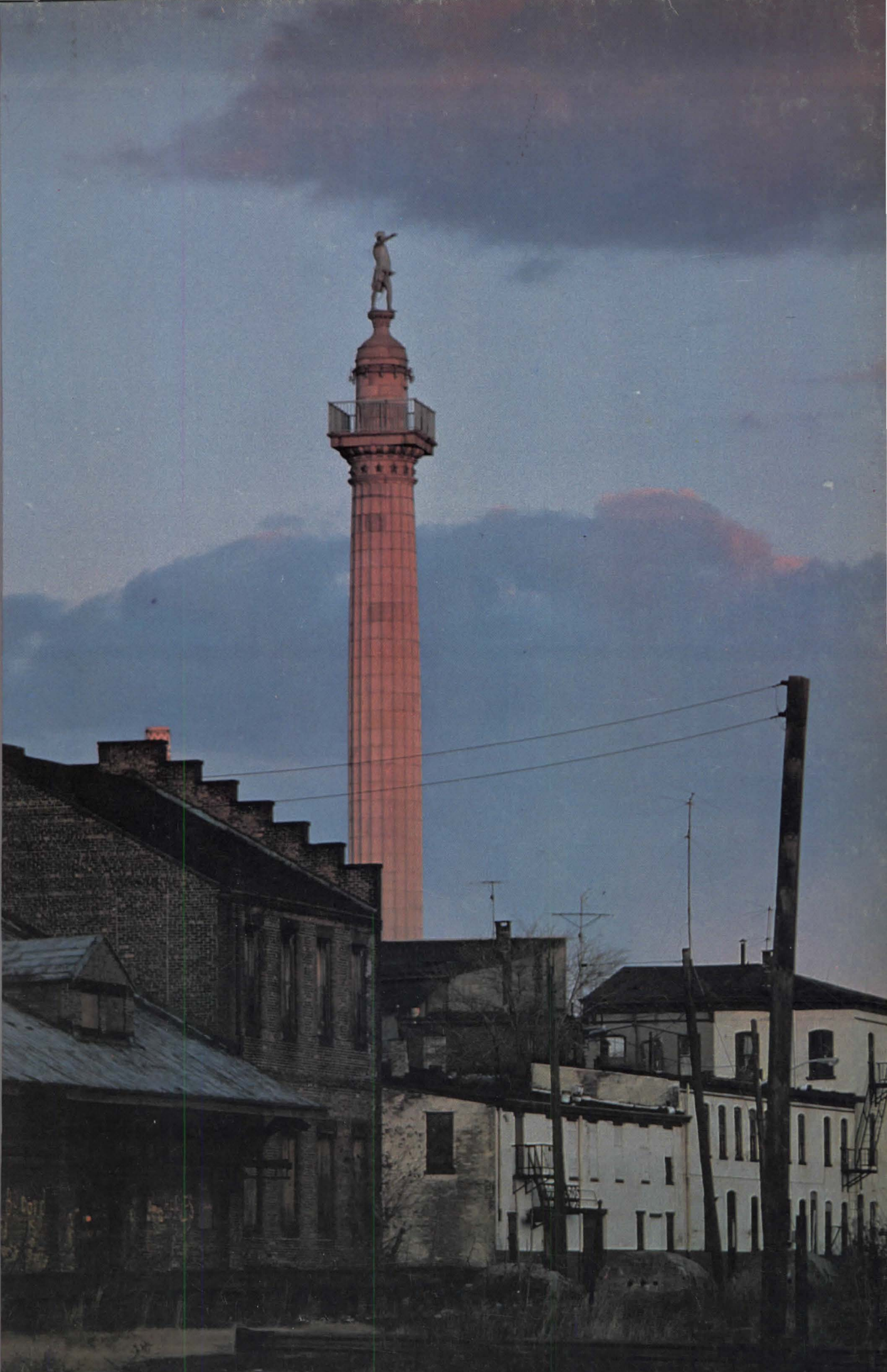



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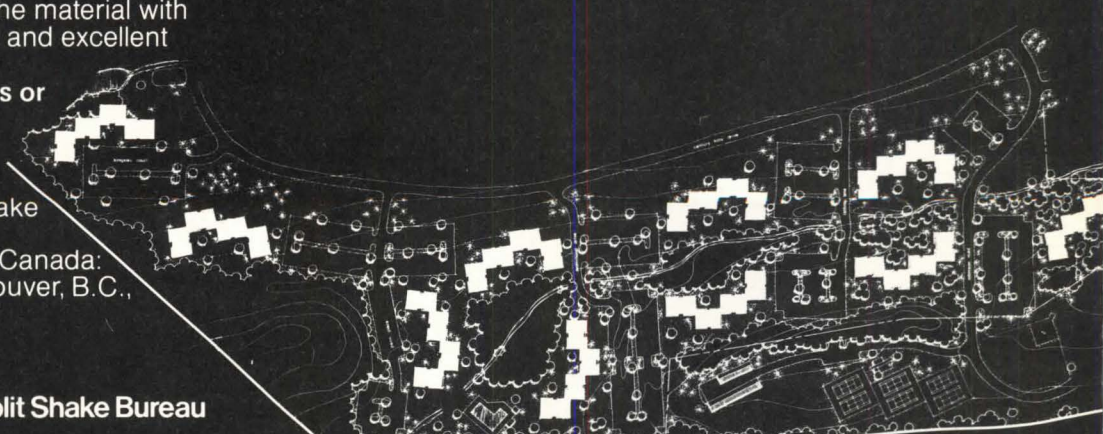
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# AIA JOURNAL

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AIA JOURNAL, official magazine of The American Institute of Architects, published monthly at 1735 New York Ave. N.W., Washington, D.C. 20006. Telephone: (202) 785-7300. Subscriptions: for those who are, by title, architects, architectural employees, and to those in architectural education (faculty and schools), and to libraries, building construction trade associations and building product manufacturers: basic rate \$12 a year; \$20 two years; \$8 to architectural students in the U.S., its possessions and Canada. For all others: \$18 a year in the U.S., its possessions and Canada; other countries to those who are by title, architects: \$18 a year. All others outside the U.S., its possessions and Canada: \$30 a year. Single copy: \$2, payable in advance. Publisher reserves the right to refuse unqualified subscriptions. For subscriptions: write Circulation Department; for change of address: send Circulation Department both old and new addresses; allow six weeks. Second class postage paid at Washington, D.C. Quotations on reprints of articles available. Microfilm copies available from University Microfilm, 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Referenced in *The Architectural Index*, *Architectural Periodicals Index*, *Art Index*, *Avery Index to Architectural Periodicals*. © 1976 by The American Institute of Architects. Opinions expressed by contributors are not necessarily those of the AIA.® VOL. 65 NO.1

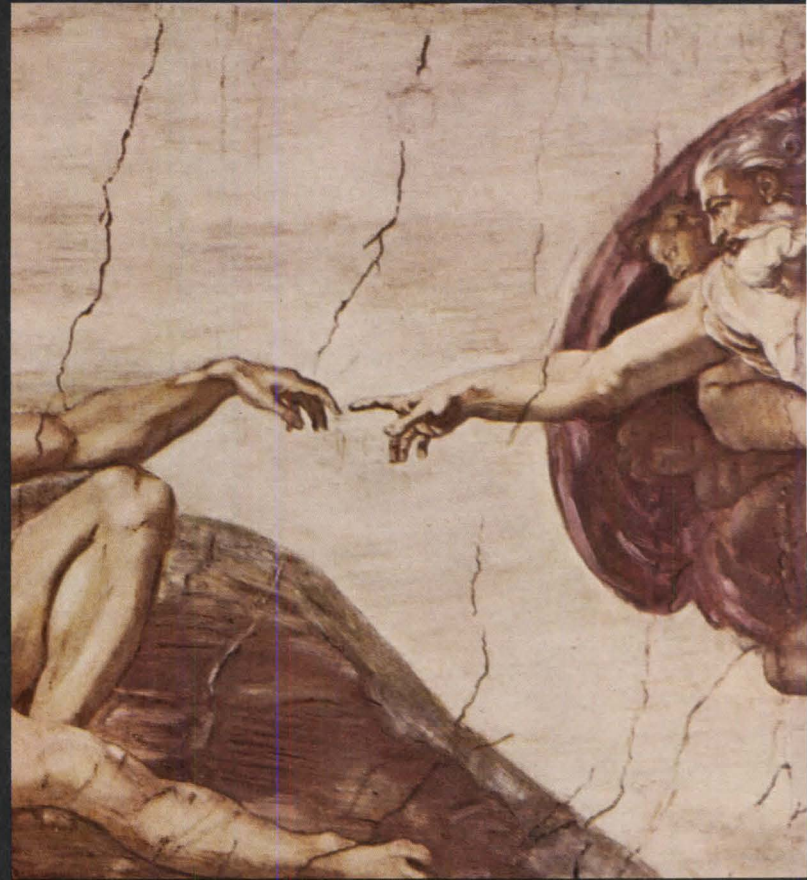


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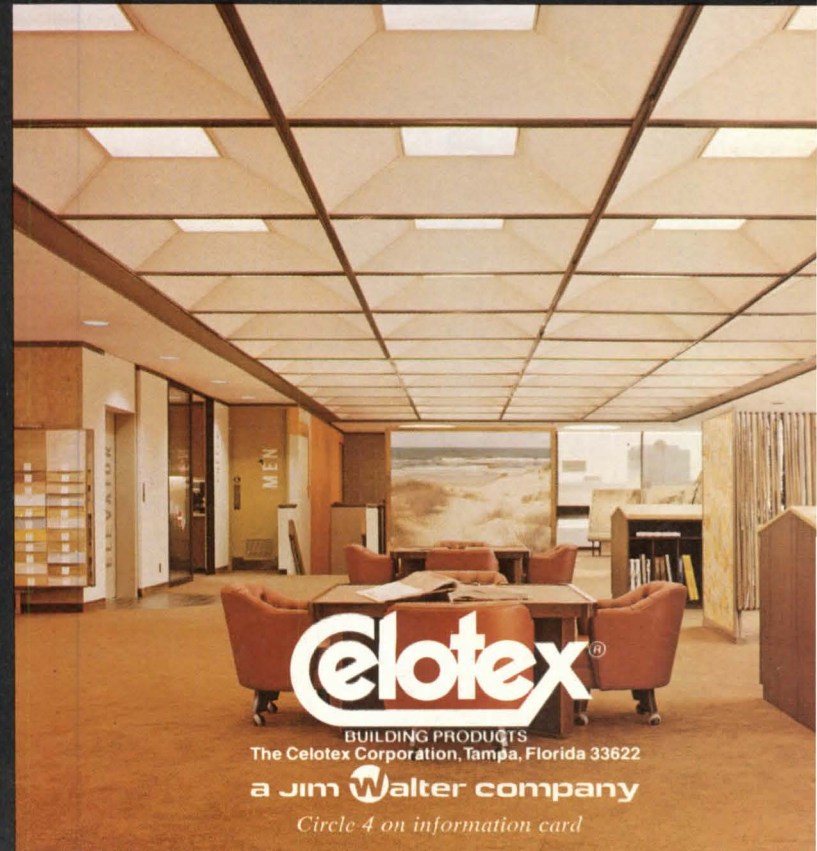
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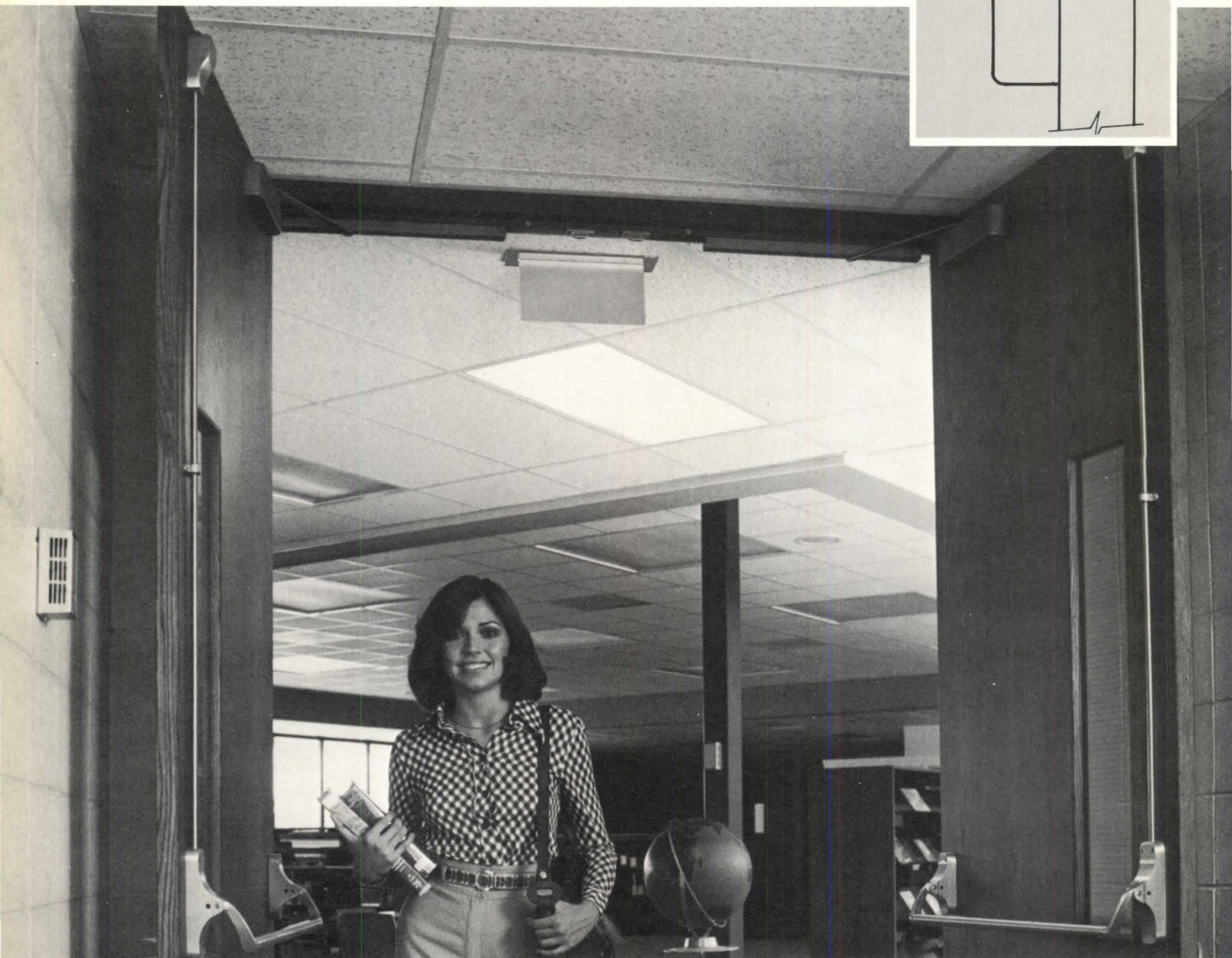
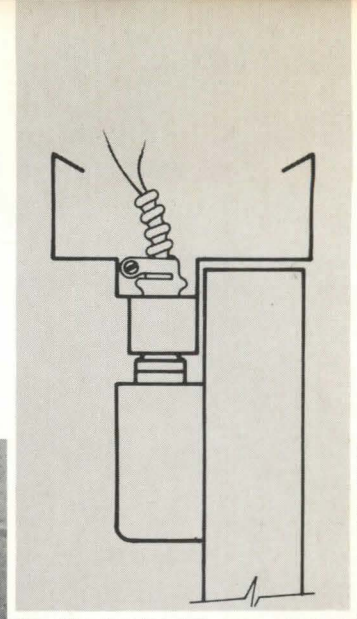
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Model 3352—Photographed at the Hyatt Regency, San Francisco.

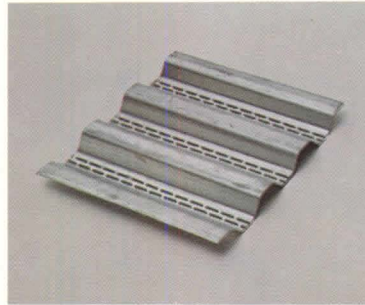
Deftly executed in polished stainless steel, this drinking fountain by Haws was designed in the tradition of elegant simplicity to complement the most resplendent interiors that can be created by man. The columnar pedestal is pure, of classic proportions, and atop, the sculpted receptor is ridged to prevent splashing. Model 3352 is true perfection in a metallic alloy that is timeless.

If yours is a task of joining form with function for a truly complete effect, you will want to know more about this unique Model 3352 by Haws. Please contact Haws Drinking Faucet Co., 1441 Fourth Street, Berkeley, California 94710.

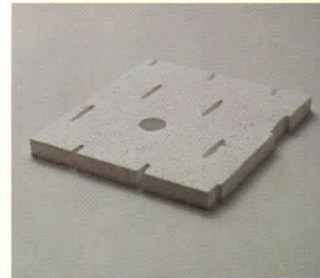
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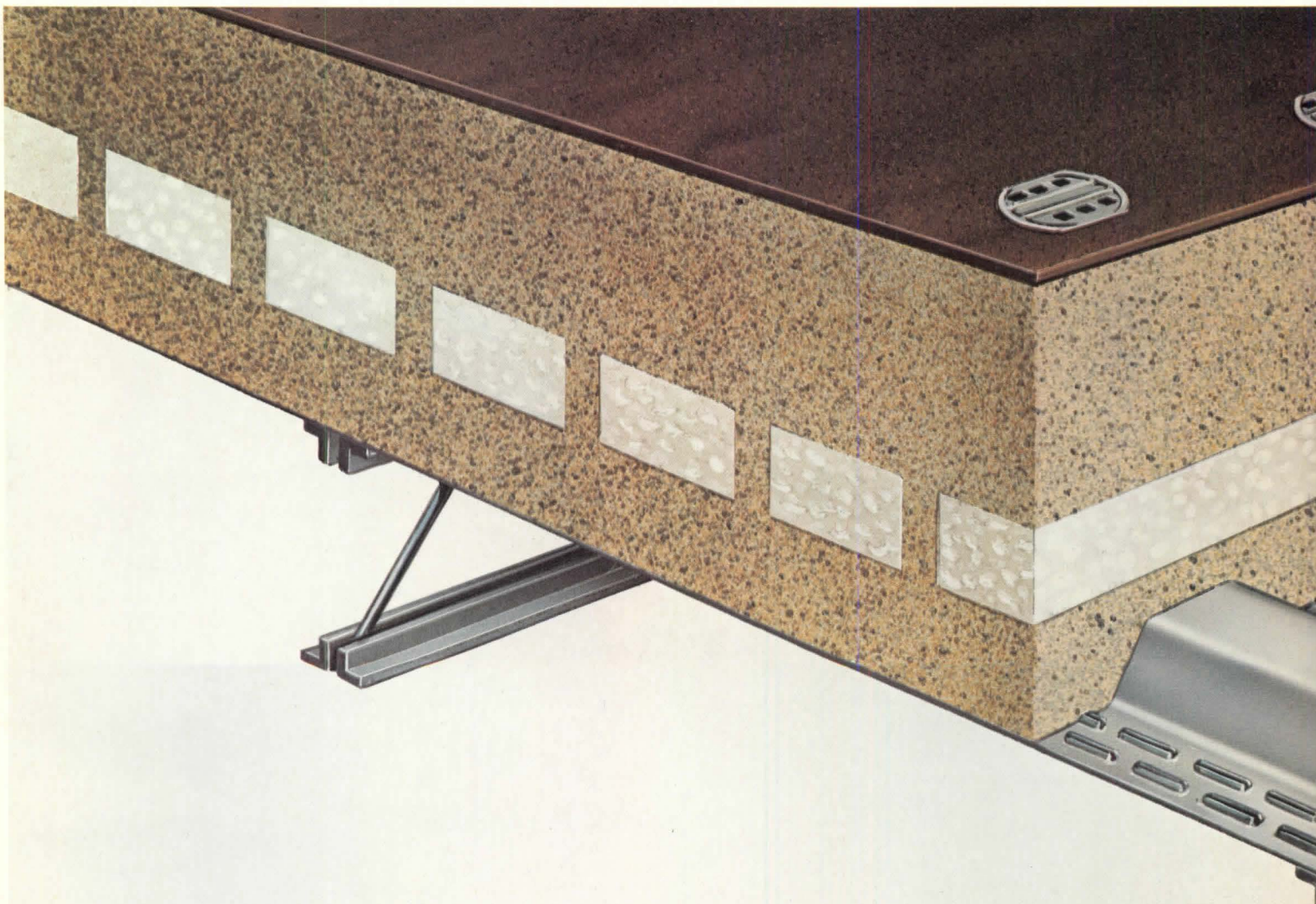


2. Insulperm™ Insulation Board



3. Zonolite Base Ply Fasteners

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**A new Slotted Metal Base, the first improvement.**

The new base helps speed drying and venting, provides a unique structural marriage with lightweight Zonolite Insulating Concrete for maximum strength and stability.

