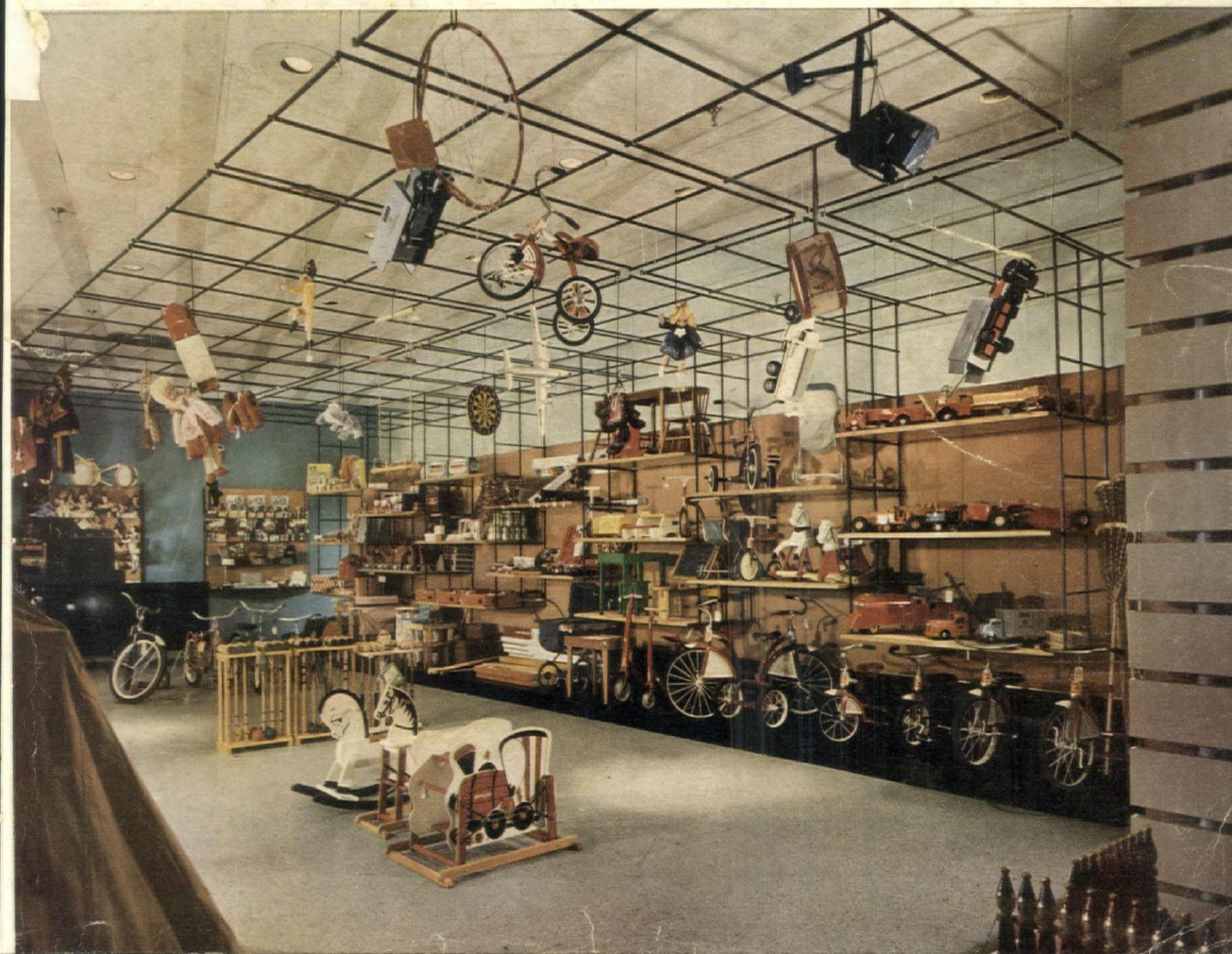
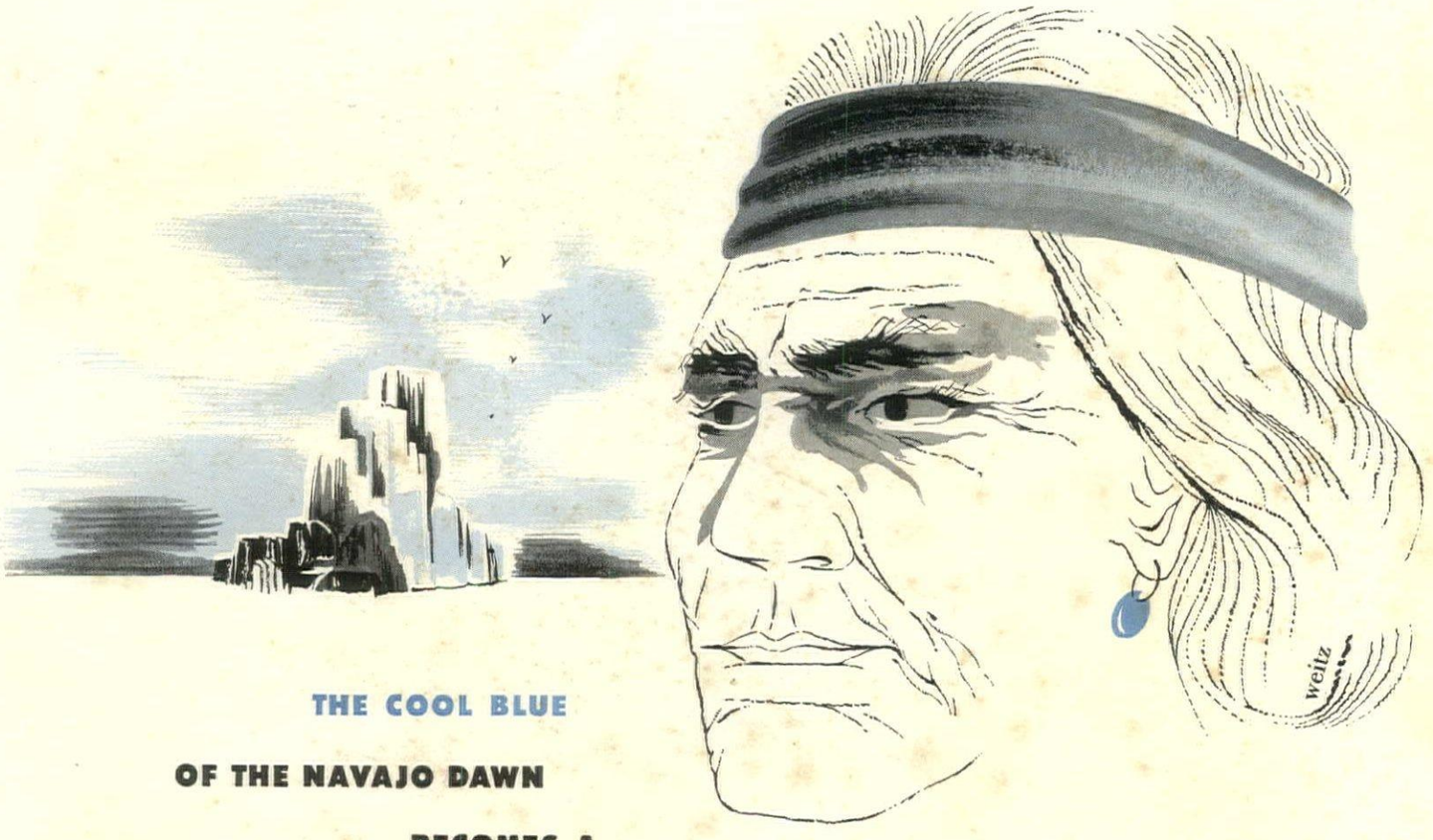
MAGAZINE OF BUILDING

architectural **forum**

July 1953





THE COOL BLUE OF THE NAVAJO DAWN BECOMES A FUNCTIONAL COLOR FOR GREATER OPERATING EFFICIENCY

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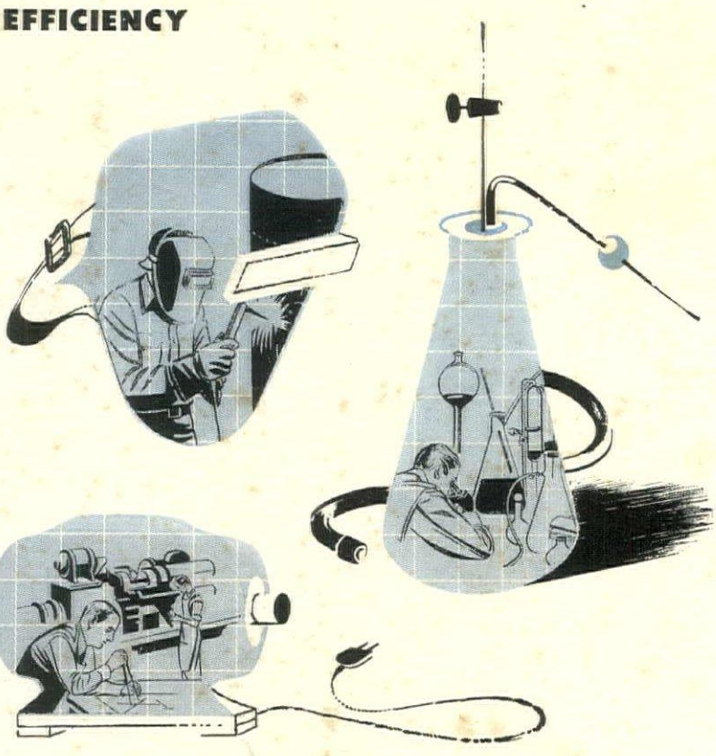

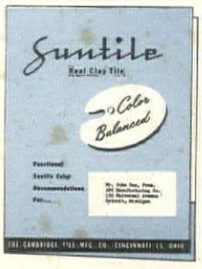

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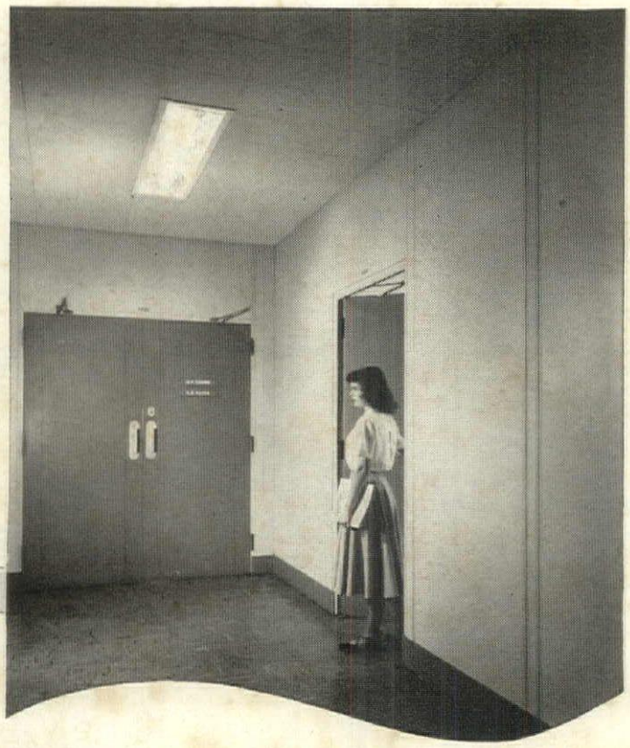

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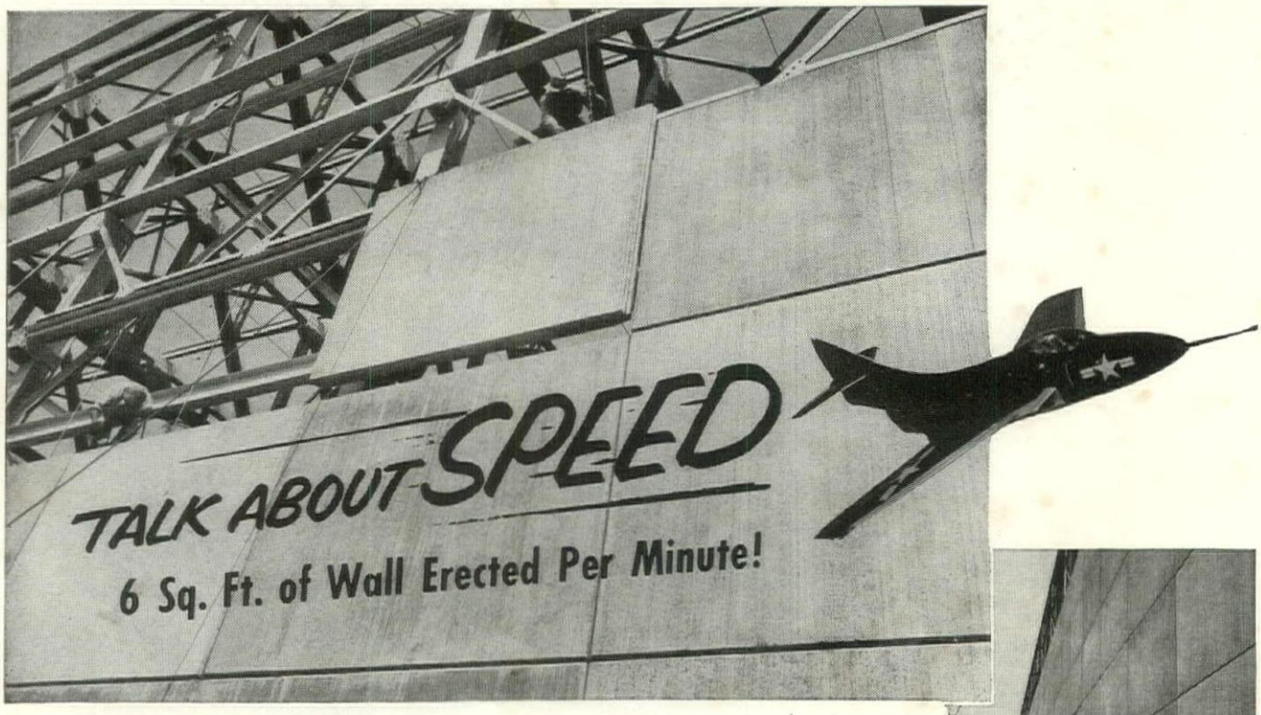

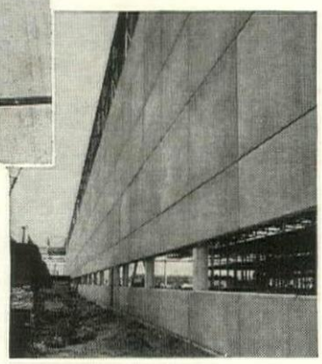

169,000 Sq. Ft. of Precast 'Incor' Concrete Wall Panels in New Grumman Aircraft Plant

● A sixth Grumman Aircraft plant is being built on a 4700-acre site, on eastern Long Island. The accent is on speed with economy, through the use of 169,000 sq. ft. of precast insulated wall panels, in a complete wall system which is fire-safe, durable, weather-resistant—2500 sq. ft. erected per 7-hour day, with one crane and crew—6 sq. ft. a minute!

Cost is less than usual masonry construction. Size and texture of units give architectural effect and appearance considered by many as superior to high quality cut-stone. Highly-mechanized casting operation gets utmost production speed by using 'INCOR'* 24-HOUR CEMENT. Panels are lifted 18 to 24 hours after casting, placed in curing room for 2 days, then stored in yard. Dependable 'Incor' high early strength assures clock-like schedules.

