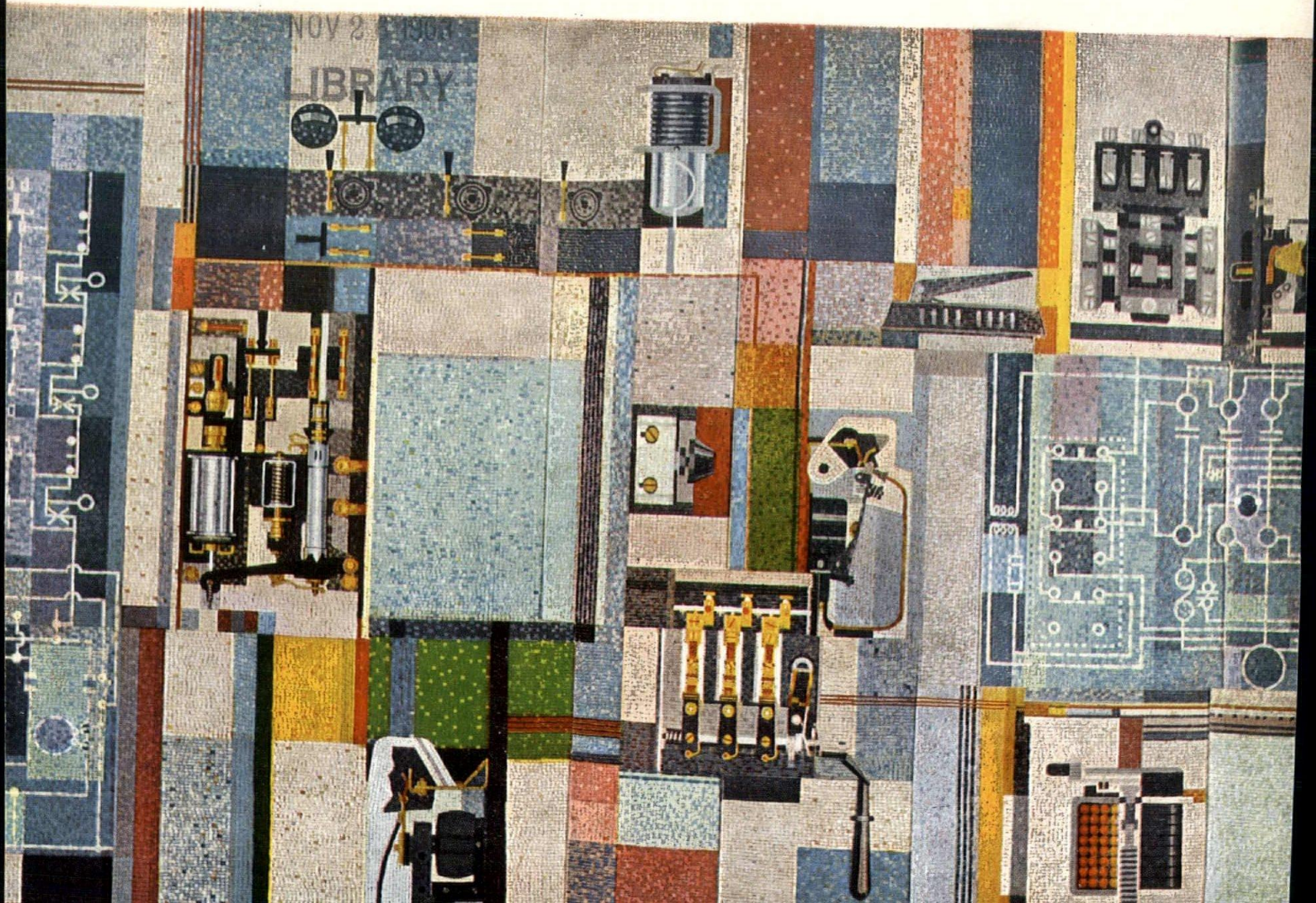
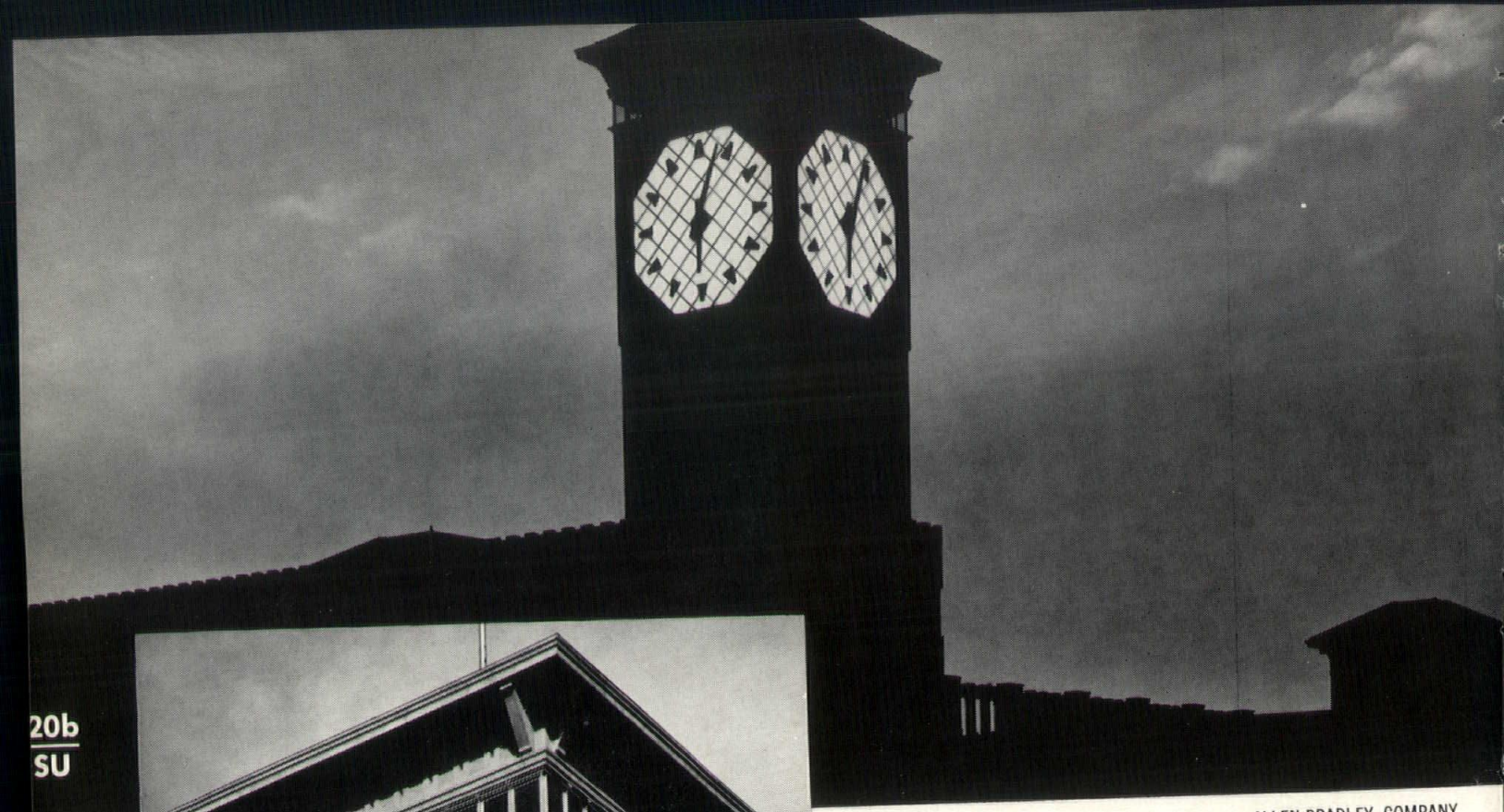
NOVEMBER 1963 11

WISCONSIN ARCHITECT





ALLEN-BRADLEY COMPANY
MILWAUKEE, WISCONSIN
ARCHITECT:
FITZHUGH SCOTT, A.I.A.

Clock Height: 260 ft.
above street level
Clock Visibility: 25 miles

Engineering Features

- Each face: 76 individual pieces opaque, laminated glass set in custom aluminum extrusions
- Weatherproof neoprene glazing strips
- 3,900 lbs. glass, 1,600 lbs. aluminum per face
- "Floating" aluminum channel mounts compensate for expansion — contraction
- Black-anodized aluminum border flashing
- Black aluminum numerals, 3 x 4 ft.

World's Largest Clock illustrates *Versatility* of Super Skylighting

Look to Super Sky to create the new dimension of form and beauty in functional skylighting. Case in point: four 40-ft.-diameter illuminated clock faces — engineered, fabricated and erected by Super Sky to produce a brilliant architectural highlight.

Super Sky's ability to fabricate the unusual — as well as standard and custom geometric domes, pyramid and ridge skylights — can help you achieve new freedom of shape and dimension on your next project. From *your* plans we design the skylight — and guarantee it! Write for detailed drawings, engineering data, estimates and suggestions. No obligation, of course.

FREE illustrated booklet — "A New Concept in Dimensions Unlimited" — at your request. Write Super Sky Products, Box 113-AE, Thiensville, Wisconsin, 53092.

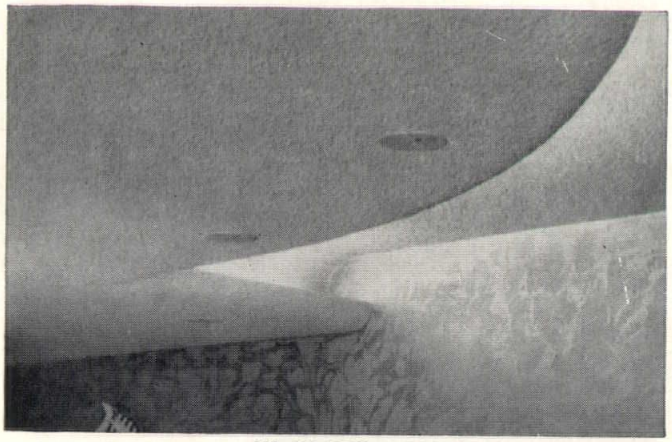
SUPER Sky PRODUCTS INC.

SUPER SKY PRODUCTS, INC.
BOX 113-AE, THIENSVILLE, WISCONSIN
PHONE: CHestnut 2-2000
Milwaukee phone: FLagstone 4-6700

Each product applied as specified . . .

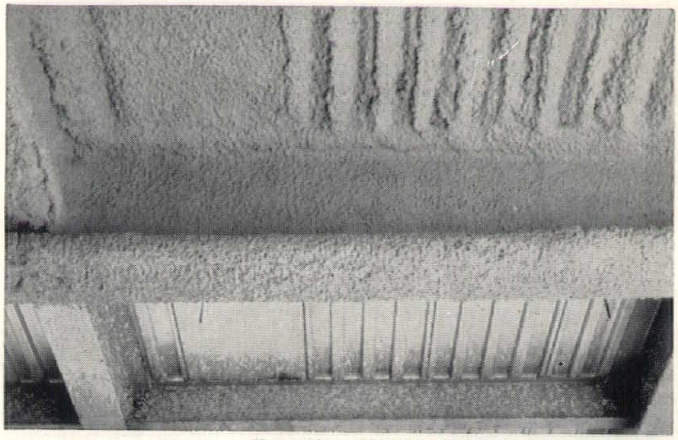
WE CERTIFY IT!

Here's protection for you and your clients. And it demonstrates our concern for our own reputation and that of our approved plastering contractors. When you specify certification, we inspect the job and certify it in writing. It's your assurance your client gets all the benefits claimed for these materials.



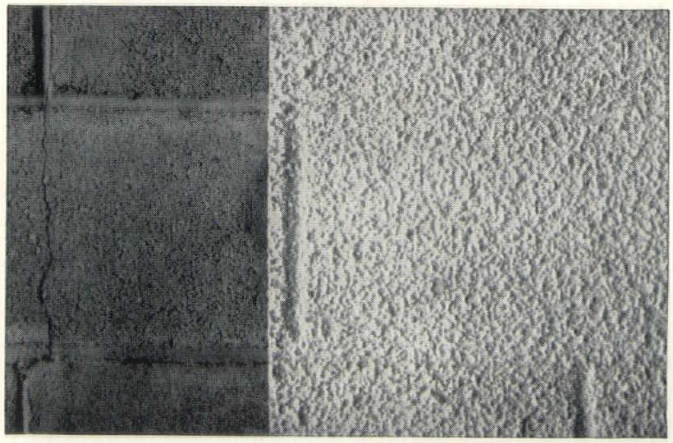
FOR A RICH, TEXTURED MONOLITHIC SURFACE

HI-SORB® ACOUSTICAL PLASTER: Enhances the beauty of wood and fabrics. A firm damage-resisting surface, yet good sound absorption. Full thickness can be applied in one day. A great aid in speeding up construction schedules. Ten exciting colors available.