**New Insulperm™ Insulation Board, the second improvement.**

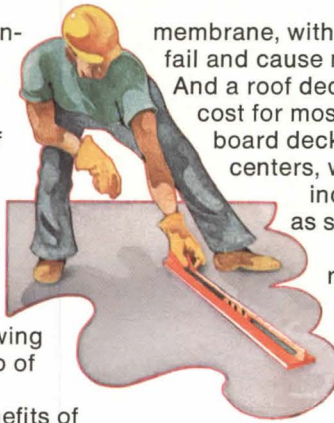
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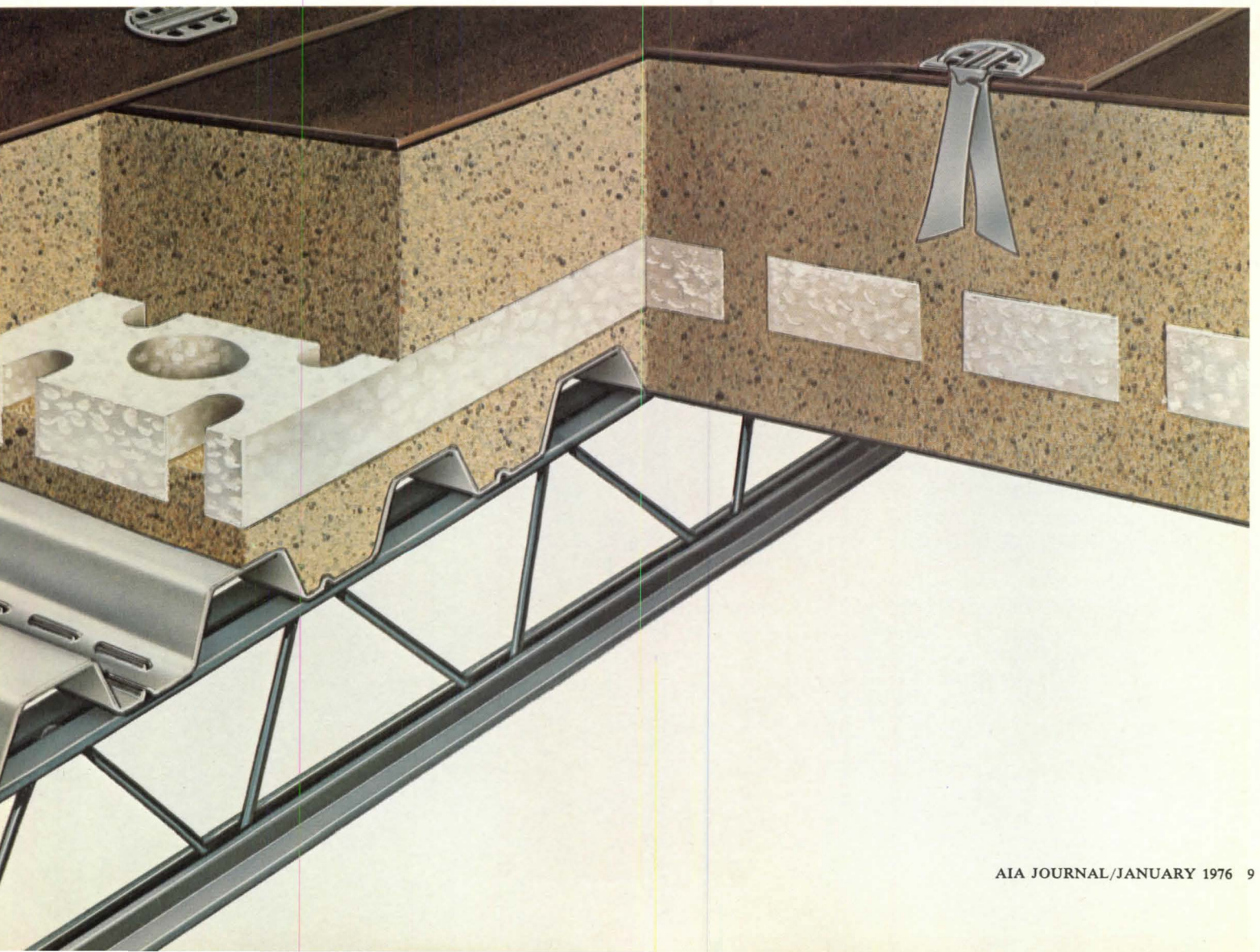
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## The Annual Changing of The Guard: New Officers And Directors Installed

On Dec. 6, Louis de Moll, FAIA, took up the gavel as the Institute's new president to hear reports on the 1976 goals and programs of new commission chairmen. The night before, at the conclusion of the annual meeting of the AIA board of directors, he had been formally installed in the office, succeeding William Marshall Jr., FAIA, of Norfolk, Va. De Moll is principal in charge of design in the Philadelphia



firm of Ballinger Co. (see p. 20). He served as first vice president of AIA in 1975 and is a past president of the Philadelphia chapter/AIA.

Other officers installed were: first vice president (president-elect) John M. McGinty, AIA, of Houston; three vice presidents, Elmer E. Botsai, FAIA, San Francisco; Carl L. Bradley, FAIA, Fort Wayne, Ind., and Robert L. Wilson, AIA, Stamford, Conn., and treasurer, Charles E. Schwing, AIA, of Baton Rouge, La.

Ten new regional directors also took office: Robert B. Marquis, FAIA, San Francisco; Robert C. Broshar, AIA, Waterloo, Iowa; Frank R. Mudano, AIA, Clearwater, Fla.; David L. Perkins, AIA, Lafayette, La.; Eugene C. Swager, AIA, Peoria, Ill.; R. Randall Vosbeck, AIA, Alexandria, Va.; Kenneth Klindtworth, AIA, Staten Island, N.Y.; James M. Harris, AIA, Tacoma, Wash.; Randolph J. Stauffer, AIA, Clarks Summit, Pa., and J. Harold Box, FAIA, Arlington, Tex.

New commission chairmen for 1976

are: Leon Bridges, AIA, Baltimore, community services; Herbert Epstein, FAIA, Brooklyn, N.Y., education and research; Willard C. Pistler Jr., AIA, Cleveland, environment and design; William R. Jarratt, FAIA, Detroit, government affairs; Ehrman B. Mitchell Jr., FAIA, Lafayette Hill, Pa., Institute and component affairs; Robert M. Lawrence, FAIA, Oklahoma City, professional practice; Rex Lotery, FAIA, Santa Monica, Calif., public relations, and Charles E. Schwing, AIA, Baton Rouge, finance.

## Energy Report Focuses On Environment

A far stronger national policy emphasis on energy savings in the built environment has been urged in the first annual report of the National Advisory Council on Research in Energy Conservation.

The council was established just over a year ago at the initiative of AIA and represents a wide range of public and private institutions involved in energy conservation.

The group chose the built environment as its area of concentration, the report says, "because it offers one of the largest, near-term conservation payoffs" and also "is more fully consistent with the most desirable national energy strategy than are many other alternatives for conservation which are currently receiving priority attention."

Says the report: "The way in which the built environment evolves affects where and how we live, work and play, how we must travel, and many dimensions of the quantity and type of energy which we must consume."

These are among the report's other major conclusions:

- No sufficient national strategy presently exists for achieving energy conservation.
- Proposed funding levels "belie the reality" that energy conservation is a major component of a national energy strategy and the federal budget for 1976 relegates conservation research to a "relatively meaningless position."
- Many of the present energy policies employ "undesirable and unnecessarily

onerous tactics which have negative effects upon individual quality of life."

- The projected supply gap for the next three decades could be more than adequately closed if conservation policies associated with the built environment were achieved, but it is most doubtful if "present policies will capture this opportunity."
- High priority should be given by the federal government to a research and development program in order to achieve a nation of energy-efficient buildings.
- "Funding for energy conservation should be rapidly increased to about 1 percent of the value of the potential annual savings," such funding approximating \$300 million annually. The council recommends that of this total \$170 million be designated for the built environment.
- Reliance upon small-scale demonstration projects, especially in the built environment, such as present policy dictates, "is neither an adequate nor effective mechanism" for the complex "innovational" problem of achieving energy conservation. "A comprehensive 'innovation strategy' should be developed . . . which will require substantially more knowledge which well-funded and balanced research efforts can generate relatively quickly."

Additional information about the council and its activities may be obtained from Joseph A. Demkin, AIA, director of energy programs at the Institute.

## N.J. Architects Seek Recovery of Legal Costs

The New Jersey Society of Architects has issued a statement calling for the state legislature to consider action which would permit architects and other professionals to recover legal expenses in damage suits where it is proved that the professionals were not to blame. The NJSA executive committee said that "the cost of professional liability coverage and the ever-present risk of third-party suits were enough of a burden on architectural economics without adding the strain and cost of defending suits of this nature."

This position was adopted after an

*continued on page 14*



## Not even 20,000,000 people and the California sun could wear out this carpet.

Another carpeting success story from Monsanto. Six years ago Acrilan® acrylic carpet was installed on the concourse of San Jose Airport, the nation's 10th busiest airport. In that six years, Acrilan® Plus carpet on the concourse received 20,000,000 traffics and exposure to heavy soiling. Three years ago, Acrilan® 2000+ carpets were installed in the baggage and car rental areas. Areas where 20,000,000 traffics have occurred in three years. Acrilan 2000+ carpet was also installed on the observation deck. In those three years the observation deck has withstood both rain and sun. Just how well Acrilan Plus and Acrilan 2000+ carpets held up in these four areas under all these demands can be seen in the pictures above.

Acrilan 2000+ carpets used in the baggage claim, car rental and observation deck areas are especially engineered to withstand the punishment of day-to-day airport activity. They're made from a solution-dyed fiber which makes them colorfast. That means they can withstand the rain and harsh California sun without noticeable signs of fading. In fact, Acrilan 2000+ carpets are 35 to 50 times more lightfast than the industry standard. And because they're fade resistant, they're exceptionally cleanable too. In most instances, simple cleaning aids are all it takes to remove stains and spots. But for more stubborn stains, harsher solvents can be used effectively without destroying the color of the carpet or the fiber tenacity. When backed with a man-made backing, Acrilan 2000+ carpets aren't even faded by 100% bleach.

*Carpeting by Burke Carpet Mills.*

As for all the traffic an airport gets, Acrilan Plus and Acrilan 2000+ carpets can take that too. Beautifully. They're resilient enough to recover their height even after long periods of heavy traffic.

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**Acrilan®**  
the ability fiber



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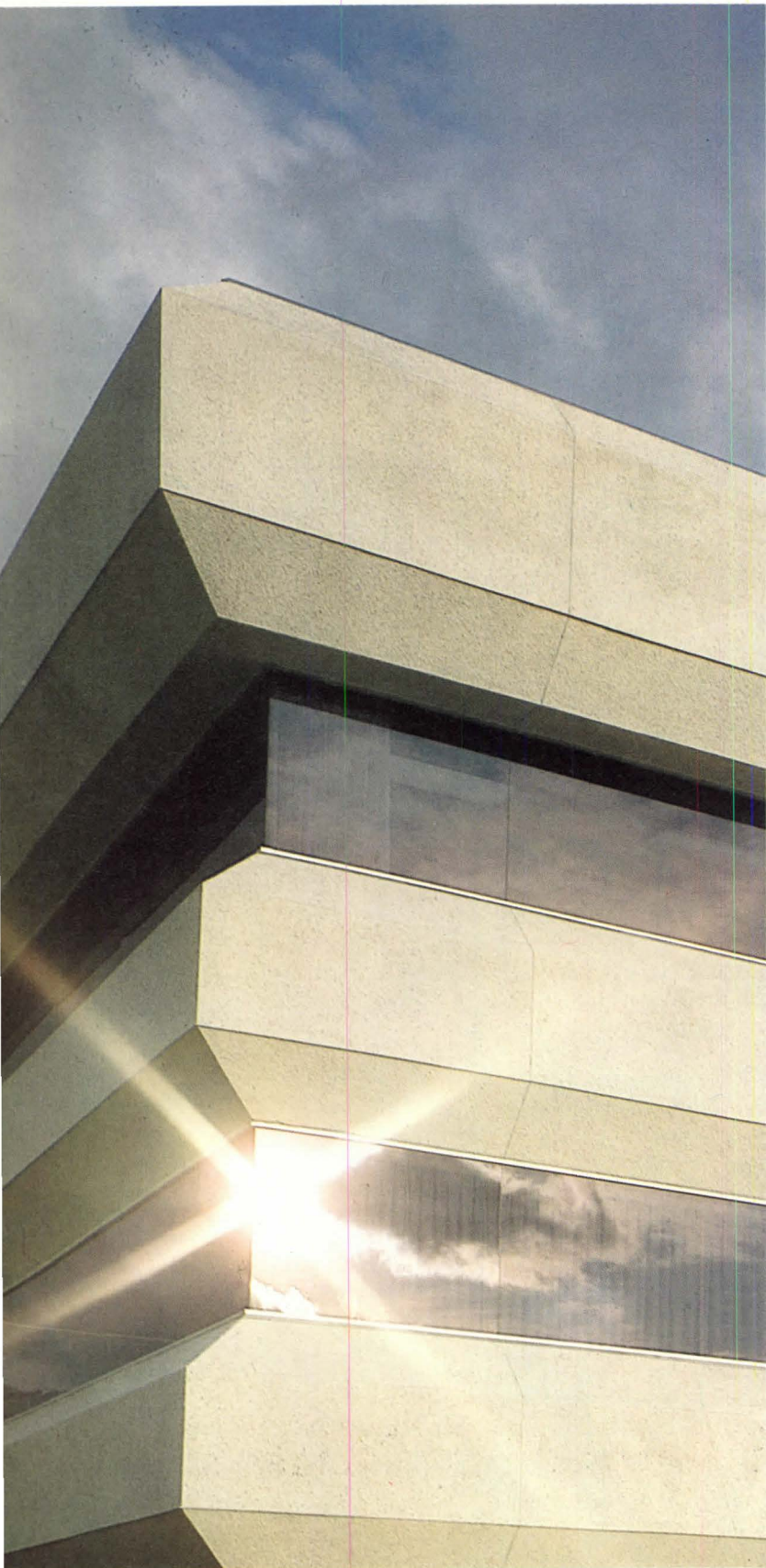
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# LOF TAKES THE H



Owner: F. D. Stangl Construction Co., Salt Lake City, Utah. Architect: Architectural Associates, Salt Lake City, Utah.

# EAT OFF THE I.R.S.



## HEAVY-DUTY TINTED GLASS OFFERS LOW SOLAR GAIN AND SUBDUED REFLECTIVITY.

When the Internal Revenue Service Building was designed for Salt Lake City, Utah, the architects wanted to create a free and open feeling. This feeling was to flow from the exterior design to achieve a cool and open atmosphere for the work areas within.

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But the savings didn't stop there. A shading coefficient of .56, without drapes or blinds, helped this LOF glass reduce solar heat gain. This resulted in lower air conditioning costs when compared to  $\frac{1}{4}$ " tinted glass performance.

Depending on the specific project, you can choose bronze or grey tint as a regular or heavy-duty glass in either monolithic or Thermopane<sup>®</sup> insulating units.

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# LOF

*Circle 9 on information card*

Going on from page 10

increasing number of NJSA members reported suits where the architect was named defendant in cases where it was proved that he had no connection. For example, Donald J. Gatarz, AIA, of North Brunswick, said that his firm was among seven defendants in a case that was thrown out of court but that cost the firm \$4,300 in unrecovered legal fees. Because of a delay in the delivery of structural steel, which cost the general contractor "significant overhead expenses," the contractor sued the structural steel contractor, who in turn sued other contractors and the architect. The complaint against the architect was that "he should have taken pains to minimize the cost to the general contractor in event of delays."

Gatarz termed the suit against the architect "unconscionable" and "unjust," calling this a "shotgun" approach "where attorneys cover themselves against the possibility of losing one suit and having to file another and still another." Gatarz said that his firm carried \$1 million in insurance, with an annual premium of nearly \$19,000, but that the policy has a \$10,000 deductible clause because anything less is "prohibitive." Hence, losses under \$10,000 have to be borne by the firm.

Another architect, J. Robert Gilchrist, AIA, of Hackensack, was also involved in a dismissed suit in which he was unable to recover \$3,500 in legal fees. He was one of eight parties to a suit brought by an industrial tenant "who suffered equipment damage as a result of a product failure that the manufacturer of the product admitted was his fault."

Herman H. Bouman, AIA, of Trenton, also reported that he had to pay legal fees in a case where a board of education employee who was injured in a fall brought multiple suits. Legal expenses had to be paid by the architect even though the case was dismissed.

"The picture is virtually the same throughout the state," concludes the NJSA statement. "Architects and other professionals are, in a sense, being victimized." Therefore, NJSA "urgently" requests action that "will offer redress."

## Lurking Liability

Keyes, Condon & Florance, an architectural firm in Washington, D.C., recently received correspondence in which it was stated that as architects of the 10-year-old residential project, Carrollsburg Square, in southwest Washington, the firm could be held liable for alleged injuries to a tenant.

The attorney for the tenant reported that his client was under a physician's care because he was "shocked and distressed to find a four-foot snake in the oven of his apartment . . ."

The architectural firm says that it is

"shocked and distressed, too, to think that anyone could contemplate suing the architect under such circumstances." The firm has turned the case over to its liability insurance carrier for handling.

## Federal Homeownership Aid Program Revived

After a moratorium of almost three years, the Department of Housing and Urban Development has reinstated the Section 235 homeownership program, with modifications. The program, originally designed to enable lower-income families to buy homes, was suspended in Jan. 1973 when president Nixon declared a moratorium on most housing subsidy programs. HUD was sued by the General Accounting Office for illegal impoundment of funds.

HUD reactivated Section 235 before the suit was settled, but changed the regulations so that the program will serve higher-income families than it had before. Previously, eligible families had incomes in the \$5,000-to-\$7,000-a-year range; under the revisions, eligible families will be in the \$7,000-to-\$9,000-a-year range. HUD also increased the downpayment from approximately \$200 to approximately \$750. Under the earlier regulations, the mortgage subsidy brought interest payments down to 1 percent; this time around, the subsidy will bring interest down to 5 percent.

In announcing the revised homeownership program, HUD Secretary Carla Hills said the department will use \$264.1 mil-

lion—funds already authorized by Congress—to subsidize more than 250,000 new single-family houses over the next two years. Houses constructed under the program would cost between \$21,600 and \$25,200, except in areas where housing prices are higher, in which case the maximum would be \$28,800.

## Justice Architecture Conference Scheduled

An architecture for justice conference will be sponsored by AIA Feb. 15-17 at the Hotel del Coronado across the bay from San Diego, Calif. Emphasis will be placed upon innovative developments and design concepts in the planning of justice facilities.

Among the scheduled speakers are Jiro J. Enomoto, California corrections director; Raymond K. Procnier, chairman of the California Adult Authority; Richard Korn, director of the Center for the Study of Criminal Justice and co-director of the Berkeley Institute for Training and Psychodrama, and Frederick D. Moyer, AIA, director of the National Clearinghouse for Criminal Justice and Architecture.

A main feature of the conference will be a tour of the San Diego Metropolitan Corrections Center, a new type of detention facility whose design concepts and materials meet the most recent Bureau of Prisons criteria. This is a downtown high-rise prison which was planned to house 500 pre-trial and short-term inmates.

Participants at the conference will also

*continued on page 55*

## The Employment Exchange

As announced, the JOURNAL will publish employment notices for AIA members and firms without charge for the duration of the profession's economic crisis. The ground rules: (1) Only one notice will be published for any individual member or firm in any given issue; each notice will be limited to 24 words, exclusive of address; (2) copy will be received between the 1st and 15th of each month for publication in the following month's issue; (3) notice will be published on a first-come, first-served basis.

### Positions Wanted

Architect, Md. Va. D.C. registration; 15 yrs. comprehensive experience + management, housing expert; 6 awards; design director last 5 yrs., steady client following. Gabriel Levy, AIA, 801 Northwest Drive, Silver Spring, Md. 20901 (301) 593-7605.

Architect, administrator, construction management, VE. 25 yrs. industrial, race track, general experience. NCARB: MI,

PA, NJ, NY, ILL. Any suitable position in US considered. Arthur J. Kaulfuss, AIA, 35 W. Locust Lane, York, Pa. 17402. (717) 764-5706.

Project architect (NCARB), 18 yrs. experience: space survey, programming, design, production (highrise offices, schools, housing) seeks responsible position/partnership US/overseas. Gabriel Harel, AIA, 7330 Ritter, Matthews, N.C. 28105. (704) 366-2757.

### Positions Available

Project architect; 2-5 yrs. experience; commercial, housing, educational; registration not required. David L. Brost, Architect & Associates, P.O. Box 1109, Cedar Rapids, Iowa 52406.

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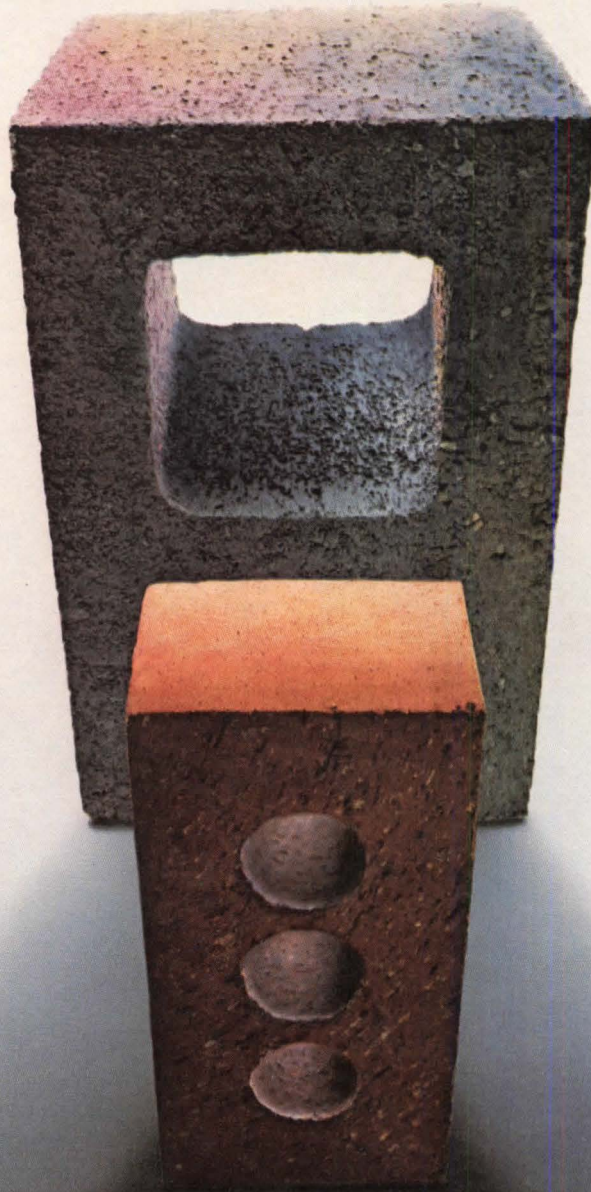
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## LETTERS

**NCARB Exams:** I am unable to answer personally each of the numerous inquiries about my termination of all activities regarding any special license preparation material. Although I am flattered that my old material and quotations from my past talks (none was copyrighted by me) are still being used by various organizations, I am no longer connected with any group providing material specifically for licensure preparation.

The exam has changed radically since I took it, and, since I do not want to rely on past exam candidates' input, I feel that I would only mislead candidates, thus causing considerable damage in time loss.