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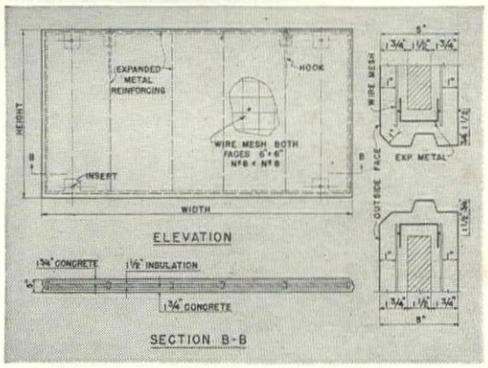
Size, texture and quality of panels produces appearance considered by many as superior to high-quality cut-stone—cost is less than usual masonry construction. Above, wall of main building; left, power plant. Panel detail, below.



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THE MAGAZINE OF BUILDING

architectural **forum**

JULY 1953

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Cover: Hutzler's toy department (see p. 84); photo © Ezra Stoller

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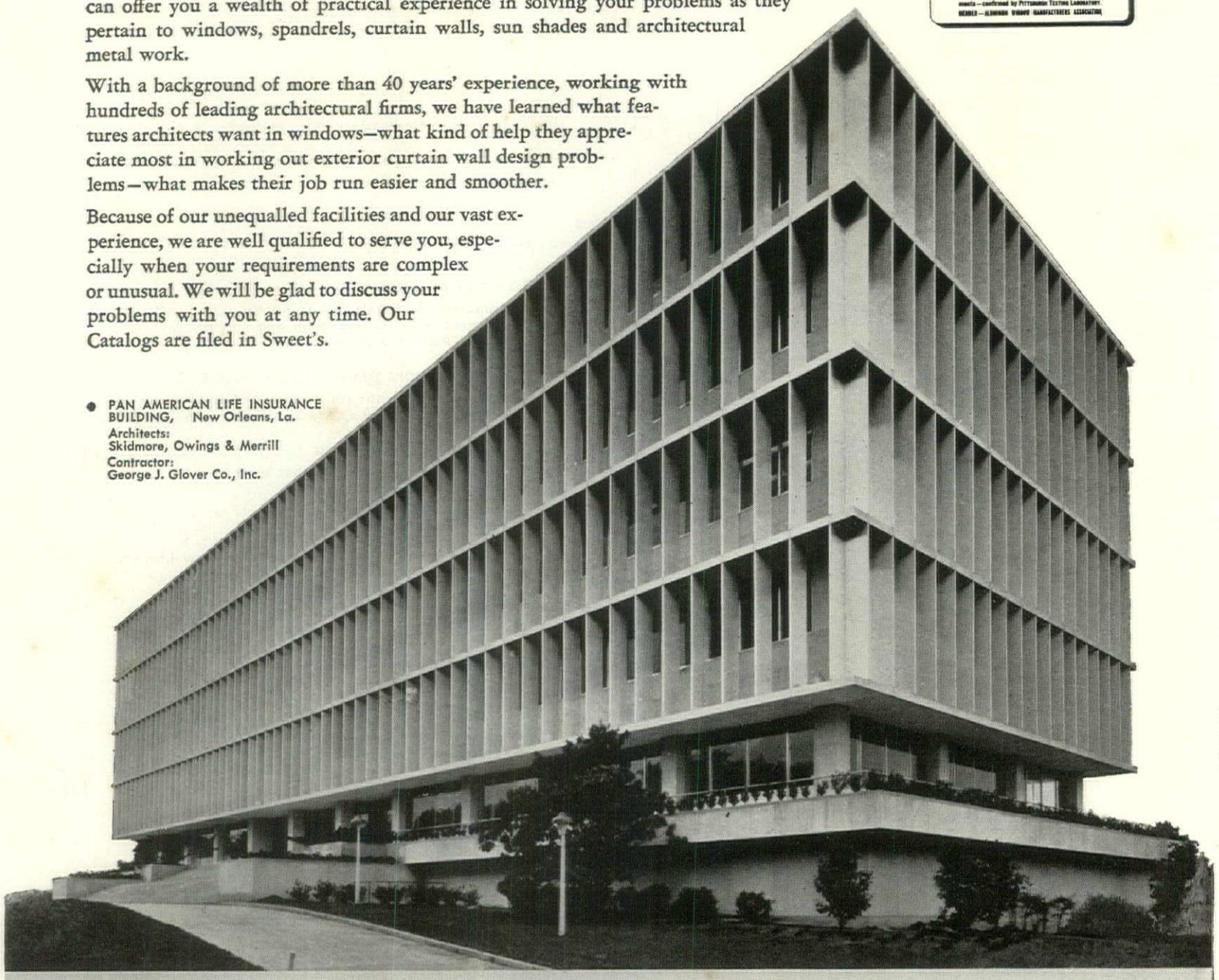

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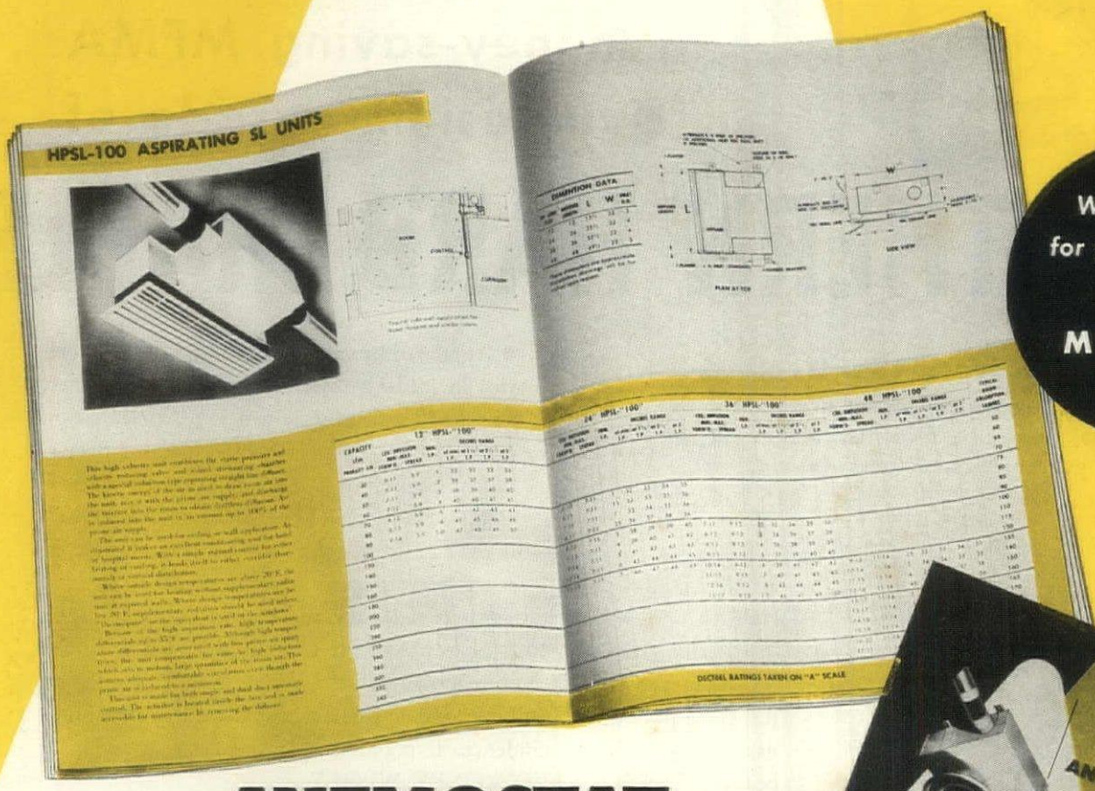

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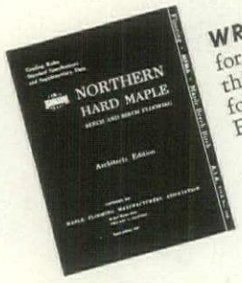

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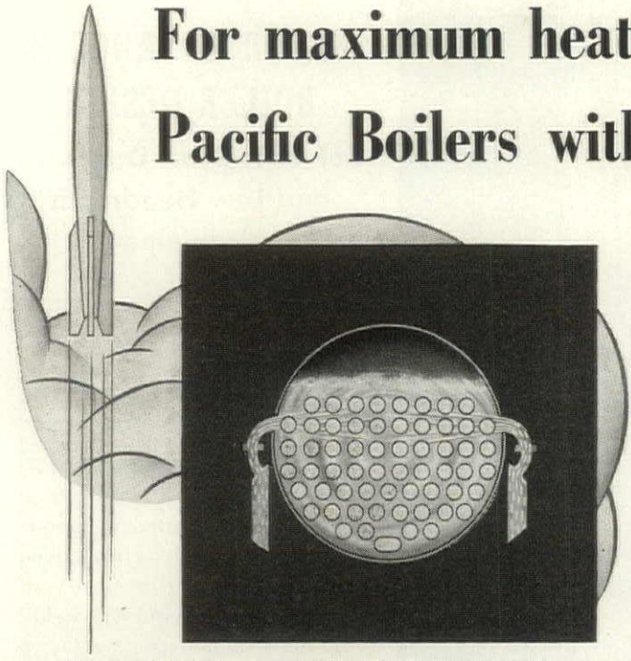

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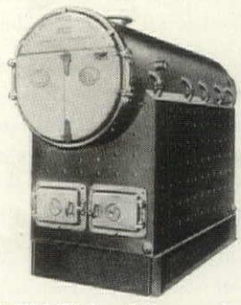

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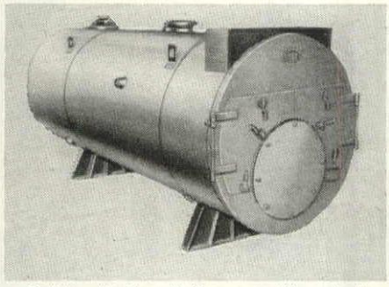
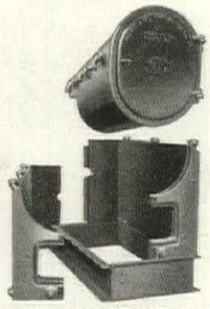


Built entirely of flange-quality steel, **Pacific Scotch Marine Boilers** feature extra-large combustion chamber, lower water line and flush-front design.



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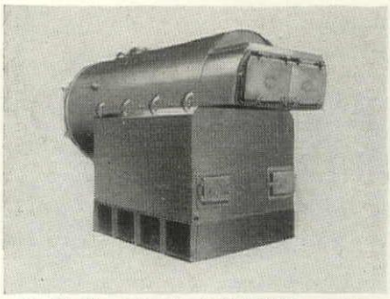

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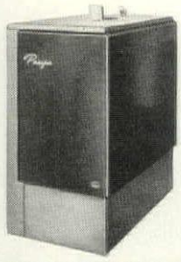

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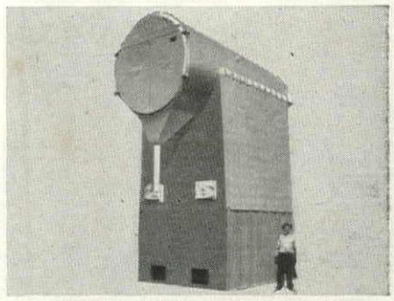

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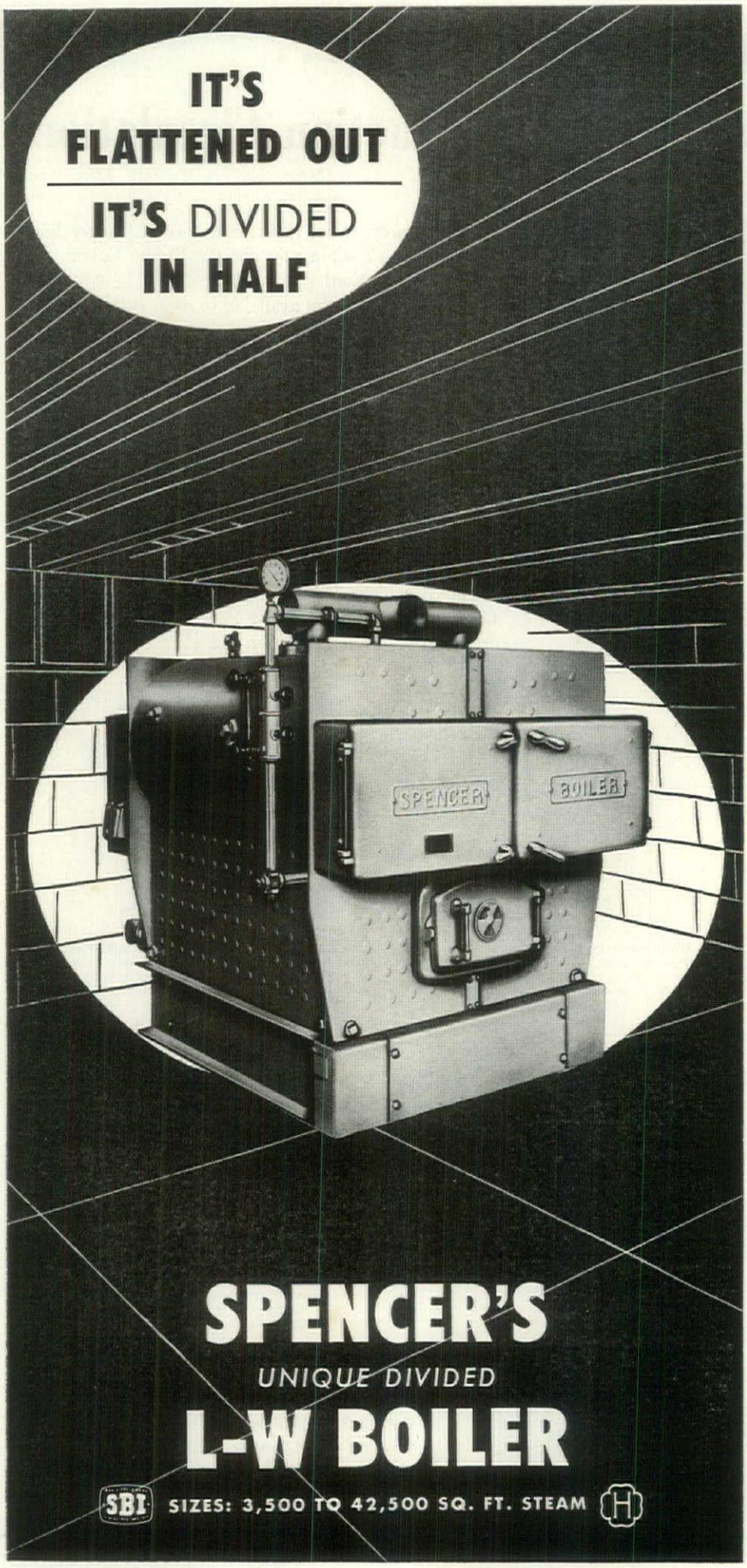

