefully followed.

SAVINGS:

Man hours and material costs are greatly reduced when compared to curing methods using—wet spraying, covering with building paper, wet sand, straw, burlap or plastic membrane.

EXCEPTIONS:

Do not use Cem-Seal on concrete slab that is to receive Bonded or Monolithic Terrazzo.

TECHNICAL DATA:

NVM - 20%. Complies with ASTM C156-55T, water retention efficiency of liquid membrane-forming compounds for curing concrete. Also conforms to ASTM C309-58 Type I as required by the National Terrazzo and Mosaic Association. Pittsburgh Testing Laboratory: Water Retention at 3 days—Average of 3 controlled tests—98.38%.

GUARANTEE:

When applied in accordance with manufacturer's directions, it is guaranteed to meet all claims made for it in the proper curing of concrete and terrazzo floors.

MAINTENANCE:

This is not a wearing surface but will leave concrete smooth and easy to maintain and free from "dusting" and efflorescence.

REFERENCES:

Hillyard A.I.A. File No. 25G
A.I.A. Building Products Register
Sweets Architectural File.

A trained professional Hillyard Architectural Consultant will demonstrate CEM-SEAL for you, at no obligation. He serves "On Your Staff—Not Your Payroll." Write, wire or call collect.
A New Dimension
In Wall Plates
Simple...Unadorned...Attractive

The classic beauty of these new P&S wall plates—with intentionally understated design—complements any decor.

No distracting embellishments to overemphasize the wall plate installation or present a cleaning problem. Two vertical planes produce interesting and distinctive tonal effects of light and shadow.

These new UNILINE plates have the solid feel of excellence. Molded of high-quality phenolic material in Brown (61000 series) or Ivory (62000 series), they are available with a wide variety of openings.

For more information write Dept. PA 665
This is another expanded line of Design Specialties' time saving rubber stamps of tree patterns, arrows, scale figures, etc. Mounted on dowels and pencil caps for easy use and simple aligning. This is a money saver for architects and engineers because the time saved to draw one tree form for a site plan pays for complete set.

DEALERS WELCOME!

Send today for New Free Stamp Catalog & Price Sheet
821 SOUTH NEIL STREET
CHAMPAIGN, ILLINOIS
On Readers' Service Card, circle No. 437

The famous swing arm lamp—originated by Walter von Nessen more than 37 years ago—has gained a special reputation among architects, designers, even museums. This versatile lamp is available in nine different standard models for residential and commercial applications.

These lamps are also available with modifications to meet specific budget or job requirements. Quality of craftsmanship remains the same. Nessen lamps are made of solid brass, with standard finishes available in brushed or polished brass or satin chrome over brass.

Write for our latest catalog and reference file.

NESEN LAMPS INC. 317 East 34th St., New York, N.Y. 10016

Finally available, a plastic light diffuser that needs no metal door frame. Increases daylight opening of fixture thus increasing its light output and efficiency.

One piece injection molded out of either acrylic or polystyrene CUSTOMLENSES reduces the cost of the fixture by eliminating the expense of the steel door frame with its assemblage of latches, screws, hinges and locks, requiring less maintenance.

Installation costs are reduced as the lenses, with their integrally molded hinge pins, are laid in the fixture and completely operable.

Available through all quality fluorescent fixture manufacturers.

Write for literature and specification sheets.

american louver company
5308 N. ELSTON AVENUE CHICAGO 30, ILLINOIS
On Readers' Service Card, circle No. 328
Special FREE Offer from ADE Supply
ART, DRAFTING AND ENGINEERING SUPPLY HEADQUARTERS

DRAFTING MATERIALS

BUY 1 GROSS NO. 2200-1 KOH-I-NOOR EJECTOMATIC LEADS $28.80

Available in 17 degrees of graphite, 6 degrees of KOH-LAR leads for drafting film, and flexcolor plastic leads in 9 colors. Your order may be assorted degrees or types (graphite-colored or KOH-LAR) minimum selection 1 doz. of each type or degree.

RECEIVE FREE WITH EACH ORDER THE FOLLOWING 3 ITEMS

• KOH-I-NOOR RAPIDOGRAPH 3065 S-4 SET VALUE $13.00
• KOH-I-NOOR LEAD POINTER 992 -- VALUE $3.50
• 2 KOH-I-NOOR LEAD HOLDERS 5013 -- VALUE $2.00

Limited Introductory Order

ADE Supply Co.
76 Ninth Ave., New York, N.Y. 10011
Tel. 212 YU 9-1133

Send for FREE

Catalog 140 pages, lists over 400 films on urban development and growth. Among subjects covered are administration, air pollution, architecture, bridges and tunnels, city planning, construction, housing, new towns, renewal, and financing. Catalog costs $4.50 a copy. ACTION, Inc., 2 West 46 St., New York, N.Y.