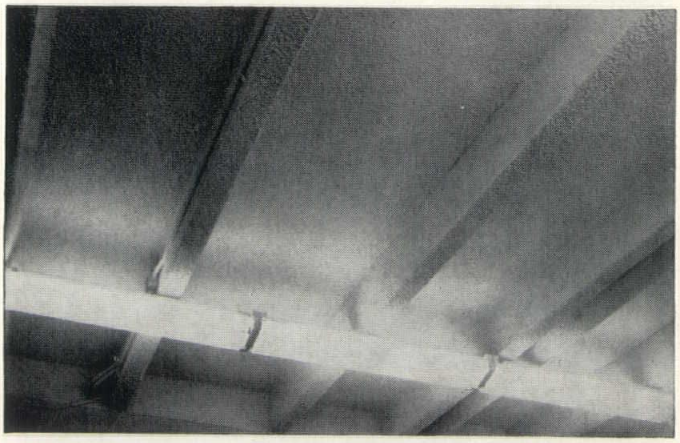
ONLY ⅞ INCH GIVES A 3-HOUR RATING

Zonolite MONO-KOTE® FIREPROOFING: Applied directly to floors and beams, Mono-Kote takes a fast, firm set. Following floor contours, only ⅞ inch gives a 3-hour rating—1¼ inches on beams gives 4 hours. Full thickness can be applied to large areas in only one day.



FOR FASTEST, EASIEST TO OBTAIN TEXTURE FINISH

Zonolite PLASTERTEX® interior and exterior FINISHES: A durable finish. One that masks minor surface blemishes and joinings in plasterboard, block and concrete. Excellent finish for pre-cast concrete, poured concrete canopies, etc. Can be spray-applied to most exterior or interior materials. Choice of three textures.



ANSWER FOR PROBLEM-TYPE INSULATING APPLICATIONS

Zonolite SPRA-INSULATION®: Ideal low cost way to insulate concrete ceilings, floors above unheated areas, and perimeter beams. Widely used to control condensation problems. Bonds permanently to steel. Easy and extremely fast to apply—keeps your project right on schedule.

For complete information write... **Western Mineral Products Company**

4725 OLSON HIGHWAY • MINNEAPOLIS 22, MINNESOTA

Bigger 'n Big Ben

Here Everything Must Go Like Clockwork . . .

This is the clock tower section of a new block square addition to the Allen-Bradley Company, Milwaukee . . . one of America's foremost manufacturers of electrical components.

In this tower, 280 feet above the city streets is the largest 4-faced clock in the world . . . symbolizing the clockwork precision and quality control embodied in the company's products.

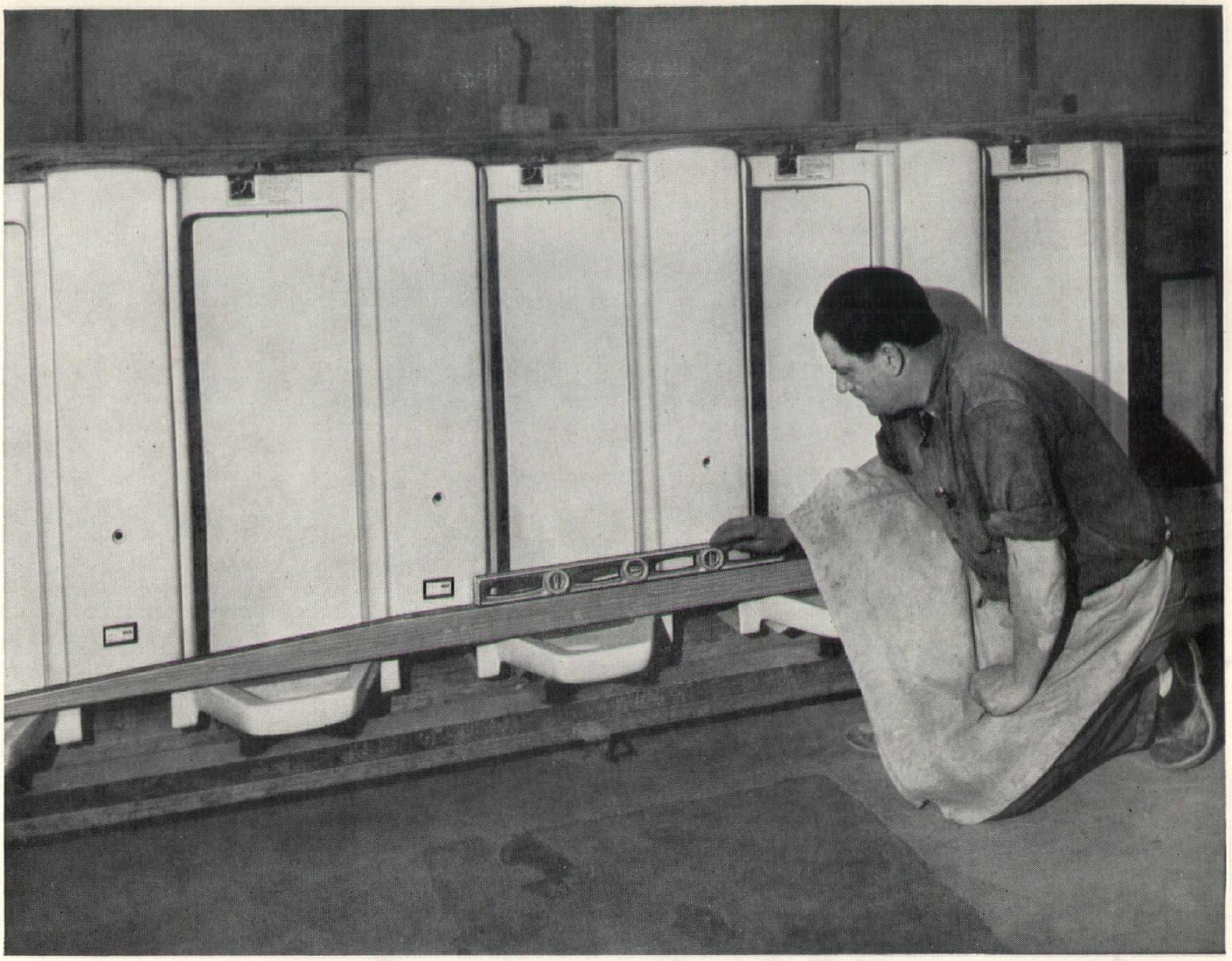
Officials at Allen-Bradley insisted on the same precision and quality in the building and equipping of this outstanding new addition.

That, of course, is the reason they selected Globe-Van Doorn cars for the 6 elevators serving the new building.

GLOBE-VAN DOORN

MILWAUKEE 9, WIS.

Leather covered removable panels/oxidized bronze doo and trim/ceiling in natural bronze with octagonal acryl light panels.



CUSTOM TAILORING
is an Extra Kohler Service

For example—back at the factory this man is pre-fitting a battery of urinals for the Sagamore Junior High School in Holtsville, L. I., New York.

This is regular operating procedure at Kohler Co.

He sets up the urinals—matching and leveling them. The seam covers are ground and fitted to the urinals. Each urinal and seam cover is then numbered in sequence to simplify installation. Kohler custom tailoring has solved the installation problems—assures a perfect on-the-job fit.

It's just one of the ways Kohler helps your plans get off the drawing board into your building—with a saving of time and installation costs.

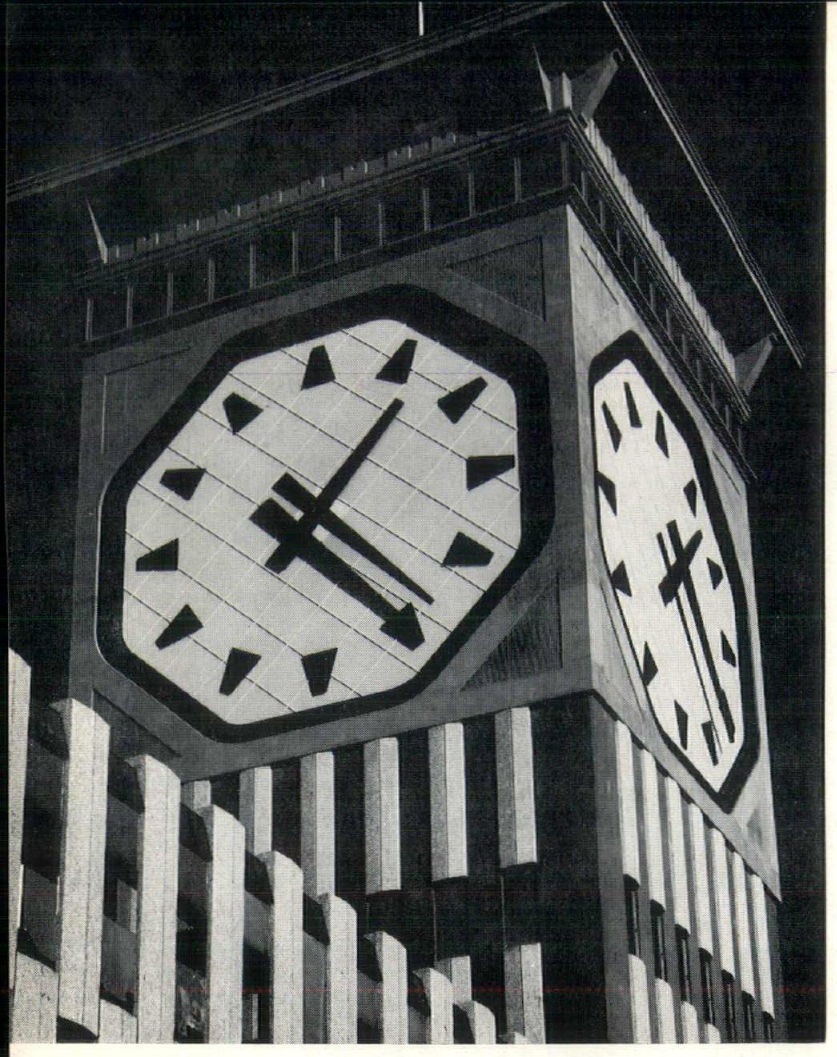
Attention to detail and a fetish about quality are an everyday part of our operation. We like to think they're some of the reasons the name "Kohler" turns up so often in specifications.

KOHLER CO. SUPPLIED THE PLUMBING FIXTURES FOR THE NEW ALLEN-BRADLEY OFFICE AND RESEARCH BUILDING

KOHLER OF KOHLER

Kohler Co., Established 1873, Kohler, Wisconsin

ENAMELED IRON AND VITREOUS CHINA PLUMBING FIXTURES • ALL-BRASS FITTINGS • ELECTRIC PLANTS • AIR-COOLED ENGINES • PRECISION CONTROLS



MILWAUKEE'S *NEW* LANDMARK

We congratulate the Allen-Bradley Company on completion of the magnificent new Office and Research Building. . . . We are highly gratified to have had the opportunity of providing this distinquished structure with HAUGHTON ELEVATORS – the finest in vertical transportation systems.

EMBLEM OF EXCELLENCE IN VERTICAL TRANSPORTATION

HAUGHTON ELEVATOR COMPANY

DIVISION OF TOLEDO SCALE CORPORATION · TOLEDO 9, OHIO

FACTORY BRANCHES
COAST TO COAST

IN MILWAUKEE AT
821 EAST BRADY ST.

CHOOSE NATURAL BEAUTY . . . UNLIMITED DESIGN POSSIBILITIES

Textured areas add a feeling of warmth while at the same time emphasizing other design features. And when it's done with acoustical plaster, it's r e a l l y "sound" construction.

Decorative eloquence — fire protection — sound control — all at a cost no more than that of building materials offering substantially less in performance and appearance. Plaster is perfect for YOUR design concepts.

Specify genuine lath and

PLASTER

it lasts

Milwaukee Area Bureau for Lathing and Plastering
3274 N. 77th Street, Milwaukee 22, Wisconsin

WHY GAMBLE?