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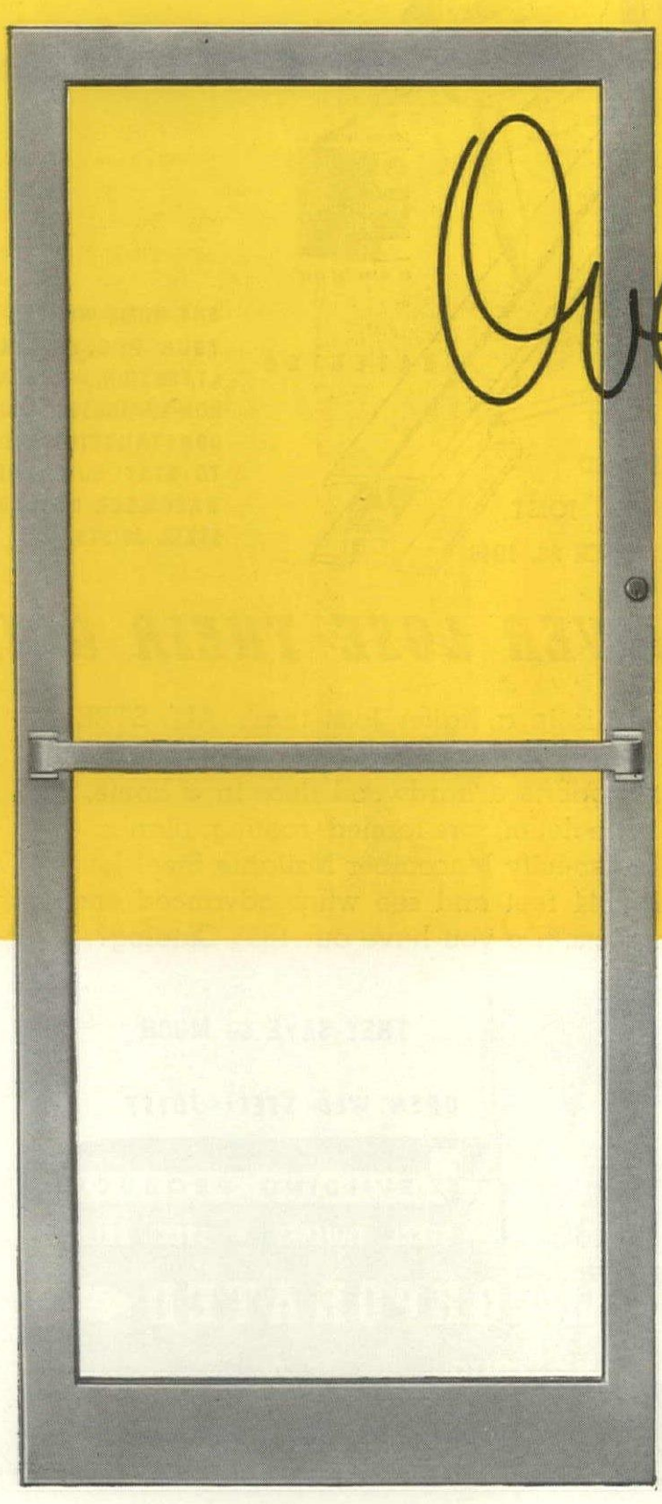

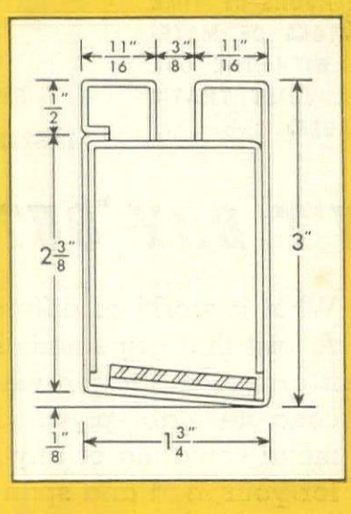

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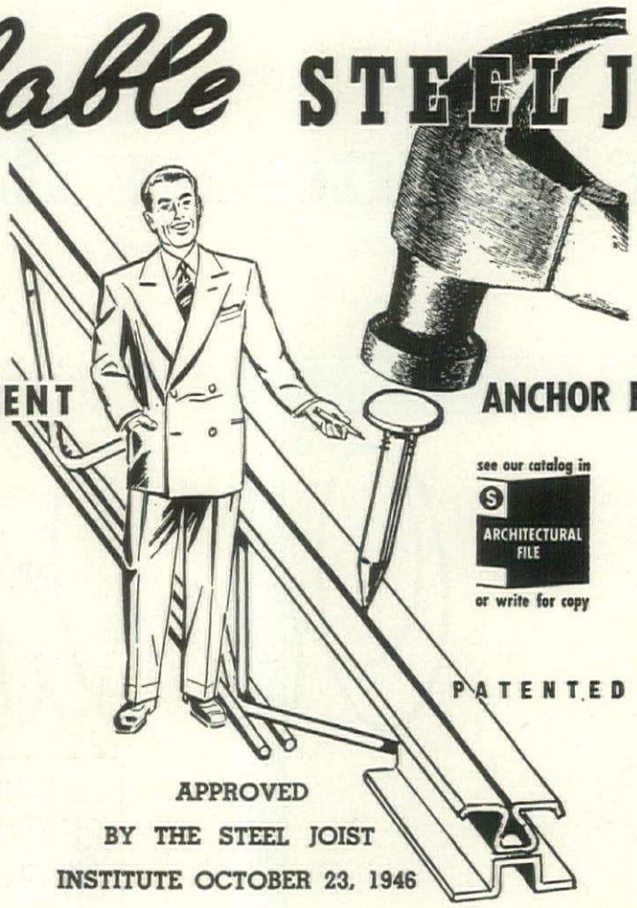

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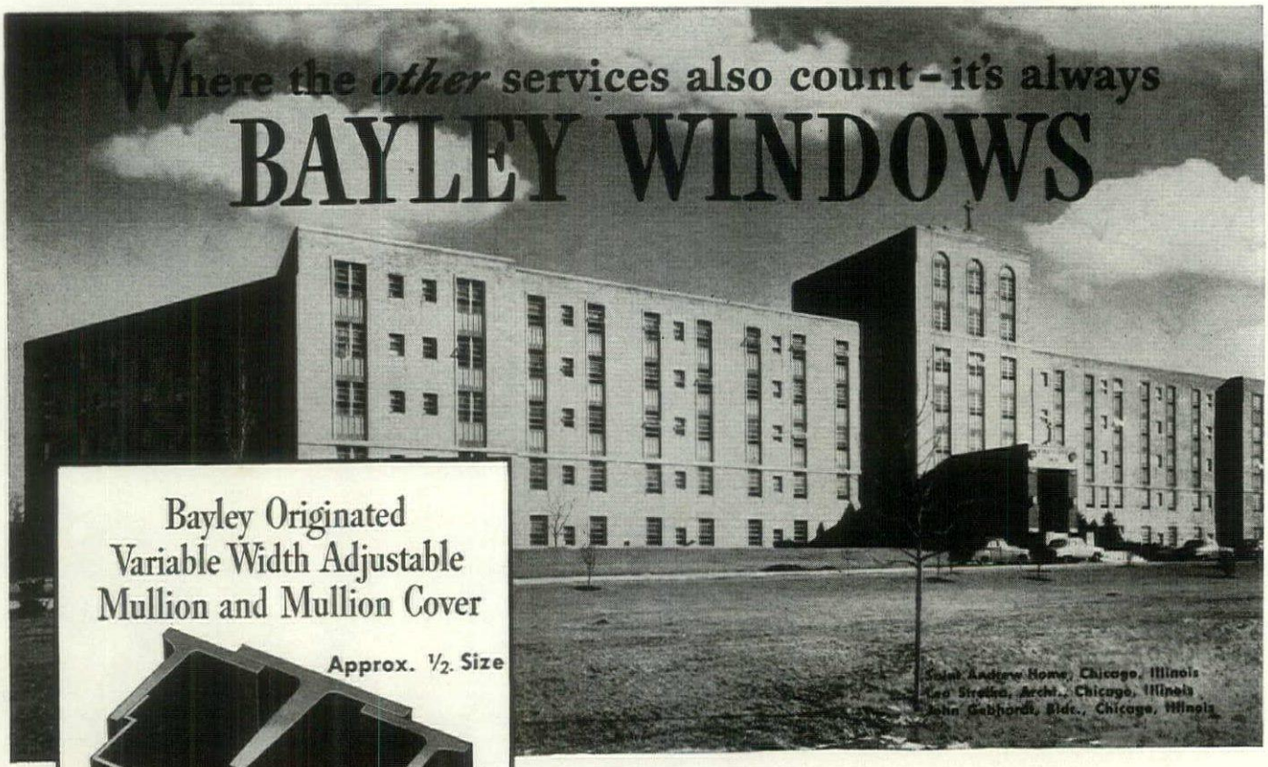
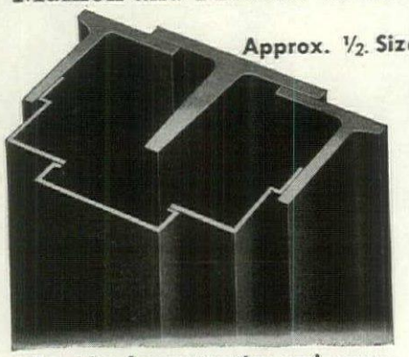


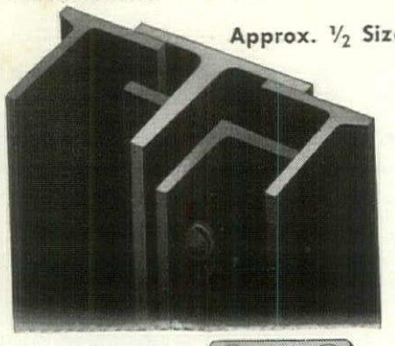
Bayley Originated Variable Width Adjustable Mullion and Mullion Cover

Approx. ½ Size



- Provides for contraction and expansion, insuring good contact at jambs
- Adjustable ½" plus or minus variation in masonry dimension
- Attractively conceals all bolts against corrosion hazard
- Provides two direction slip joint
- Lintel or building load do not bear on window — preventing distortion and assures proper ventilator operation
- Cost-reducing clip and bolt assembly
- Tight window and mullion fit, facilitates caulking

Approx. ½ Size



74 *Years of* RELIABILITY

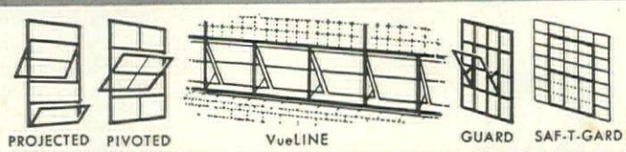
Bayley Projected Windows provide the modern hospital with better ventilation, vision and natural daylighting

The "better-serve" policy that, for so many years, has keynoted Bayley's client relationship is readily apparent in numerous ways. Constant improvement in product detail and quality is one. Another is exemplified in the Bayley Aluminum Projected Window (offered also in steel) that was designed to provide the window features requested by hospital authorities. Such features as:

Modern appearance • Economy—painting unnecessary • Permanence — long carefree life • Simplicity — no complicated mechanism • Adaptable to all types of construction • Glazing outside — flat surface inside • Easily washed from inside • Prepared for screens • Permits use of accessories, such as draperies, shades, curtains, venetian blinds or awnings.

Whatever your window requirement may be, Bayley's years of specialized window experience can undoubtedly be of value to you. Write or phone.

See Bayley in Sweet's. Complete catalogs on aluminum windows, 16a/Bay; steel windows, 16b/Ba; Saf-T-Gard Hospital Detention Window, 16b/Bay.



THE WILLIAM BAYLEY COMPANY

Springfield, Ohio

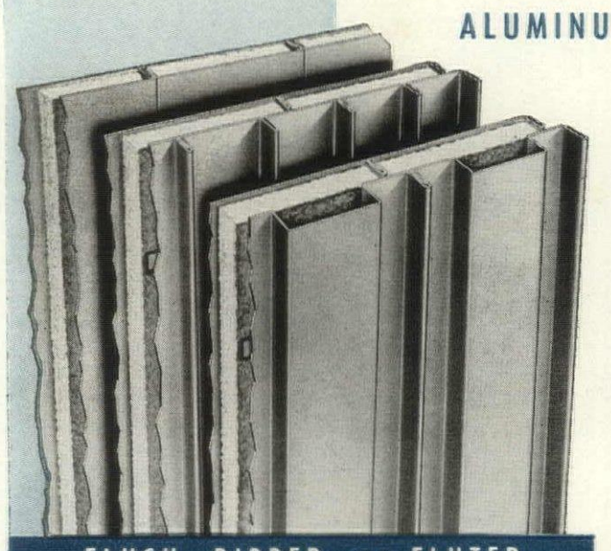
District Sales Offices:

Springfield Chicago 2 New York 17 Washington 16

INSULATED METAL WALLS

for INDUSTRIAL and COMMERCIAL BUILDINGS

ALUMINUM, STAINLESS or GALVANIZED STEEL



FLUSH, RIBBED, or FLUTED
Over-all "U" Factor of Various Types is Equivalent to or Better than Conventional 16" Masonry Wall

The trend to metal walls for new industrial and commercial buildings is evidenced day after day with more architects and designers turning to this modern, economical, timesaving, permanent type of exterior wall construction. The Lincoln-Mercury plant illustrated below is one of three complete plants built by one manufacturer employing aluminum exterior walls throughout . . . another manufacturer has employed Mahon Aluminum Insulated Walls on two completely new plants involving fourteen separate buildings. One Power Company has built three large steam powered generating plants employing Mahon Stainless Steel Walls on one, and Aluminum on the other two. Insulated Metal Walls offer definite advantages in lower cost of both materials and labor, reduction in construction time—plus the fact that these walls can be erected under weather conditions which would preclude masonry construction. Insulated Metal Walls also lend themselves to individual architectural expression in building design. Mahon Insulated Metal Walls are available in the three exterior patterns shown at left. The Mahon "Field Constructed" Fluted or Ribbed Wall can be erected up to sixty feet in height without horizontal joints—a feature of Mahon walls which is particularly desirable in powerhouses or other buildings where high expanses of unbroken wall surface are common. See Sweet's Files for information or write for Catalog No. B-53-B.

THE R. C. MAHON COMPANY

Detroit 34, Mich. • Chicago 4, Ill. • Representatives in All Principal Cities

Manufacturers of Insulated Metal Walls; Steel Deck for Roofs, Partitions and Permanent Concrete Floor Forms; Rolling Steel Doors, Grilles and Underwriters' Labeled Rolling Steel Doors and Fire Shutters.

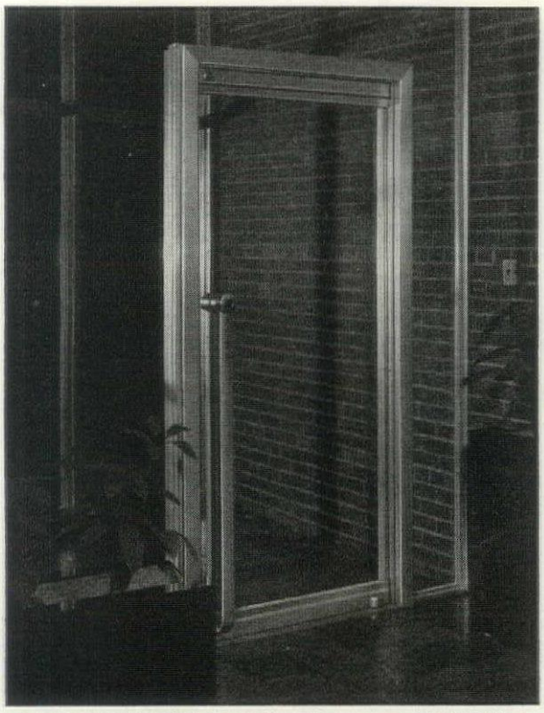
Lincoln-Mercury plant, Wayne, Mich. In this new plant and powerhouse, 175,600 Sq. Ft. of Mahon Aluminum Wall was employed for exterior surfaces. Giffels & Vallet, Inc., L. Rossetti, Architects and Engineers, Bryant & Detwiler Co., General Contractors.