The National Council of Architectural Registration Boards has created a most excellent exam, providing all necessary material required during any of the exams. NCARB also publishes, through McGraw-Hill, portions of previous exams, which is the best thing that has happened since my book *Problems and Solutions* was published. (This book, copyrighted years ago under my name, is out of print.)

Also, various AIA components provide excellent insight into both exams, often with members of the board present and at minimum cost.

I do not think any special preparation

is necessary other than that recommended by the examination boards. That's exactly why I personally do not provide any more digested material specifically to sneak through a test. The books listed in bibliographies of NCARB publications are the basis for all exams, and the books are all one needs to be familiar with to take the exams.

Therefore, I urge every candidate to direct any question regarding the exams, as well as any preparatory materials, to his or her own state boards.

*Alfred M. Kemper, AIA  
Los Angeles*

**Architects and Books:** Cooks swap recipes and, as you turn the pages of the November issue, it would seem that architects enjoy exchanging ideas contained in books. It is not easy to assess the forces of our time, but there have been a number of landmark publications dealing with the very crucial issues of nature, man and construction—those elements largely responsible for environmental quality. My own selected list of books to give or to receive follows, organized chronologically rather than in any order of importance: *Garden Cities of Tomorrow*, Ebenezer Howard (1898, London; MIT Press, 1970): Along with the earlier effort of Patrick Geddes, this was the beginning of 20th century planned community consciousness.

*The Life and Work of the American Architect, Frank Lloyd Wright* (1925, C. A. Mees, Santpoort, Holland): This monumental work was the first publication of Wright's early years and was a great rallying point for contemporary European architects.

*Culture of Cities*, Lewis Mumford (1938, Harcourt, Brace): Though neither a sociologist nor planner, Mumford broadened the view of several generations.

*Space, Time and Architecture*, Sigfried Giedion (1947, Harvard University Press): Allie Beth Martin, who now serves as president of the American Library Association, has said that this is still probably the most widely read book on architecture in the country.

*The New Regional Pattern*, L. Hilberseimer (1949, Theobald): Complete with historical references, this work defines the unsolved problems of urbanization and anticipates the lineal city.

*American Building Art*, Carl W. Condit (1960, University of Chicago Press): While dealing extensively with the Chicago School, this work and its companion volume published later offer a comprehensive view of construction technology.

*Design with Climate*, Victor Olgyay (1963, Princeton University Press): A great deal of the voluminous material on energy-effective building dates from these pioneering investigations.

*continued on page 55*

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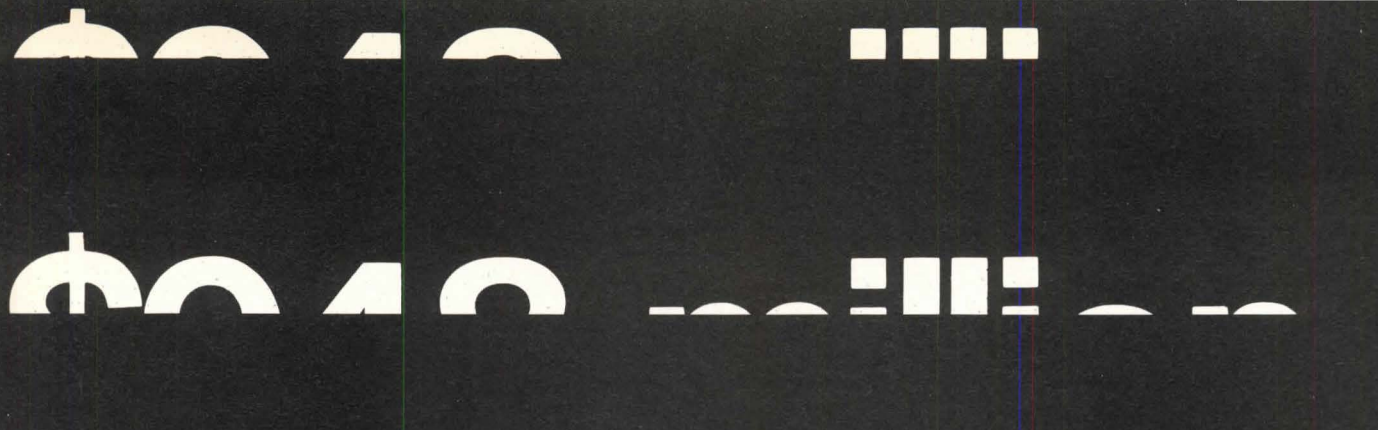
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## **'We Must Be Doing Something Right To Last Two Hundred Years.'**

The above title of the floridly patriotic song that opens last year's hit movie "Nashville" could be (and hereby is) applied to the American architectural profession.

The first two centuries of American architecture are ending in financial anguish and a mass professional searching of souls. The all-too-real economic crisis of the profession, and the seeming crisis of confidence alluded to in this space a year ago, should not be allowed to eclipse a record of very real accomplishment.

The beginnings of American architecture were modest indeed. With the towering exception of Mr. Jefferson, architecture as a profession scarcely existed in the new nation. When a competition was held for design of the national capitol, only one entry came from a professionally trained architect and the winner was a physician.

In the 19th century, as the young nation grew, so did the profession, at first taking its training and models from mother Europe, then gradually finding its own means and modes of expressing an ever-expanding industrial democracy. Home-grown giants emerged and captured the attention of the architectural world.

Their work, in the 20th century, nurtured the several movements toward a new architecture; and as war darkened all of Europe for the second time, America gave refuge to and was enriched by giants of another modern movement. The culmination came in postwar years when America assumed undisputed world pre-eminence in architecture.

This highly encapsulated history is not recited here in self-congratulation, but as a reminder that, entering the nation's third century, American architecture has a great deal to celebrate—and, more importantly, to build upon. *D.C.*

# Profile: AIA's New President Louis de Moll

At first glance, the new president of AIA does not appear extraordinary. Louis de Moll is of medium height, his clothes casual, even slightly rumpled. His facial features are pleasant and regular, striking only because framed by a full beard and eyeglasses.

Nor does de Moll try to impress as he talks about his new role as president of the Institute and about himself. "Leadership probably comes easily to me," he says, "because I haven't irritated people by being overbearing. I think that one thing people feel about me is that I'm not pushy. I can stand outside of myself and laugh at myself."

He seems neither prepared for—nor perturbed by—searching, sometimes personal questions, but becomes increasingly fascinated with trying to find answers to them. As he warms to the task of explaining himself, de Moll's initial shyness all but vanishes, and he becomes a man with an easy, open manner. Crinkling his face in a characteristic way, he ventures, "I'm reserved. I'm not a deep intellectual person, nor a showman or gladhandler."

Nor a Mr. Milquetoast. Gesturing for emphasis with a square, competent-looking hand and looking the listener straight in the eye, de Moll begins to explain why he has been promoted to positions of leadership all his life. "There is a certain logic in the way I do things that seems to impress people. I think my greatest strength is organizational ability, being able to sort things out, compromise and find solutions. I'm *very* pragmatic, and not a flare-up-type person. I think I'm a steadying influence." He relates how at board meetings when 30 people are all trying to rewrite a resolution, he'll be the one to suggest that in the interests of saving time and tempers three people go off and do the writing.

De Moll says that he has already laid the important groundwork for his year as president. "The budget is set, the programs are set, all my commissions are lined up." He says that the actual year of presidency is largely ceremonial, "running the board meetings, making all kinds of operational decisions."

Might that not be rather boring? "How could I find it boring?" he asks. "It's



utterly fascinating, because I've written a composition and am going to play it. I enjoy working with people and seeing how I can best use their expertise and get something accomplished."

He is, he says, basically a doer and a man who makes decisions easily. "I may seem wishy-washy about a thing for a while, because I'll listen and weigh the various arguments. But when it comes time to make a decision, I'll make it." Thwack, on the last words, de Moll's hand comes down hard on the table top. "I think I would have made a pretty fair judge," he says, "because I listen to both

sides and then try to be straight and fair."

De Moll claims he is not particularly ambitious, that running for president of AIA required considerable soul-searching. "All my life," he says, "I've needed someone to say, 'Hey, Lou, why don't you run?'" It would appear that there has often been someone there to do just that. For despite his quiet demeanor, de Moll has never been a background person.

Louis de Moll was born and raised in Swarthmore, Pa., a small college town, not far from where he lives today. His father was an architect, despite having dropped out of school after sixth grade to

help put an older brother through college; he took courses at the Drexel Institute and became both a registered architect and an engineer. By the time his fourth child, Louis, was born, the elder de Moll was 50, married for a second time and practicing architecture in what is now the Ballinger firm, located in Philadelphia. Lou remembers him as a "fascinating guy; my God, he would now be 102 years old."

Lou de Moll recounts that he was the proverbial all-American boy in high school, president of his class, male lead in the school play, captain of the football team. Listening to him tell about these things in an easy manner, puffing a pipe and still looking athletic, a picture of a different president—Gerald Ford—may actually come to mind, and vanish just as quickly. Young de Moll's life seemed to suit him. He says it aroused no conflicts, required no role playing. And he insists—protesting too strongly perhaps—that he has never been an intellectual or particularly reflective person. He claims that his reading is almost completely confined to professional materials.

From high school, de Moll went to the University of Pennsylvania for a year before joining the army in 1943. He served in Europe, taking part in the Normandy landing, was wounded and left the military as a corporal.

When he returned home, de Moll went right into architectural school and, after graduating with honors from the University of Pennsylvania, joined the Ballinger firm. "I had no question as to what I wanted to do," he says. "I always drew and sculpted as a kid; I let the flow take me. No conflicts." Today, Louis de Moll is chairman of the board at Ballinger; his brother John, an architect and engineer, is president of the firm.

Looking backward, de Moll is struck by the differences between his own beginnings in life and the manner in which his five children are now entering the adult world. For them there is much more freedom, but decisions come harder—if at all. "In my generation," he says, "you got a job right out of college and worked hard, got promoted, provided for your family. . . ." This is said without resentment toward the younger generation. He lets his

children pursue their different paths, and gives evidence of being able to live with change and contradictions. Such tendencies are seen in his watercolor painting, a hobby of his. He says that he enjoys other people's abstract paintings and has himself experimented with working in a nonrepresentational manner, but he is simply not a man to be carried away: "I'm too disciplined; my sense of perspective is good, so it just hasn't made sense to me to break away into abstraction."

Despite the superficial appearance of conventionality, de Moll regards himself as an untraditional person. "There aren't many families of seven," he says, "who can go to Europe together for a summer and live happily in a camper. Carol and I have been married for 28 years and have lived in the same house all that time." He built it himself as a tiny house to begin with and added on to it five times, "doing less of the work myself with each addition as we had less time and more money." By contrast, he points out, most families begin in a small development and keep moving up the scale as the years go by. "That makes us different."

He describes their house as an un-groomed but comfortable dwelling where the occasional hole in the rug or leak in the roof doesn't cause undue consternation.

"I don't think I've changed that much over the years," he says. "I don't think people do. The series of decisions I've made during my life have all followed the same basic pattern." All during his working life, de Moll has tried to maintain a careful balance between being the practical firm manager and the designer. When it comes to possible regrets about his life, there may be just one, he says, the fact that he didn't pursue a career of pure design.

The hallmark of his firm, Ballinger, is cost and project control, according to de Moll. Established almost 100 years ago, the firm employs some 120 architects and engineers and up to 80 percent of its clients are corporations. For years, the firm has been expanding its services to include construction management; marketing; economic and feasibility analysis; value analysis; interiors and space plan-

ning; process engineering; materials handling; system construction, and most recently solar systems design. "In addition," says de Moll, "an allied firm is heavily involved in real estate development—build and lease and in joint ventures with contractors in design and build." He feels it very important that more architects enter the development field, for their own sake since it is remunerative, but mainly for the good of the built environment.

"Our approach at Ballinger is very businesslike," says de Moll. A year ago the firm instituted a comprehensive organizational revamping that extends to every phase of its operations. The aim was to eliminate an accumulation of bad habits and replace informal, undefined ways of operating with straightforward and clearly understood methods. The guiding principle is "management by objectives," which requires first of all that a firm establish where it wants to go—and can go—and chart a general route for getting there.

Lou de Moll believes that in the immediate future only those firms that have outstanding management capabilities or a reputation for distinctive design will survive.

He is not particularly sanguine about the immediate future of the profession, but approaches it with practicality, as he does most things. As he recently told *Engineering News-Record*, de Moll believes that 1976 will mark the beginning of recovery for the building professions, but it will start late in the year, and modestly, and will not accelerate appreciably for the foreseeable future. Consequently, he predicts that an increasing number of firms will not survive through the next year. "Some firms, particularly small ones, may find that the next commission on which they rely for survival will come just a little too late. Or if that commission comes on time, it may not be succeeded quickly enough by a second to enable the firm to sustain itself" in the face of mounting expenses.

An important result of the present recession, says de Moll, is that it will tend to accelerate all the trends that are already being felt in the profession. Thus, it will bring, he says, an increase in multidisciplinary firms; in the proportion of large to

small firms; in joint ventures and conglomerates; in continued growth of and reliance on construction management as an independent discipline; in the number of building projects that "go the route of the design/build firm or architect/contractor venture"; in the development of cost management techniques such as value analysis and life-cycle cost analysis, and in the development of new energy conservation techniques.

De Moll concludes that "the demand of the '70s is, very simply stated, project completion in a minimal time period and within an appropriate budget." He also foresees that the traditional roles of the different building professions will become increasingly blurred. "Throughout man's history, since he first began to build, these roles have been combined. Even in early America, the craftsman/designer/builder produced most of the buildings. With time, of course, these roles became separated into distinct professions. But now they are again coming together," says de Moll. "And it is this new merging of the design and delivery process which will most affect our professional practices." In the future, as architects become increasingly involved in roles that go far beyond traditional practice, says de Moll, the title "architect" may connote many things, the least important of which may well be the traditional meaning or image we now attach to it.

De Moll says that the process he is describing here is already far advanced. The problem now is to convince the public and architectural clients that professional consulting firms have adjusted, have changed and are meeting current market requirements.

Since buildings will always have to be built and designed, de Moll is not worried about the actual survival of the profession. Nor is he disconcerted by the fact that there are many more people being trained as architects than can be absorbed by traditional private practices. "On the contrary," he says, "an architect making important environmental and planning decisions for a government agency, for a business or manufacturing corporation, for a developer or as a developer himself may have far more impact on our environment

and lifestyle than the traditional architect."

Applying the implications of such thinking to the future of the Institute, de Moll foresees the possibility of a professional society broad enough to embrace all those involved in building design—landscape architects, planners, engineers, graphic designers, interior designers and architects, of course, for starters. "I think there is parallel," he says, "between firms becoming larger and incorporating other specialties and professional societies broadening out. Take my own firm, we're architects and engineers. Why should we belong to two different professional societies?"

He goes on to explain that his ideal would be an American Institute of Environmental Designers, and says that AIA is already sneaking up on becoming such an organization by virtue of its participation in ICED (Interprofessional Council on Environmental Design) and "the presence of people and groups from other disciplines."

In a similar vein, de Moll believes that in time the Institute (or whatever it is known as in the future) may become more important as an advocate for the profession and a better built environment, and less for its assistance with traditional problems of practice, "because there may not be many people practicing in traditional ways."

Practical man that he is, de Moll's attention soon reverts to the more immediate task at hand, his upcoming year as president of AIA, as it is now. "Our main goal," he says, "is survival, because 1976 dues will be based on 1975 employment."

"The key thing," says de Moll, "is setting priorities and doing the things we do best, while dropping those that are marginal. The welfare of the firms out there is the first priority." He feels practice-oriented programs should be stressed, and that accomplishing something in the area of energy conservation should take precedence, for example, over environmental education programs. It is hoped, he says, few such choices will have to be made. Also, programs should be closely coordinated. Land use and national growth programs, as examples, have a "connection

with energy policies and programs, because if you plan growth more logically that will save energy."

De Moll has established a council of commission chairmen who will meet four times a year and be responsible for program development. He also explains that he intends to make board meetings run more smoothly by assuring that solutions to controversial issues are hammered out elsewhere and that matters of detail are also kept off the agenda. "I'd like to see more time available for substantive discussions of policy and future directions," he says.

As chairman of the planning committee last year, de Moll established a new system of goals and objectives, which provides a framework for evaluating Institute programs and setting priorities, as well as mapping yearly planning strategy. He divided Institute activities into three areas: Institute effectiveness, public influence and professional development. After the specific contributions of AIA departments to these three areas was assessed, each department was asked to establish a series of goals and subgoals for the coming year, along with a plan for implementing them. "This is the first time we've pulled things together in a coherent way," says de Moll.

Increasing the strength of AIA components has been an abiding concern of de Moll's, and he feels that this is where his efforts, which go back four years, have perhaps been most fruitful. Without hint of rancor, he thanks Chick Marshall, 1975 AIA president, for "stealing my thunder" by implementing proposals originated by de Moll as chairman of the committee on structure in 1973.

De Moll feels that the national organization is now leveling off after having grown rapidly for a time, and that this is appropriate, "at least until the components can come up to strength." He also underlines the need to find new types of funding and develop, with the help of the components, more effective ways to let the membership know about existing programs.

"I couldn't have chosen a worse year to be president," says de Moll with a mixture of relish at the challenge and concern. *Andrea O. Dean*



# Rediscovering the Gritty Cities

Mary Procter and Bill Matuszeski

They are the exits off the Eastern turnpikes that mark progress on your map—the train stations where you hope no one will board and take the empty seat next to you—the places where your best friends may come from but have never told you. They are the “gritty cities,” the old Eastern manufacturing centers that still produce many of the goods we use every day—from thermos jugs to underwear to cough drops—but which seldom receive in the press or on television the same attention as New York or Boston or Philadelphia—unless fire, flood or other ills befall them. Yet, together, their populations more than match those of the bigger cities, so that in a very real sense the “typical” Eastern city dweller is found not in Brooklyn or Society Hill, but in Bridgeport or Trenton.

Little is known of such places. Like Baltimore until very recently, the long-standing image of the gritty cities is dark and sooty and oppressive. But in recent years, Baltimore has emerged as a lively city of thriving neighborhoods, meriting even a piece in the *National Geographic*. Observing Baltimore's changing image, we began to wonder if there were not more to these other places as well.

Starting with little more than a map, we began to visit these smaller cities. We avoided New England, except Connecticut, because much attention has already been given the old mill towns, and the rest are more quaint than gritty. We stopped at the Alleghenies in the west. In all, we checked out about three dozen cities in the 50,000-300,000 range in Delaware, New Jersey, Pennsylvania, New York and Connecticut.

When we had finished our exploration, we concluded that there are pleasant and interesting places to live and work in nearly all the gritty cities, but we picked 12 that are our favorites. Admittedly, our choice can be defended only on subjective grounds; someone else would probably

The authors, husband and wife, are residents of Washington, D.C. Mary Procter is a management consultant for American Management Systems and Bill Matuszeski is assistant staff director for the President's Council on Environmental Quality.





*Previous page, the falls of the Passaic River in Paterson, N. J. Top, this page, Harmony Mills adjacent to Troy, N. Y. Left, the central square of Waterbury, Conn. Below, downtown mall in Paterson.*





*Left, the P. T. Barnum museum in Bridgeport, Conn.  
Above, the Erie Lakawanna terminal in Hoboken, N. J.*

include other cities and drop a number of our choices. Nonetheless, our chosen dozen is comprised of Bridgeport, Norwich and Waterbury in Connecticut; Troy in New York; Hoboken, Paterson and Trenton in New Jersey; Allentown, Bethlehem, Lancaster and Reading in Pennsylvania, and Wilmington in Delaware.

It is easy to identify the economic base for a number of the cities. Anyone who has ever played "Monopoly" associates Reading with railroads. Likewise, it is difficult to say "Bethlehem" without saying "steel." And Wilmington is well-known as the home of the duPonts.

The economic base of the other cities may not be as familiar. Hoboken, like Reading, is a railroad center but is also water-based; the copper-clad railroad barge terminal directly across from Manhattan still dominates the commercial area. Paterson, like Wilmington, grew up around water power, using the falls of the Passaic River. The main industry was silk, which ironically enough, did well until Wilmington's chemists came up with nylon. Norwich and Troy had textile mills which were among the most elaborate and ornate ever built in America.

Waterbury, Bridgeport and Trenton established a wide range of manufacturing industries, with the emphasis on hardware, electrical equipment and china respec-

tively. Allentown, sister city to Bethlehem, made good use of the steel by building the massive Mack Truck works. Only Lancaster, of all the cities, established an economic base that did not rely heavily on industry and manufacturing. While it has some factories, its primary interest lies in serving as an agricultural center for the rich farm country surrounding it.

Much of this industrial legacy is still apparent in the cities today. In a few cases, there has been extensive restoration; the duPonts have seen to it that all their early mills along the Brandywine are fully restored in a combination park and museum of industrial history. Other cities exhibit adaptive uses. Bridgeport has factories converted to shops and restaurants. Reading has become a center for "factory outlets," using its old factories as salesrooms and attracting shoppers in busloads from distant points. In some cases the old mills and factories have been abandoned and demolished; examples of this can be seen in Troy, Waterbury and Paterson. But for the most part the structures are still in use, sometimes with modern additions to handle new lines of products and to facilitate shipping by truck.

But all that these cities have given us cannot be summed up in a list of products. They have contributed their share to

the American character as well. The school of art which produced Howard Pyle and the Wyeths began in Wilmington. Benedict Arnold came from Norwich. P.T. Barnum was mayor of Bridgeport for a number of years in the 19th century and is responsible for its extensive system of parks. While all of his fanciful homes have long since burned, his ornate museum remains and his memory is celebrated with a circus parade every Fourth of July weekend. But the award for diversity must go to Troy which has given us Uncle Sam, Arrow Shirts and "The Night Before Christmas."

Around the turn of the century, when civic pride and the art of photography were simultaneously flourishing in America, the city fathers of nearly all the gritty cities, commissioned albums of photos of their prosperous downtowns, showing intersecting trolley lines and as many merchants as there were telephone wires. To tell the tale of the decline since then is to recite the litany of ills that have befallen the downtowns of nearly all our older cities, regardless of size: growing suburbs, difficult annexation laws, outlying shopping centers with discount houses and branches of stores, and crime and congestion in the old commercial areas.