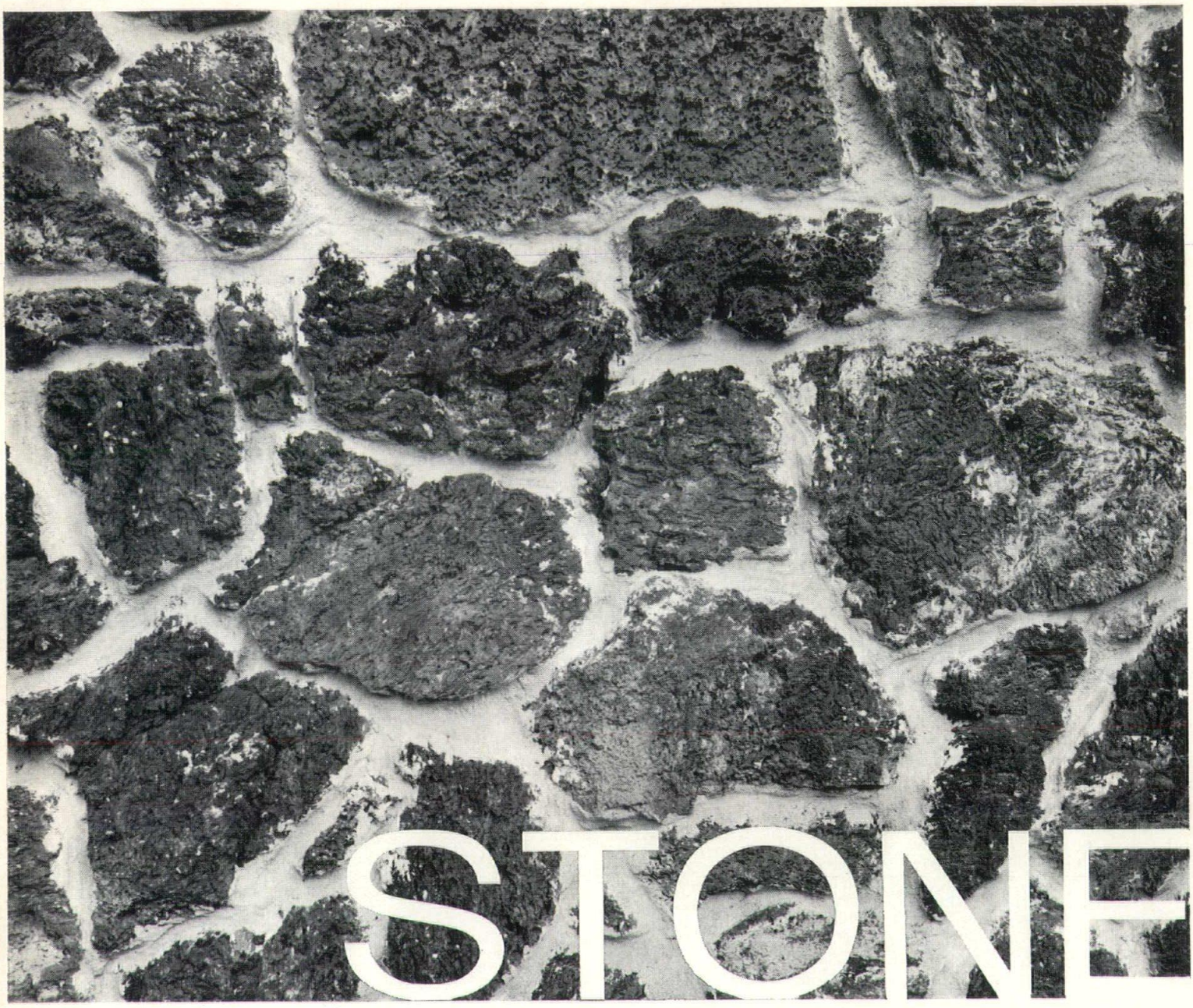
SPECIFY OIL HEAT FOR YOUR CLIENTS

No other fuel today can give your clients all the proven advantages of oil. That's why so many architects specify oil heat for buildings of every size and type — homes, hospitals, churches, schools, offices, factories. And what are the advantages of oil?

1. Oil is safe — stored fuel oil is so safe it will extinguish a lighted torch. Only when mixed with air under pressure (as in the combustion chamber) will it ignite. **2. Oil is dependable**—there's always a reserve supply on hand — on the property and at the dealer's. Cold weather "pressure drops" can never restrict fuel supply. **3. Oil is economical** — with modern equipment oil produces 40% more heat power than other automatic fuels. More BTU's per dollar. **4. Oil is clean**—oil has no odor, film, or soot. Combustion products are non-corrosive—special chimney liners are not required. **5. Oil is competitive** — your clients have freedom of choice for both supply and service—a competitive incentive that assures better, more economical heating performance. **6. Oil is modern** — automatic controls perfected over the years with oil heat are unmatched for accuracy and dependability. Modern automatic oil heat serves many of the nation's most distinguished buildings. **So why compromise? Specify OIL heat!**

for further information . . . about highly successful techniques in the use of fuel oil, write or phone Wisconsin Petroleum Association, 318 Tenney Bldg., Madison, Wisconsin. 53703, Phone 608-257-5411, or National Fuel Oil Institute, Inc., 60 E. 42nd St., New York 17, New York.

FUEL OIL DEALERS OF WISCONSIN



STONE BY HALQUIST

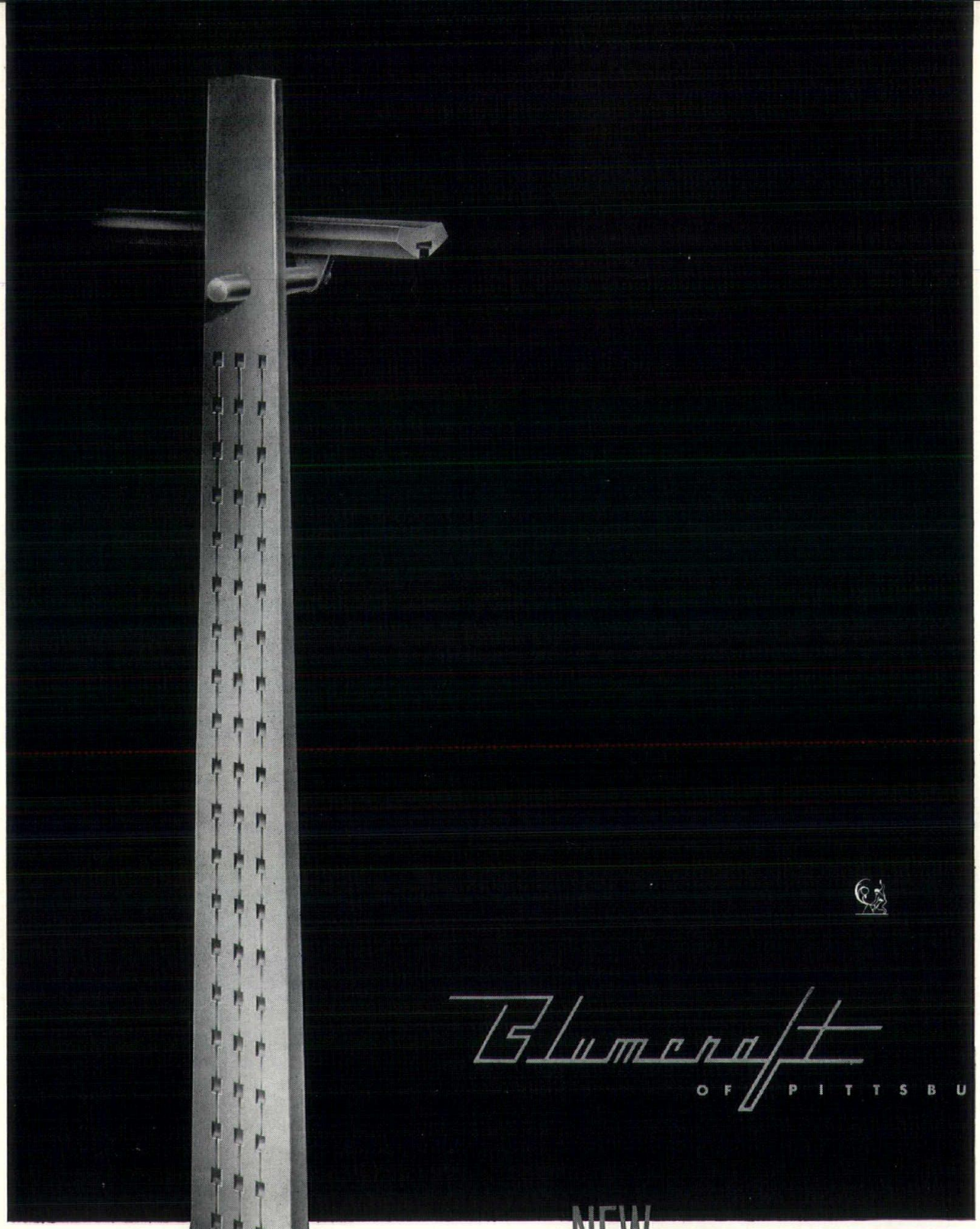
Project:
TRENDS Gift Shop,
Milwaukee

Designer:
Eric Tamm

Builder:
Seftar Construction Co.

A dramatic, richly textured effect is created by Socorro Lava from Halquist.

Halquist Lannon Stone Co.
Sussex, Wisconsin
Phone HO 6-6480 or Sussex 246-3520



Blumcraft
OF PITTSBURGH

NEW classic tapered aluminum post 149-S. Sculptured pattern shown. Available with a plain surface or inlaid natural wood.

Complete catalogue of railings and grilles available upon request.

Permanent display - Architects Building, 101 Park Ave., New York, N.Y.

Allen Bradley Office and Research Building	12
World's Largest Clock	16
World's Largest Heat Pump	18
Fitzhugh Scott, AIA	22
Chapter Notes	23
Welcome Aboard	24
News Notes	25
Wisconsin Architect's Foundation	29
Progress Report on 1964 Convention Plans	30

THE ARCHITECT

NOVEMBER, 1963

This month's cover is a section of the Allen-Bradley Mosaic Murial, 10' x 40', executed by Edmund D. Lewandowski in Venice, Italy in the summer of 1958. The mural depicts the 50 year history of the Company through its major developments in the manufacture of electrical motor controls combined with significant contributions in the field of electronics.

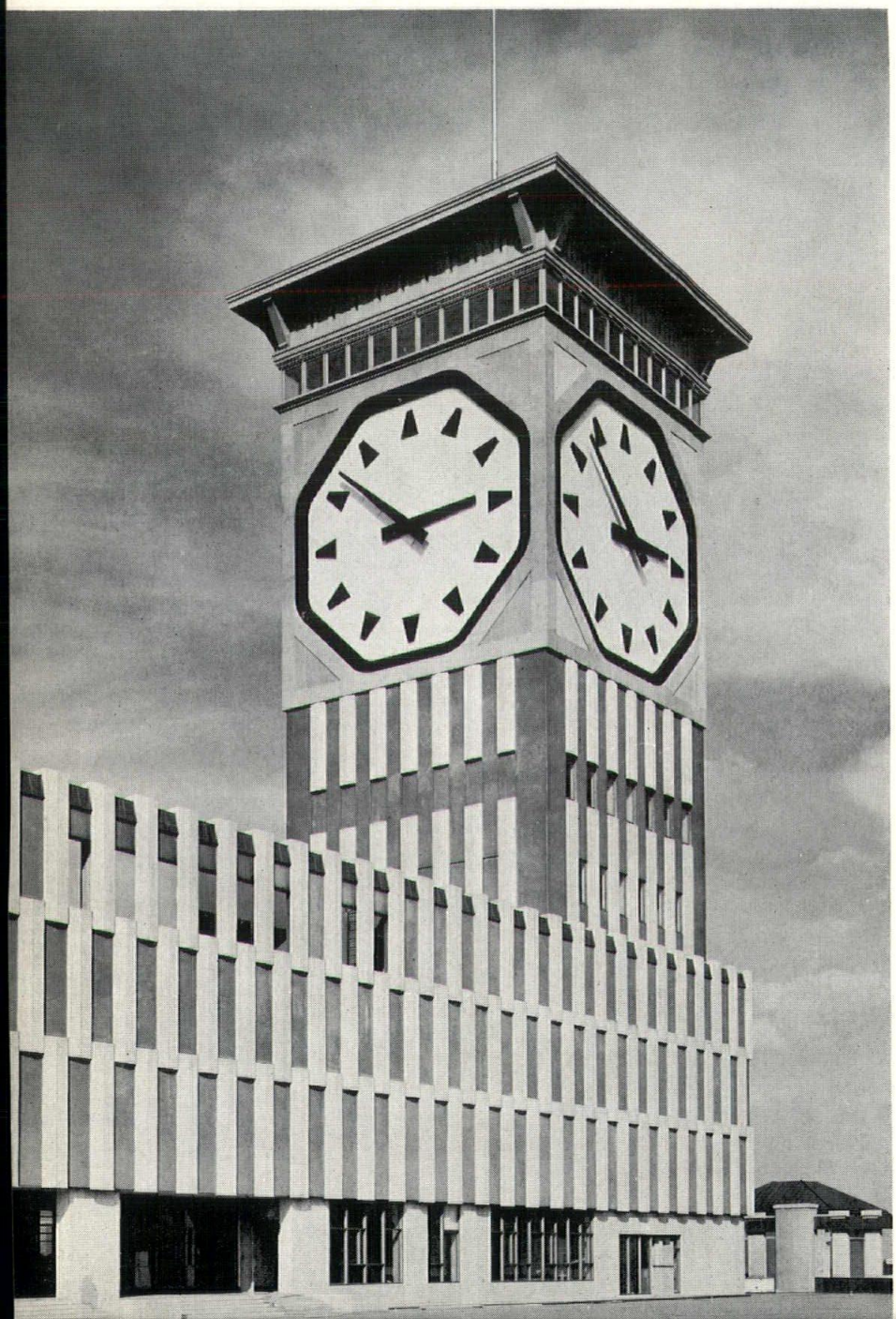
The mural is carried out in the traditional Byzantine style, the glass tessera was produced on the Island of Murano. The mural is located in the employee's cafeteria and is a companion to 12 columns which depict the symbols of the electronic industry.