MAHON

PITTCOMATIC... *"the nation's finest*

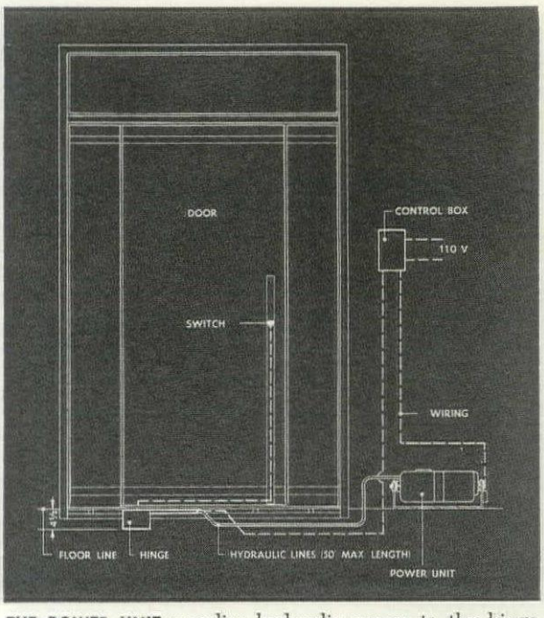
PITTCOMATIC hinges operate the sturdy Herculite Doors which form the entrance to the aluminum-faced skyscraper office building of the Aluminum Company of America at Pittsburgh, Pa. The magic-like operation of the Pittcomatic is controlled by a 10-volt switch, concealed in the door handle. It is so sensitive that the instant the handle is touched, the door starts to open by hydraulic action, smoothly and silently, in either direction. A steady flow of traffic into and out of the building is thus permitted with the utmost efficiency. Each door operates independently, so that the operation of one door in a battery can be discontinued without disrupting the operation of the others. Architects: Harrison and Abramovitz, New York City; Associate Architects: Altenhof and Bown; Mitchell and Ritchey.

automatic door opener"

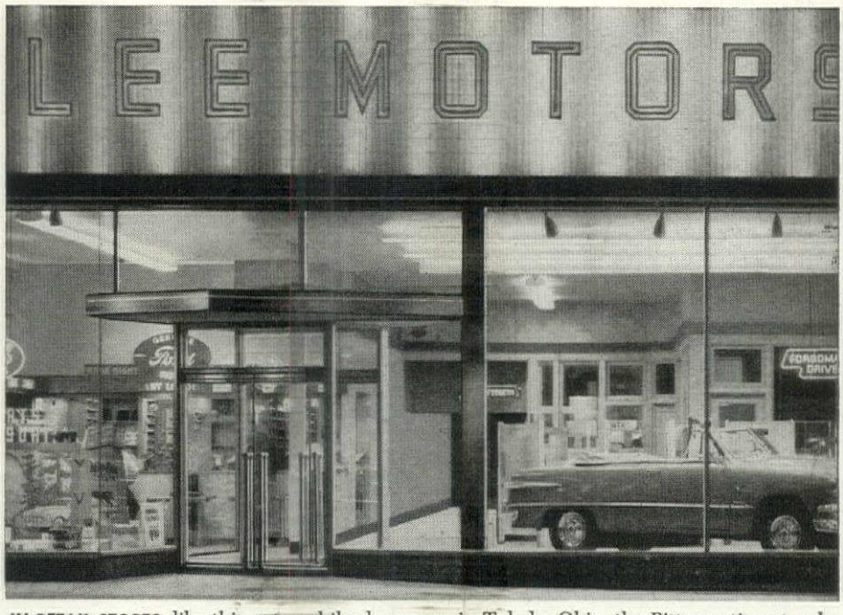


FOR ALL KINDS of industrial and commercial buildings, leading American architects are specifying the Pittcomatic automatic door opener. This building in South Bend, Indiana, is an interesting example. Architects: Schwartz & West, South Bend, Indiana.

BANK EXECUTIVES are "sold" on the Pittcomatic. They state that their customers like the easy response of doors having this automatic opener; that these installations have actually attracted more customers. Architect: Wyatt C. Hedrick, Dallas, Texas.



THE POWER UNIT supplies hydraulic power to the hinge under the door through ⅜" copper lines. The power unit is activated by a 10-volt circuit in the handle which passes through the control box. Oil lines are 3000-lb. test. The action of the door in all respects can be regulated by adjustments provided in the control box and the hinge. No power can build up. It is a safe door.



IN RETAIL STORES, like this automobile showroom in Toledo, Ohio, the Pittcomatic not only brings the practical advantages of its automatic operation, but, with Herculite Doors, adds to the over-all feeling of open-vision, which is such a proven sales stimulator. Architects: Sanzenbacher, Morris & Taylor, Toledo, Ohio.

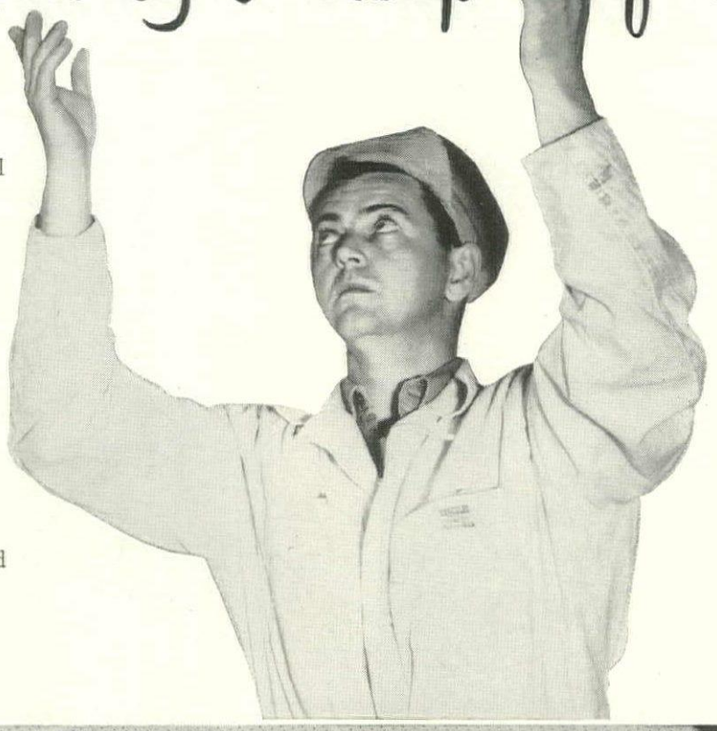
For complete information on the Pittcomatic, write to Pittsburgh Plate Glass Company, Room 3288, 632 Fort Duquesne Blvd., Pittsburgh 22, Pa.

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

"What's the best way to keep quiet?"



● The *best* way is to specify Gold Bond Acoustimetal, with .85 noise reduction coefficient and long-lasting steel construction. National Gypsum's production has been increased, and the material is readily available.

The Acoustimetal unit is a 12″x24″ perforated metal pan holding an incombustible mineral wool pad. An Acoustimetal ceiling has high light-reflection and a handsome modern appearance. Its long life and low maintenance over the years make economical sound conditioning. If desired, Acoustimetal can be painted without impairing its efficiency, and the units can be quickly and easily removed to repair concealed wiring or plumbing.

Gold Bond Acoustimetal is installed only by skilled, factory-approved contractors. Write today for Gold Bond Technical Bulletin No. 692 which gives complete details and specifications.

You'll build or remodel better with Gold Bond®

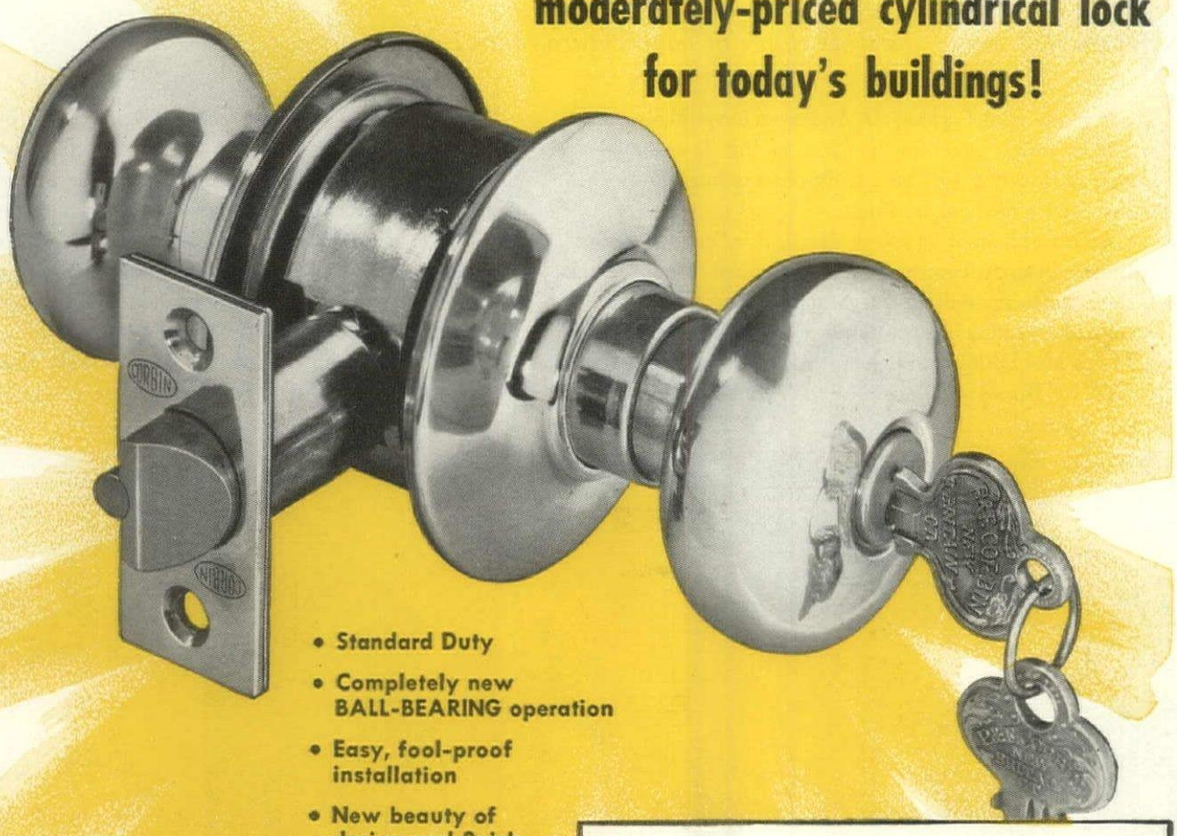
NATIONAL GYPSUM COMPANY • BUFFALO 2, NEW YORK

Lath, Plaster, Lime, Sheathing, Roofing, Siding, Gypsum Roof Decks, Wall Paint, Textures, Rock Wool Insulation, Metal Lath, Sound Control Products, Fireproof Wallboards, and Decorative Insulation Boards

BIGGEST HARDWARE NEWS OF 1953!

CORBIN® Defender

The NEW and BETTER moderately-priced cylindrical lock for today's buildings!



- **Standard Duty**
- **Completely new BALL-BEARING operation**
- **Easy, fool-proof installation**
- **New beauty of design and finish**

A major advancement in its class, the Corbin Defender is the hardware sensation of 1953! The moment you see it, you'll recognize *superb* engineering and *superior* materials. Yet it is moderately priced! Specify the Corbin Defender for any building where security, appearance and *economy* are the key requirements.

Check this list of major features!

- Exclusive *ball-bearing* latch-bolt retractor
- Exclusive outside knob feature that permits fast change of hand or removal of cylinder —without sacrifice of security
- Famous P. & F. Corbin 5-pin tumbler security
- Can be master keyed with other Corbin Cylinder locks
- All trim wrought brass, bronze or aluminum
- All internal parts zinc-plated, di-chromated steel
- Double compression springs
- Screwless knobs and roses
- Meets Federal Specifications Type 160
- Thirteen best-selling functions
- One mortise for all functions
- Time-saving installation—special boring jig, boring bit and lock front mortising tool available.

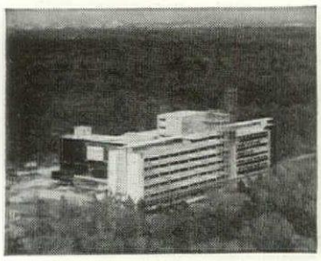
5½" ROSE

TURN BUTTON

PUSH BUTTON

CORBIN
The World's most widely used BUILDERS' HARDWARE

P. & F. CORBIN Division
The American Hardware Corporation
New Britain, Connecticut, U.S.A.



New Texas Hospital Demonstrates Flexibility of Honeywell Customized Temperature Control

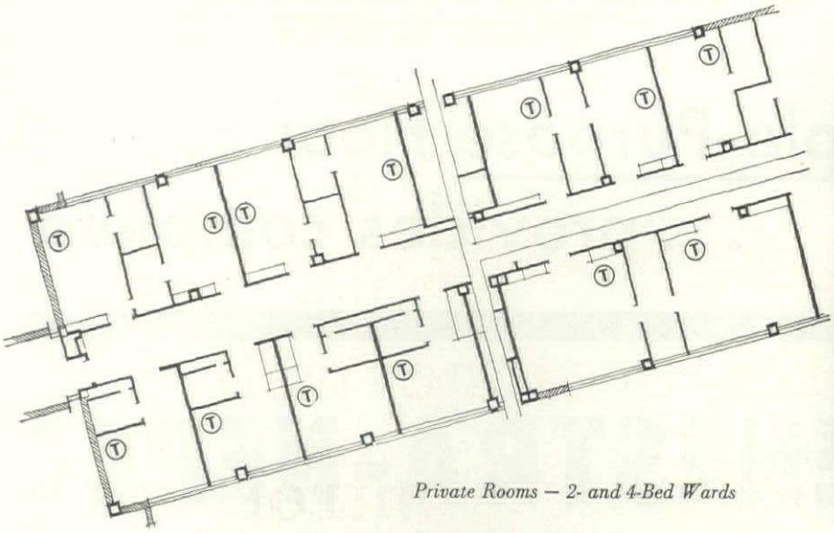
System will meet with wide range of temperature control needs

The University of Texas M. D. Anderson hospital for cancer research, now under construction in the Texas medical center at Houston, will be a truly outstanding addition to the country's medical facilities.

Carefully planned in every detail, this "cancer station" will contain such features as the first cobalt "bomb" in the United States for radiation treatment, color television for remote observation of operations and a betatron laboratory.

In this new building both heating and cooling will be controlled by Honeywell Customized Temperature Control. The installation includes *comfort* control for patients—an individual thermostat in every patient's room. It includes operating room controls for both temperature and humidity. It includes a new electronic temperature control system to maintain photographic bath water within a range of plus or minus one-tenth of one degree Fahrenheit. And it includes electronic fume hood controls to remove dangerous fumes from radio isotope laboratories.

Thus, Honeywell Customized Temperature Control will indeed meet a wide range of temperature needs.



Private Rooms — 2- and 4-Bed Wards

Notice on the floor plan that with Honeywell Customized Temperature Control each patient-room has its own individual thermostat. This means that *each* patient can be kept genuinely *comfortable* no matter what the weather outside. And it makes it possible for doctors to "prescribe" the exact temperature each patient needs to get well fast.

Plans for the Anderson hospital were developed by the following firms; MacKie & Kamrath, AIA, Architects, Houston; Schmidt, Garden & Erikson, Consulting Architects, Chicago; Lockwood & Andrews, Mechanical and Site Engineers, Houston; Walter P. Moore, Structural Engineer, Houston; Farnsworth & Chambers Co., General Contractors, Houston; Archer Plumbing Co., Mechanical Contractor, Houston.