Vinyl Wallcoverings

Swatch catalog (three-ring ed and 12" x 12") offers "Duran" vinyl wallcovering of 18 patterns and 4 weight qualities. Swatches of each pattern are mounted in all colors. Backside of each page gives specs for the weight of the pattern and application instructions. "Duran" offers wallcoverings in more than 140 colors including a wide range of textures (such as marble, woodgrains, florals, silk and linen finishes, and multicolor overlay printing). The Masland Dura-Leather Co., 3236-90 Amber, Philadelphia, Pa.

Tweed Carpet

"Tintawn" carpeting has a tweedlike appearance. It is made from sisal fiber (produced in East Africa and woven in Ireland) with a looped pile and plastic backing. Tintawn has good tensile strength and resistance to abrasion. Some 22 patterns are shown in color brochure. Tintawn Inc., 281 Fifth Ave., New York, N.Y.

Free Lead Pointer, Holders and Rapidograph Pen Set.

Send for FREE

Retailer's Service Card, Circle No. 438

On Readers' Service Card, Circle No. 416

June 1965
Filled with revolutionary new lighting devices, specially developed by Kliegl Bros., to utilize the new line of quartz-iodine lamps, this new catalog lists, describes and offers not only unit specifications but suggested application and operating advantages, as well.

Another Kliegl First—no one in the industry has such a broad and thoroughly field-tested line of quartz lamp devices as Kliegl. With three full years of intensive engineering and development, plus hundreds of “proved out” installations for your ready reference, these new devices, all included in this new Catalog Q-8, offer the serious technician and lighting specialist a real “break through” in dramatic, economical lighting.

For the name of your nearest Kliegl Representative and a copy of Catalog Q-8, write today.
Dramatic proof...

RIGIDIZED METALS DON'T SHOW DENTS!

See for yourself! Let Rigidized send you actual colored and polished samples you can scratch, mar, and dent. Rigidized Stainless reduces actual deforming by as much as 50% over plain stainless. Scratches, fingerprints, and scuffs are completely concealed in the design-strengthened texture. These features mean big dividends in maintenance and replacement savings; initial costs are low, too.

Rigid-tex offers you the largest choice of patterns and finishes for the widest range of aesthetically-pleasing design effects. For Design-Engineering Facts and New Pattern Catalog, Write, Wire, Call:

Send for a FREE Guide to Better Fountain Designs, detailing important facts about selection of Fountain Equipment. Details on Pumps, Spray Rings, Fountain lights and installation procedures on use of Fountain Kits. Many catalog pages showing Self-Contained Fountains.

ROMAN FOUNTAINS

14847 Bossemer Street
Van Nuys, California 91401

On Readers' Service Card, circle No. 479
people specs.

These seemingly abstract lines are no abstractions at all. They are motations—codifyings of movement. They represent a new system that will enable architectural designers to plan for the movement of people and vehicles through space. This project is published in detail for the first time in the July Progressive Architecture.

In addition to motation, the July P/A will present a folio of New England houses; picture stories of offices that "design" congeniality into the physical environment; presentations on single-duct air conditioning and specialty wall coating materials.

There's no better time to start your P/A subscription than now—with the provocative July issue. Send your $5 check immediately. You'll receive July plus eleven more issues, including the January Design Awards issue. Address: Circulation Department, Progressive Architecture, Reinhold Publishing Corporation, 430 Park Avenue, New York, N. Y. 10022.
Why are Bradley Washfountains the people's choice?

Because... lavatories are fine at home, but in employee and public washrooms, people want wash fixtures that are truly sanitary, quick and easy to use, and require no fussing. Only one wash fixture fits that bill — a foot-operated Bradley Washfountain.

Management also insists on Bradleys. Washfountains save 25% or more on floor and wall space. And they serve up to 8 people with one set of plumbing connections, cutting installation costs as much as 80%.

They also save water and reduce maintenance time.

What's more, Washfountains give you a wider choice of colors and compositions than any other type of wash fixture. So, for plants, commercial buildings, schools, institutions — all modern buildings — specify Bradley Washfountains!

For complete details, see your Bradley representative. And write for latest literature. Bradley Washfountain Co., 9141 Fountain Drive, Menomonee Falls, Wisconsin 53055.

On Readers' Service Card, circle No. 334