The Board of Directors of The American Institute of Architects has granted approval for the formation of a Fourth Section for the Wisconsin Chapter, American Institute of Architects. This new Section will include communities such as Wausau, Wisconsin Rapids, Stevens Point, Eau Claire, Marshfield and Eagle River.

The Wisconsin Architect, Volume 31, No. 11. Address all matters pertaining to editorial or advertising content to the Publisher, Schmidt Publications, 781 N. Jefferson St., Milwaukee 2, Wisconsin. Phone BR 1-6400. **The Wisconsin Architect** is the official publication of the Wisconsin Chapter of the American Institute of Architects, Frederick G. Schmidt, Editor. Ello Brink, Managing Editor. Subscription rate: $5.00 per year. Individual copy: 50c.

allen-bradley office and research building

Architect: Fitzhugh Scott, AIA
General Contractor: Selzer-Ornst
Heating: Hoye Heating Co.
Electrical: Magaw Electric Co.
Plumbing: The Maag Co.
Sprinkler: Paul Grunau Co.



In 1956 plans for one of the largest buildings ever to be erected in Milwaukee, the Allen-Bradley Office and Research Building, were started. The new building was to have roughly one million square feet of floor space and was to be erected on a 300 feet square site in Downtown Milwaukee, adjacent to the existing Allen-Bradley plant.

In 1963 the Allen-Bradley Office and Research Building with its seventeen floors including the huge clock-tower, rising 280 feet above street level, has added a distinct silhouette to Milwaukee's skyline. The four-sided clock, the largest one in the world, illuminated at night, visible for a distance of 25 miles, is also a navigational reference point.

Architect for this giant project which is still, and will be for quite some time in the future under construction, is Fitzhugh Scott, AIA.

Mr. Scott recalls the various considerations which led to the final architectural treatment of this building: "When we started the plans it was my opinion that this building should be more contemporary in feeling than the existing plant (designed by his father Fitzhugh Scott, Sr., FAIA); that richer materials should be used, and that it was quite appropriate that since it was an office building and a research laboratory it could have a very different feeling from the existing structure.

"We made numerous studies along that line. Mr. Bradley, however, and quite correctly I believe, always had the feeling that if we used much richer materials or were able to achieve a far more glamorous design, we would tend to downgrade the existing building, which had in his opinion and in mine too, stood up very well over the years, both from a practical and from an aesthetical point of view."

After many discussions the final decision was to relate the new structure in scale and design to the existing one. Mr. Scott decided to keep on with the same basic design his father had conceived, expressing the strong verticals of the concrete columne at 30 foot centers and treating the spandrels with stucco. The old and new building were to a bridge over Second Street.

The old building, although appearing as one structure, actually is comprised

of a series of buildings erected at different times. Column spacing, color and fenestration vary slightly in each one of them, creating a "charm" or non-conformity, as John Huegel of Fitzhugh Scott, Architect, puts it, not unlike that found in old European villages which "grew" with the need rather than the economical requirements of standardization.

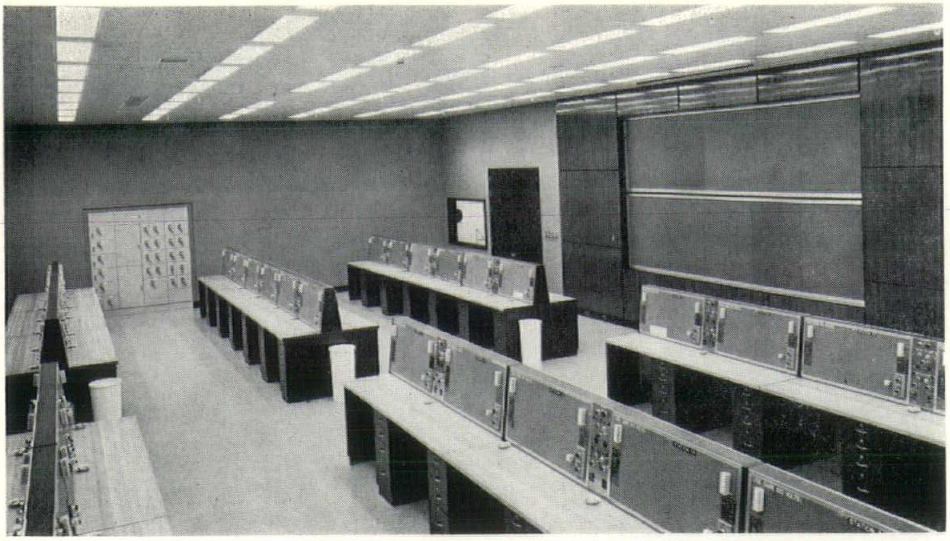
To reproduce this "charm" in a brand new building of the proposed dimension with its rigid modules and economical need for standardization was found impossible and impractical.

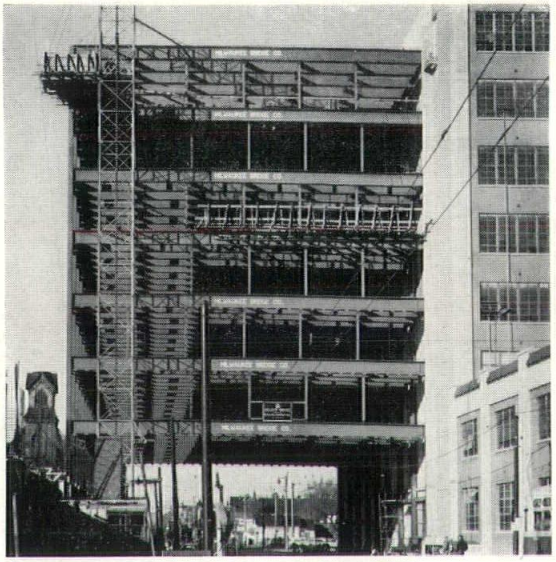
The architect therefore decided to repeat materials only in the new building and to depart from window sizes and fenestration pattern. Small windows were used in order to cut down the air-conditioning load and to give scale to the building. Windows were completely eliminated on the east and west elevations. All windows are vertically pivoted so that they can be cleaned from the inside.

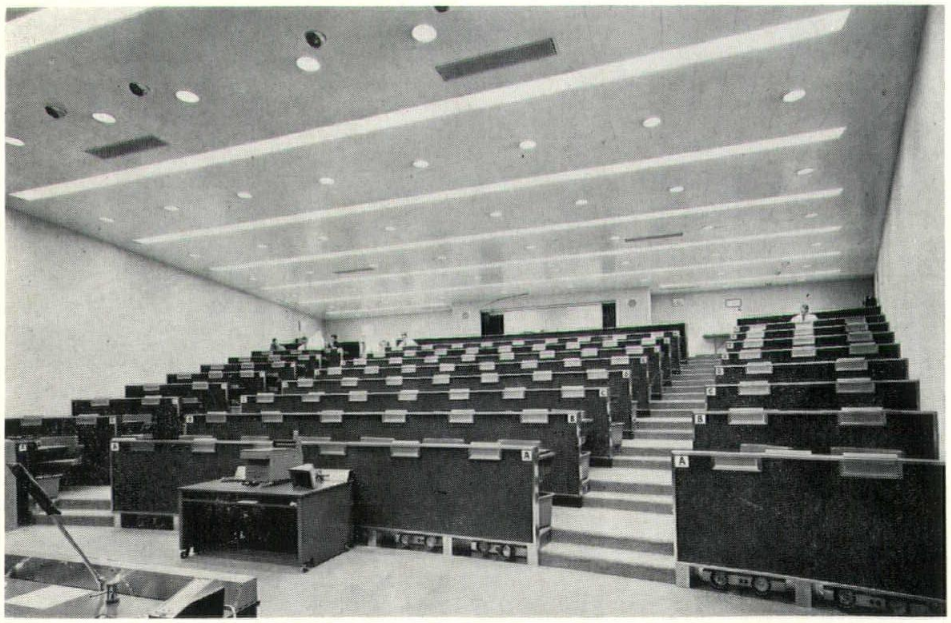
To accomplish a unified design and to keep the feeling of non-conformity the windows were staggered and between them pre-cast planks of Mo-Sai were applied. The Mo-Sai planks provide a three-dimensional relief to what otherwise would have been a flat monlithic surface of immense proportion.

From a design as well as a structural standpoint the bridge section over Second Street is the most unusual feature of the new building. The architect departed from the structural system of the old and the new building, settling for economical reasons on a curtain wall construction. 36-inch-deep I-beams are placed 7½ feet on centers and span 77 feet 10 inches weighing approximately 9 tons apiece. On the upper flange of the beams small studs, shear connectors, are welded, which together with the 5-inch concrete slab, poured over them, results in a "composite construction."

Allen Bradley Photo Departme







The camber in the beams, which was about 4 inches at the center point, was put in by applying heat to the lower flange of the beam. The camber has gone out of the beams now that the loads have been put onto the various floors. It did, however, add to the problems involved in designing and constructing the curtain wall, in that the curtain wall was erected before the final loads were applied.

The unique problem in the design of the bridge was to construct a curtain wall which not only had to account for expansion and contraction due to temperature changes, but one which could move independently of the structure of the bridge. The fact that each bridge floor could conceivably be loaded differently and, therefore, result in different floor to floor dimensions, meant that while the horizontal module of the curtain wall would have to remain constant at 14 foot, the whole facade had to be connected to the bridge structure in such a way that the various floors could move down or up without breaking up the wall. This was accomplished by making the connections act as short sections of tracks, on which these floors could ride.

The spandrel panels are of aluminum abrasive tread plate anodized and laminated to 2 inch styrofoam forming insulated panels. The anodizing of this material was at first met with some skepticism. There was no guarantee that the color would last. The end result, however, is proving pleasing. Due to the nature of the material, when it was anodized, a marblization occurred which was not anticipated but accidentally added to the feeling of texture the architect was striving for. To make the lightweight curtain wall, largely consisting of aluminum framed glass — the spandrel panels are also framed in aluminum, more compatible with the massive structure of the rest of the buildings, extruded gold and silver anodized aluminum fins were attached to the window mullions. The aluminum fins shield the windows to some extent and the runners act as a guide for a window washing device. However, their function is more aesthetic than practical.

The soffit of the bridge is a series of stainless steel barrel vaults, interrupted by the bridging of the I-beams. The six-

story-high bridge section of the new Office and Research Building is unique in Milwaukee because its space is used for other purposes than just passages. At the present stage of the construction it houses a library, a display room and a small auditorium, equipped with the latest devices for visual presentation.

The structural system of the new building is basically the same as that of the old plant, flat-slab reinforced concrete construction. Since the live loads for the new building were somewhat less, the architect was able to use a greater span, thirty feet both ways, which incidentally worked out well with the 300 foot square block on which the building is erected. 12,138,000 pounds of reinforced steel and 73,220 cubic yards of concrete were used.

Generally poor soil conditions made it necessary to provide pilings on which the building footings rest. These piles have a bearing capacity of forty tons apiece. All in all, 4490 piles were driven. They average about 62 feet in length.

The first four levels of the building are used for parking. Approximately 700 cars can be self-parked in this area.

In the north corner of the basement is a mechanical equipment room which houses the heat pumps for the air-conditioning system. Adjoining this room is a vault of 28 x 52 feet in area. The concrete floor of this vault is one of the building footings, a large concrete mat 6 feet thick. This vault is to house the Allen-Bradley records. The architect was requested to design this vault to be proof against any blast except a direct hit from a hydrogen bomb.

Both the employee and the public entrances to the building are on the east side below the bridge. The employees' entrance leads into an elevator lobby where four and ultimately eight passenger elevators lead to the upper floors. The public entrance is through a loggia five bays wide and about 12 feet deep. On two sides of the reception room conference rooms of varying sizes — 13 in all — are grouped.