For Comfortable, Even Temperature in New or Existing Buildings—of Any Size—Use Honeywell Customized Temperature Control

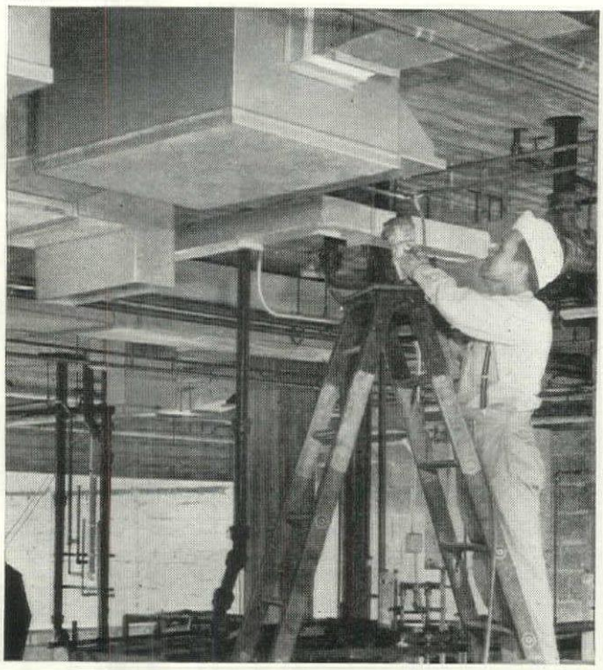
Whether it's a hospital, apartment, office, store, factory, school — or any size building — new or existing, Honeywell Customized Temperature Control can help meet your client's heating, ventilating and air conditioning problems.

Once equipped with Honeywell Customized Temperature Control, they'll have an ideal indoor "climate"—and save fuel besides.

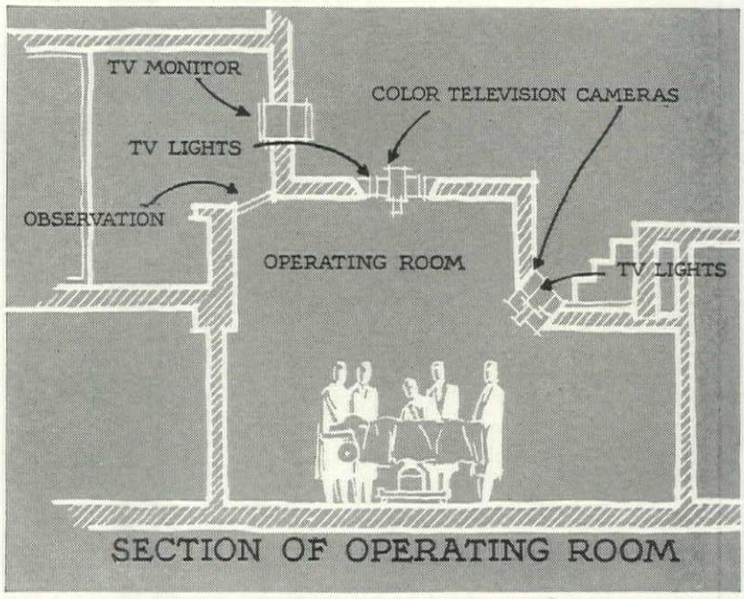
For full facts on Honeywell Customized Temperature Control, call your local Honeywell office. There are 104 across the nation. Or mail the coupon today.

W. M. Andrews of Lockwood & Andrews, Consulting Engineers, says:

"It's an extremely flexible method of control. And that means Honeywell Customized Temperature Control can be used to meet nearly any temperature problem—in any type of building."



Honeywell Customized Temperature Control will control these air conditioning units suspended above doorways. Heating of rooms will also be thermostatically controlled. When installed *at time of construction*, system duct work can easily be concealed, can be put in at lowest cost.



Color television, as shown on the operating room cross section above, will permit over 300 students to watch surgery. Extra heat from television lights will be compensated for by sensitive Honeywell thermostats. Operating rooms will also be equipped with humidity controllers, an important feature in the Honeywell Customized Temperature Control installation.

MINNEAPOLIS
Honeywell

First in Controls

MINNEAPOLIS-HONEYWELL REGULATOR CO.
Dept. MB-7-201, Minneapolis 8, Minnesota

Gentlemen:
I'm interested in learning more about Honeywell Customized Temperature Control.

Name _____

Firm Name _____

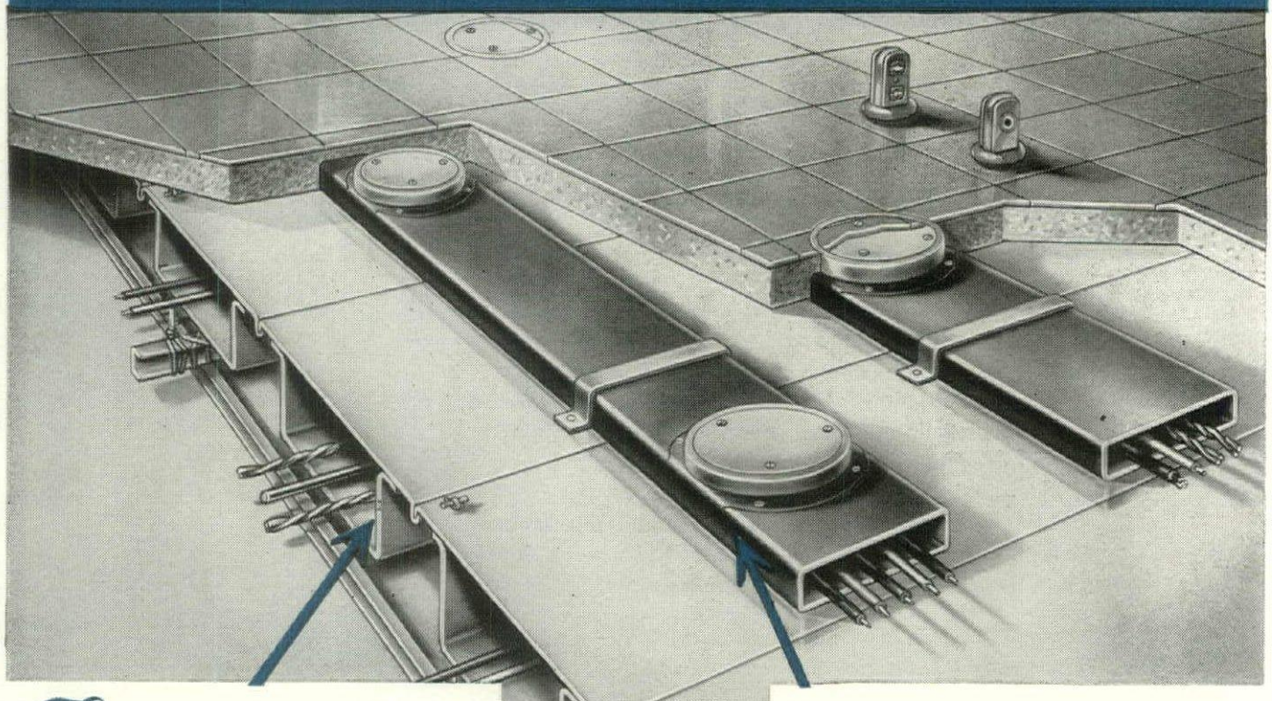
Address _____

City _____ *Zone* _____ *State* _____

New Triple-Purpose Floor System ... provides complete,

Announcing **FENESTRA-NEPCO**

The NEW ELECTRIFIED cellular floor system



Fenestra FLOOR PANELS by Detroit Steel Products Company

The cellular steel load-supporting structural panels couple maximum strength with light weight . . . offer maximum cross sectional area (30 sq. inches) for wire fills. Cellular raceways are used for installation of electrical wires for power, light, telephone, and intercommunications.

ENERGIZED with NEPCO Header Duct Wiring System

National Electric Header Duct is an all-steel grounded feeder raceway from the distribution panel to the raceways formed by the structural steel floor panels. Electric wiring through this combined raceway system provides the availability of electric outlets in any square foot of floor area.

cuts building costs
simplified electrification

ELECTRIFLOOR

Fenestra-Nepco Electrifloor is (1) a structural unit; (2) a complete electrical system; (3) a subfloor—all in one package! It combines the experience and products of two leading manufacturers—Detroit Steel Products Company and National Electric Products Corporation. It provides architects and engineers with the *latest* developments in electrical floor distribution systems utilizing the large area ducts of cellular building panels.

Reduces building costs. Less structural steel and concrete required.

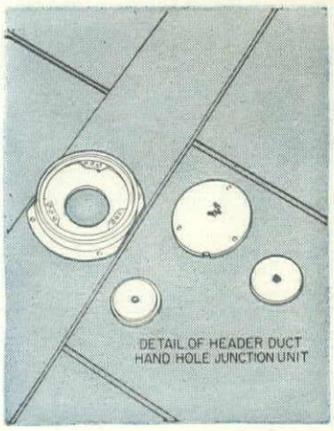
Reduces erection time. Three men can lay over 100 square feet of floor in less than an hour.

Provides earlier occupancy. Floors go in to form working platforms as frame goes up.

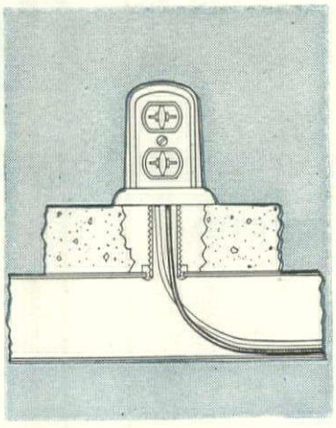
Provides complete, simple electrification. You can have electric outlets anywhere, any time—*without* disrupting business, *without* costly alterations.

Fenestra-Nepco engineers are ready to work with your architects, engineers and contractors. Write for our booklet and details on new Electrifloor installations in Detroit's City-County Building.

HERE'S HOW ELECTRIFLOOR WORKS:



1. Header duct is installed on top of cellular steel panels according to pre-determined layout. Access holes are used to feed the panel cells selected for electrification.
2. Electrical service fittings are installed as specified in office layout. Service fittings may be established anywhere along the cellular raceway.
3. Selected raceways or all raceways may be energized to accommodate any requirements of power, light, telephone or inter-communications.
4. Cellular raceways may be energized when header duct is installed or at a later date. Service extensions or relocations can be made easily, in less time than ever before, with less interruption to office routine.



Listed and approved by Underwriters' Laboratories, Inc. Sold through leading electrical distributors.

Nepco Header Duct has successful, time-proven features. Produced by the leading manufacturer of electrical roughing-in wiring systems.

EVERYTHING IN WIRING POINTS TO

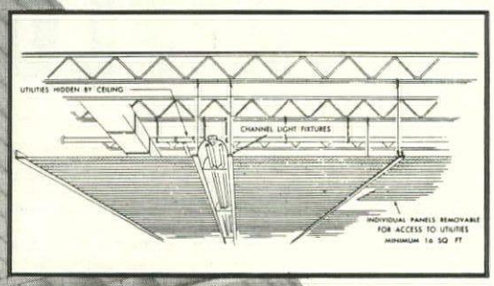
National Electric Products

PITTSBURGH, PA.

3 Plants • 7 Warehouses • 34 Sales Offices

NEW BEAUTY *in acoustical treatment...* AND EFFICIENCY

Typical installation: Panels are supported on aluminum angles and T-sections. Sound absorbing material is laid on panels or attached direct to ceiling.



REYNOLDS *Lifetime* ALUMINUM ACOUSTICAL SYSTEM

New beauty, with this embossed aluminum... in either natural or white finish. *Greater efficiency* in noise reduction... an excellent material for *large* industrial areas. Low in first cost, low in maintenance. High-speed installation... minimum work interruption. Adaptable to any air-conditioning... high thermal insulation value reduces cooling and heating cost. Fire-resistant ...carries Underwriters' Laboratories label. And any section is readily removed and replaced without damage... providing easy access to utilities! Call the nearest Franchised Applicator or write for literature.

FRANCHISED APPLICATORS

ALABAMA: Badham Insulation, Birmingham; Stokes Interiors, Mobile.

CALIFORNIA: Pacific Acoustics, Los Angeles; Sound Reduction, Oakland.

COLORADO: Danco, Inc., Denver.

CONNECTICUT: Wilson Construction Co., Hartford.

DISTRICT OF COLUMBIA: T. M. Woodall, Inc., Takoma Park.

FLORIDA: Standard Insulation, Fort Lauderdale; Cliff Haller, Orlando.

GEORGIA: Lewis & Co., Atlanta.

ILLINOIS: Anning-Johnson Co., Chicago.

INDIANA: Brown-Anning-Johnson, Inc., Indianapolis.

IOWA: Anning-Johnson Co., Des Moines.

KENTUCKY: Braun Acoustical Co., Louisville.

LOUISIANA: Walker Lloyd, Baton Rouge.

MAINE: Edw. F. Byrnes Co., Portland.

MARYLAND: Limbach Co., Hagerstown.

MASSACHUSETTS: Edw. F. Byrnes Co., Boston.

MICHIGAN: Nichols Co., Detroit; Harold R. Sobie Co., Grand Rapids.

MINNESOTA: Anning-Johnson Co., Minneapolis.

MISSISSIPPI: Stokes Interiors, Jackson.

MISSOURI: Hamilton Co., St. Louis; Stokes Co., Kansas City.

NEW JERSEY: Woolsulate, East Orange; W. M. Moyer Co., Quakerstown.

NEW MEXICO: Welch-Erwin, Albuquerque.

NEW YORK: Albany Acoustical Corp., Albany; A. P. Madden Co., Syracuse; Davis-Fetch, Buffalo, Rochester, Jamestown; Wm. J. Scully Corp., New York.

N. & S. CAROLINA: Bonitz Insulation, Greensboro, Columbia.

OHIO: Gellin Co., Cleveland; J. H. Archibald Co., Cincinnati.

OKLAHOMA: Ball Dist. & Eng. Co., Tulsa, Oklahoma City.

OREGON: Steward Griffith Co., Portland.

PENNSYLVANIA: Limbach Co., Pittsburgh; W. M. Moyer Co., Philadelphia.

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TEXAS: C. F. Schilling Co., Houston; Gen'l Supply Co., San Antonio; Acoustic Builders Co., Dallas; Welch-Erwin, El Paso.

VIRGINIA: McL. T. O'Ferrell & Co., Richmond.

WASHINGTON: G. D. Bradley Co., Seattle.

WISCONSIN: DeGelleke Co., Milwaukee.

"MR. PEEPERS" returns September 13th on NBC-TV

REYNOLDS *Lifetime* ALUMINUM

...in industrial siding

REYNOLDS *Lifetime* ALUMINUM RIBBED EMBOSSED SIDING

DESCRIPTION:

METAL THICKNESS: .032" (22 U.S. Std. Ga.).
FINISH: Stipple-embossed.
LENGTHS: 5', 5½', 6', 6½' and so on to 13½'; also 13'10". Special lengths to order.
WIDTH: Over-all width 33⅜", nominal coverage 32".
RIBS: Pitch 4" center to center, depth 1".
WEIGHT: 59 lbs. per 100 square feet.

New beauty, with the proved efficiency of .032" aluminum siding... freedom from rust, resistance to corrosion, lowest maintenance (no painting), and heat-reflectivity that cuts cooling costs in summer, fuel costs in winter. It's what industrial builders have long sought... the modern metal in modern architectural design. *And it's still low in applied cost!*

New Cochran Foil Company plant, Louisville, Ky. Installation by MacArthur Company, one of Reynolds approved jobber-erectors, for the Austin Company, General Contractors. See below.*

*Comprehensive material and installation service now available through an approved jobber-erector system. For literature call the nearest Reynolds office listed under "Building Materials" in classified phone books of principal cities. Or write **Reynolds Metals Company**, Building Products Division, Louisville 1, Kentucky.