Urban renewal has left a spotty record in the gritty cities. While some, like



*Above, the historic district of Bethlehem, Pa.  
Right, Victorian punctuation in predominantly colonial Lancaster, Pa.*



Bridgeport, Waterbury, Allentown and Trenton appear to have used it to overall good advantage, others display the results of an apparent competition to see who could lay waste the largest portion of downtown. (If such a contest were in fact held, Wilmington would probably win the "Rubble Cup.")

Almost everywhere, there are today the signs of downtown revival. Historic buildings, market areas, cultural facilities and clusters of shops are being used creatively to draw people back to the old commercial streets. Malls have become fashionable; no less than six of the dozen cities described here have converted downtown streets into pedestrian preserves. While the basic idea is the same, it has been executed in a variety of ways.

Bridgeport decided to best the suburbs at their own game and installed a multi-level enclosed shopping center in the middle of downtown, with parking on the roof. The idea seems to be working; two major department stores are located there and an effort has been made to tie the mall into existing downtown streets along its north side.

Allentown was blessed with a famous downtown department store that continues to draw shoppers from long distances to see its extravagant special purchase items. A system of steel girders and lamp-posts has been used creatively along Allentown's major streets to give a sense of unity to downtown by visually bridging parking lots and other gaps between buildings. Reading, Trenton and Wil-

mington have all recently converted portions of their main shopping streets to malls; the centerpiece of the Wilmington project is a restored 19th century opera house. And Paterson has begun a project to extend glass enclosures over large portions of the streets in the downtown market area.

The other six cities have quite varied downtowns. The attractive shopping streets of Norwich and Troy look much as they must have looked for six or seven decades. Waterbury retains a lovely central square; urban renewal has brought new public buildings of good design across the street from rows of restored commercial storefronts. Downtown Bethlehem is quiet, reminiscent of a county seat in the Midwest, but boasts a showy modern government complex.

Lancaster's downtown, focused on two active farmer's markets, melts into the surrounding historic neighborhoods. Hoboken may have the liveliest downtown of all, stimulated both by the newest ethnic group—the large Latin population—and the young couples from Manhattan buying brownstones.

More than anything else, it is the residential neighborhoods of the gritty cities that give them their character. Each city has its own consistent housing style. Almost every section of Lancaster, with its dignified colonial neighborhoods, looks different from any block of nearby Reading with its exuberant rows of 19th century working class residences.

Also important is visual continuity

within each neighborhood, unbroken by vacant lots or the intrusions of very different styles. This quality multiplies the details of individual houses into a lively repetition of themes. That the most attractive cities have extensive neighborhoods of rowhouses may be due to the fact that it is more difficult and more expensive to clear one unit of a row of houses than to knock down a house or two in a street of detached homes.

Adding to the impression of consistency, many of the gritty city neighborhoods are dominated by particular ethnic groups with characteristic tastes in decorative elements such as awnings. Gritty city neighborhoods also tend to have little shops—family restaurants, bakeries and barber shops—right in the middle of blocks of houses, adding a delightful visual variation.

Reading, Lancaster, Trenton, Hoboken, Allentown and Troy all are rowhouse cities. Trenton displays the greatest variety of rowhouse styles, while Hoboken houses nearly everyone in the same five- to six-story walkups. Wilmington is a city of duplexes while Bridgeport, Norwich and Waterbury all have large wooden single family and three decker apartment houses. Waterbury's three deckers are much like those of Boston, with Waterbury's own special asymmetric porch arrangement.

Sometimes it is details like porches that give a special character to the neighborhoods of a given city. In Allentown, nearly everyone has awnings; some are beautiful ornate antiques rarely seen elsewhere.



Well over half the rowhouses in Reading have stained glass. In Troy, it is bay windows, and in Wilmington, it is gray fish-scale shingles that seem to adorn at least a roofline or a bay window of every house in town.

Often the distinctive detail is a color scheme. Wilmington's gray shingles are frequently set off by green trim and red brick. The same red, green and gray appears in Reading but there the gray is the Permastone housefronts. Trenton's red doors and painted brick facades, also trimmed with green, are several shades brighter than the brick red of the other cities. Houses in Troy are painted quite exotic colors—roses, olives and browns. In Bridgeport, sea green shows up on the roof shingles and siding of many houses. And in Waterbury many of the triple deckers are three-tones, with each floor painted a different color.

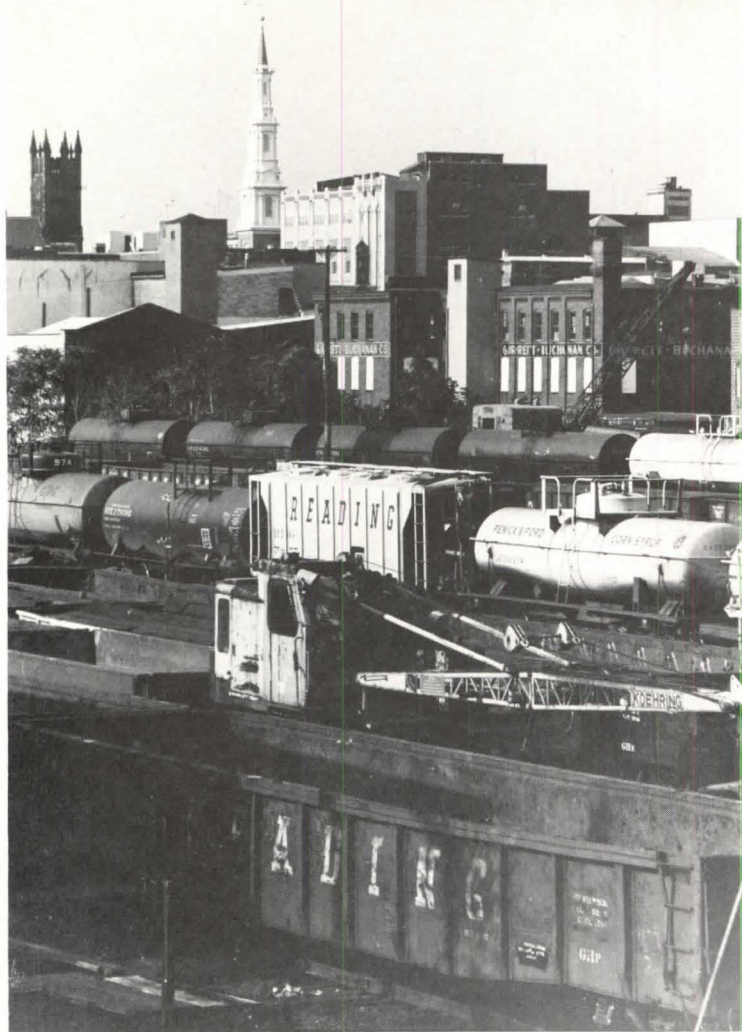
While the gritty cities are not treasure troves of Americana or architectural museums, they do present a liveliness that surprises the casual visitor and a range of physical settings that can delight the eye and make the spirit glad that they are still there. Most of the cities are finding new ways to make use of existing physical, cultural and historic resources that show progress, good taste and a sense of the need to conserve what is unique about the place. In a very real sense, the gritty cities are being rediscovered by their own citizens. On the following pages is a closer look at three of them, Reading, Norwich and Trenton.



*Top, the agitated awnings of Allentown, Pa. Above, a truncated row and a contemporary tower in Wilmington, Del.*



*Reading, Pa., rowhouses march over the hills, intermixed with commercial and even industrial buildings.*



## Reading, Pa.

Reading is a manufacturing city that wears its image on its sleeve, from the yards and shops of its famous railroad up the hillsides to the uppermost rowhouses. The rowhouses, the neighborhood shops and stores, the parish churches, and the red brick warehouses and factories are densely packed together in a grid of streets that shares with San Francisco a total disrespect for the hilly terrain.

The town is cut in two by the massive Reading Railroad yards, which include an agglomeration of old brick car and locomotive shops, abandoned stations and half-fallen footbridges that make one wonder what it must have been like in 1897 when 27,000 passenger trains and 50,000 freight trains stopped in Reading.

Stimulated by the vigorous growth of the railroad, Reading had by the turn of the century a solid reputation as a manufacturing center, shipping annually six million hats, 50 million cigars and hundreds of different kinds of iron products. This reputation persists today, although with a new wrinkle. The city has discov-

ered that its future lies in seconds and irregulars, and has become the East Coast center of factory outlets. Each day, busloads of shoppers from such cities as Philadelphia, Wilmington, Baltimore and Washington, D.C., crowd into the old factories and warehouses in search of bargains in everything from support hose to cherry-filled chocolates and soup tureens.

Antedating the onslaught of zoning that segregated uses (a theory which has since fallen out of favor), Reading's 19th century factories were built right in the middle of residential blocks. To contemporary eyes, this well proportioned brickwork and ornamental facades add strength and variety to the residential streets.

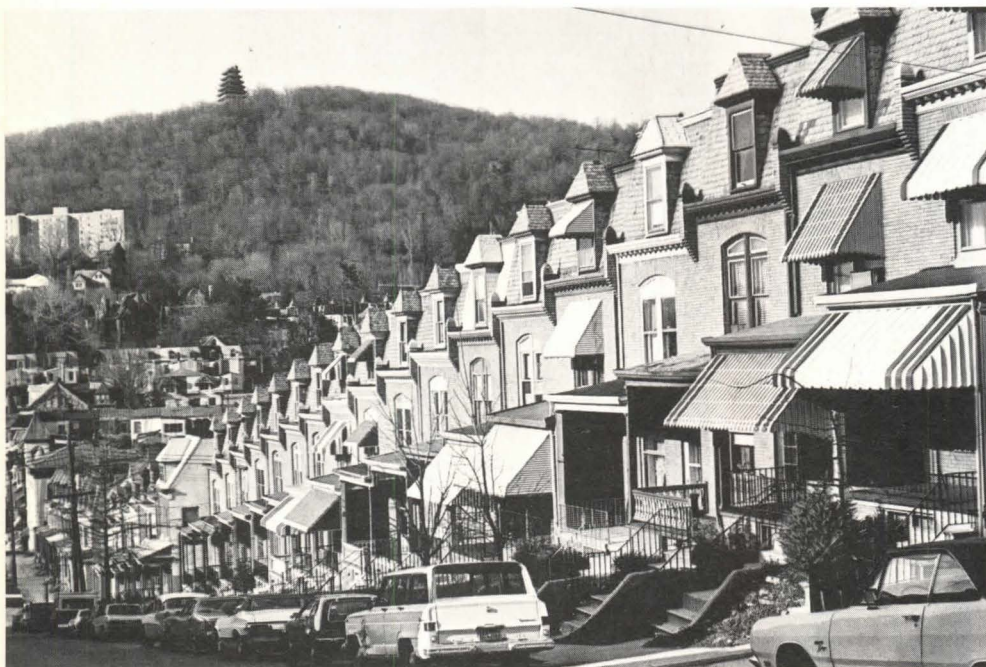
Also softened and made respectable by age, Reading's rowhouses still house thousands of workers and their families and line the hilly streets in exuberant profusion. There are two-story rowhouses and three-story rowhouses, plain rowhouses and rowhouses with porches, turrets or gables. There are, in addition to

workers' rowhouses, merchants' rowhouses and bankers' rowhouses in elegant clusters all over town. Almost all of them were built in the last half of the 19th century when over 15,000 residences were built, 90 percent of which were brick.

Rowhouse construction was financed by a myriad of savings and loan societies, many of which were founded by groups of workers in the same factory. After 1876, the societies went beyond the mere financial role and entered directly into the construction of blocks of houses. Although there is a wide variety of rowhouse styles, each block of houses in Reading is usually, therefore, of a single style. Thus, the repetitive patterns that make the city so attractive today can be attributed in large part to the housing finance mechanism that grew up with the factories.

One early 20th century planner (John Nolen, *Replanning Reading*, 1910) much preferred detached garden district houses with fresh air and grass to the "unnecessary congestion" and "cheerlessness" of the "mass of unrelieved tin-roofed

*Repetitive details in Reading include stained glass panels, iron balconies and a plethora of awnings.*



brick blocks with narrow straight streets." But what he described as "this unfortunate type of building so characteristic of the city" sold for \$1,800 and rented for \$12 a month in 1910. Thanks to the rowhouse, Reading had one of the highest rates of homeownership and one of the lowest indices of crowding in the country.

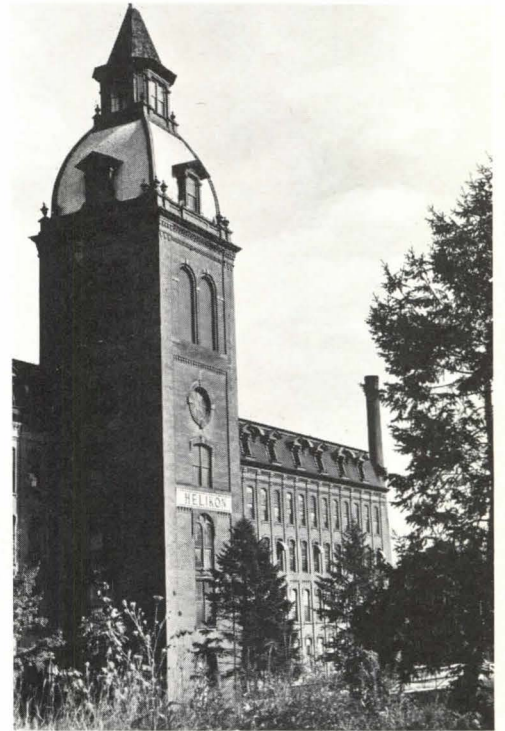
Today, our eye has changed. The sight of an entire city of rowhouses on hills is a visual delight, especially rowhouses so adorned like those of Reading. In addition to the built-in ornaments of gables, turrets and porches, the rowhouses of Reading look like the world's largest display of awnings and Perma-stone. While neither of these features is on any list of architects' favorite details, where they appear in such profusion they force the discriminating eye to surrender to the overall effect.

Even more delightful are Reading's two esthetic specialties—ironwork railings on curved porches and, most dazzling of all, stained glass windows of the most delicate design and colors. At least half of the rowhouses in Reading boast one or

more beautiful stained glass windows. In many cases these lovely windows are somewhat incongruously framed in Perma-stone. One can spend hours and even days following the blocks around corners to find the most beautiful window of all.

And so we've come full circle. It has now been a century since 1876, when the savings and loan associations got into the business of housing construction and began putting up their rows. The intervening fashion for detached houses, each set in its own ample yard, seemed legitimate in its time. Now, however, the "unfortunate housing type"—the rowhouse—and the "unyielding" grid of streets ignoring hills seem good ways to save energy, reduce congestion and still keep things at a human scale. The "hopeless" mix of housing and commercial uses is now looked to as a way of reducing crime and increasing urban vitality. As we build townhouses in the suburbs to recreate the sense of neighborhood that's missing there, a place like Reading becomes a source of ideas and even inspiration.



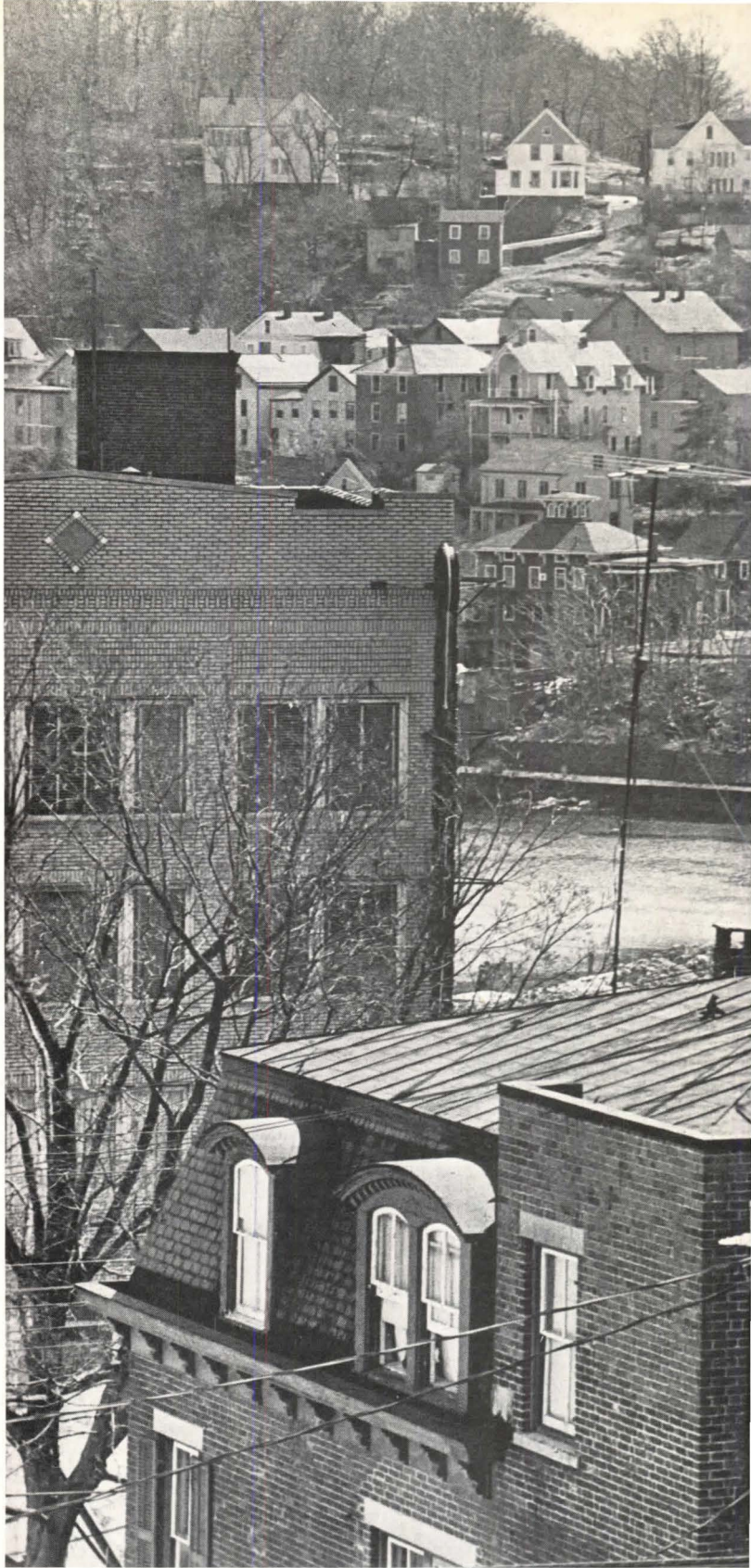
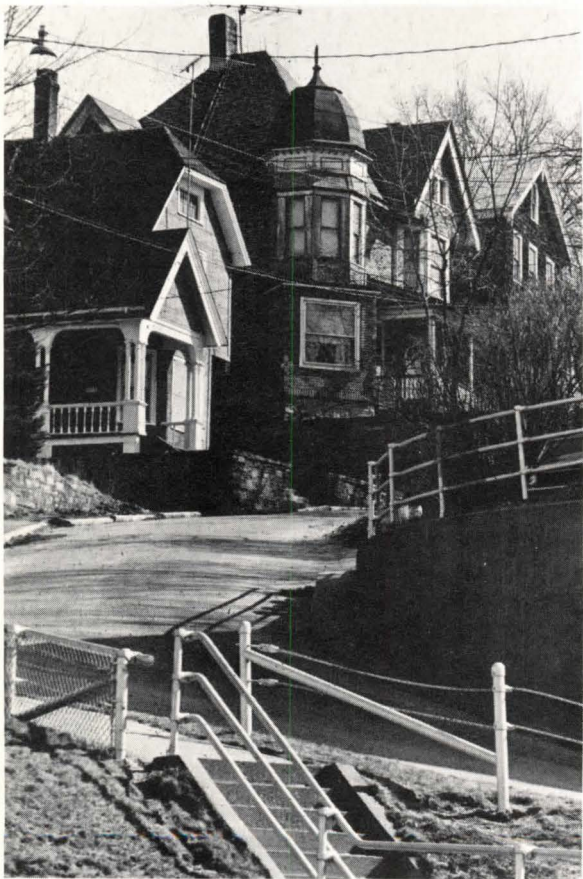


## Norwich, Conn.

Norwich, like Reading, is a city built on hills; but instead of railroad yards and locomotive repair shops, its valleys are filled with a series of fast-flowing streams that empty into the Thames estuary where downtown stands today. The city is very old; the earliest settlement dates from 1659. The old village green remains to this day up in the Norwichtown sector, surrounded by streets of fine colonial homes. This section of Norwich resembles a great many other New England towns.

The mill streams, however, proved too valuable a resource to allow the place to remain a colonial village for long. Between 1813 and 1816, four cotton mills, two woolen mills and a nail factory were built on the Yantic and Shetucket. Before the 19th century was over, a whole new downtown was built down on the Thames where the deeper draft ships could tie up. By the time the elaborate new town hall was completed in 1873 at the exorbitant cost of \$350,000, the city was a major manufacturing center for textiles, paper, nails, stoves and firearms. To this day, the affluence and exuberance of that era

*Beyond the Thames estuary, the houses of Norwich, Conn., ascend the hills in irregular patterns.*





is reflected in the ornate stonework of the buildings in the business district.

Rising above the downtown and the mills and factories of the river valleys are Norwich's neighborhoods, comprised of prosperous looking clapboard houses with pleasant gardens and ornate Victorian porches and trim. Oliver Wendell Holmes, in one of his less judicious opinions, described Norwich as "a town of supreme, audacious, Alpine loveliness. The hills are hardly Alpine, but the houses, yards and public gardens might justify the title of L.W. Bacon's 1896 book *Norwich: The Rose of New England*. To this day, a rose festival is held in June.

Bacon's description of Norwich at the end of the 19th century remains apt: "Happily for the beauty of Norwich, the diverse and numerous factories have for the most part disposed themselves along the streams in suburban villages or on side streets, without interfering with the sumptuous residence streets of the city or with the quaint and archaic beauty of the old town. This is not to be taken as implying that there is no beauty in the

factory. The magnificent properties of the Ponemah Mill at Taftville have a grace and dignity equal in their way to those of a cathedral." The pattern of segregated uses contrasts markedly with Reading, where the factories appear in the middle of neighborhoods. Industrial intrusions would be more disruptive among Norwich's detached homes than they are within the rhythmic repetition of Reading's rowhouses.