Visitors arriving by automobile can park inside the building in a special area on the second parking level. From there one can enter the reception room through a passage below the loading dock. The loading dock will be entered off Scott Street and will be served by one freight elevator. Space for a second future freight elevator is provided.

The purchasing department is located on the second floor above the reception room.

The third floor of the building is level with the first floor of the bridge and the third floor of the plant. From the third floor up the building is divided into two parts. The north half including the bridge, and the south half divided from each other by a "mechanical core," containing fan rooms for each floor, toilet rooms, transformer rooms and elevator lobbies plus three stairways.

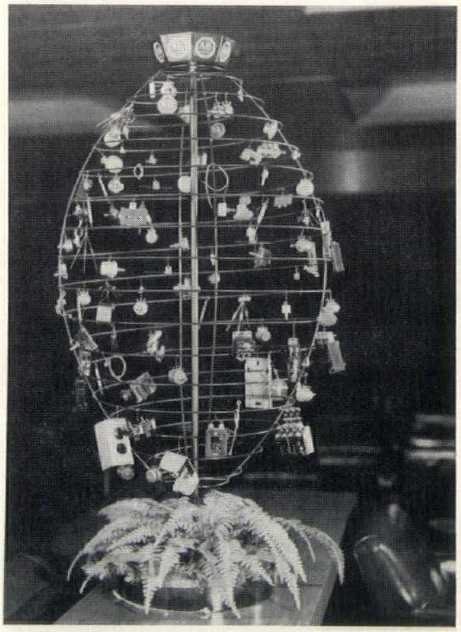
The third and fourth floor will be used for a stationery department, warehouse and possibly some pilot plant operation. The research laboratory will be on the fifth and sixth floors. General offices are to be located on the seventh and eighth floors. On the ninth floor a roof deck shielded by a parapet 14 feet high is hoped to be developed into a "recreational" park.

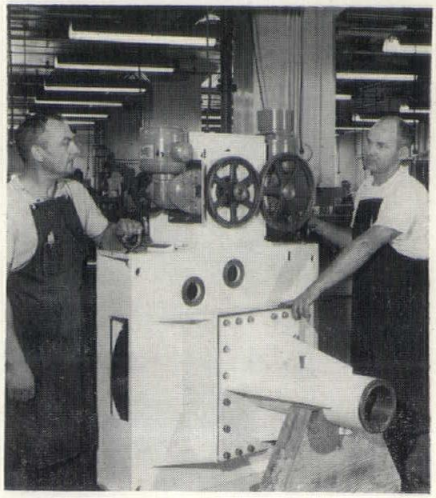
Also on the ninth floor, in the center of the building, an employees' lounge with snack bar for coffee breaks is located.

The clock-tower houses elevator machinery and space for the sprinkler tank containing 50,000 gallons. At the top of the tower Fitzhugh Scott planned an observation room, comfortably equipped to entertain and to enjoy an unrestricted view of the city, the harbor and Lake Michigan.

The basic principle in planning this enormous project was flexibility. Mr. Scott had to keep this in mind and provide that this building would be adaptable to many purposes and to changes in techniques which no-one can anticipate now.

On a recent tour of the Office and Research Building with the architect in charge of the project, George D. Troller of Fitzhugh Scott, Architect, this visitor was impressed by the quality of materials used on the exterior and interior. Marbles from Italy, Peru and Scandinavia in beautiful patterns and color are used lavishly. Great care in color schemes has been exercised. One word not unfamiliar in connection with the client sums up the over-all scheme: quality in every aspect of the word.





allen-bradley/the world's largest clock

The world's largest four-sided clock is found in Milwaukee. It is the focal point of the Allen-Bradley Office and Research Building. It also is the most noticeable of the many unique features incorporated into this building by Fitzhugh Scott, AIA, Architect.

There is a complete clock in each of the four sides of the tower which rises 280 feet from street level. Each clock is operated by a separate mechanism designed and built by the Special Machinery Department of the Allen-Bradley Co.

Fitzhugh Scott designed the faces for the clocks. The hands of each clock are hollow and made of sheet aluminum, anodized black, and reinforced with steel at the hub and at the counterweight.

Each hour hand, including its counterweight, has an overall length of 15 feet 9 inches. The distance from the center of the clock shaft to the tip of the hour hand measures 11 feet, 3 inches. The width tapers from 30 - 1/8 inches at its widest end to 18 - 5/16 inches, while the thickness varies from 4 - 9/16 inches to 4 - 3/16 inches. Each hour hand weighs 560 pounds and is keyed to a shaft which is 6 1/8 inches in diameter.

Each minute hand, including its counterweight, has an overall length of 20 feet. The distance from the center of the clock shaft to the tip of the minute hand measures 15 feet. Each minute hand weighs 600 pounds and is keyed to a shaft 4 1/8 inches in diameter.

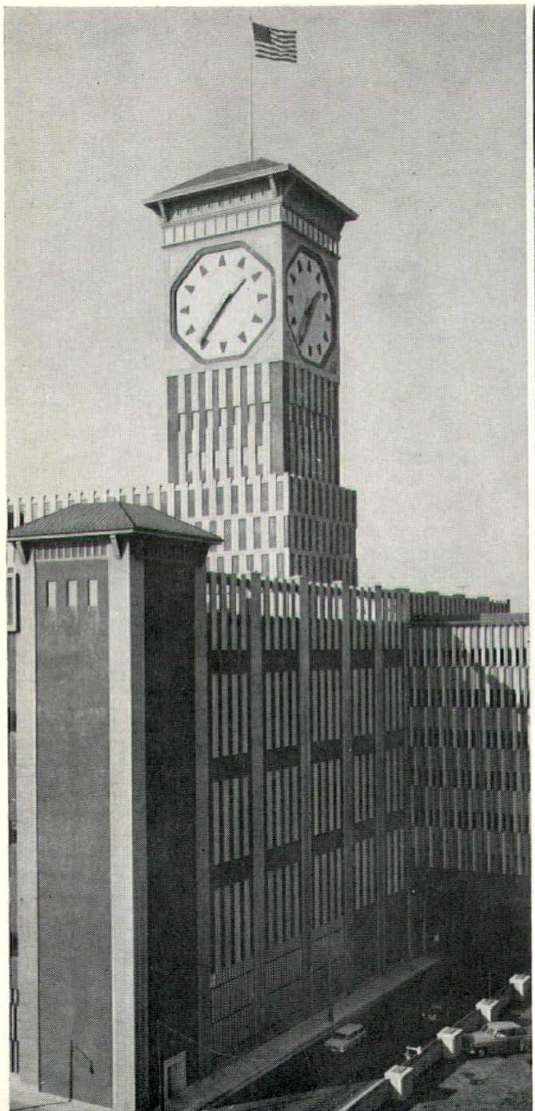
The timing mechanism for each individual clock is operated through a set of gears powered by a 1/3 H. P. synchronous motor. By a special arrangement of gears and pinions, the clock can be reset by moving the hands forward or reverse without stopping or disengaging the timing motor.

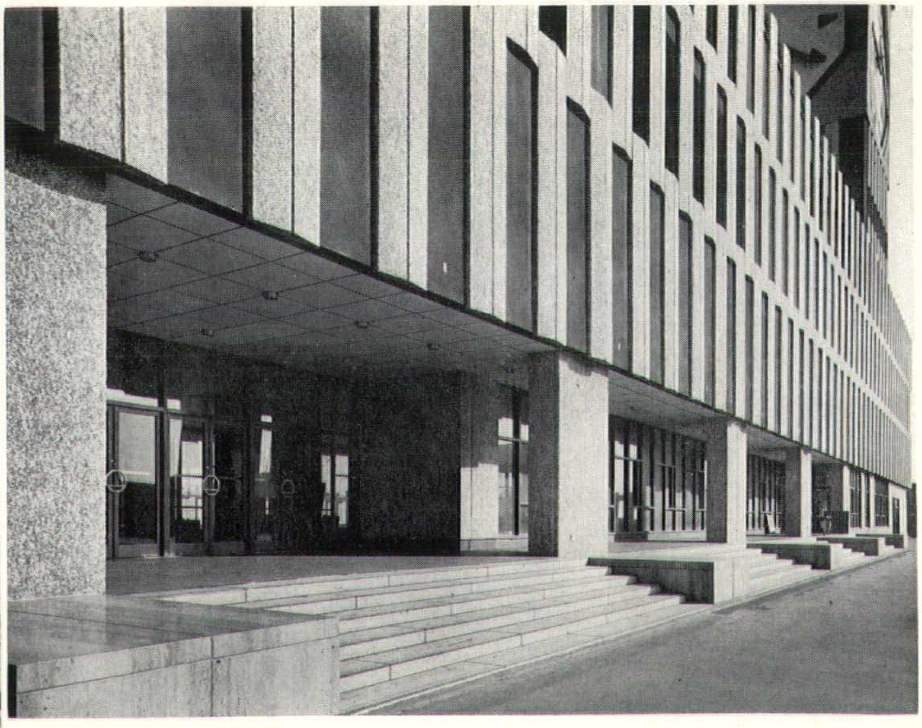
The glass on the face of each clock is 36 feet 8½ inches wide, with a band of sheet aluminum, anodized black, a little less than 2 feet wide making the total width of each clock face 40 feet, 3½ inches. The aluminum black band has the octagonal shape, an important part of the Allen-Bradley Company trademark. Each glass face consists of 76 individual pieces of glass, 4 feet square. Each piece is made of two pieces of glass 1/8 inch thick, separated by a thin plastic film to give the white color to the face of the clock. The glass in each face of the clock weighs 3,900 pounds. The aluminum mounting supports for each face weigh 1,650 pounds. These aluminum supports are fastened to steel I-beams which weigh 6,084 pounds.

The hour markings on the face of the clock are 4 feet high, with the maximum width being 3 feet, while the narrowest portion measures 1 foot. These hour markings are 1½ inches thick.

Each clock is illuminated by fluorescent tubes located behind the face of each clock. Each of the clocks requires about 34.6 kilowatts for both lighting and power, which is equivalent to the power required by 346 one hundred watt light bulbs.

About 8,000 feet of wire were required to connect the lighting fixtures located behind the face of the clock. The weight of each individual clock is 24,973 pounds, the four clocks together weigh roughly 100,000 pounds or 50 tons.





Design: Fitzhugh Scott, AIA
Mechanical: Allen-Bradley Company
Glass: Super Sky Products Co.

SELZER–ORNST CO.

GENERAL CONTRACTORS

ALLEN BRADLEY CO.

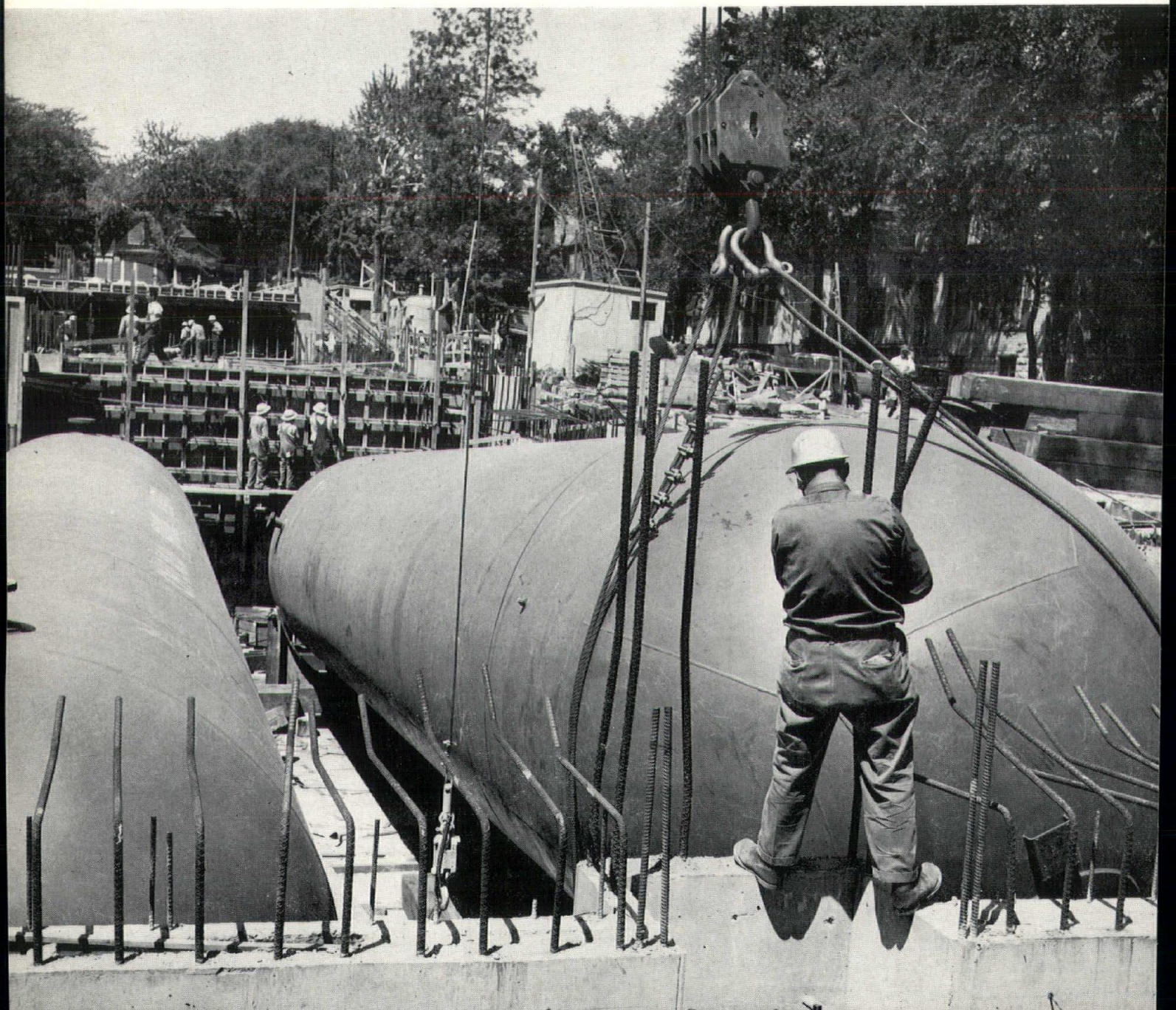
OFFICE AND RESEARCH BUILDING

allen-bradley/world's largest heat pump

The following is a detailed description of the unique heating pump system prepared by George Volk, heating engineer, for the Allen-Bradley Office and Research Building. This system was the largest of its kind in the world at the time of its preparation in April of 1963.