BUILDING PRODUCTS

Why they call Weyerhaeuser 4-Square West Coast Hemlock the "Ability Wood"

This striking room is paneled with West Coast Hemlock bevel siding in a natural finish. While you may feel that the effect is a bit *too* striking, it does demonstrate two points of considerable importance to architects who specify materials for fine homes or other structures requiring beauty as well as utility.

First, Weyerhaeuser 4-Square West Coast Hemlock makes siding so beautiful that discerning homeowners want to bring the siding *inside* where they can enjoy it fully.

Second, the fine, even texture . . . the straight grain and light, warm color . . . the freedom from pitch, loose knots and splintering . . . make this West Coast Hemlock a superb building material, whether it supports a building, protects the exterior, or enhances the charm of the interior.

It may sound impossible, but Weyerhaeuser 4-Square West Coast Hemlock has many other advantages, some known only to men who have come to love the wood by working with it. For example, it takes nails well, and holds them tenaciously—which means that it stays tightly in place as siding for many years. And even the small, tight knots in West Coast Hemlock take and hold finishes—natural or painted—in a way that delights professionals as well as amateurs.

Architects who love fine woods will enjoy working with this versatile softwood which has earned the name "Ability Wood". Descriptive literature will be mailed promptly on request. Write Department H.A.F.

PROPER PROCESSING OF HEMLOCK

● Weyerhaeuser takes this abundant "Ability Wood" and through scientific logging, accurate sawing, controlled kiln-seasoning, precision surfacing, proper grading, careful handling and shipping, produces a wide range of 4-Square West Coast Hemlock lumber products.

Weyerhaeuser 4-Square Lumber

WEYERHAEUSER SALES CO. • ST. PAUL 1, MINN.

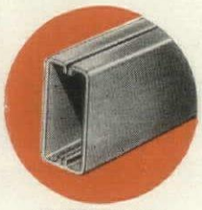
Important News for Architects . . .

FABRICATING DISTRIBUTORS FOR STRAN-STEEL® FRAMING

OFFER COMPLETE FABRICATION AND ERECTION SERVICE AS WELL AS A COMPLETE LINE OF FRAMING MEMBERS

With Stran-Steel Cold-Formed Structural Sections and Framing Members, a building can be completely, economically framed in steel.

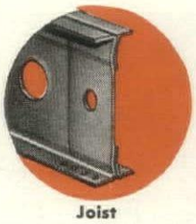
Hat Section



2 "C" Sections

"C" Section

Any Combination



Joist

Stud

Narrow Stud

Channel

Shopping Centers, Schools, Hospitals, Churches, Garden-type Apartments, Public Buildings, Industrial Plants—all are better built with Stran-Steel Framing.

Your fabricating distributor for Stran-Steel Framing has been carefully selected for his proved ability to serve the architects, engineers and general contractors of his area.

He carries a complete stock of Stran-Steel Framing, the finest quality line of framing you can find—fire-safe, economical and permanent. He renders a complete service to the architect. His complete stock is your guarantee against shortages and delays. He is equipped to completely engineer, fabricate and erect Stran-Steel Framing speedily and well.

WHY STRAN-STEEL FRAMING IS SPECIFIED BY ARCHITECTS ACROSS THE COUNTRY

1. **Unique nailing groove permits easy application of collateral materials. Provides complete freedom of design, and complete flexibility.**
2. **Wide range of shapes, sizes and gages. All necessary accessories available.**
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Lumber treated with penta will resist weather, rot, and insect attack far beyond the normal life span of untreated wood. Forced deep into the cells of wood by an economical pressure process, this preservative makes wood virtually time-proof . . . insects won't touch it . . . rain and ground water can't wash out the penta. Properly formulated, penta can leave your wood clean and paintable—dimensionally stable if desired.

In public buildings, durability is essential. This new high school in St. Louis County's finest residential section has *extra* durability built in. Nailing strips and sleepers, door frames, and other wood parts in the school are protected for years with Monsanto Penta.

For economy, the long-range value of this clean preservative is an established fact. You build permanence in your work and confidence in your client when you specify Monsanto Penta.

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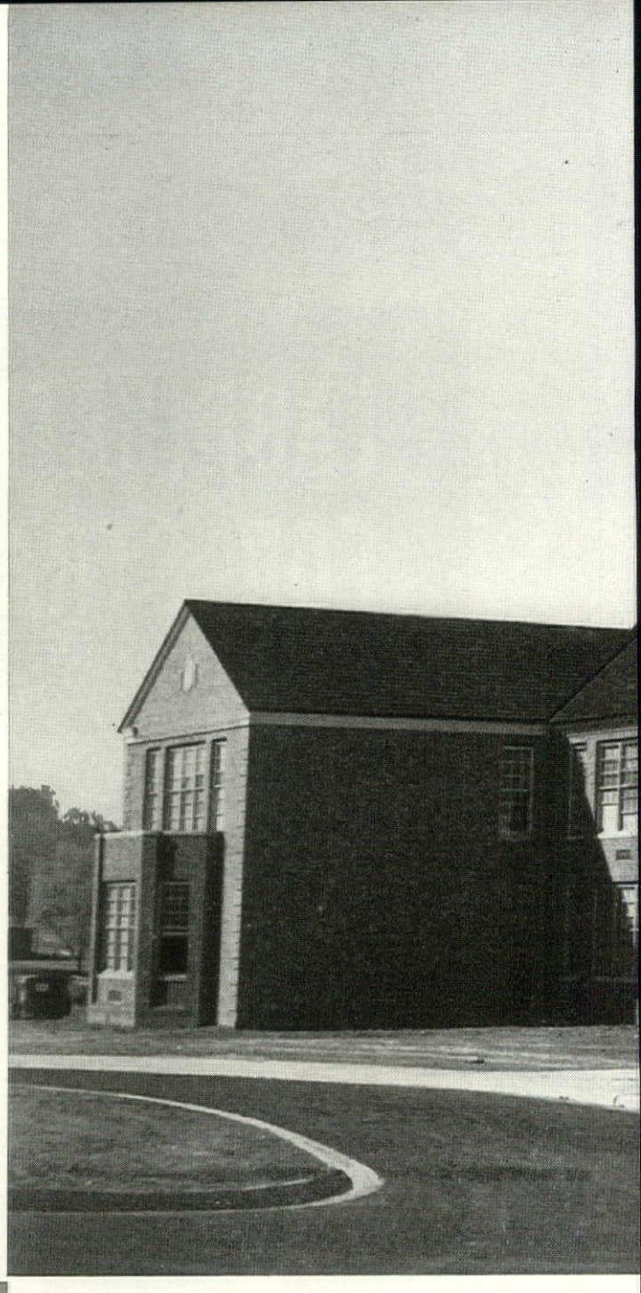
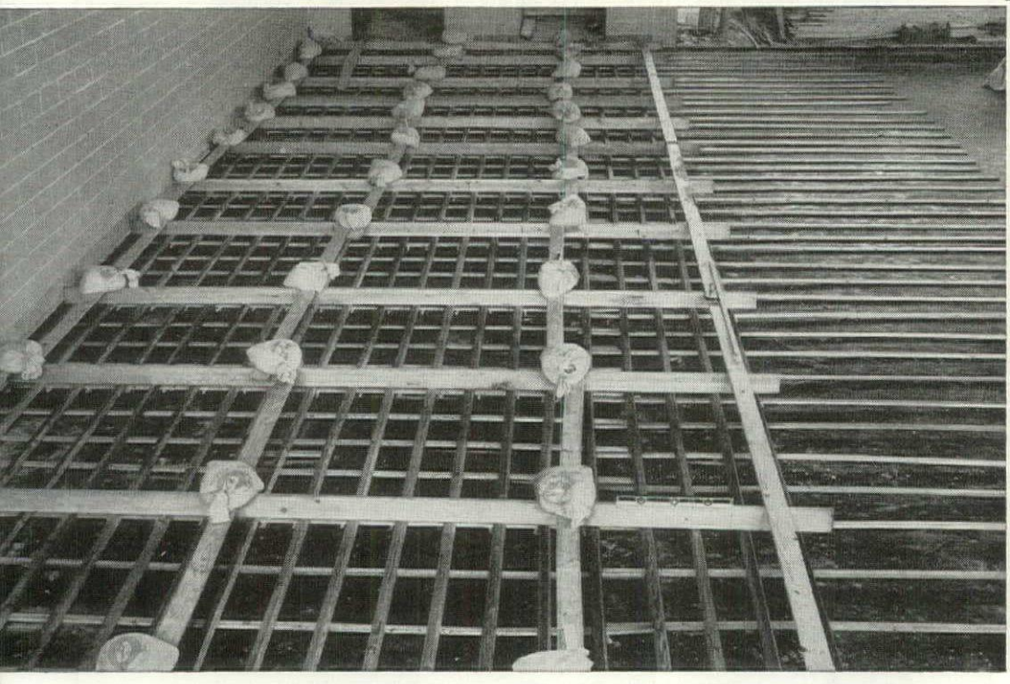
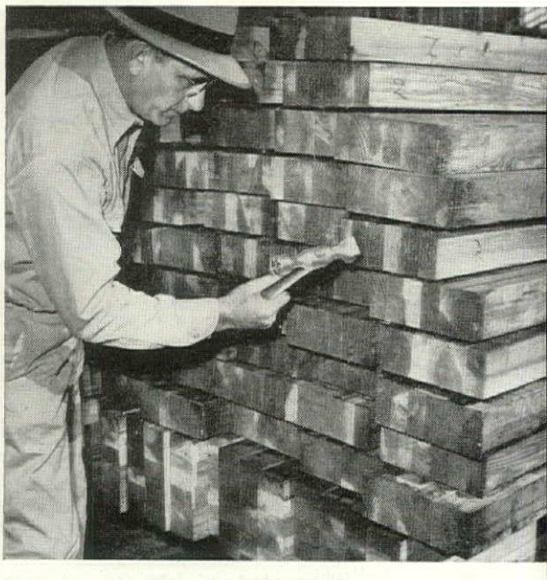
WILLIAM B. ITTNER, INC., ST. LOUIS, Architect
ROBERT PAULUS CONSTRUCTION COMPANY, ST. LOUIS, Contractor
ASSOCIATED WOOD PRESERVERS, INC., ST. LOUIS, Wood Treater





Understripping of gymnasium floor, as well as white pine door and window frames, was pressure-treated to a 6-pound retention of penta. Note: More than 50 government specifications for durable wood applications ranging from tent pins to freight cars name penta preservative.



Wide usage of penta. In addition to its many applications in public and private buildings, this preservative is being specified regularly by utility companies, railroads, and in farm, home, and heavy industrial construction. (For preservation of cellulosic fiber products, such as insulation board and wallboard, write for information on Monsanto Santobrite.)

Specify Penta to protect . . .

Sills and plates • Screeds and subflooring
Joists and girders • Studding and rafters
Roof planks, strips, shingles • Platforms and decking
Millwork • Posts and fences

. . . wherever wood is meant to *last*.

Information for Architects. This brochure, titled "Specify Penta," gives complete instructions for specifying penta treatment for different woods. We will mail you a copy at no obligation. Write: Monsanto Chemical Company, Organic Chemicals Division, 800 North Twelfth Blvd., St. Louis 1, Mo.

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Santobrite: Reg. U. S. Pat. Off.

Noted for school design, the firm of William B. Ittner, Inc., writes penta into the specs for St. Louis area construction as protection against termites—and against rot, a serious local problem due to humidity and temperature extremes. From left: David Stephen, R. G. Alexander, Mr. Ittner, Lester C. Haeckel.

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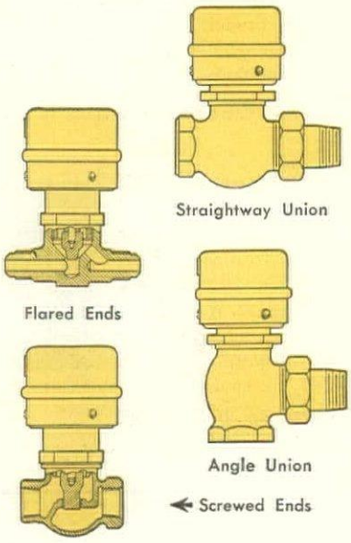
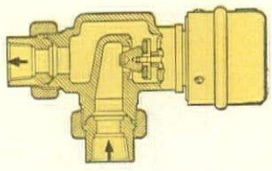
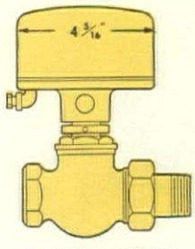
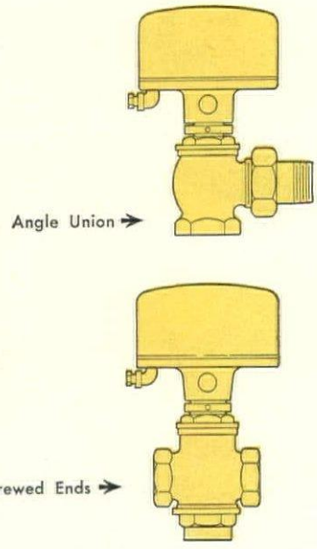




Reverse Flow Double Union

Available in various types and sizes for control of convectors, unit ventilators, unit air conditioners and radiators.





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For Controlling Convectors, Unit Ventilators, Unit Air Conditioners and Radiators.

Now, at NO Extra Cost — users of Powers pneumatic control systems will get the additional benefits of still lower operating and maintenance costs — insured by Powers packless valves.

Duo-seal Construction Gives Them Superior Performance. Bronze packless bellows is the Primary Seal which eliminates packing maintenance — packing friction — steam and water leakage or loss of vacuum. Secondary Seal permits servicing of valve top without draining the water system or shutting off the steam supply.

Typical Specifications for POWERS-Packless-Pneumatic Control Valves

Control valves for convectors, radiators and unit ventilators shall be packless type with bronze packless bellows to eliminate steam and water leakage or loss of vacuum. This packless bellows shall be located so that it is not subject to corrosive action of the steam or water. A spring-loaded secondary seal shall be provided to permit convenient inspection or servicing of valve top without draining the water system or shutting down the steam supply.

Valve sizes shall be determined by control manufacturer for capacities specified. Type of valve body and valve top to be used shall be as required to best satisfy the application.

Valves shall be equipped with phosphor bronze bellows or Neoprene diaphragms of sufficient size to close off against specified line pressures. Diaphragms shall be replaceable. Valves shall be equipped with characterized throttling plugs to insure a measured flow of steam or water in direct relationship to the demand of the controlling thermostat.

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... leakage of air reduces efficiency of heating system and increases corrosion in return lines

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(b18)

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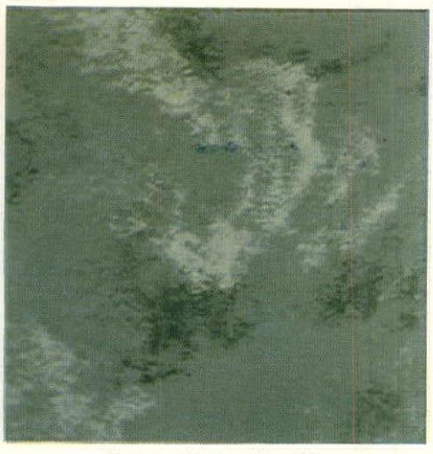
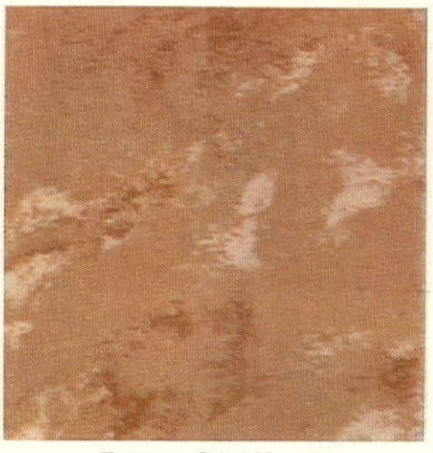
Armstrong's Excelon Tile is a new plastic-asbestos flooring material of outstanding beauty and durability. Its vinyl content gives this floor excellent resistance to grease, oil, and normal household reagents. Tough, flexible, and fully alkali resistant, it's suitable for installation over all types of subfloors, below grade, on grade, or above grade. The exclusive non-directional swirl marbleization of Armstrong's Excelon Tile with its muted tone-on-tone shades permits allover flooring effects of exceptional beauty. Its coordinated colorings also offer outstanding possibilities for multi-color custom floor designs. Available in the 10 colors shown, ⅛" gauge only.