Whereas Reading's rowhouses march in straight lines like Hessian soldiers, Norwich's houses are more reminiscent of the Continentals, peering from behind rocks and trees all over the hillsides. The streets seem to wander randomly and the houses face in all directions. They are usually painted white and many are in very good condition for their age. One house that did not survive—the birthplace of Norwich's most famous son, Benedict Arnold—was declared haunted and demolished in 1853.

Perhaps the most impressive part of Norwich is Taftville, a small community northeast of the main part of town. There



*Below, Ponemah Mills and, left, houses built for their employees.*

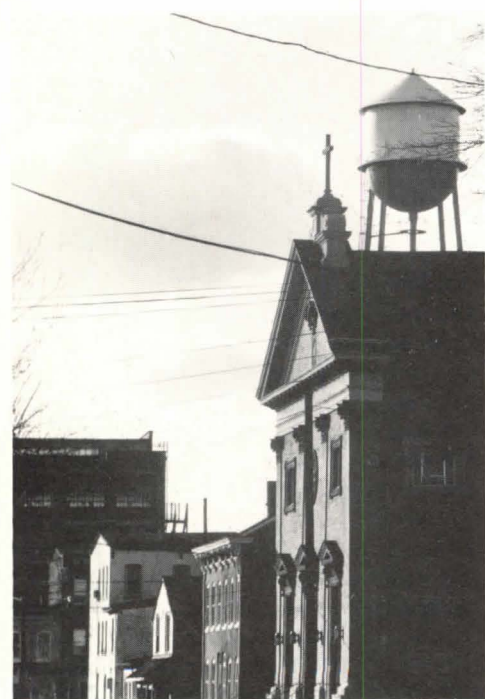
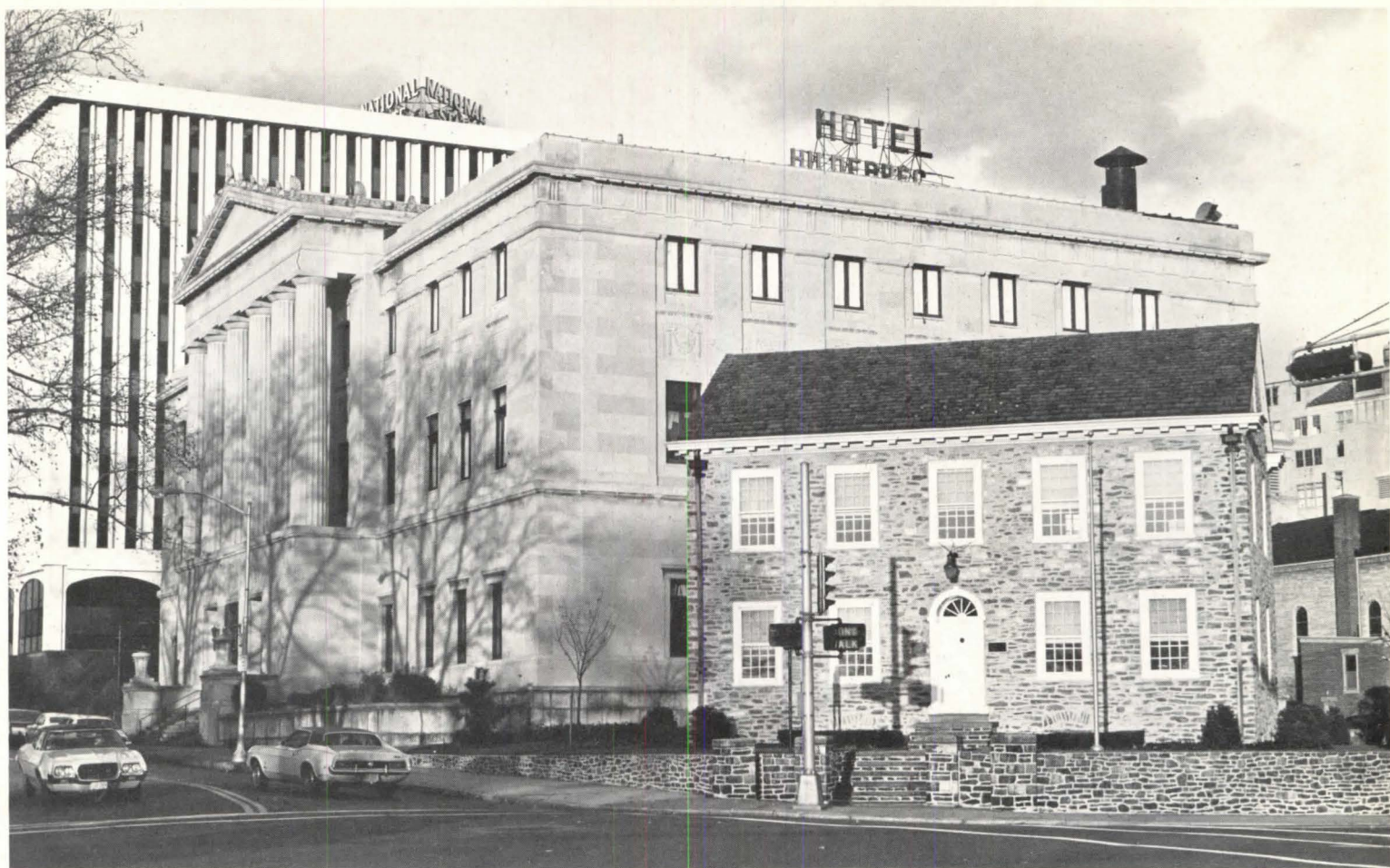


along the Shetucket, John F. Slater built the magnificent Ponemah Mill. The first building, completed in 1873, accommodated 1,500 looms to produce the finest fabrics. The complex of buildings, giving the impression of a castle along the Rhine, is still in manufacturing use.

Back from the river and the mills is the town, with two large mansard-roofed commercial buildings and several blocks of company houses—duplexes and multi-family clapboard structures that are an architectural experience in their own right. And rising up the hillsides behind these are large wooden houses with multiple porches that look out over the town, the mills and the river.

The charm of Norwich, in short, derives from its having unfashionably set off to one side its quaint New England origins and plunged into the 19th century. While a few pages from Norwichtown in picture-books of old New England homes may occupy the preservationists, those who look at Norwich as a city are drawn to the richness of that 19th century legacy.





## Trenton, N.J.

But for the intervention of a well-known land speculator in the early years of the Republic, Air Force One might today be home-based in Trenton. In October of 1783, Congress resolved to locate the national capital either on the Delaware near Trenton, or on the Potomac near Georgetown. George Washington, who with his friends had extensive land holdings on the east side of the Potomac, argued successfully that the unity of the Republic required the more southern location.

Trenton at that point was already well-established, having been founded in 1679 at "Ye ffalles of ye Da La Warr." In what must be one of American history's first recorded comments on floodplain management, the Indians dubbed the town Littleworth, in recognition of its dangerous adjacency to the river. But in the three centuries since, Trenton has survived not only floods but three revolutions as well—the American, the industrial and the bureaucratic. In the process, it has been the site of George Washington's famous Christmas night rout of the Hessians, a

center of early innovation in manufacturing, the producer of thousands of rubber and steel products used throughout the world and the seat of government for one of the most populous states.

Each of these has left its mark on the city. In contrast to Reading and Norwich, which attract because of their consistency and repetitive patterns, Trenton teases the eye with juxtapositions of different periods and different scales. When you turn the corner in Trenton, you cannot predict what will be there—a restored colonial mansion, an old factory or a highrise state office building—in fact, it may be all three.

There are buildings of colonial origin throughout the downtown area of Trenton, especially around the state capitol. Particularly noteworthy is the Old Barracks, the only remaining of five such installations erected in New Jersey at the time of the French and Indian War. There is also a small but expanding neighborhood of restored colonial homes on Jackson and Mercer Streets south of downtown.

Trenton was reluctant host to Colonel



*Above, the capitol dome rises above barracks built for the French and Indian War. Left, ornate rowhouses opposite the capitol. Acrosspage, center, Trenton clubhouses.*



Rall and his 4,000 Hessian troops during the winter of 1776; the town buzzed with conspiracies and everyone thought everyone else to be a spy for the Continentals. A legacy of that era is the secret societies and clubs that have ever since played a role in Trenton society, and still maintain ornate clubhouses. And a later era's legacy of that era is the ornate battle monument erected in 1891 at the site of Washington's victory. Today, the monument is surrounded by a confusion of intersecting radials, old railroad yards, tacky commercial and rundown residential that in an odd way make it more impressive than if it were set off forlornly in a park somewhere (*see cover*).

Industry came early to Trenton because the falls gave rise to both canals to skirt them and mills to use them. John Fitch developed his steamboat at Trenton 20 years before Fulton's *Cleremont*. Another early industrialist was Walter Scott Lenox, a producer of china and pottery whose quality control and sanitation practices set new standards for American manufactur-

ing. John A. Roebling was the first American to manufacture steel cable; the Brooklyn bridge and the bridge over Niagara Falls were suspended from cables made in Trenton. By the turn of the century, the city was a major producer of iron, steel, pottery and rubber goods.

Many of the industries have gone now, relocated in the suburbs or elsewhere. The headquarters for Roebling's steel works is now a county office building. The canals await efforts to restore them as parks and recreation areas. The working class neighborhoods are still there; many of the steelworkers now commute to the Fairless Hills works in nearby Pennsylvania. Chambersburg, a predominantly Italian neighborhood that backs up on the empty steel mills, is a particularly well-kept and attractive area of rows, duplexes and single homes with manicured side yards. It still retains the corner stores, the taverns and the restaurants that have been there for decades.

The loss of manufacturing jobs in Trenton has not brought economic stagnation;

the city has entered an era where the employment base is white collar. The gain in state employees has pretty well kept pace with the loss of industrial employment. Around the capitol and down State Street past old Victorian townhouses to the commercial center (yes, Trenton, too, has its pedestrian mall), the city looks prosperous and lively. But after work the parking lots around the glistening but somewhat gaudy new state office buildings empty out as everyone goes home to the suburbs.

In a very real sense, Trenton is today an example of the post-industrial society. The major challenge the city faces is making those who work in Trenton want to live in Trenton. The resources to do that are there—in the canals that could become parks, the factories and warehouses that could be adapted to new commercial and other uses and in the great variety of housing types that are still in good condition. Trenton is a city whose future lies in making good use of its potpourri of remnants and vestiges of all the things it has seen and been before. □



# Community Design Centers: Practicing 'Social Architecture'

During the mid-1960s, a new feeling of community consciousness took root in many low-income urban neighborhoods, to which some architects and planners responded with an increased sense of social responsibility. One result was the establishment of community design centers, whose purpose was to help the poor formulate and communicate their own plans for reshaping their neighborhoods.

The militant spirit for bringing about social change characteristic of the '60s may have abated. But as James Moyer, associate director of the District of Columbia's Washington Planning Workshop says, "There is today the same dedication but there's also a realization that you can accomplish more by working within the system, and that the highest priority is providing good services to the people." This is the predominant feeling that today keeps alive over 80 community design centers across the nation.

The first CDC was formed in 1964 when a group of architects, supported by the New York City chapter/AIA, founded the Architects Renewal Committee in Harlem (ARCH). Its purpose was to offer design and planning services that Harlem residents needed to combat construction of a proposed freeway and other unwanted "improvements" in the area.

Like other CDCs that were to follow, ARCH operated on the premise that communities should—and do—have a right to participate in the planning of their own future. In an effort to help low-income people define their own planning goals and effectively present them to city hall, ARCH and other CDCs became community advocacy groups, providing professional and technical support, including information, management know-how and design assistance. Speaking about the way design centers function, the acknowledged leader among CDC directors, Augustus Baxter of Philadelphia's Architects' Workshop, says: "The first thing you do on each project is the same: Shut up and listen. Once you begin to understand the client's needs, the design process begins. You try to interpret those rough ideas that you've heard into a finished graphic plan that can be presented before the people who can provide money to carry it out."

For the design professions, CDCs have become the equivalent of what legal aid is to the law and what community health centers are to medicine. In many ways design centers have benefited the architectural and planning professions as much as their community clients.

Of long-range advantage to professionals is the fact that CDCs have introduced low-income people to the practical benefits of good architecture and planning. "The centers can also introduce architects to a new method of practice that we can call 'social architecture,'" says Van Bruner AIA, a former Institute vice president and CDC pioneer and early supporter. Many professionals admit that they have become much more sensitive to user needs as a result of their CDC experiences. Of course, CDC work can also lead to architectural commissions and often does.

"For young architects fresh out of school," says Bruner, "community design centers can provide an alternative to being consigned to drawing toilet details. CDCs can furnish an opportunity to deal directly with real clients, real dollars and real life problems."

As a kind of design-oriented domestic Peace Corps, CDCs can also give young people some needed breathing space, a period of time to explore career alternatives and get first-hand work experience.

The nation's community design centers now provide, free of charge, a wide array of services. They range from helping individuals cope with the local red tape and economic problems of remodeling a house to creating plans and designs for developing an entire neighborhood; from designing a rural health clinic to recycling a city library. All the centers provide educational materials intended to make community members more knowledgeable about issues related to planning and community development.

At times, CDCs have even served as a design-oriented Red Cross in emergencies, as in 1972 when the Architects' Workshop of Philadelphia along with Pittsburgh's Architects' Workshop placed their services at the disposal of communities that had suffered flooding and other damage as a result of Hurricane Agnes.

Although concentrated in cities, CDCs have also sprung up in rural areas. And while most began as small volunteer organizations, the majority today are run by a core of paid staff. Boston's Urban Planning Aid, for instance, employs 26 persons from a variety of disciplines.

A common but mistaken view of community design centers is that they are minority-run operations with little continuity in personnel. In fact, 64 percent of CDC directors are white and many—







black and white alike—have been with their organizations for years. A characteristic of design centers is that they tend to revolve around a strong director whose association with the organization has been a long-standing and stable one. Some examples include CDCs in Albuquerque, Denver, Philadelphia, Lansing, Mich., Washington, D.C., San Francisco, Los Angeles, Tucson, Ariz., Raleigh, N.C., Pratt Institute and the University of Idaho.

Some 44 percent of design centers are university-based; 41 percent are affiliated with local AIA chapters, and a handful have associations with chapters of the American Institute of Planners, the American Society of Interior Designers or the American Society of Landscape Architects.

Altogether CDCs employ about 1,130 professional volunteers, 125 VISTAs (Volunteers in Service to America), about 90 UYAs (University Year for Action) and 400 students (some of whom may also be UYAs). There are, incidentally, almost no VISTA volunteers belonging to minority groups.

A serious threat to the immediate future of CDCs is posed by the government's apparent intention to withdraw VISTA volunteers from the design centers; other social causes, such as help for the aged, have for the moment taken precedence. But as Harold Glover, Institute director of community programs, points out, "The centers have always seemed to thrive in adversity." In all likelihood, VISTAs will be replaced by participants in the Comprehensive Employment and Training Act (CETA) program, which is in part a public service employment program in which CDCs can participate, and has attracted a larger number of experienced professionals than could VISTA. So harnessing CETA to design centers could benefit CDCs, while providing a source of employment for architects out of work.

Funding for CDCs comes from a variety of sources; the vast majority of centers ask no fees for their services. Total operating funds in 1974 came to \$1,735,031, with the federal government contributing \$815,300 (including VISTA grants), local governments \$176,340, state government \$242,826, universities

\$109,700, private foundations \$152,140 and miscellaneous (including in-kind contributions) \$157,250. AIA contributions came to a little over \$30,000.

Despite their many similarities, CDCs differ widely from one another. Each is a local product, reflecting local problems and priorities, and there is almost no communication between them, so most remain unaware of developments in other centers. Other variations among them are explained mainly by differences in levels and sources of funding; by whether they rely mainly on volunteers or have a paid



staff, and by whether or not they are affiliated with a college or university.

A look at four successful design centers gives some indication of the variety within the CDC movement.

Boston's Urban Planning Aid derives almost its entire—and relatively substantial—annual budget of \$240,000 from the Community Services Administration (the successor to OEO). UPA was established in 1966 to deal with problems created by proposed highway construction in the Boston area and was later chosen by the Office of Economic Opportunity, along with four other CDCs, for funding a model community design center. Since its beginnings, however, UPA has changed its emphasis and all but divorced itself from the architectural and planning activities that are the *raison d'être* for most CDCs. Its current director is trained primarily as an administrator and none of UPA's 26 staff members is an architect. The organization's work consists mainly of general neighborhood and community organizing, planning, training and education. UPA is also unusual among design centers in having chosen to remain free of university ties and affiliations, despite being in a city

whose major industry is higher education. It has vigorously guarded its autonomy and has had the money to do so.

ARCH in Harlem may have been the first CDC, but Philadelphia's Architects' Workshop served as the predominant model for subsequent centers. It was begun by the Philadelphia chapter/AIA in 1967 and is also affiliated with the University of Pennsylvania. The school pays part of the director's salary as well as providing the workshop with office space. (In turn, 18 undergraduates and four graduate students are now receiving credit for work being completed in conjunction with the workshop.) Unlike some CDCs that have university affiliation, it also maintains strong ties with various community organizations.

With an annual budget of approximately \$120,000, the workshop employs 10 full-time employees, 16 VISTAs and



draws from a very substantial pool of professional volunteers, among them architects, landscape architects, planners, lawyers and educators. Over the years, the organization has worked with the model cities program, urban renewal agencies, city planning and housing organizations and community action programs. There are nine satellite "mini-workshops" in communities throughout the Philadelphia area.

To a large extent, the workshop has derived its strength and direction from its

**'We must give to communities something that is of value professionally and technically, rather than just do-gooding.'**

longtime director, Augustus Baxter. Although Baxter's training has been in social work, he conceives of the workshop's mission as being first and foremost that of providing architectural and planning services. "What made CDCs so valuable," he says, "is that for the first time they made architectural services available to people who couldn't otherwise afford them and that's what they should continue concentrating on. We must give to communities something that is of value professionally and technically, rather than just do-gooding." The workshop is involved in numerous community planning projects, feasibility studies and creation of alternative plans to city and state proposals.

During its more than 10 years of operations, the Pratt Institute Center for Community and Environmental Development has kept the bulldozers from the doors of scores of New York residents. Recently, it saved the predominantly Eastern European northside neighborhood in Brooklyn from destruction. Earlier, the Center was involved in the establishment of the Bedford Stuyvesant Restoration Corporation, in which Robert Kennedy had been active. Although director Ron Schiffman has a staff of only eight, he has at his disposal 30 to 40 Pratt students each year, as well as Pratt faculty members. On one thing he is adamant: "We don't ever use the community as a laboratory for students. Our primary function is to give technical assistance to communities." Pratt is committed to the center and provides space, administrative expenses, the salaries of participating faculty members and deficit financing. The Pratt center also receives public and foundation support.

Ron Wells, director of the University of Idaho's Community Development Center, explains that "our motivation and values are the same as other CDCs, but we have little else in common with the others." While most CDCs are based in a city, Idaho's CDC works primarily on rural projects and operates throughout the state, "hopping from place to place with no long-term commitment in any community." Unlike urban areas in which most CDCs operate, "there are no real identifiably low-income communities in Idaho," he says. *Idaho's Community De-*



velopment Center operates with two full-time professionals, five VISTA volunteers and approximately 35 UYAs. This CDC and North Carolina's Community Development Group are the only U.S. design centers whose work is mainly confined to rural areas.

When asked "what is the main problem of your center?" almost all CDC directors answer "getting funds."

The most viable types of community design centers have been those that have ties with a university and/or are affiliated with and utilize local publicly funded programs for prime support, programs such as the Community Action Program, Neighborhood Legal Services, Model Cities (and its successors) and housing and urban renewal programs.

The least workable type of design center has been the community-based model, which is located in, operated and staffed primarily by community people rather than professional volunteers or other outsiders. Most of these have either gone out of existence or been replaced by satellite centers connected with a parent CDC.

Monies from private foundations have fallen off sharply. And although the level of overall funding has remained relatively stable, the sources for funds are constantly shifting, as one federal program replaces another and guidelines for obtaining grants change unaccountably. The argument for direct funding by the federal government was set forth as follows for the House and Senate subcommittees on

labor-health, education and welfare by Charles H. Kahn, AIA, chairman of the Institute's community development committee: "Unfortunately, there is no alternative to federal funding. Revenue-sharing is not a satisfactory source for community design center operating funds for several important reasons. Because design centers operate in widely different geographic areas and not necessarily within one municipality or city, there is often a conflict of interest between projects undertaken by a center in more than one local governmental jurisdiction and projects funded through revenue-sharing in only one jurisdiction. In Los Angeles, for example, there are 78 municipalities within the corporate city limits. Community design centers cannot afford the administrative apparatus necessary to obtain revenue-sharing funds from each municipality."

The relationship between CDCs and AIA has not been without conflict. As James Moyers, of the Washington (D.C.) Planning Workshop says: "At the start, AIA provided CDCs with a home, but their popularity wore off." Some AIA members oppose supporting CDCs on the grounds that they can siphon off work from private practitioners. AIA Vice President Robert Wilson feels that the Institute should stay involved with CDCs if for no other reason than to make sure they do not compete for architectural contracts. Wilson adds that CDCs have produced jobs for architects, himself among them. Remarks T. Michael Smith, director

of Denver's Community Design Center, "Most centers are scrupulous about not doing work for clients who are able to pay a fee. In 1973, AIA issued guidelines for CDCs, and some design centers, considering them restrictive, broke away as a result."

Van Bruner says that the spats between AIA and the centers "are largely a reflection of differences between the establishment and young interns." During the last couple of years, says Glover, AIA has given CDCs less direction than before, "feeling that it can assist in ongoing programs, but shouldn't tell CDCs, especially new ones, what to do. There is a need, however, for greater communications, which AIA can help to provide."