The heat pump uses as a source of heat the energy given off by the lights, occupants and equipment; which heat it absorbs by means of various pieces of heat transfer equipment. This heat is then transferred (or "pumped") to other heat transfer equipment to offset the building transmission losses, raise the temperature of the incoming air, and heat water for humidification.

Excess heat is stored in two 75,000 gallon water tanks for use to supplement building heat absorbed by cooling equipment when such heat is insufficient to supply the above requirements. The tanks have a storage capacity of approximately 70 million BTU. Water will be supplied for heating at up to 135 deg. F., and for cooling and dehumidifying at 42 deg. F. It is estimated that the cooling and heating systems will balance at approximately plus 20 deg. F. outdoor temperature. After the tanks are fully charged, excess heat is used to temper domestic water, melt snow on sidewalks and ramps, and raise the temperature of additional fresh air. If, after these systems are satisfied, there is additional heat available, it is discharged through cooling towers. For summer cooling, the system operates as a typical water chilling system, discharging asbsorbed heat



to the atmosphere through cooling towers.

The heat pump compressors are driven by three 700 H.P. synchronous motors. The motors are synchronous so the Owners can take advantage of a leading power correction factor to balance their electrical load. Cooling towers are equipped with run-down tanks for winter use.

The chilled and warm water circulating systems are primary-secondary type pumping systems. There are 95 pumps totaling 745 H. P.

There are a total of 77 supply, return, or exhaust fans and unit coolers in the building totaling 923 H.P.

Toilet and other exhaust air is cooled before being discharged to the atmosphere in order to provide a heat source for the heat pump.

Electrical equipment rooms, elevator penthouses and air-conditioning equipment rooms are cooled by means of unit coolers to provide heat for the heat pump system.

Each floor has its own air-conditioning system. The First Floor is heated and cooled by means of a high pressure, double duct system discharging air into individual rooms through slots by means of mixing boxes.

The Second Floor is heated by means of perimeter finned pipe radiation and radiant ceiling panels and is cooled by means of radiant ceiling panels combined with a high pressure double duct system discharging air into the area through a perforated metal pan ceiling by means of mixing boxes fitted with diffusers.

The Third Floor Bridge and North Area is heated by means of perimeter finned pipe radiation and ceiling mounted high pressure induction units, and is cooled by means of ceiling mounted high pressure induction units discharging air through ceiling diffusers. Floors are warmed by means of radiant floor coils.

The Third Floor South Area is heated by means of unit heaters.

The Fourth Floor Area and Fourth Floor Bridge is heated by means of unit heaters.

The Fifth and Sixth Floors are heated by means of perimeter finned pipe radiation and ceiling mounted high pressure induction units, and cooled by means of ceiling mounted high pressure induction units discharging through ceiling diffusers.

The Sixth Floor Bridge is heated by means of perimeter finned pipe radiation and ceiling mounted high pressure induction units, and cooled by means of radiant ceiling panels combined with ceiling mounted high pressure induction units fitted with diffusers discharging air into the area through a perforated metal pan ceiling.

The Seventh and Eighth Floors are heated by means of perimeter finned pipe radiation and radiant ceiling panels, and cooled by means of radiant ceiling panels combined with a high pressure double duct system discharging air into the area through a perforated metal pan ceiling by means of mixing boxes fitted with diffusers.

The Eighth Floor Bridge is heated by means of finned pipe radiation and radiant ceiling panels, and cooled by means of radiant ceiling panels combined with a low pressure, zoned air handling system discharging air into the area through perforated metal pan ceilings.

The Ninth Floor is heated by means of convector and finned pipe radiation, unit heaters and radiant ceiling panels, and cooled by means of radiant ceiling panels combined with a high pressure double duct system discharging air into the area through a perforated metal pan ceiling by means of mixing boxes fitted with diffusers.

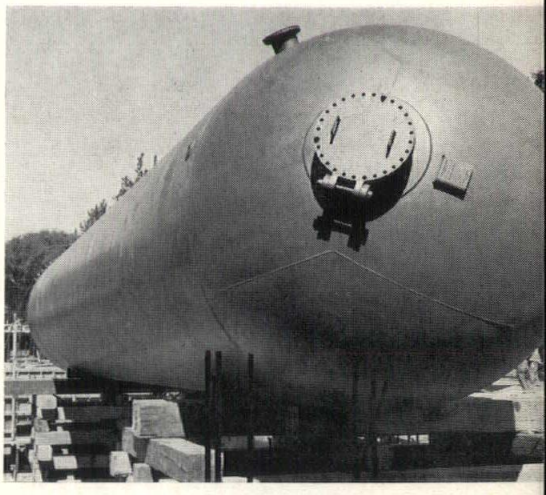
The Tower Rooms are heated by means of finned pipe radiation, and heated and cooled by means of a high pressure double duct system discharging air into the areas through perforated metal pan ceilings by means of mixing boxes fitted with diffusers.

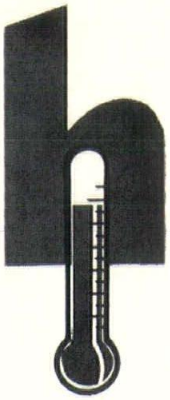
Stairways will be heated by means of convector radiators.

Fresh air for ventilation of First Floor, Second Floor, Eighth Floor Bridge, Ninth Floor and Tower will be supplied directly by means of the individual ventilating systems, and humidified by means of infrared electric humidifiers. Fresh air for ventilation of all other areas is supplied to the individual fan systems by means of a separate fresh air handling system located in the Penthouse where fresh air is heated and cooled, and humidified by means of a spray type humidifier using de-mineralized water.

All fresh and return air will be filtered through two banks of high efficiency mechanical filters arranged in series to provide maximum filtration.

Heating Engineer: George Volk
Equipment: Carrier Co.





Thomas E. Hoye Heating Company

CONSULTING ENGINEERS AND CONTRACTORS

1906 WEST ST. PAUL AVENUE, MILWAUKEE 3, WISCONSIN, PHONE DIVISION 2-9355

Designers and installers of heating, ventilating and air conditioning systems for the Allen-Bradley Company Office and Research building.

FIRE PROTECTION SPECIALISTS

The entire Allen-Bradley Office and Research building is protected against fire by an automatic fire sprinkler system designed and installed by the Paul J. Grunau Company.

PAUL J. GRUNAU COMPANY

Mechanical Contractors

P.O. BOX 4486 • MILWAUKEE 53207 • HU 1-5400

FITZHUGH SCOTT

BORN:

January 13, 1910 at Milwaukee, Wisconsin

SCHOOLS:

Milwaukee Country Day (Graduated in 1928)
Yale University (1928-1932 — B.A.)
Yale School of Fine Arts (1932-1935 — B.F.A.)

ARCHITECTURAL REGISTRATION:

Wisconsin — August 1, 1939 (#1577)
New Jersey — Nov. 30, 1959 (#3846) Expired
Illinois — Dec. 16, 1959 (#01-5059)
Colorado—July 31, 1961 (#C-392)
N.C.A.R.B. Certificate — Nov. 3, 1959 (#3746)

PROFESSIONAL EXPERIENCE:

1935-1936 Apprenticed to Eschweiler & Eschweiler
1936-1939 Apprenticed — Fitzhugh Scott, Sr.
1939-1946 Draftsman and Designer — Fitzhugh Scott, Sr.
1946-1954 Partnership — Fitzhugh Scott and Fitzhugh Scott, Jr.
1954-1958 Partnership — Scott, Kloppenburg and Scott
Fitzhugh Scott, Sr. deceased Oct. 1957)
1958-1959 Partnership—Scott ana Kloppenburg
(Dissolved January, 1959)
1959- Fitzhugh Scott — Architect

OFFICES: PRESENTLY HELD

Milwaukee Boys' Club — President
Milwaukee Country Club — Vice President
Milwaukee Art Center — Trustee and member Executive Com.
Layton School of Art — Executive Board and Trustee
Y.W.C.A. — Board of Trustees
In 1960 was Chairman of the Wisconsin Chapter A.I.A.
Hospital & Health Committee
Is a member of the Greater Milwaukee Committee

Some of the clients and jobs of the Fitzhugh Scott firm, in addition to many residences:

Allen-Bradley Company—All work for their Milwaukee plant including new office building and Research Laboratory.
Allen-Bradley Company—Office building and plant at Galt, Ontario, Canada.
Allen-Bradley Company—Office building and warehouse in Bloomfield, New Jersey
Allen-Bradley Company—Office and distribution center in Chicago, Illinois.
Milwaukee Children's Hospital — Original building and all additions and remodeling
Milwaukee Country Club — Original building and swimming pool and pavilion at a later date.
Y.W.C.A. Building — In Milwaukee and also the building in Racine, Wisconsin
City of Cudahy — Library
Milwaukee Boys' Club — 15th Street Branch
Milwaukee Boys' Club — North Franklin Street Branch
Milwaukee Boys' Club—South Side Unit on Rogers Street, now under construction
Emil Blatz Recreation Building in Lincoln Park
Washington Park Temple of Music
Whitefish Bay Pharmacy Building — Where Fitzhugh Scott architectural firm is located
Lodgewood Apartments — Milwaukee
Wisconsin Malting Company — Manitowoc, Wisconsin, as well as Addition and Remodeling
Milwaukee Sanitarium — Additions and remodeling
Wisconsin Telephone Co. — Building at Waupun, Wisconsin
Wisconsin Telephone Co.—Building at Hartford, Wisconsin
Wisconsin Telephone Co.—Building at Berlin, Wisconsin
Milwaukee Gas Light Company—Utility and Research Building on Silver Spring and Green Bay Rd.
Layton School of Art — Addition and Remodeling

AWARD RECEIVED:

The Bell Telephone Company System
Merit Award for architectural excellence of the Wisconsin Telephone Company Central Office Building at Waupun, Wisconsin, for good design at reasonable cost — January 9, 1962.

HOBBIES:

Golf, fishing and skiing. Mr. Scott is presently participating in the construction of a new ski village at Vail, Colorado, 107 miles West of Denver on Highway 6. His office has completed a hotel, private homes, shops, and apartments last year, and this year will be building an addition to the hotel, a chapel, additional residences, shops and row houses.

FAMILY:

Mr. Scott, Jr. is married to the former Eileen Schlesinger. They have four children and three grandchildren.

chapter notes

The Executive Committee of the Wisconsin Chapter, AIA, met on September 20, 1963 at the Park Motor Inn, Madison with the following present: Allen J. Strang, Mark A. Pfaller, Leonard H. Reinke, Robert Cashin, Joseph Durrant, Paul Graven, Francis J. Rose, A. A. Tannenbaum and William Wenzler.

Reports were heard from the three Chapter Sections. Meetings are scheduled in all groups, after an inactive summer.

The 1964 convention dates were established by action of the Executive Committee. April 27 thru 30 will be the days and Lake Lawn Lodge, Delavan, Wisconsin the location. The Convention and Exhibitors Committee is making excellent progress toward an interesting meeting.