Brittany Blue No. 758

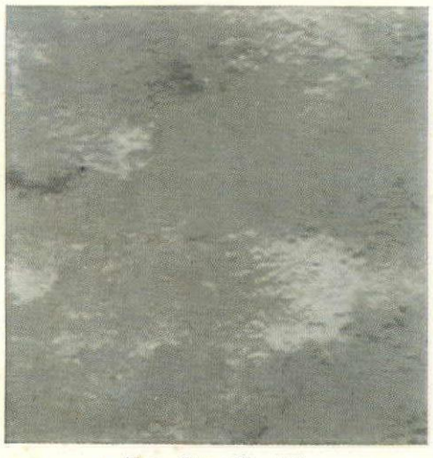
Manila Tan No. 756



Gretna Green No. 754



Formosa Coral No. 755



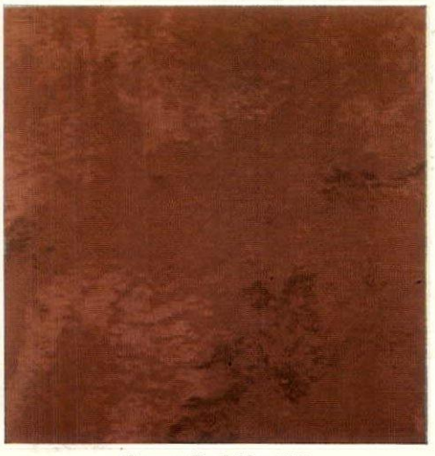
Slate Gray No. 751

Sirocco Taupe No. 757

Charcoal Black No. 752

Chalk White No. 750

Ming Yellow No. 759

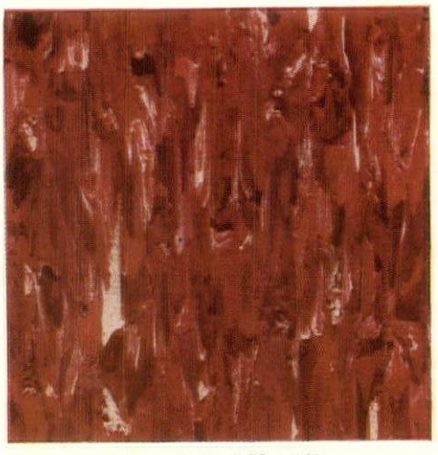


Gypsy Red No. 753

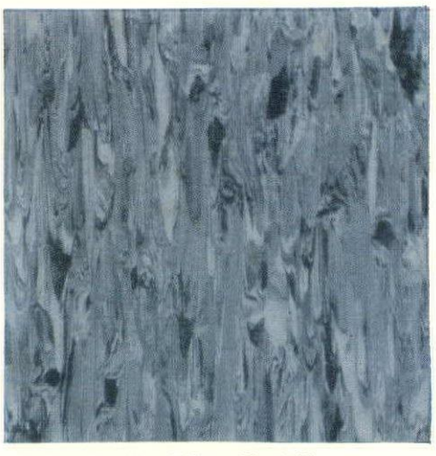
ARMSTRONG'S *Custom Corlon* TILE

Armstrong's Custom Corlon® Tile is a luxury vinyl plastic flooring offering an entirely new style of graining. Its distinctive directional burl marbleization and rich colorings create unusually handsome floor effects. An exceptionally smooth, glossy surface and unexcelled resilience and durability make Armstrong's Custom Corlon Tile particularly suited to fine homes and commercial interiors where an atmosphere of quality and refinement is desired. This floor may be installed over grade-level concrete slabs with Armstrong's No. S-104 Chemical-Set Waterproof Cement, as well as on all types of suspended subfloors. Available now in the nine harmonizing colors shown on this page, it is made in $\frac{3}{32}$" gauge only.

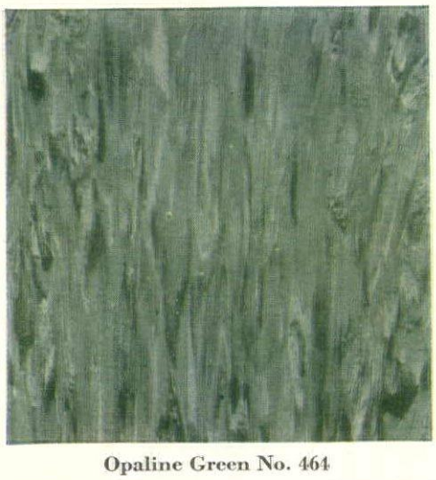
Imperial Black No. 462



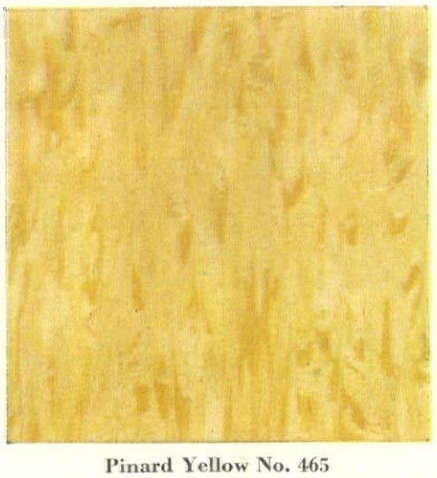
Picardy Red No. 463



Beryl Blue No. 466



Opaline Green No. 464



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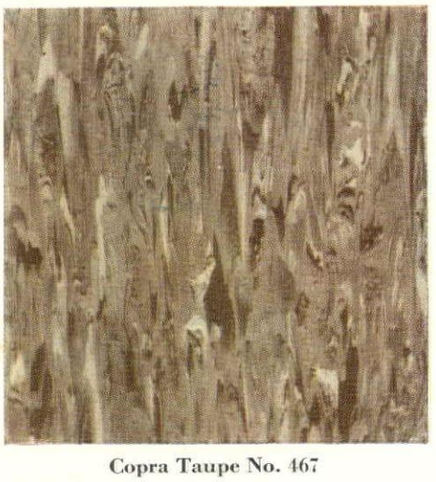
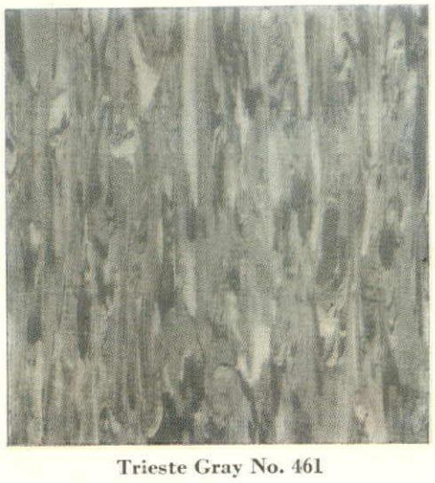
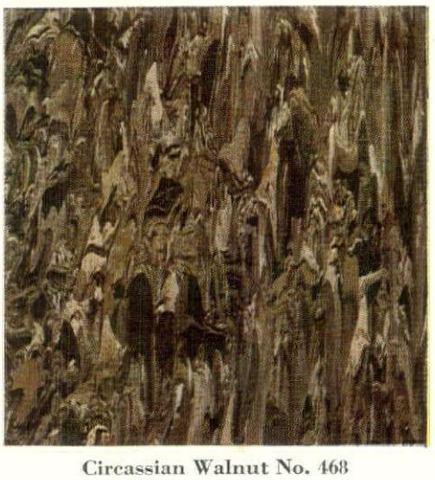


Copra Taupe No. 467



Trieste Gray No. 461



Circassian Walnut No. 468

Carrara White No. 460

ARMSTRONG CORK COMPANY

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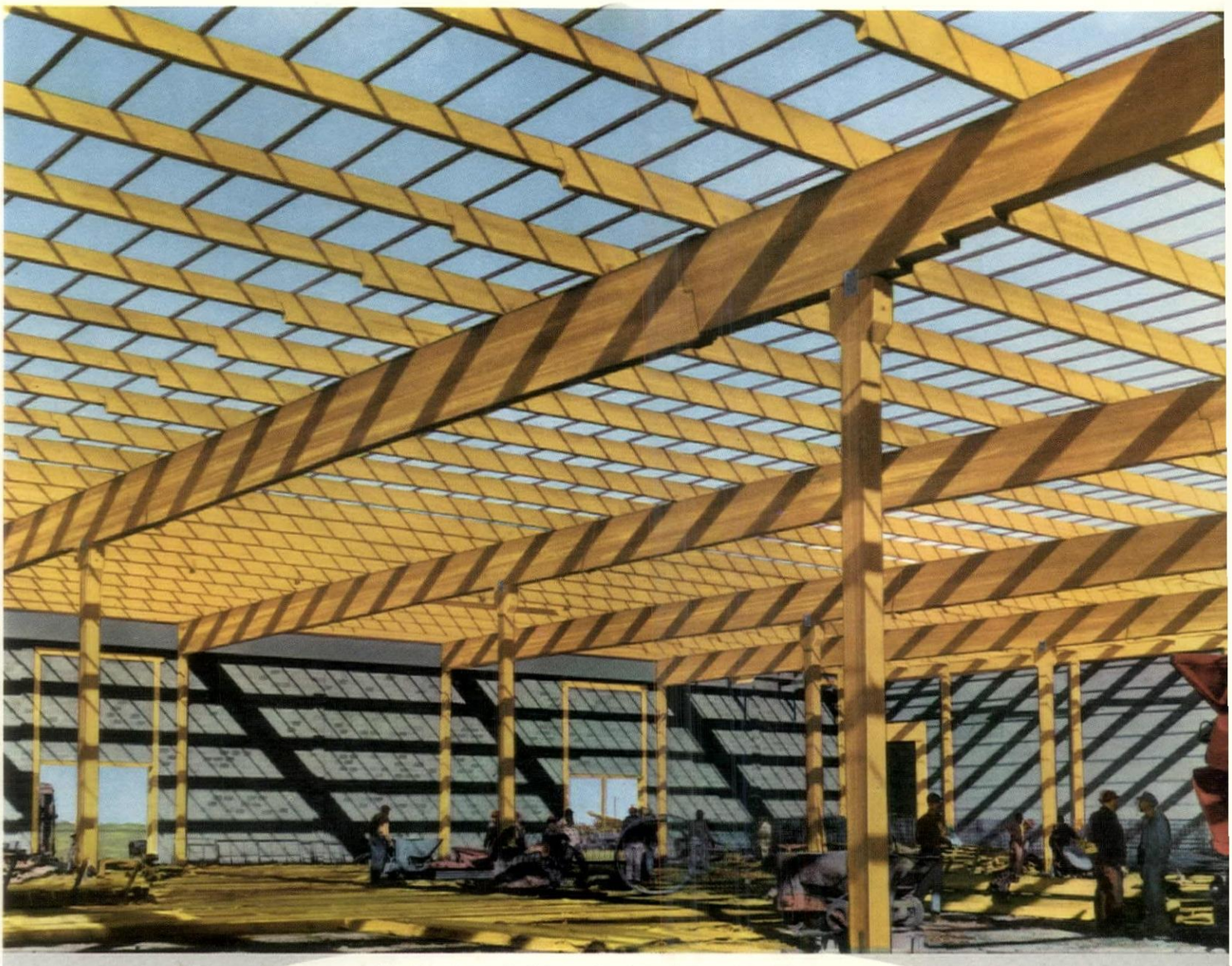

Wyatt Warehouse, North Kansas City, Missouri. Size—117x481 feet.
Glulam girders are spaced at 25 feet, with purlins of 8-foot spacing. Architect is William D. Fullerton, Jr., Kansas City, and contractor is Estrin Construction Co., Kansas City.

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Timber Structures glued laminated members are the product of America's largest and most experienced fabricators and laminators of structural timbers. Formed to exact specifications and pattern, in any desired section and length, they are highly resistant to destruction by fire, and free from seasoning action.

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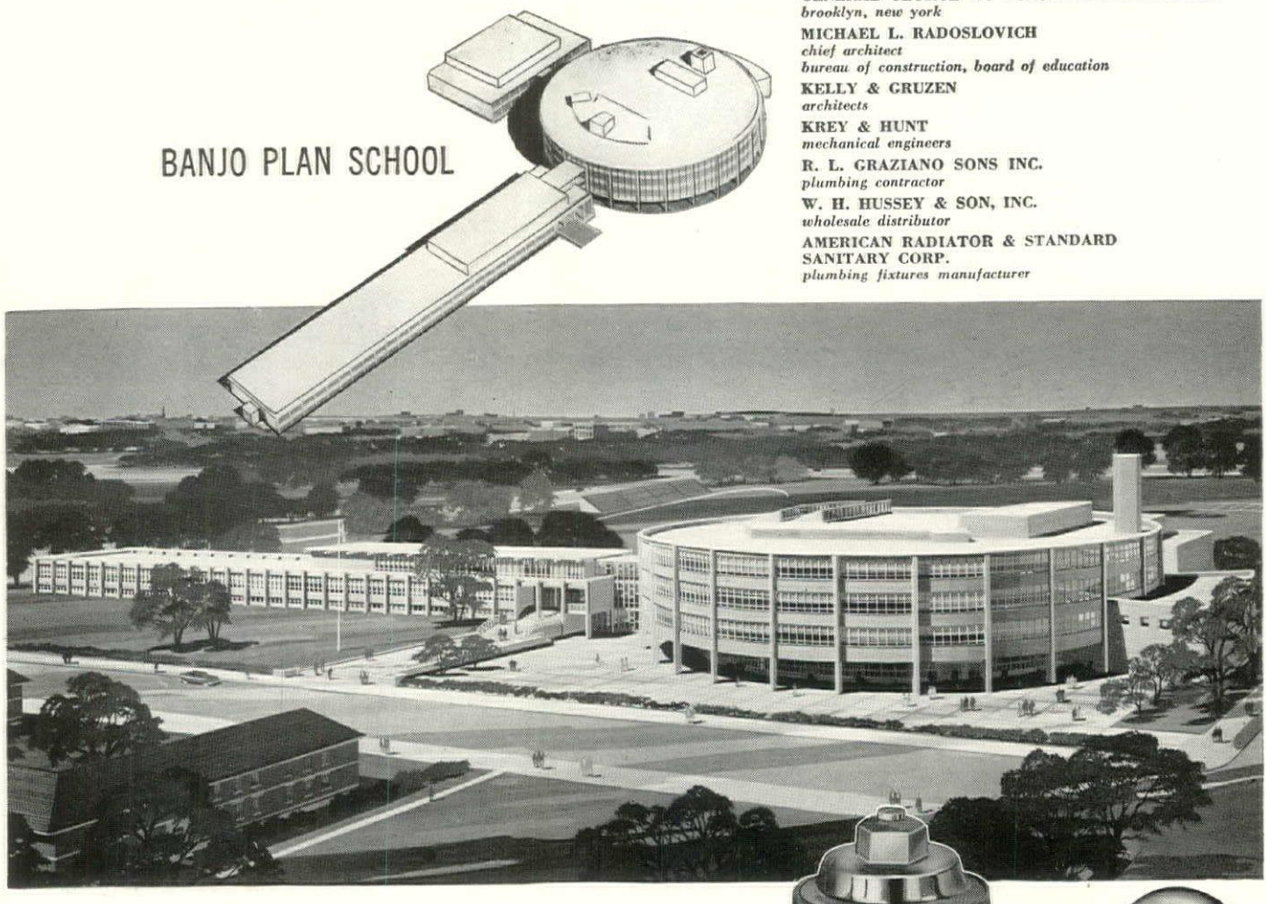
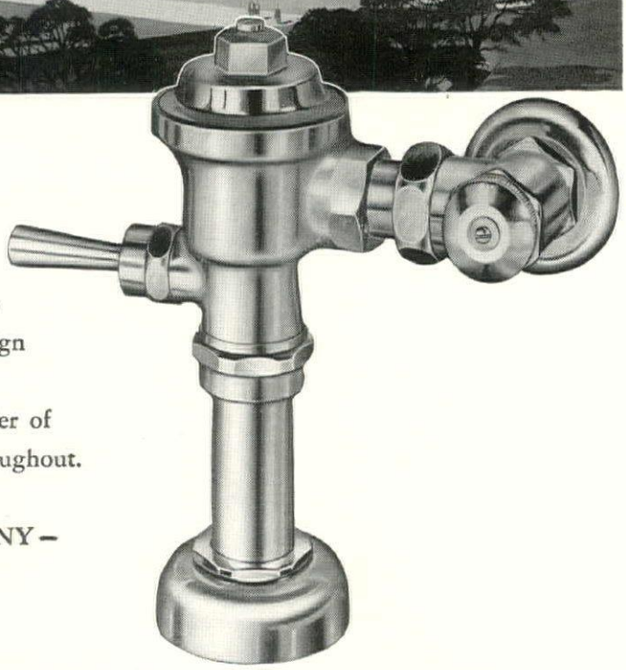
AMERICAN RADIATOR & STANDARD SANITARY CORP.
plumbing fixtures manufacturer