A problem faced by some CDCs is that nonprofessional community people sometimes try to tell architects how to ply their trade, while architects sometimes try to tell community people "how they should live," says Bruner. His solution is one that has been adopted by many centers: "Keep the draftsmen doing the drawing and the social workers dealing with the community." Gray Smith, former architectural director of the Philadelphia Workshop, adds that "students shouldn't speak for the people. In fact, very few noncommunity people have much credibility in the community. As time has passed, we've learned to concentrate on being educators instead of spokesmen."

Changes in personnel who deal with communities and their problems can pose severe difficulties, especially among centers that rely heavily on volunteers and students. Most older design centers have worked out a system similar to the one used by Smith in Denver. He assigns VISTAs, who usually are assigned to a CDC for a year's time, to projects headed by a permanent staff member. Students, whose stay is often still shorter than that of VISTAs, have both permanent staff people and VISTAs backing them up and following up on their work. Similarly, because students often make assumptions about the community which are incorrect, they are not let loose before a staff member prepares them and prepares the way for them.

Many CDCs are caught in a conflict of

being at once fearful of relinquishing their independence by affiliating with a university, AIA component or some other group, while knowing that such ties could be of measurable help to them in financial and other ways. As Annette Anderson of the East Tennessee Community Design Center puts it, "Money has strings attached; how do you keep the strings from strangling?" Denver's Smith responds that "in a democracy every organization has to be held accountable. You're never free of strings. If we're going to hustle bucks, we're going to have to accept strings." He contends that the predominant attitude of universities has been one of "let's discuss it" rather than being authoritarian. There can, however, be some financial handicap to university affiliation, since as much as 33 percent (off the top) of most grants given to university-affiliated CDCs is passed on directly to the parent institution.

Most other problems of community design centers are the result of growing pains. East Tennessee's Anderson raises a problem common to CDCs when she says, "We have reached a point where we have to expand or cut back on projects, and we don't know whether to maintain ourselves as a low profile, low budget, volunteer operation or to change our posture and become a well-staffed service agency." Her own feeling is that once a CDC has a visible and permanent staff, volunteers will lose their motivation to contribute, and she claims that only volunteers can generate the enthusiasm needed to fuel CDCs. "By the time you've done your fourth health clinic as a regular staff member, the kick can be gone," she says.

The more common feeling among CDC staff members, however, is that a well-organized, stable, paid staff is vital for providing reliable services. "You have to have people managing things on a permanent basis," says Philadelphia's Baxter. "You can't build up people's hopes and then just let them drop; you can't exist one year and then disappear the next. What we should concentrate on is providing dependable design and planning services. We can't be all things to all people, and there are already too many general do-gooder organizations around."

A.O.D.



# Applying the Case Method To Architectural Management

Douglas E. Durand

The case method is a time-proven learning device used to develop analytical and business skills. The following case problem serves as a pilot effort to help architects develop their managerial skills more fully. To use the case method, the reader is asked to analyze a situation, designate the major problems faced by the persons in the case and then recommend specific solutions.

Throughout, the focus is on concrete problems. However, the major purpose of the case is *not* to provide specific answers to the problems uncovered in the case; nor is it the major purpose of the case to convey new information (though this could be a useful by-product of the process). Rather, the purpose is broader: to provide a means for readers to increase their own analytical and decision-making skills. It is rare that a *single* correct solution or approach exists for a case problem, but generally certain alternatives have more to recommend them than others.

The case which follows should be read and analyzed to determine both the major and minor problems facing Henry Watkins and Albert Crawford. Following identification of problems facing these partners, the reader should assume the role of a consultant and formulate specific recommendations as to what Henry and Albert should do next. Ask yourself: (1) What are the most important short-term and long-term problems in this situation? and (2) what practical recommendations would you make to deal with these problems? The case follows:

Henry Watkins strolled into the office where his partner, Albert Crawford, was waiting. "Henry, I thought we had a meeting scheduled this morning at 10:00 on the Boone Junior High School. Where have you been anyway?" asked Albert in a tone of voice that indicated both frustration and irritation at Henry's half-hour tardiness. He continued without giving Henry a chance to answer, "Well, no matter, I've got some more bad news today. Last night, my friend Joe Pickard (a school board member) called and told me that two more firms had indicated interest in that expansion of the senior high school. That makes 13 firms competing on that job! There's even a firm from Denver in the running. Can you believe it? Do you think it's worth our time to develop a presentation?"

Henry slowly sat down as Albert spoke. He leaned back a bit in his chair and looked surprised, "Why shouldn't we be number 14? Give a reason why not. After all, this firm has had 15 years of experience in school building design, and we have a solid reputation in this community in that regard." With a somewhat strained grin he added, "Besides, now that we have cleaned up all our files, redone our brochure and almost completed Boone Junior High, what else besides that small renovation do we have to occupy our time?"

"Let me get a cup of coffee, and let's talk about this some more. There are several decisions I think we must make," responded Albert.

**Dr. Durand** is assistant professor of management organizational behavior at the University of Missouri in St. Louis. His case study was initiated by a task force of AIA's office practice committee as part of its continuing search for new means of disseminating business management information to architects.

The firm of Watkins, Crawford & Associates is a new partnership in which one of the principals (Henry) has had over two decades of architectural experience. When Henry Watkins' former partner and schoolmate, Ernest Hodge, died unexpectedly of heart disease 10 months ago, Albert Crawford joined Henry as a partner. At the time, Albert had been an employee of the firm for a little more than one year. Watkins wanted and needed a partner, and he had been very positively impressed with Crawford's design talent. As a result, he proposed the partnership to Crawford, and Albert accepted.

Henry Watkins is 54 years old and has had 27 years experience in independent practice. He is a seasoned, practical and friendly man who has developed many personal contacts over the years. Although he does not consider himself a socialite, he belongs to three local service clubs and the most exclusive country club in the area, and he is active in his church. He has carefully developed a local reputation of being concerned about civic matters, such as the Red Cross, United Fund and a local repertory theater. Henry feels that over the years these activities have provided him access to many persons who later became clients. Thus, he justified his substantial attention to cultural and community affairs as a necessary part of his business.

Henry's major concern in the firm is to obtain work; relatively speaking, he is less interested in good design. His general attitude is well summarized by one of his favorite statements to Albert that "you can't even do *bad* design without a client." Even so, Henry has to admit to himself that while he feels Albert is frequently too impractical, he often is inspired by his new partner's idealism and enthusiasm.

Albert Crawford is 31 years old. After completing college and before his association with Henry, Albert spent three years working in a 20-person firm; he found that experience to be somewhat inhibiting. During his last year at the first firm, he decided to look for another opportunity—a small firm in which he had a good chance to become a principal.

As things turned out, he was a little surprised at how quickly these earlier dreams became a reality. When Henry offered him the chance to become a partner, Albert was ready to accept. Albert had always been eager to learn and to take on new responsibilities.

In addition to his keen interest and high energy level, Albert is intensely professional and idealistic. He is deeply committed to providing truly good design work. He and Henry have some of their biggest disagreements between what Albert considers to be preferred design requirements and what Henry feels are the practical demands and limitations of the project.

Watkins, Crawford & Associates is located in a Midwestern city of 225,000 people. Like many towns, the city and the surrounding area experienced steady economic and population growth during the '60s, but the recent recession has virtually stopped all economic growth. With the slowdown in the local economy, regional architectural firms have become increasingly competitive over the limited work available.

The office consists of one substantially sized room in an older building near the city's central business district. Though the

## Introducing the saga of Henry and Albert. 'The reader is asked to analyze the situation, identify problems and recommend solutions.'



*Henry leaned back a bit in his chair and looked at Albert in surprise.*

desks and fluorescent lighting are quite old and the "offices" consist of partitions secured to the floor, everything is functioning and adequate. Two years ago, the partners signed a five-year lease on these quarters.

The office staff includes three other persons. Sarah Watkins, Henry's wife, acts as the secretary, bookkeeper, filing clerk and general office manager. Steve Montgomery is a competent draftsman with 10 years experience; he has worked for the firm for seven years. Joe Wipke serves as Steve's assistant and is hoping to gain enough experience in the business to help him obtain a job with a growing firm when he completes his education; Joe is working during the current year to help earn enough money to return to school next term.

The two partners, because of their varying interests, experience and abilities, have focused their efforts on different aspects of the firm's work needs. Henry's outgoing personality and experience has caused him to designate himself as the "outside" man. He takes the major responsibility for making contacts, presentations, contract administration, etc. Though he performs some design work, his interaction with clients, contractors and engineers (particularly as a trouble-shooter and problem-solver) occupies most of his time.

While at the office, where he spends about 40 percent of his time, Henry occupies himself with cursory reviews of the work that has been done in his absence. In a typical review, he spends five to 10 minutes being told by Albert, Steve and occasionally Joe what new changes or approaches have been developed for a particular project. Henry tries to use this opportunity to help Steve and Joe develop their professional abilities and value to the firm by asking detailed questions and making critical appraisals of their work.

In addition, Henry supervises Sarah's accounting, filing and record-keeping. A recent incident indicated to him that possibly more attention should be devoted to this area. While cleaning out the files for a completed project, Sarah found a time sheet in Ernest Hodge's handwriting which represented \$647.75 in professional services for changes made in the original drawings for a client. A note in the margin of the time sheet indicated that Hodge had never submitted the bill to the client. The client, a local doctor, had engaged the firm to design a very expensive new home; Hodge had felt uneasy about submitting the bill for these "extras" because the doctor had made it clear that he considered the added work to be a part of the original fee. Sarah's reaction was emphatic. She immediately prepared a statement for the total amount and mailed it to the doctor; a check for the full amount was received by return mail. Henry was proud of Sarah for her action, especially since he had feelings of apprehension at submitting such a bill 13 months after the home was completed. After getting Albert's agreement, he decided to share one third of the proceeds with Sarah as a "bonus."

Albert's duties in the partnership center mainly on design work. He is responsible for initiating most of the design efforts of the firm plus supervising all phases of document production. These responsibilities require substantial amounts of time in the office; in contrast to Henry, Albert is in the office approximately 90 percent of the time.

Since Albert's responsibilities cause him to spend many working hours with Steve, Joe and Sarah, he has made a conscious, and largely successful, effort to suppress any negative comments or outbursts which stem from his impatient nature and drive for perfection. There are times, however, when he erupts into what Steve labels "a minor explosion." These incidents seem to occur just after Albert spends long hours working over a particularly difficult problem in an attempt to get the design "just right." In general, Albert feels that any resentment or strained feelings resulting from these "disagreements" will resolve themselves in time.

Finally, Albert recognizes that he needs to develop his ability to deal with clients, but he usually finds himself telling Henry that "I know I need to be able to make contacts and conduct a first-rate presentation, but it just seems like there's never enough time to do everything." Upon hearing this, Henry always nods his head in a noncommittal fashion, but often he wonders whether or not Albert is just rationalizing.

The partners' meeting: "O.K., Albert, it's almost 10:45. I've got an appointment at 11:30 with Bill Norris for lunch to talk about this year's March of Dimes drive, so shoot." Henry continued, "What's the problem at Boone Junior High now?"

"It's that rooftop greenhouse again. The roof surrounding it still leaks after three correcting repairs. I've suggested everything I know to the contractor, but nothing seems to work," replied Albert.

"We should never have agreed to those substitute materials. I would hate to think how much time we've spent just trying to get the bugs out—let alone redesigning it to incorporate the substituted material in the first place. This is the kind of change that

just eats you alive, Albert. By the way, how much time *have* you spent on that greenhouse anyway?"

"I don't know, Henry. I'm afraid to add it up. But you can bet I've learned my lesson about changing materials just because the contractor thinks he's got a better idea. I wish you would take a *careful* look at it though and help straighten this out once and for all." Albert's irritation and frustration were evident as he spoke.

Henry tried to reassure his partner: "I'll go out there and look it over with the contractor after lunch. You can leave this one to me. O.K.?" But he could not keep from taking a little jab at Albert, "Next time, you've just got to do a better job of researching the effects of changes like this. Also, we've got to consult more with the client—and don't forget to keep track of your time so Sarah can bill it."

"O.K.," Albert conceded. "But you have to admit that the greenhouse has been improved 100 percent." Henry had to agree, but he also reminded himself that Albert's working and reworking of that aspect of the project had caused such delays that it almost prevented the September opening of the school; it was the last part of the project to be completed.

"Albert, what's this you heard about the new high school addition? Did your school board friend say whether the board had made an informal decision yet—does anyone have an inside track on this thing?"

"No, they are just being pressured by 13 firms for the opportunity to make a presentation. Henry, it seems like things must really be tight for a 75-man firm, like that one from Denver, to be interested in such a small contract."

"It's not the intense competition that I mind, it's sacrificing our fee that just tears me up. It seems like this kind of fee discussion always comes up when there is so much interest in a job. Who can survive if you have to give away services in order to get the project?"

"It sounds to me, Henry, like we had better reorient our marketing efforts or think about other types of building. With the moratorium on building new schools around here, we're going to be limited to renovations of the ones you designed years ago." Albert continued without a pause, "I know it's not quite that bad, at least yet. But what *do* you think we should do?"

"Well, Albert," said Henry in one of his most serious, yet fatherly, tones, "in the short run, I'm going to try to impress that school board with our experience, and the advantage of having a local architect. In addition, I'm going to identify how we have saved them money in the past. And I'll try to make it clear to them that we are as up to date as anyone. I'll hit them with terms like 'construction management' and 'phased construction.' I'll tell them we can cut time off this project and save everyone money."

"But this will mean that you're going to have to get the drawings off the board on time for once, Albert. It will require discipline and organization on our part. I hope you can do it. And as far as the long run is concerned, I don't think we have time to get into that now. Maybe we can spend some time on it later when I get back from the junior high."

**Case Problem Analyses:** Representatives from five architec-

tural firms (Anselevicius, Rupe, Associates; The Hoffman Partnership; Milton D. Petrides & Associates; Smith, Entzeroth, Inc.; The Architects Collaborative [TAC]) analyzed the above case and made specific recommendations for Henry and Albert. The style, focus and length of the analyses varied substantially. As a result, I have condensed below their major points and provided what I feel to be the more significant portions of their comments.

The emphasis of most of the responses to the Watkins, Crawford & Associates case tended to be in two major areas: 1) the problems associated with the personalities and personal needs of Henry and Albert and 2) the partnership's operating problems (e.g., marketing plan, financial control, scheduling, etc.).

From one architect came this response, which summarizes most of the comments about the personalities of the principals: "There is an evident lack of compatibility between Watkins and Crawford. While partners should be complementary, there seems to be an emotional barrier separating these two. The firm seems too small for such rigid departmentalization as is practiced here. Watkins should spend more time with design and production, and Crawford should spend more time understanding clients and learning about construction. I personally cannot accept a 'sales' oriented architect or an 'ivory tower' designer."

"Henry Watkins seems more interested in selling himself than in selling good design. And though Albert Crawford is described as deeply committed to providing truly good design, I doubt that this is true. To really design, one must understand clients, construction and the whole spectrum of the building industry. Crawford seems to me to be a paper designer."

A second person saw the problem in a different light: "It appears that almost all decisions ultimately revert to the senior partner. Since the senior partner has selected a bright young junior partner to fulfill those areas of responsibility he is not interested in, logic would indicate that he should give some authority in these areas to the junior partner. He always seems to hold a string on the junior partner. Henry, as senior partner, has also retained control of the business, but he honestly has not attended to details. He has not provided the routine checks of trouble spots to prevent problems regardless of whether they occur in the billing procedures or in a leaking greenhouse."

Regarding operating problems, the following comments were relevant: "Henry and Albert *together* should set goals for themselves and for the firm. They should concentrate on time/efficiency goals. Habits develop out of personal preference and a lack of discipline—projects, clients, civic organizations, etc., control an architect's time rather than the reverse. Henry probably spends so much 'community time' because he likes it, not because it's needed. Albert needs to produce on schedule rather than always run late."

"Proper delegation of work should be made at the start and followed continuously throughout any project. Man hours that are available can dictate whether a project can be produced. Indirect expenses and direct expenses must be evaluated for better production output."

"A partner's wife as secretary-bookkeeper is usually not a

## Prepublication analysis of the case: 'An evident lack of compatibility' between Henry and Albert, and a need for common goals.



*"How much time have you spent on that greenhouse anyway, Albert?"*

good solution if for no other reason than impartial criticism of performance is nearly impossible."

"Few building owners can resist a bargain buy in anything, including professional services, unless they truly understand the dangers of short cuts. Henry and Albert should develop a system of reporting to their clients the work they are doing. Regularly impressing them with the extent of the service will help head off unfair price competition. Meanwhile, they should develop ways of 'packaging' their services by making certain types of work 'extra' or 'additional' so that owners looking for a bargain may feel they are getting one."

"Partners should have regularly scheduled appointments to discuss business and business development matters together."

"The principals should ask themselves: 'What is our work load? Can we handle a new job? Do we need a new job to keep the staff busy? Will we compete with competitors on skill level or in cost of services? In considering a new project, how will it affect our overall firm's objectives?'"

A more minor problem was noted by several respondents: "Merely adequate space accommodations may not foster the best work environment. Also, it probably does not provide good public relations with clients." It should be pointed out that this problem must be balanced against the current need of the firm to keep its costs at a minimum.

The following analysis has been condensed from a response to the case by the management consulting firm of Coxe Associates, Inc.: "Henry and Albert disagree sharply over what the firm's product—distinctive design vs. pragmatism—should be. This basic disagreement, before all other difficulties, is their major problem. This conflict prevents them from focusing on the

day-to-day operational concerns which must be solved for the practice to be restored to good health.

"Nevertheless, certain short-term operational issues must be dealt with immediately. First, the partners must work together to win the senior high expansion project.

"Second, the greenhouse must be fixed, especially since the owner is the same school board that will award the senior high commission. Albert has exhausted his remedies and Henry—the 'trouble-shooter'—must get involved.

"While they are no less serious, other operational problems can be treated over a longer time frame. Specifically:

"The firm has no management controls for either its projects or the organization. The firm needs a financial information system to collect, record and report data on each project's status (earned vs. spent), staff utilization and on the overall performance goals. No organized system for project quality control or for project and personnel scheduling exists.

"The firm's current lack of work reflects the absence of an organized marketing effort. The firm needs a marketing plan that specifies target markets, the number of commissions needed, how leads will be developed, the time frame, and who will accomplish each marketing task.

"To determine how to go forward, Henry and Albert must discuss the following issues freely and candidly: (1) What each wants the firm's product to be; (2) what role each is willing and able to play in pursuing that goal, and (3) how they could work together and support each other in their respective roles.

"The available evidence suggests that Albert is not the right partner for Henry today nor is he suited to becoming his successor. Albert was a convenient way to fill Henry's need for a partner—but he is not filling what Henry has needed in *his* partner. Henry apparently does not have the knowledge, the inclination or the ability to train Albert in the necessary skills. Albert has not shown any interest in acquiring these skills, or in resolving the interpersonal conflicts that impair staff morale and effectiveness. If Henry and Albert decide they cannot work together, it is clear that they should separate.

"Henry will still need someone to fill the role Hodge played, which apparently had complemented Henry in a way that had made the practice viable before Hodge's death. It is unlikely Henry could hire and train someone to fill that role; his interest and ability for doing so are insufficient. An alternative would be for Henry to join forces with another small local practice whose owner possesses sufficient management skills to both organize the firm's delivery process and control systems and to help Henry structure his marketing efforts.

"In summary, no professional practice can expect to succeed unless its principals are all committed to a common goal. If they continue as they are, it may be an association of architects, but cannot hope to become a viable professional organization." □

*Editor's note: Readers are invited to submit their own analyses of the problems contained in the case and suggest possible solutions for publication in a future issue of the JOURNAL with additional comments by Dr. Durand.*

# Professionals And Political Contributions

F. Carter Williams, FAIA

Designers of public works in certain geographic areas and some states are confronted with established patronage systems for the award of commissions. Some government agencies have functioned as payoff pipelines for blatantly exacted kickbacks of a precise percentage of professional fees to the party in power. The need or greed of the party treasury has determined the amount exacted.

In some instances, the public, appearing powerless though aware, has accepted the partial evidence and condemned as corrupt all professionals who participate in public work. Some competent professionals do not seek or accept public work because of the universal condemnation.

Participation in our democratic processes of government is a laudable activity. Even a person of unsophisticated conscience, however, can recognize the bounds of acceptable and reasonable ethical standards.

Since the Agnew-Nixon-Watergate storms, a clearing of the atmosphere has brought the need for ethical standards into sharper focus. Old laws are being newly applied and new ones are being tested.

The Congress has finally adopted, and appeal courts have upheld, a law limiting contributions and campaign expenses in federal elections. This support by judicial

**Mr. Williams** was the first chairman of the AIA national inquiry committee.

process appears to recognize "compelling governmental interest, both as to need and public perception of need" (U.S. Court of Appeals, District of Columbia).

The states are also taking action. Maryland has adopted new selection procedures after considerable study and effort, and the state of Louisiana has enacted into law a selection board process for award of commissions for professional services on public works. The criteria are competence and performance, not competence and pay back.

Ethical and legal violations of the past are being adjudicated and punished. Prosecuting attorneys for state and federal governments are in pursuit of abuses of the public trust. Professional organizations are cooperating and seeking their remedies for offenses against ethical standards.

It is increasingly apparent that political contributions, especially large or excessive ones, can be considered kickbacks or bribery. The Federal Election Campaign Act amendments of 1974 set forth specific monetary limits for contributions that an individual can make to "any candidate with respect to any election for federal office" (aggregate cannot exceed \$1,000); that a political committee can make to any candidate for federal office (\$5,000), and prohibits individuals from making contributions aggregating more than \$25,000 in any calendar year. According to the act, forced donations, ticket purchases, excessive entertainment and expense paying for candidates can be considered bribery or extortion.

There are two sections of the Federal Corrupt Practices Act (Title 18 U.S.C. Sections 610 and 611), originally enacted in 1925 and added to and amended in 1940 and 1972, which have become painfully familiar to a number of people, including architects and especially those

under contract with the federal government (Section 611). Laws concerning corporate contributions to political campaigns have been on the books for a long time, but violations had not come to public attention until Congress, together with the Office of Special Prosecutor, recently decided to pursue them vigorously. (First conviction, May 1, 1974, against Northrop Corp.—under Section 611.) There had been prosecutions under Section 610 prior to 1974, although a decision in 1972 upheld the constitutionality of this portion of the act in a case involving the United Mine Workers Union.