Jack Klund of Madison, was named chairman of the 1964 Honor Awards Committee. For the first time, the Honor Awards program will be offered two years in succession. Usually this is a biennial affair.

A report on the activities of the Lake Michigan Region Planning Council is expected at the next meeting. The Chapter annually contributes to the financial support of this organization. Prior to approval of the annual assessment, the Executive Committee requested a progress report from this group.

The Building Code Committee appeared and discussed several plumbing code changes they would recommend. During the discussion, it was brought out that the entire Wisconsin Plumbing Code could be considerably modified to make it more workable. This complete code ramification will be considered at a later date.

Action was taken to permit changes in the bylaws at the annual meeting, during the 1964 convention. The Chapter Affairs Committee has recommended extensive changes in the dues schedule of each classification of membership.

The meeting was adjourned at 4:15 p.m.

Women's Architectural League of Milwaukee, Inc., will hold a Harvest Ball with square dance entertainment and midnight buffet, on Saturday, November 16, 8:30 p.m. at the Bavarian Club, 5423 North Port Washington Rd.

welcome aboard

NEW CORPORATE MEMBER:
Laurent J. Schutte
Born — June 5, 1915, Milwaukee
Resides — 1080 Highland Drive, Elm Grove
Firm — Schuette, Phillips, Mochon, Milwaukee
Degree — B.S. in Civil Engineering

NEW ASSOCIATE MEMBER:
John F. Funck
Born — September 7, 1932, Milwaukee
Resides — 4454 So. 14th Street, Milwaukee
Firm — Herbst, Jacoby and Herbst, Inc., Milwaukee
Degree — B.S. Architecture, Notre Dame

In our ad in the October issue of the WISCONSIN ARCHITECT we listed Boswell Associates as architects for the Hahn Electric Motor Service. We regret this error and state with our apology that Boswell Associates was not connected with this building.

news notes

International Design Competition, Allegheny Public Square, Pittsburgh. Information Sheet and Registration Form are available at the Wisconsin Chapter Office. Closing Date for registration: November 15, 1963.

* * *

National Community Fallout Shelter Design Competition. The Defense Department has authorized a national competition for the design of a shopping center incorporating fallout shelter with cash prizes totaling $55,000. The American Institute of Architects is conducting this national competition. Architects and engineers registered in the United States, faculty members and graduates of accredited architectural and engineering schools are eligible to participate. Copies of the program and registration forms can be obtained by writing: A. Stanley McGaughan, AIA, Professional Advisor, National Community Fallout Shelter Design Competition, 1341 New Hampshire Avenue N. W., Washington, D. C. 20036.

* * *

Ralph H. Kloppenburg, FAIA was reappointed by the Wisconsin Industrial Commission as member of the Architectural Division, **Robert C. Johnson** as member of the Engineering Division of the Wisconsin Registration Board of Architects and Professional Engineers, for the term expiring September 15, 1966.

* * *

Allen J. Strang, AIA, President of the Wisconsin Chapter, AIA, spoke about New Materials and Methods at the Biennial North Central States Apprenticeship Conference in Milwaukee, on September 26 and 27, 1963.

* * *

Kenneth Kurtz, AIA, spoke to 23 students at a Rufus King High School, Milwaukee, Career Day program on October 17, 1963.

* * *

George A. D. Schuett talked on Church Architecture to a group at the First Methodist Church in Milwaukee. The session was sponsored by the Milwaukee County Council of Churches on October 28, 1963.

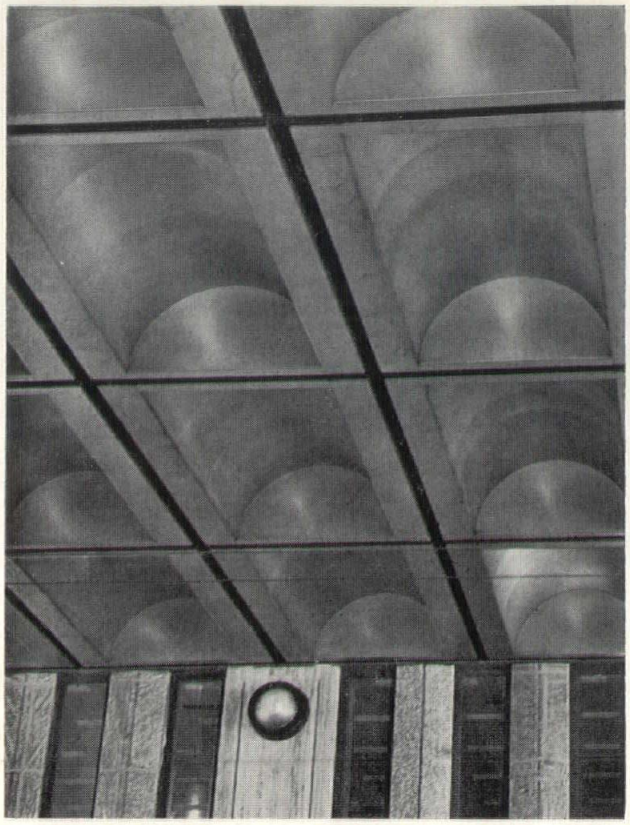
* * *

Lester Niehoff, AIA, used "Wisconsin's Changing Face" as a part of his presentation to a small group in Wauwatosa on October 15, 1963.

* * *

The 1963 Honor Awards mounts were part of an architectural display at Brookfield East High School during the month of October.

(Continued Page 30)



ALLEN-BRADLEY CO. STAINLESS STEEL SOFFIT
ARCHITECT: FITZHUGH SCOTT, A.I.A.
CONTRACTOR: SELZER-ORNST CO.

FABRICATORS OF A WIDE RANGE OF METAL work for the Allen-Bradley Co. Office and Research building, including the vast ventilation system, architectural sheet metal work with handsome standing seam copper roofs, gold aluminum window wall and entrances to the promenade roof, and the graceful stainless steel soffit over the street.

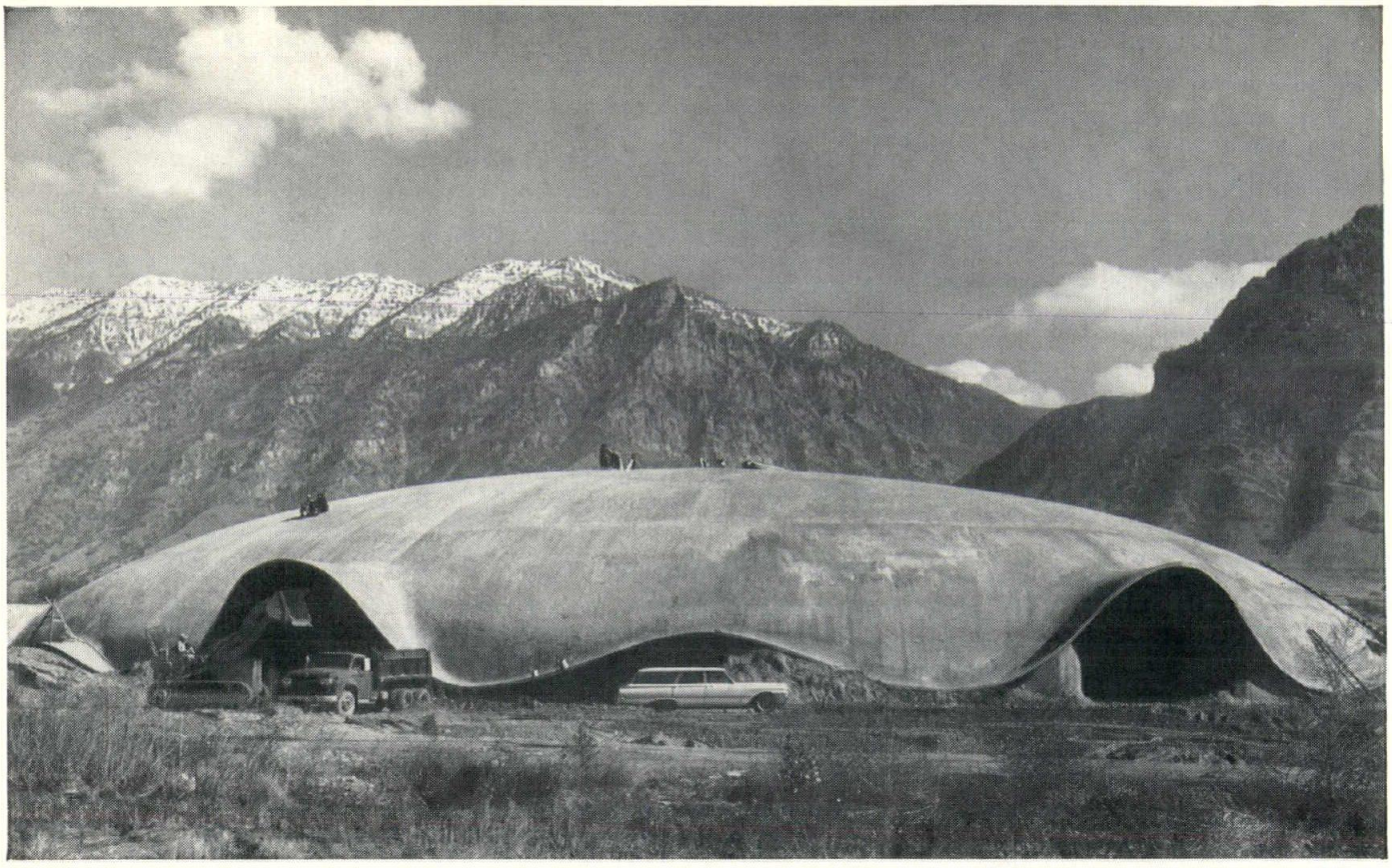
All were designed by Fitzhugh Scott, A.I.A., and executed —from shop drawings to fabrication and erection—by the Louis Hoffmann Co.

Louis Hoffman Co.
117 N. JEFFERSON ST.
MILWAUKEE 2, WISCONSIN

We are pleased to have been selected
to design, fabricate and install
the cafeteria kitchen at
the Allen-Bradley Company,
and to supply the Syracuse china,
the flatware, glassware and utensils.

S. J. CASPER CO. INC.
FOOD SERVING EQUIPMENT

MILWAUKEE • GREEN BAY



Winter Garden Ice Skating & Sports Arena, Provo, Utah.
Architect: Lee Knell, Provo. Engineers: Harry Hodson, Provo, and Arnold Wilson, Provo.

"Triaxial ellipsoid" at Provo, Utah...

modern concrete built this arena for $2.32 per square foot

An unusual concrete shell roofs the new Winter Garden Ice Skating & Sports Arena in Provo. Termed a "triaxial ellipsoid" by the architect, the double-curved shell was formed over a man-made mound containing 40,000 cubic yards of earth.

Because of the steep slope, specifications called for concrete to be gunned on pneumatically. After the concrete shell (3½ inches thick) had cured, front-end loaders readily removed the dirt through the entrances of the structure.

The entire cost of the 160- x 240-ft. arena, including footings, was $70,000—about $2.32 per square foot of floor area. At low cost, Provo got a building of striking appearance, uniquely suited to its ice skating and other recreational uses.

Everywhere today, engineers and architects are finding new and ingenious applications for concrete shell roofs in structures of every size and type.

FOR STRUCTURES . . .
MODERN
concrete

PORTLAND CEMENT ASSOCIATION
735 North Water Street, Milwaukee, Wis. 53202
A national organization to improve and extend the uses of concrete

VIC AUFDEMBERGE

ANN C. ESCH

RICHARD KOSHALEK

CHARLES R. TICHY

Students

Pictured are Wisconsin students of architecture who are receiving tuition aid for the first time this fall:

Richard Koshalek — Madison — University of Minnesota
Ann C. Esch — La Crosse — University of Washington
Charles Tichy — La Crosse — Iowa State University
Victor Aufdemberge — Berlin — University of Nebraska,

has been receiving aid since the second semester of the academic year 1962-63. Facts concerning these young students were published in the October issue.

Holiday Greeting Card

The Foundation's fund-raising project is a most important source of revenue. Considering that 1963 tuition aid grants to needy Wisconsin students of architecture amounted to $3600, replenishment of the fund must anticipate the coming semester. The print for the card design was carefully chosen for universal appeal, and the card was printed by a union press. We trust the State AIA members and friends in organizations allied with the architectural profession will give enthusiastic response. Contributions in lieu of orders for cards will be appreciated also and will receive recognition in this publication.

Award

The Foundation's annual award of $50 at the 1963 Designer-Craftsman Exhibition, Milwaukee Art Center, went to Jean Podell for her beautiful enameled bowl. Selection for award, made by a jury of Foundation Directors, is based on excellence in design and craftsmanship.