Fines have been large and there have been prison sentences. Plea bargaining, involving the reduction of the number of counts, has resulted in fines for a one violation plea. Both felony and misdemeanor convictions have been concluded.

In simple terms, paragraph 610 prohibits a corporate contribution for political purposes, but certain provisions make it possible for a separate voluntary contribution fund to be administered for political giving. Also, individuals who are members of a corporation that may be covered as a "contractor" under 611, and thereby prevented from any contribution to federal campaigns, can make private nontax-deductible contributions as individuals. The Federal Elections Campaign Act amendments of 1974 added a provision to 611, similar to the provision already existing in 610, which permits a corporation to establish, administer and solicit voluntary political contributions by its shareholders and their families to a "separate segregated fund." The 1974 act also created the Federal Elections Commission to be responsible for the promulgation of rules and regulations governing the extent of permissible activities of corporations in the establishment, administration and solicitation of contributions to any separate segregated fund.

Until such guidelines are issued, however, the extent of permitted activity is unclear. Considering the complexities and the constantly changing interpretations, the seeking of competent legal advice from an attorney appears very appropriate.



## 'Old laws are being newly applied and new ones tested.'

Individuals who are members of a corporation can make private contributions subject to monetary limits allowed under the Federal Elections Act. Such contributions are deductible by the individual only to the extent of one-half of the contributions and not more than \$12.50 (\$25 on a joint return) as a credit against the tax as an itemized deduction of \$50 (\$100 on a joint return).

Individuals or partners of a noncorporate firm that is under contract, and thereby covered under paragraph 611, would not be allowed to make such a contribution even with a separate fund device permissible under paragraphs 610 and 611.

Explicitly, any firm under contract to the federal government is vulnerable to prosecution for violations. The U.S. special prosecutor has indicated that he intends to pursue some on a large list of firms that made contributions to the Nixon re-election campaign of 1972.

Another paragraph in both 610 and 611 states that those who knowingly seek contributions from individuals who are covered under these acts are themselves liable in the same manner as those who make the contributions. Therefore, not only those under contract with the federal government but campaign workers who are representatives of political office seekers could be liable.

The Federal Elections Campaign Act amendments of 1974 also increase the penalties under Section 610 and 611. The change substituted the amount of \$25,000 where the fine had previously been only \$5,000 and \$50,000 where it had been \$10,000. Section 614 prohibits a person from making contributions in the name of another or knowingly permitting his name to be used to effect such a contribution.

The definition of "contribution" has also been clarified under the 1974 act. It defines the term "contribution" as a "gift, subscription, loan, advance, or deposit of money or anything of value . . ." but

does not include the value of services provided by volunteers who are not compensated.

Pertinent here is the standard of ethical practice, number eight, from The American Institute of Architects Document 1330, which reads in part:

"An architect may make contributions of service or anything of value to those endeavors which he deems worthy. An architect has the right to participate in the political process and to contribute time and money to political campaigns.

"An architect shall not, however, contribute or promise to contribute either directly or indirectly, any gift, compensation, or other consideration of value in order to retain present work or employment, to obtain future work or employment, or to reward anyone for the award of past work or employment. He shall not exert improper influence in obtaining professional work or employment or with respect to his activities in the construction industry. The term 'improper influence' means influence, direct or indirect, which induces or tends to induce consideration or action with respect to any prospective work on any basis other than the merits of the matter.

"An architect, in making a political contribution, shall do so publicly, in his own name and as an individual citizen."

In March 1974, the AIA board of directors adopted a resolution strongly supporting federal legislation on campaign finance reform. It recommended:

- Strict limits on the size of private contributions.
- An overall limit on the amount that candidates may spend.
- Provision for candidates in primaries to obtain public funds to match small private contributions.
- Provision for candidates in the general election to get public funds under an objective nonpartisan formula.
- A severe limitation on organized giving by special interests.
- Preservation of a role for political parties in giving financial aid to candidates.
- Creation of an independent oversight and enforcement agency to ensure strict compliance with campaign financing laws.

- Disclosure of all political contributions, at all levels of government, by both contributors and recipients.

In May 1974, the national inquiry committee of AIA was formed and positive steps were taken to implement the recommended actions. (In March 1975, the board authorized a method providing immunity from disciplinary proceedings by legal prosecutors when warranted.) The committee was established as a permanent part of the Institute and, to help ensure its objectivity, was permitted a certain amount of independence.

Investigations by the national inquiry committee have resulted in appropriate conclusions involving ethical and legal violations which have occurred in the past. Although the number of reported instances has been relatively small—less than 30—all have received adequate attention and numerous actions have been taken or are pending throughout the country in several states. As the results of corrective actions for illegal or unethical contributions become more widely publicized, potential violators will be warned and, it is hoped, discouraged.

We hold that where private enterprise and government are dedicated to the good of all the people, bribery and extortion are indefensible no matter what the rationale or means. We also believe that our country and profession have a better future as a result of a renewed concern and dedication to fundamental principles of honor and integrity. □

# How a California Firm 'Grew Up' With the Computer

Beverly Willis, AIA

As a five-person firm, we began our involvement with the computer five years ago. We give this involvement a lot of credit for helping us to grow into the 35-person firm we are today.

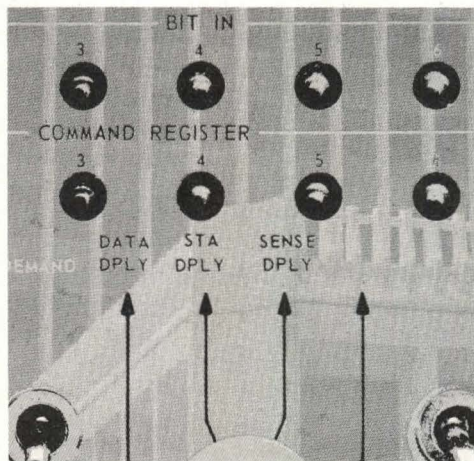
Against the advice of almost everybody, we decided to apply computer aids to our architectural and planning processes to solve our own problems and those of our clients. Our clients needed not only good design, but also an economical architectural management system that could handle construction cost problems and such details of project management as budgeting and construction scheduling. We needed cost and time effective design, a less expensive way of dealing with the overwhelming amount of data we were evaluating and a more effective way of handling in-house communications. In short, we needed a management system that would help us to meet fee budgets and time schedules and free creative professionals from repetitious, boring work.

Fortunately, even prior to our infatuation with the computer, we realized that to improve our productivity we should develop a specialty. We soon learned that having repetitious work, as is involved in specializing, is the first step in making the computer cost effective. The specialty we chose was large-scale housing and environmental land planning, a field in which there is abundant repetitious work. It was a relatively new field for architects, and no major firms had yet cornered the market. Environmental legislation and new planning concepts had brought a complexity to the subject which we felt required computer applications, yet it was a field that remained largely untouched by computer aids.

The programming concepts involved in land planning are enormously complex and relate to a wide range of physical, biotic, social and economic concepts. Therefore, we chose this area to begin our application of computer aids.

We were most fortunate in obtaining the help, on a consulting basis, of Eric Teicholz, currently associate director of the Harvard Computer Laboratory. In

**Ms. Willis** is president of Willis & Associates, Inc., of San Francisco.



conjunction with Clifford Stewart and Kaiman Lee, he had developed CAPS, a directory of all known computer programs in the United States that are applicable to our profession. He insisted that our first step be to define, on a step by step basis, how we worked on projects in our office.

That was a traumatic experience. We found that none of us—and we had worked together for a number of years—agreed on how we actually accomplished our work. Architects learn their skills intuitively and there is no book that defines how you systematically reproduce a design and a set of working drawings. This process of definition took the better part of a year; it caused tempers to flare, generated hours of debate, and sometimes made the office seem like an encounter group.

We have since learned that, despite those many hours of intense analysis and debate, our ability to describe what we actually do is only 10 to 25 percent accurate. And since that time, we have learned to minimize the discussion time and quickly get a concept in operation, test it in the office and monitor it in order to define, under controlled conditions, what it is we actually do.

While carefully documenting work flow prior to the introduction of computer software systems, we determined that we actually needed two overall systems: the actual work flow system, as discussed above, and a production management system that would monitor the work flow system. We feel that without a management monitoring system it is not possible to

apply or use computer aids in a cost effective manner.

On completion of our systems analysis work, we surveyed existing software programs that are available through the major time-sharing computer firms in the U.S., such as Service Bureau Corporation, General Electric Corporation, Computer Science Corporation, as well as software programs now in use in England, Germany and Israel. We selected certain existing programs for testing in-house and negotiated agreements permitting us to use these programs on a time-sharing basis. This required that we establish a terminal connection in our office at a cost of \$65 per month. Monthly costs for the time-share agreements ran \$25 to \$100 per month each. Thus, our total initial outlay was approximately \$210 a month in addition to charges for time used. We also found that there were small service firms that were available to assist in running computer programs. Some had their own computer programs and would offer both program and manpower for a reasonable fee. We found these accumulated charges were less than our staff labor costs in the areas in which we used the computer, namely plotting and data manipulation.

The purpose of testing a number of time-share programs was to find out whether any of our preliminary assumptions about our needs were cost effective. With this experience, we could then accurately determine which programs would be best for us to develop in-house.

Each of the programs that we developed in-house was part of a network which related to an overall pre-established activity work flow process. We called the first series of programs CARLA, an acronym for Computerized Approach to Residential Land Analysis. We copyrighted this process and trademarked the name CARLA.

Each year we develop several additional computer programs that plug in missing links of the overall work flow network. We anticipate some day having computer aids in almost every step of our work.


For those who did not take computer courses in college, the computer may seem

*continued on page 64*

The logo consists of the lowercase letters 'ai' in a bold, red, sans-serif font. The 'i' has a small dot above it. The background of the entire advertisement is a photograph of a modern interior furniture display set within a construction site. The scene features concrete pillars, rebar, and a crane in the background. In the foreground, there is a large, tufted, brown corduroy sofa and a glass-topped coffee table with a chrome frame. A man and a woman are standing in the middle ground, and a worker in a yellow hard hat is visible on a higher level of the construction. The lighting is dramatic, with warm floor lamps illuminating the furniture against the cool, grey tones of the construction site.

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*Circle 14 on information card*

**Planning and Designing a Burn Care Facility.**

Irving Feller and Keith Crane. Ann Arbor, Mich.: National Institute for Burn Medicine, 1975. 132 pp. \$15.

Exceptionally well organized, this book presents the essential technical information required for planning a burn care facility. The identification of the problem, and its magnitude as it relates to health care problems in general, is valuable for perspective.

Appropriately, the planning process is defined in terms of (1) need, (2) program and (3) facilities. An essential step is the placement of the burn care unit within the context of other community medical resources. Missing, however, is an analysis of its interface with public agencies (comprehensive health planning units), which have a significant role in the definition of requirements for highly specialized care units, such as burn facilities. If not properly factored into the planning process, such agencies can make decisions that will negate long hours of planning.

The section on project organization is troublesome. Institutions where a burn unit may be considered are generally large medical centers that offer comprehensive services. Therefore, the planning of a burn care unit must fit into larger institutional goals that may be beyond the strict purview of the burn unit director. Experience in health facility design suggests that when strong clinically minded individuals are in control of design the result is usually a highly customized and inflexible facility. The need is to define generic criteria, which the book does very well.

There is no quarrel with the technical description of burn unit requirements, a part of the book that seems exceptionally well researched. Many burn care units will be designed within the constraints of existing facilities—a fact which dictates the specification of precise mechanical/electrical service requirements. The authors provide this information as well as the definition of specific equipment support, which is very helpful in planning.

The authors' explanation of relationships and desired adjacencies of the burn care unit with other hospital-based services is critical to an understanding of the dependency of the burn unit on total hospital services. Finally, the specific example of

the University of Michigan unit represents an application of the criteria and is a significant demonstration of research results.

The book is a contribution to the state of the art for the design of these highly specialized facilities. It is worthwhile as a resource document in an office library. *Sandor B. Csobaji, AIA*

**The Bathroom.** New and expanded edition. Alexander Kira. Viking, 1976. 272 pp. \$18.95 hardbound, \$7.95 paperbound.

When the first edition of this book was published in 1966, little in-depth research had been done on that important place in the American home, the bathroom. The book, which resulted from seven years of research, was acclaimed by critics with such adjectives as "illuminating" (Ralph Nader) and "fascinating" (*The New York Times*).

Kira has continued his study about the bathroom's functions and design, and this new edition encompasses his recent investigations into the bathroom and our own attitudes about such things as personal cleanliness, privacy and modesty. Even now, the bathroom is lagging far behind modern technology, and this book should be read by any architect who includes a bathroom or rest room in any building that he designs, and that's pretty comprehensive. This edition contains two excellent additions: one on the nature and demands of public facilities and the other on facilities for the elderly and the handicapped.

**Model Security Code for Residential Areas.** Oscar Newman and Stephen Johnston. New York: Institute for Community Design Analysis, 1974. 91 pp. \$5.

Crime is a major problem in this country, but very few municipalities have incorporated safety provisions against crime in their building codes. Furthermore, say the authors of this booklet, national codes "are totally lacking in provisions directed at achieving security." The model code which Newman and Johnston have developed is directed at providing for protection of person and property from a "human element," in contrast with existing codes, which protect against such nonhuman elements as fire and earthquake.

Even though this model security code may not become a requirement of building codes generally, every architect who designs a single-family or multifamily dwelling ought to read it. Its guiding principles make good sense.

There is information about site planning for vulnerable multiple dwellings to help eliminate criminal attack, with attention given to such things as landscaping and lighting as aids for security. The section on building design considers location of elevators, garage access, entry ways, interior lighting, mail box areas, etc.

Although private dwellings generally have lower crime rates than multifamily structures, they, too, through design can be made safer places to live. Again, planting, lighting and controls on access and egress are important. And for both types of dwellings, construction materials and methods can be a deterrent to crime. Consequently, the model code pays great attention to door and window construction and hardware.

Copies may be obtained from the Institute for Community Design Analysis, 853 Broadway, New York, N.Y. 10003, by sending a check or money order for \$5, plus 50 cents for postage/handling.

**Handbook of Solar and Wind Energy.** Floyd Hickok. Boston: Cahners Books, 1975. 124 pp. \$20.

Inexhaustible, nonpolluting and free (except for the cost of conversion), non-fossil energy resources are ours for the taking, says Hickok. "Sooner than most people think, it would be possible to depend on these nonfossil resources without burning another drop of oil or speck of coal and without adding another one of the controversial fission reactors."

This is a "state of the art" report on nonfossil energy. Aimed at helping those concerned with long-range energy planning, the report will be of special interest to entrepreneurs. All that is needed, says Hickok, "is the will to act." He discusses solar energy and many of its conversion technologies; wind as an energy resource and the design of windmills; energy from ocean thermal differences, and other energy potentials, setting timetables for probable development.

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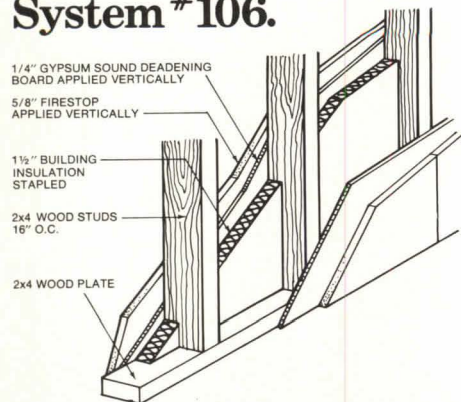
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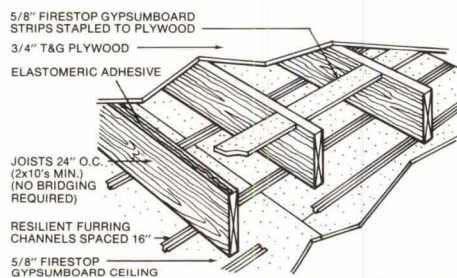


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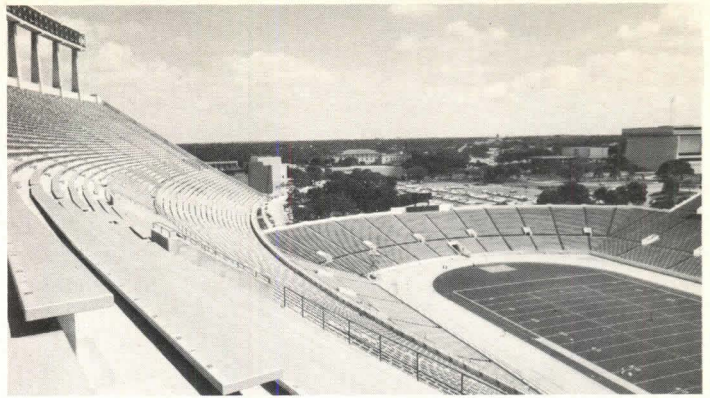
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Letters from page 17

*Community and Privacy*, Chermayeff and Alexander (1963, Doubleday): An amazingly complete analysis of housing criteria and solutions are contained here.

*Townscape*, Gordon Cullen (1961, Reinhold): The British editor of *Architectural Review* created a whole new vocabulary, later used by Lynch, Halprin, et al., and suggested the ways in which urbanization could become an important visual experience.

*God's Own Junkyard*, Peter Blake (1964, Holt, Reinhart & Winston): Largely visual, this book deals with the desecration of America.

*Contemporary Architecture, Its Roots and Trends*, L. Hilberseimer (1964, Theobald): A book by probably the only man who was ever intimately associated with Corbusier, Gropius and Mies, as well as having firsthand acquaintance with the work of Wright.

*Mies van der Rohe*, Warner Blaser (1965, Praeger): While not the most complete, this publication dealing with the work of Mies is the most successful graphically.

*Architecture Without Architects*, Bernard Rudofsky (1965, Museum of Modern Art): Indigenous architecture, especially among earlier Mediterranean cultures, raises a number of questions about our own lack of directness in solving problems.

*The Bauhaus*, Hans M. Wingler (1969, MIT Press): What *Time* magazine has described as the most significant educational achievement of the century is virtually cataloged in this work.

*With Man in Mind*, Constance Perin (1971, MIT Press): This is a small book with fine print and no illustrations; however, it has been the beginning of something very important among behavioral scientists and the design professions.

*Systems*, C. W. Griffin Jr. (1971, Educational Facilities Laboratories): This work has popularized an approach to the rationalization of building systems.

*Design with Nature*, Ian McHarg (1971, Doubleday): McHarg didn't teach us how to spell "ecology," but he certainly threw down the challenge.

Robert Lawton Jones, FAIA, AIP  
Tulsa, Okla.

**'Sing It Out':** The editorial titled "Which Way the West? An Urgent Need for Regional Planning" in the November issue should be sung from the rooftops by the muezzin and rung with the cathedral bells. The entire AIA should be driving to discourage the myth that the destruction of the earth is the salvation of beauty. They just got the words backwards.

Nathaniel A. Owings, FAIA  
Washington, D.C.

**Stop Sexist Jokes:** We read the snide letter by Thomas Gene Zaugg in the June 1975

issue on saving energy in the home through encouraging wives to do housework in the nude. This is incredibly puerile stuff! How can you reconcile it with articles about progress by the AIA task force on women and AIA's admission of its first woman member? Putting an end to sexism in the profession means putting an end to sexist jokes. An editorial policy which promotes an image of women as sex objects and of housework as "women's work" encourages a distorted view of women, men and dwellings.

Dolores Hayden, Assistant Professor, and  
Gwendolyn Wright, Research Affiliate,  
Department of Architecture  
Massachusetts Institute of Technology  
Cambridge, Mass.

## EVENTS

**Feb. 2-4:** Southwest Air-Conditioning, Heating and Refrigeration Exposition, Convention Center, Dallas. Contact: International Exposition Co., 200 Park Ave., New York, N.Y. 10017.

**Feb. 3-6:** Reinforced Plastics/Composites Institute annual conference, Shoreham-Americana, Washington, D.C. Contact: RP/CI, 355 Lexington Ave., New York, N.Y. 10017.

**Feb. 5-6:** Conference on Public Tax Policy and Its Effect on Conservation of the Built Environment, Mayflower Hotel, Washington, D.C. Contact: National Trust for Historic Preservation, 740-748 Jackson Place N.W., Washington, D.C. 20006.

**Feb. 5-6:** Professional Marketing Workshop for Engineers, Planners, Designers, Consultants, Contractors, Atlanta. (Repeat workshops on Mar. 5-6, Las Vegas; Apr. 1-2, Boston; May 6-7, Kansas City, Mo.; June 3-4, Toronto.) Contact: Building Industry Development Services, 1301 20 St. N.W., Washington, D.C. 20036.

**Feb. 8-13:** Conference on Energy Storage: User Needs and Technology Applications, Asilomar Conference Grounds, Pacific Grove, Calif. Contact: Engineering Foundation Conferences, 345 E. 47 St., New York, N.Y. 10017.

**Feb. 9-14:** Short course on A Systematic Approach to Building Material Evaluation and Selection, University of Wisconsin, Madison, Wis.

**Feb. 15-17:** Conference on Architecture for Justice, Hotel del Coronado, Coronado Island, Calif.

**Feb. 17:** Entries deadline, 1976 Lab-of-the-Year awards program. Contact: *Industrial Research*, 222 S. Riverside Plaza, Chicago, Ill. 60606.

**Feb. 17-19:** Course on Controlling Concrete Quality in Production and Construction, Cement and Concrete Center, Skokie, Ill. Contact: Portland Cement Association, Old Orchard Road, Skokie, Ill. 60076.

**Feb. 19-21:** North Carolina chapter/AIA

winter convention, Royal Villa Hotel, Raleigh, N.C.

**Feb. 22-26:** Cellular Concrete Association annual meeting, San Juan Hotel, Puerto Rico. Contact: CCA, 715 Boylston St., Boston, Mass. 02116.

**Feb. 23-27:** Course on Construction Management, Biscayne College, Miami, Fla. Contact: Continuing Engineering Education, George Washington University, Washington, D.C. 20052.

**Mar. 7-9:** Wisconsin Society of Architects convention, The Abbey on Lake Geneva, Fontana, Wis.

**Mar. 24-25:** Conference on Optimizing the Choices, National Bureau of Standards, Center for Building Technology, Washington, D.C. Contact: Office of Continuing Education and Public Service, University of Illinois, 116 Illini Hall, Champaign, Ill. 61820.

**Mar. 25-27:** Seminar/workshop of the Cultured Marble Institute, International Hotel, New Orleans. Contact: CMI, 230 N. Michigan Ave., Chicago, Ill. 60601.

**May 2-5:** AIA annual convention, Sheraton Hotel, Philadelphia.

## GOING ON

### Going On from page 14

examine two other case studies of innovative justice facility design: the public safety building in Danville, Ill., and the police station in Newport Beach, Calif. Architects and officials connected with all three facilities will discuss the buildings. Among these discussants are Thomas Tucker, AIA, president of Tucker, Sadler & Associates, San Diego; Tony Lang, AIA, partner of Phillips Swager Associates, Peoria, Ill., and James C. Robinson, AIA, of Robinson Thompson Associates, Austin, Tex.

For further information, telephone Mark Maves, department of environment and design, at AIA headquarters (202) 785-7366.

## Deaths

**Rob Roy Bittmann Jr., FAIA**, La Jolla, Calif.

**P. L. Chericci**, Syosset, N.Y.

**Jules K. de la Vergne**, New Orleans

**Roscoe DeWitt, FAIA**, Dallas

**Fred W. Dolke**, Bradenton, Fla.

**Walter R. Furey**, Enfield, Conn.

**Robert E. Harrison**, Martin, Tenn.

**N. H. Hill**, Indianapolis

**Warren W. Kane**, Austin, Minn.

**R. Theodore Kirmmsee**, Syracuse

**Albin Kisilius**, Chicago

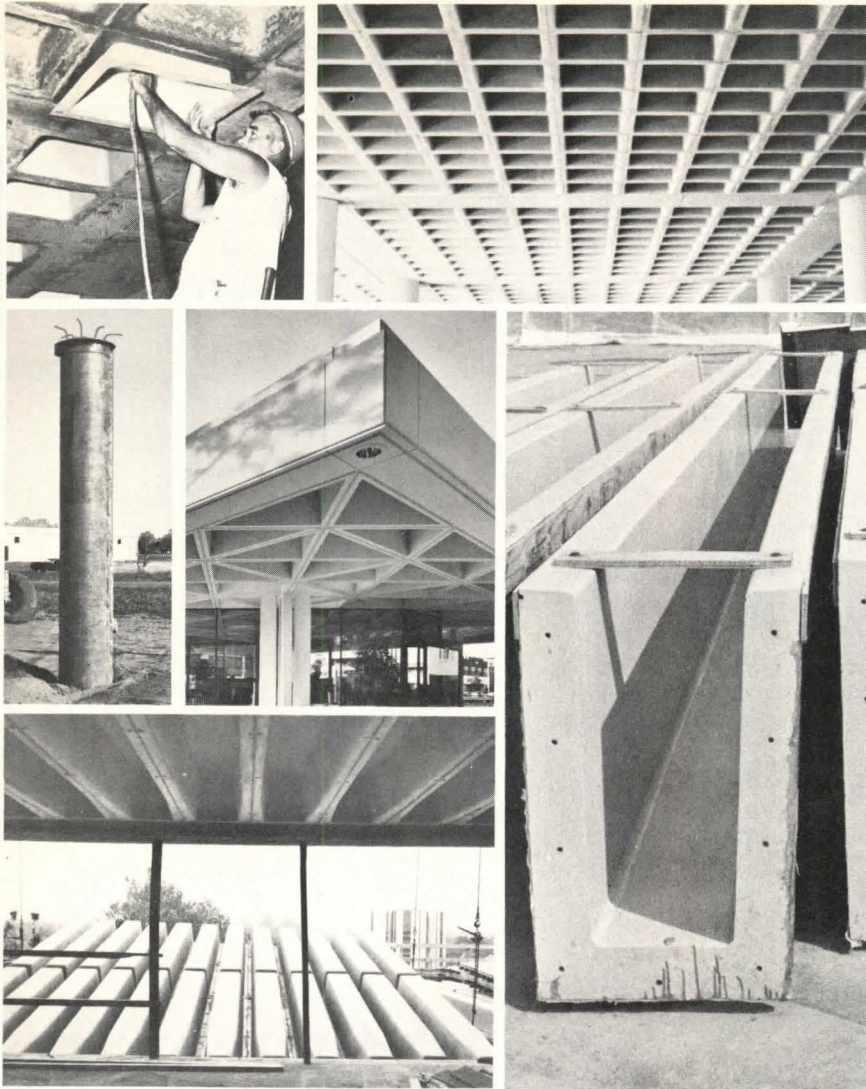
**Richard T. Morenus**, Washington, D.C.

**James C. Morton**, Knoxville, Tenn.

**John B. Parkin**, Toronto

**Walter Scholer, FAIA**, Lafayette, Ind.

**Esmund Shaw, FAIA**, New York City



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## Newslines

**Nathaniel A. Owings, FAIA**, was recently honored by the Boy Scouts of America when he was presented with a "distinguished Eagle Scout award." He was cited both for his "distinguished leadership as senior partner of Skidmore, Owings & Merrill" and his "service to Scouting." Owings earned his Eagle badge as a Scout in 1922.

**"Building the Potomac Aqueduct, 1830"** is the title of a booklet prepared by Donald Beekman Myer, AIA, and published by the Preservation Press, National Trust for Historic Preservation. It is the story of the construction of the Aqueduct Bridge in Washington, D.C., which made engineering history when it was completed in 1843. Made obsolete by the automobile, the bridge was replaced in 1923 by Key Bridge. The booklet was prepared to accompany an exhibition on "Bridges and the City of Washington," held recently at the Octagon.

**The Asphalt Institute** is issuing a new series of publications called "Construction Leaflets" for use by architects and engineers concerned with designing, building and maintaining asphalt pavements. To date, 15 leaflets have been published, appropriate for insertion in standard three-ring binders. Copies of the leaflets are available without charge through any Asphalt Institute office.

**Ralph H. Burt, AIA**, chairman of the AIA committee on architecture for education and principal in the Butler, Pa., firm of Burt, Hill & Associates, was invited by the Department of Commerce to represent the U.S. at a three-day conference on educational systems in Iran.

**One out of every five companies to fail** in the first half of 1975 were construction contracting firms, reports Dun & Bradstreet. In this period, 1,302 contractors failed—45 percent more than in the first six months of '74 and nearly twice as many as in the first half of '73.

**Arthur J. Fox Jr.**, editor of *Engineering News-Record*, has been elected president of the American Society of Civil Engineers. Leland J. Walker, chairman of the board of Northern Testing Laboratories, is president-elect.

**"Architects Do It Better"** reads a bumper sticker in red and white letters. Priced at \$1 each, the stickers may be ordered from the Houston Chapter/AIA, 3121 Buffalo Speedway, Suite 404, Houston, Tex. 77706. Proceeds from sales go to the chapter's library, scholarships for minority students, etc. □

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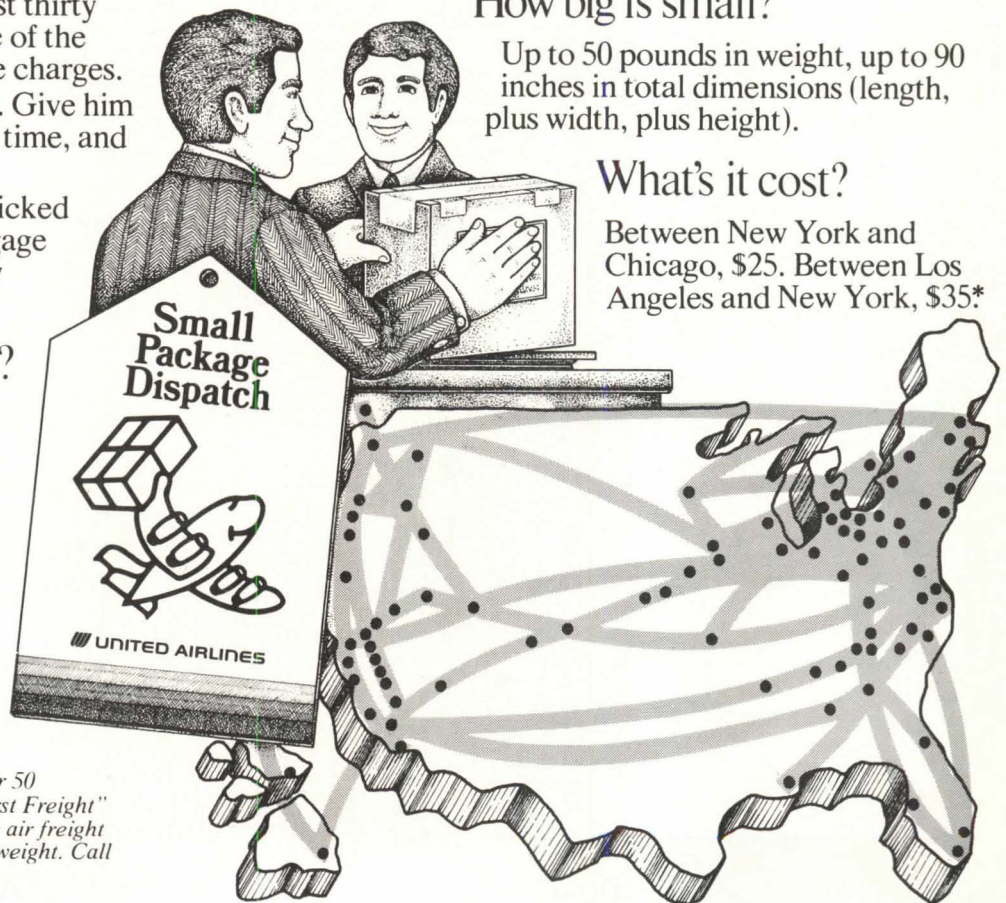
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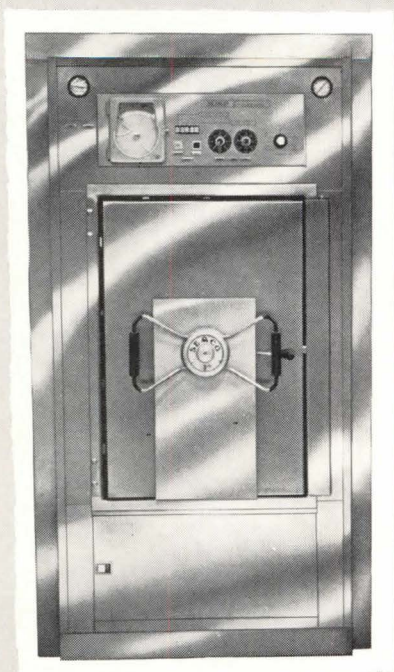
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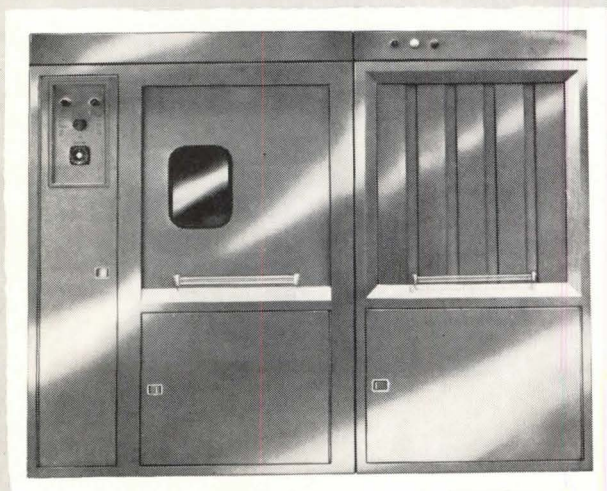
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# Planning and Designing a Burn Care Facility

## FEATURING...

- STEP-BY-STEP DESCRIPTIONS OF THE BURN CARE FACILITY PLANNING AND DESIGN PROCESS; FROM FORECASTING BED NEEDS TO PREPARING PRELIMINARY DRAWINGS.
- BASIC SPACE AND EQUIPMENT SPECIFICATIONS FOR ALL BURN CARE FUNCTIONS.
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- OVER 80 ILLUSTRATIONS, PHOTOS, AND CHARTS.
- 132 PAGES, 8½" X 11", HARD BOUND.

## About the Authors...

I. FELLER, M.D. is Clinical Professor of Surgery at the UMMC, and Director of the Michigan Burn Center in Ann Arbor, Michigan. His experience includes organization and direction of the burn facility and caring for more than 1000 burned patients.

K. CRANE, M.D. gained experience as a consulting hospital systems engineer prior to joining Dr. Feller in 1968. Since then he has been involved with systems analysis, statistics, data processing, architectural planning, and design aspects at the Burn Center.

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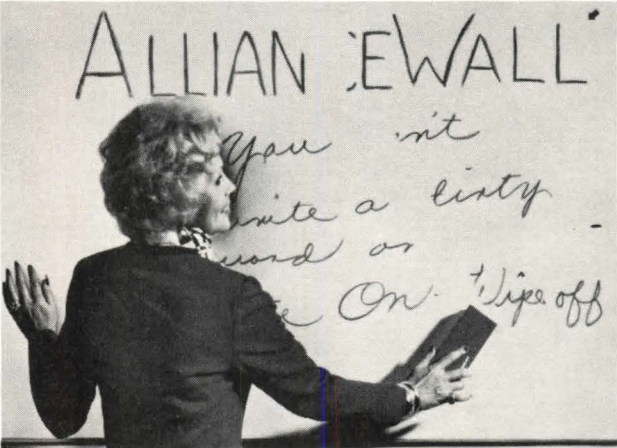
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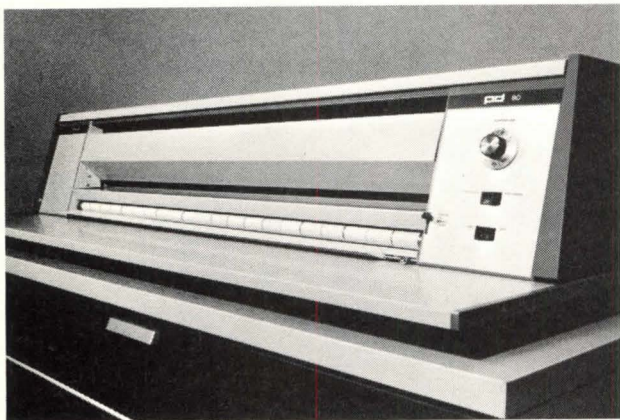
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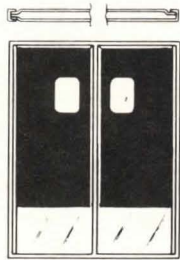
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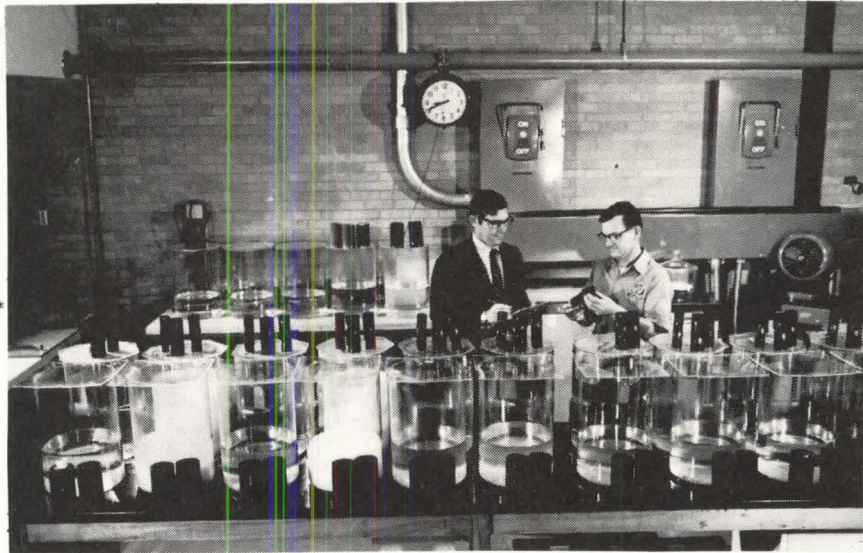
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**Acknowledgments:** 10 and 20, Kevin Green;  
 23-37, Mary Procter and Bill Matuszeski;  
 43, 45, drawings, Dick Sisk.

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## Computer from page 48

like a mechanistic monster, unsuited for playing a role in the development of creative design and documentation. Unlike older architects, however, most who are under 30 have been exposed to the potentials of computer applications and are eager to give it a try. But most young architects are not in a top management, decision-making position, and senior executives often resist computerization.

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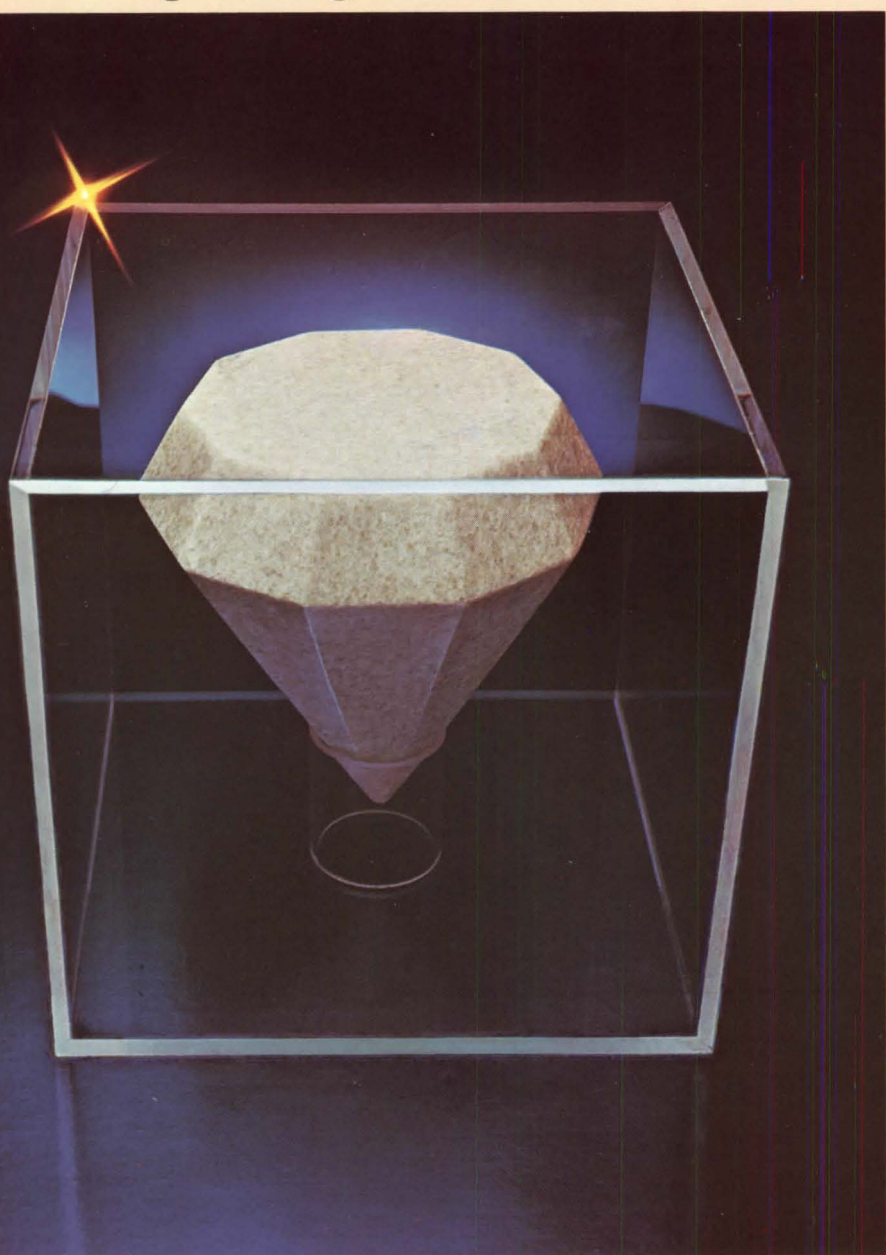
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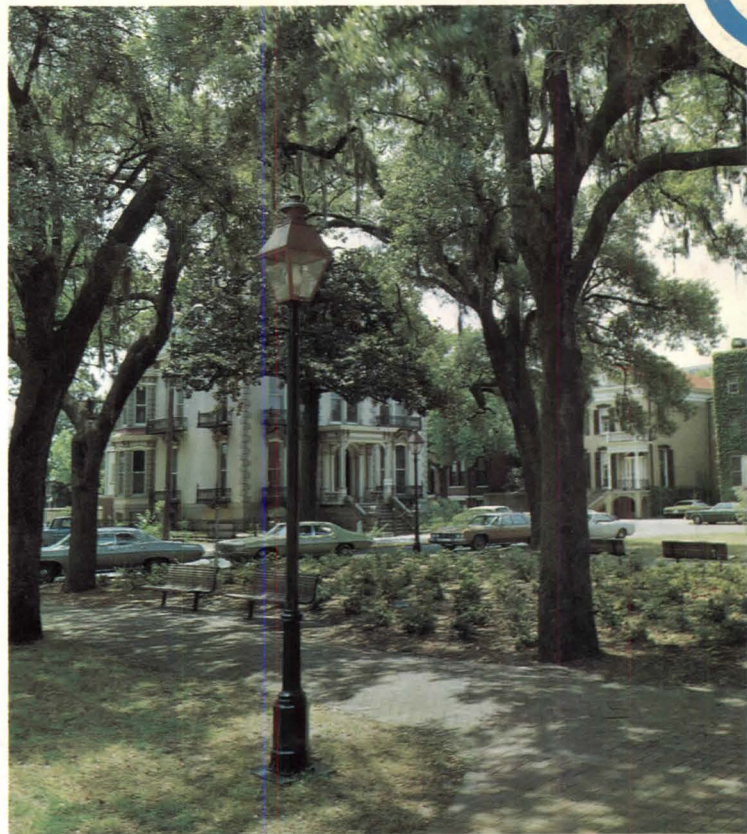
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