Jean Podell (Mrs. William B.) is a resident of the suburb of Shorewood in Milwaukee. She is currently President of the Wisconsin Designer-Craftsmen and State representative for the American Craftsman Council, New York. Trained in Milwaukee art schools, she practiced interior design for a number of years, and then turned to the art of enameling, specializing in accessories for interiors. She has received many first awards, and presently has pieces traveling with the Smithsonian Institute Show. Recently she had a one-man showing at the Kenosha Museum. She has helped to establish the newly opened Craft Guild Gallery located on East Silver Spring Drive, Milwaukee.

Book Plate Competition

To remind: Closing date for the Book Plate Competition is December 31, 1963. Particulars and instructions are given in the August issue, WISCONSIN ARCHITECT. Newly published books on architecture will be awarded as prizes for 1st, 2nd and 3rd place. With the library for the future College of Architecture in Wisconsin being a most important contribution by the State Architects from their own libaries, it should be a challenge to many of the younger members of the State AIA to design an attractive and significant Book Plate to identify these contributions for future generations of aspiring young students. The Foundation has received a number of entries to date but feels that because of the importance of the purpose, a larger range of selectivity should be provided.

WISCONSIN ARCHITECT FOUNDATION
4685 N. Wilshire Road WO 2-5844
Milwaukee 11, Wisconsin

(Continued from Page 8)

Carl W. Schubert, AIA was one of two main speakers at the national convention of Allied Stone Industries on September 29 through October 2nd in Greenbriar, White Sulphur Springs, W. Va.

* * *

On September 26, 1963, the Circuit Court for Dane County issued an injunction restraining Gregg Lacey of Green Bay, Wisconsin from practicing and offering to practice professional engineering in the State of Wisconsin without first being registered with the Wisconsin Registration Board of Architects and Professional Engineers.

PROGRESS REPORT ON THE 15TH ANNUAL CONVENTION

The 15th Annual Convention of the Wisconsin Chapter, AIA, is scheduled at Lake Lawn Lodge, Delavan, from April 28 through 30.

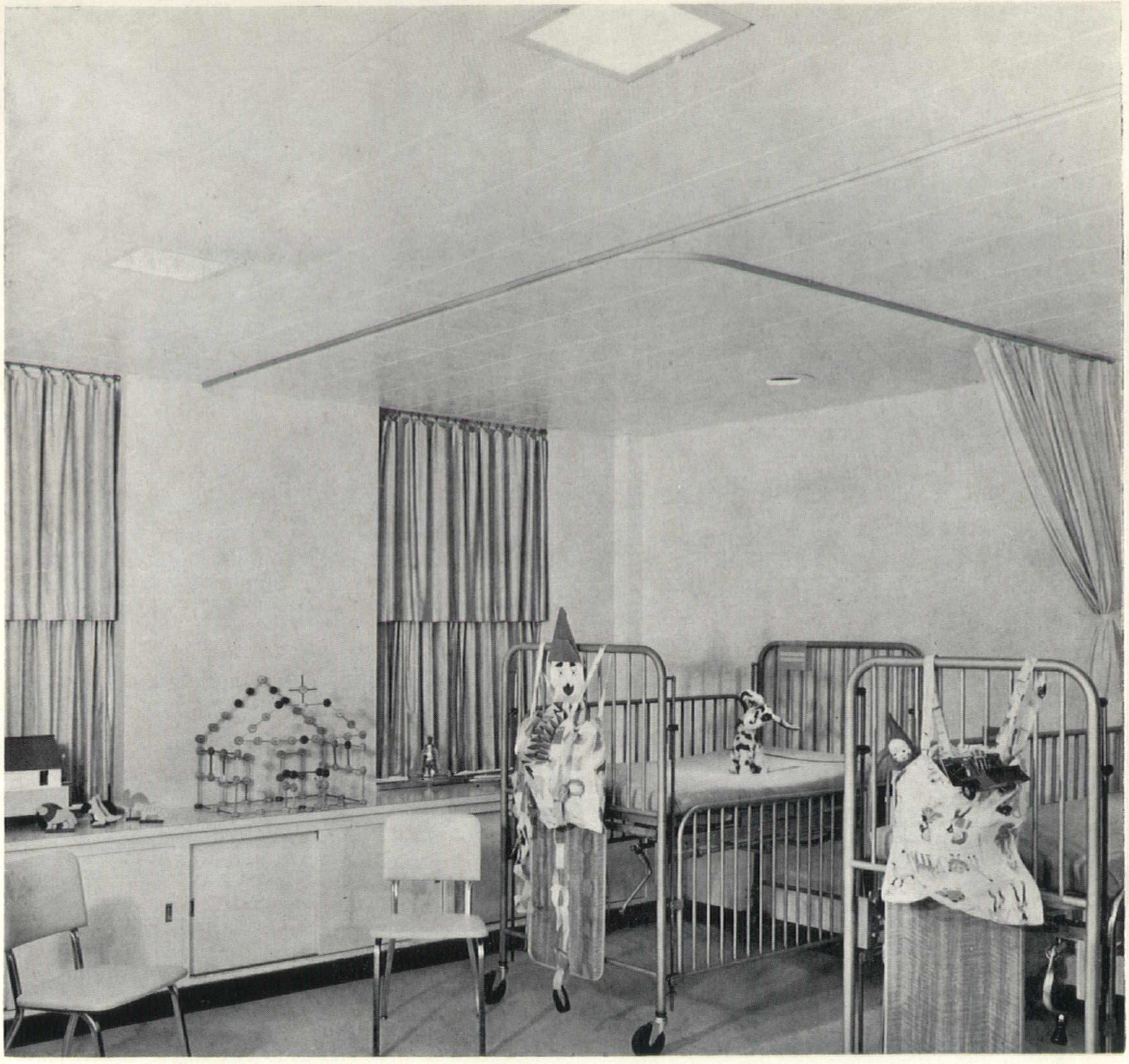
Convention plans have, of course, not been completely formulated as yet but are progressing extremely well, according to Fritz Van Grossmann, chairman of the Chapter Convention Committee.

Beyond the familiar framework of the regular convention program, a new and unique concept is added.

The Chapter Convention Committee and the Convention Exhibitors Committee are presently devoting intense and cooperative efforts toward the 1964 convention. They have proposed and agreed upon introducing a program of investigation of four basic structural materials, brick, concrete, steel and wood. Each of these materials will be investigated from three different aspects — architectural, technical and fundamental use and application.

To please members of the AIA and exhibitors who in the past have complained about lack of time to do justice to construction material displays, several new ideas have been conceived. Two "Codes" have been proposed. One for presentation to the exhibitors and another one as a suggestion for attending members. Members will be invited as guests of the exhibitors to an "Eye Opener" hour and a special luncheon in the exhibition area. The cocktail hour preceding the dinner-dance will also be hosted by the exhibitors.

The Executive Committees and the Convention Exhibitors urge closing of all AIA Offices for at least one day of the convention.



Architect: Fitzhugh Scott; Consulting Engineers: Holland-Beseke & Kurtz, Inc.; General Contractors: Selzer, Ornst Co.

Fast-acting radiant heating and cooling

There are no "cold spots", "hot spots" or drafts to aggravate the condition of patients in Milwaukee Children's Hospital. Burgess-Manning/Inland Radiant-Acoustic Ceilings keep indoor temperatures uniform the year 'round. The acoustical properties of the ceilings help keep noise levels low. ● There are other advantages that make Burgess-Manning/Inland ceilings ideal for hospitals — and other buildings: Ease of housekeeping. Low maintenance requirements. Flexibility of layout. Adaptability to lighting. ● For more information on these remarkable ceilings and their application to your own projects, either new or remodeling, call or write the DeGelleke Company at the address shown below.

Distributor-Installer

INLAND

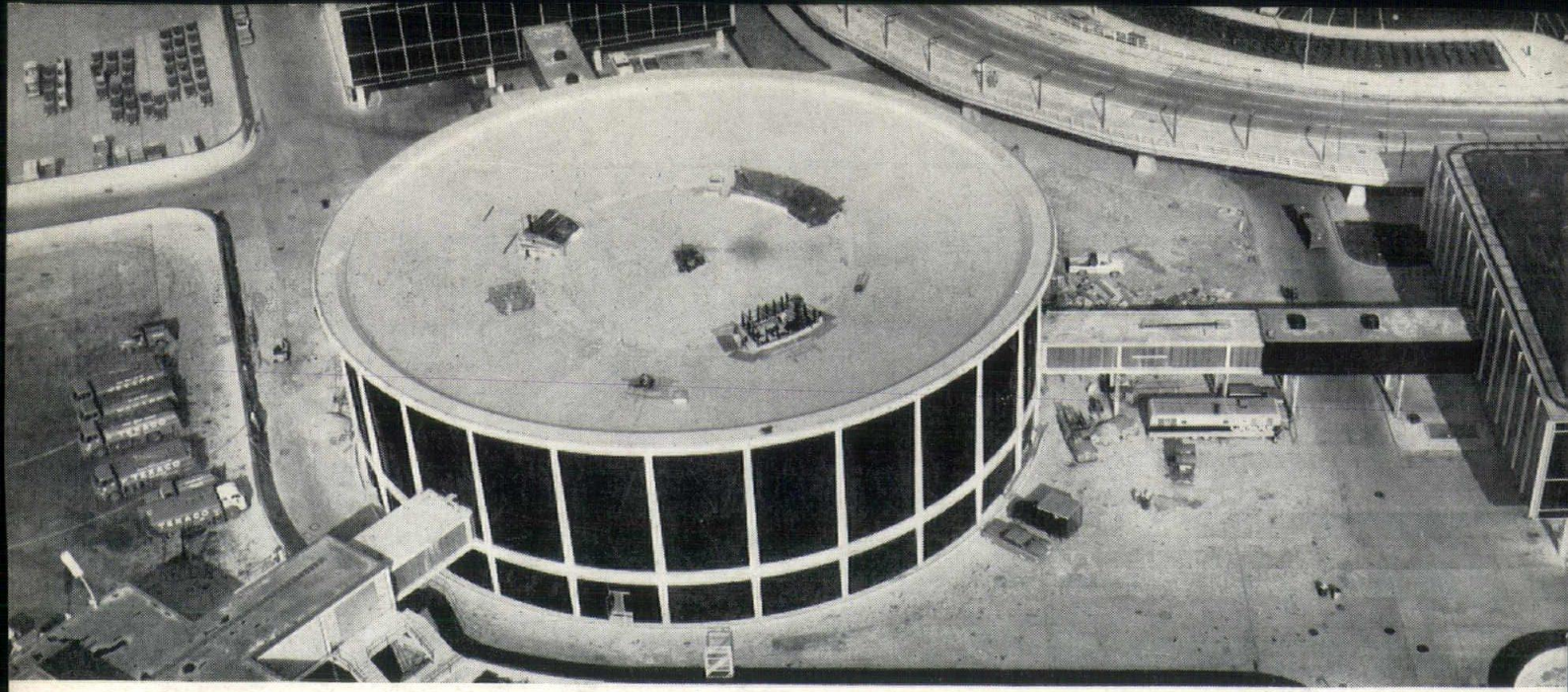
Burgess-Manning / Inland
Radiant-Acoustic Ceilings

DeGelleke Company, Inc.

4040 North 126th St., Brookfield, Wis.

Acoustical contractors
since 1946 . . .

SUnset 1-5300



MATERIALITE

ARCHITECT-ENGINEER: C. F. Murphy Associates, Chicago CONTRACTOR: E. H. Marhoefer, Jr. Co., Chicago

Materialite®
LIGHTWEIGHT CONCRETE AGGREGATE

A high quality expanded shale lightweight concrete aggregate manufactured by a scientifically controlled process. The exclusive non-porous, sealed surfaces achieve maximum cement utilization, providing the ultimate in strength and dimensional stability.

"A unique feature of Carson Pirie Scott's Circular Restaurant building at O'Hare International Airport is its 190-foot diameter suspended roof," stated Sherwin Asrow, C. F. Murphy structural engineer, in a recent A.S.C.E. paper. "Requirements of high strength, low weight and a high modulus of elasticity dictated the use of light-weight concrete for cable encasements and precast 5000 psi roof slabs. In construction, pretensioned steel cables supported approximately two thousand roof slabs, which were preloaded prior to pouring the encasements. Necessary rigidity was achieved when pre-load removal brought the entire roof into compression."

Materialite was the lightweight concrete used. Why not investigate Materialite for your next project?

LIGHTWEIGHT CONCRETE AGGREGATE

FROM MATERIAL SERVICE

DIVISION OF
GENERAL DYNAMICS CORPORATION GENERAL DYNAMICS

300 W. WASHINGTON ST., CHICAGO 6—FRanklin 2-3600

MS-6306