A bold approach to school planning has given 3200 students a $6,000,000 "banjo" in this, the first high school to be built in New York City in twelve years. Here, conservatism has been abandoned in a scheme that is "unique in design and economical in operation"—an accolade that belongs equally as much to the very large number of COYNE & DELANY valves that will be installed throughout. Here, and in countless better projects where progressiveness is the keynote, you will find DELANY—"the fastest growing name in flush valves!"



The DELANY VALVE is the ONLY diaphragm type flush valve providing a renewable main valve seat, as shown at left. This feature, a basic requisite demanded in all other type valves, is just one of many contributing to the rapidly expanding prominence of DELANY VALVES. It guarantees that the flush valve will serve throughout the life of the building even should seat pitting or high pressure wire cutting occur.

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Building volume grows; federal experts see $34½ billion year

Despite government cutbacks and the rising price of money to finance both public and private works, construction finished the first half of the year at such a pace that federal experts were about ready to jack up their estimates of 1953 dollar outlays.

Last fall, the Commerce and Labor Departments predicted a $33½ billion year for US construction, a gain of 2.7% from 1952's $32.6 billion mark. But after studying the figures for the first six months of this year (table, next page), building soothsayers were talking about boosting the forecast to $34½ billion.

The biggest ingredients of the building bulge were well known. Commercial construction was running 43.2% ahead of last year. Private industrial building, which government men had expected to sink 27%, was so far only 0.8% behind 1952's level.

Federal increase. More surprising, in the light of GOP determination to cut federal spending, was a revised forecast for this year's federal construction volume: close to $4.4 billion (compared to $4.2 billion actually spent in 1952). Biggest gainer at midyear was public industrial, mainly AEC construction, up 28% from last year's level. Experts thought it would still be ahead at year's end, though not that much. Other federal construction, mostly military public works, was up 12% over 1952 at the end of June. While prognosticators looked for some decline in the next six months, they expected it to end the year ahead of 1952. State and local public works reached a record $6.6 billion last year, but indications were this would shoot up to more than $7 billion in 1953.

Hill-Burton boost. Federal and local outlays for hospitals and reclamation were nosing down. But the Senate this month trounced the GOP economy bloc by boosting the appropriation for federal grants-in-aid for local hospital construction under the Hill-Burton Act. The Truman budget had recommended $75 million. Ikemen sliced this to $60 million and the House trimmed it to $50 million. The Senate, concerned over penny-pinching in health and welfare, put it back to $75 million. The final amount would be settled in conference, but odds favored a higher appropriation than allowed by the House.

In military construction, Congress was making mincemeat of appropriation requests. But the services had some $4.9 billion in unspent previous appropriations on June 30—more than three times the amount ($1.3 billion) they managed to spend for construction last year. Unlike most other Congressional appropriations, unspent military (and AEC) appropriations for construction do not revert to the Treasury at the end of each fiscal year; they are good until used. By living off their fat, the armed services could go on spending huge sums for construction even though the House appropriations committee, reporting out the public works section of the military supply bill, gave none of the three services a cent for construction in fiscal 1954.

Air Force rapped. The Air Force, which Secretary of Defense Wilson recently called in sad shape, was given a thorough tonguelashing by the House committee for unrealistic planning and excessive lead time from appropriations to contracts (average: nine months). Said a subcommittee report: "The only conclusion that can be drawn . . . is that the Air Force construction programs presented to Congress for fiscal years 1952 and 1953 were sadly deficient in planning and administrative direction. An agency charged with the utilization of the major portion of the defense funds of the nation thus destroyed the confidence of the subcommittee." The committee ordered the Air Force and Corps of Engineers find ways to cut the lead time by January.

On Moroccan air bases, the House committee was even more critical. It ordered that no more money be obligated at two: Boulhaut and El Djema Sahim. It rebuked the Air Force for easy toleration of officers responsible for waste in construction, citing such items as an underground sprinkler system on a golf driving range at Kelly AFB, Tex.; a golf course at McClellan AFB, Calif.; a tile floor in an officers' mess barber shop at Scott AFB, Ill.

For 1954, 10% cut? Thus the twin bogeys of federal cutbacks and tighter money appeared likely to take what bite they take at all out of 1954's construction, rather than 1953's. But government forecasters thought this month that even for next year, the decline in over-all construction would not top 10%. School building, for instance, they regarded as so urgent it would continue even if it costs more to float bond issues. Moreover, increasingly keener competition by contractors was tending to cut construction costs enough to offset the rising price of funds. (In Baltimore, for instance, nearly all school contracts let this year have turned out lower than city estimates.)

Like war bulletins on enemy casualties, news accounts of federal construction cutbacks could be misleading. It looked as if some building men had let their fears run away with their judgments.

IN THIS MONTH'S NEWS:

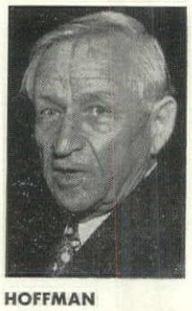
▸ Four pages of photos and text on AIA's 85th convention at Seattle.

(pp. 104-107)

Rep. Clare Hoffman goes on the warpath against jurisdictional building strike abuses

Everything in construction was in a mess in Kansas City. Examples: Expansion projects at the Army's Sunflower Ordnance Works, producing rocket powder for Korea, were halted 17 times in three years by strikes. When AFL teamster locals started another strike at Sunflower on May 11 that soon spread and brought all Kansas City area construction to a stop, they also tied up a $7 million construction job at Lake City Arsenal, an $11 million expansion at Grandview Air Force Base.

AP



HOFFMAN

Because of the interference with defense work, a House subcommittee headed by Rep. Clare Hoffman (R, Mich.) held a five-day, televised hearing in Kansas City June 29-July 3, heard testimony that bitter jurisdictional fights and union corruption, brutality and intimidation dominated the construction scene.

Protection fee. Pipe-line Contractor Oscar R. Burden of Lubbock, Tex. said he paid $500 last August to Otto Bowles, head of the Kansas City common laborers district council, for "protection" against union featherbedding on a Missouri job. He was "not surprised at all" at this and several other similar payments, said Burden, "because when we laid pipe through this country during the war, when the government itself couldn't stop it, I don't see what chance a poor contractor has got to do it." Bowles denied Burden bribed him.

Edward Chevlin, vice president of Local 838, testified that while he was in the office of Teamster Boss Orville L. Ring, Ring knocked him to the floor, jumped on him and choked him until restrained by associ-

ates. Chevlin said he resigned last April because of the continued terrorism and "irresponsibility" among teamsters. J. O. Mack, president of the carpenters, said Ring phoned him about two years ago and "threatened to bust my head in."

Federal medicine. Before returning to Washington, Hoffman recommended a federal grand jury investigation, said the committee would return if one was not made. Both federal and local grand jury probes appeared probable.

Back in Washington, Hoffman introduced three bills which would: 1) apply federal anti-racketeering laws to defense construction by private interests; 2) make it a crime to require payments for services that are not rendered or intended to be rendered on defense jobs (aimed at nonworking "roving stewards"); 3) impose severe criminal penalties "whenever any person commits an assault on another person" to stop him working on a defense project.

The bills had little prospect of enactment this session. But they gave national labor leaders pause. Hoffman warned that if jurisdictional rows in defense construction did not end he would subpoena top labor chiefs to explain why they cannot keep their house in order.

AFL leaders act. Responding to the Kansas City heat, the AFL building and construction trades department's council held a three-day meeting in Kansas City, placed the strife-torn local building trades council in trusteeship, announced that jurisdictional troubles would undergo regular settlement procedures.

But skeptical Kansas City contractors awaited surer signs of reforms that would really bind unions to a plan for settling intercraft rows without always halting production. Until then, they would let the tie-up go on.

Union, contractors named in Chattanooga anti-trust case

A federal grand jury this month indicted Local 175 of the AFL International Brotherhood of Electrical Workers and the Chattanooga chapter of the National Electrical Contractors Assn. on anti-trust charges. They were accused of conspiring to rig prices and contract awards. Said the indictment: contractors engaged in a collusive "selected bidder system," and the union cooperated by refusing to supply labor or sending unqualified workers to noncooperating firms. When member firms disagreed over who would submit the "low bid" for a contract, an association "grievance committee" would decide, it was charged, and anyone violating the ruling would be subject to a fine. The government alleged the conspiracy permitted only Terrell Electric Co. to bid seriously on a job at Volunteer Ordnance Works.

BUILDING STATISTICS: materials prices and construction volume continue to rise

Announced the Departments of Commerce and Labor this month: "Even after adjustment for price changes, new construction activity so far in 1953 was at an all-time high."

The federal data on dollar outlays showed that almost every type of building figured in the rise. The only "significant declines," said the government, were in public and private hospital building, and public housing. Private outlays for residential and public utility construction (both up 9% from last year) were the "highest on record for any similar period."

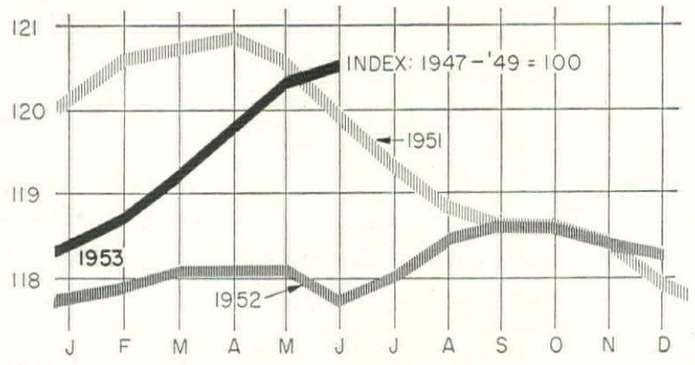
The upsurge in commercial construction, fully expected after credit and materials controls were eased last fall, turned out far greater than government experts foresaw. The $729 million spent on commercial building during the first six months was 43% more than for the first half of 1952, mostly suburban shopping centers.

NEW CONSTRUCTION ACTIVITY

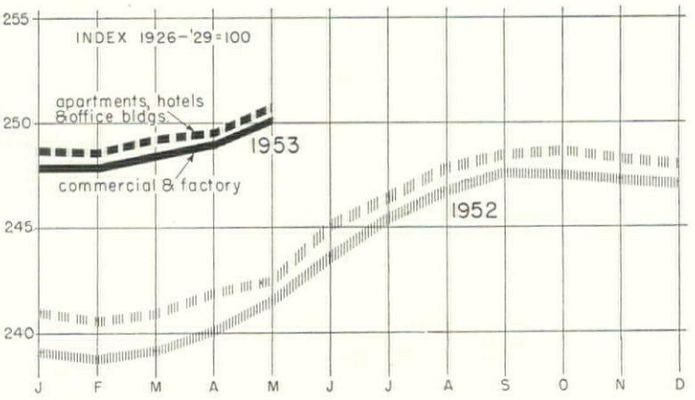
(expenditures in millions of dollars)

	June			1st six months		
Type	'52	'53	change	'52	'53	change
PRIVATE						
Residential (nonfarm)	993	1,090	+9.8%	4,963	5,428	+9.4%
New dwelling units	875	960	+9.7	4,400	4,800	+9.1
Additions & alterations	103	107	+3.9	485	507	+4.5
Nonhousekeeping	15	23	+53.3	78	121	+55.1
Industrial	183	188	+2.7	1,186	1,176	—0.8
Commercial	93	152	+63.4	509	729	+43.2
Other nonresidential	129	141	+9.3	733	748	+2.0
Religious	31	38	+22.6	178	208	+16.9
Educational	28	34	+21.4	160	190	+18.8
Hospital	35	26	—25.7	198	156	—21.2
Public utilities	359	399	+11.1	1,837	2,001	+8.9
*TOTAL	1,927	2,131	+10.6	10,025	10,851	+8.2
PUBLIC						
Residential	53	50	—5.7%	341	290	—15.0%
Industrial	149	162	+8.7	691	887	+28.4
Educational	137	141	+2.9	795	812	+2.1
Hospital	42	34	—19.0	234	203	—13.2
Military	125	123	—1.6	632	678	+7.3
*TOTAL	1,009	1,053	+4.4	4,796	5,116	+6.7
GRAND TOTAL	2,936	3,184	+8.4	14,821	15,967	+7.7

* Minor components not shown, so total exceeds sum of parts. Data from Departments of Commerce and Labor.



MATERIALS PRICES as charted by the Bureau of Labor Statistics rose for the sixth consecutive month during June, reaching an index of 120.5—up 0.3 from a revised May level of 120.2. Not yet reflected in BLS figures were price increases based on the average $4 a ton boost in steel prices (structurals were up $5 a ton) ordered in mid-June. Many a purchasing agent thought steel price hikes would not trigger a general price spiral because of consumer resistance, production capacities and strong competition.



BUILDING COSTS measured by E. H. Boeckh & Associates continued to creep up in May. For apartments, hotels and office buildings, the Boeckh index reached 250.7; for commercial and factory buildings, it rose to 250. Among other indexes, Austin Co.'s industrial building costs rose to 187 after three consecutive quarters at 186. President George A. Bryant said improved deliveries of materials and equipment were producing almost enough increase in job efficiency to offset wage and material price boosts.

Segregation new public housing battleground; HHFA approves deal to end LA dispute

In big cities and little towns across the nation, a new battle with ugly undertones was developing over public housing. Its name: segregation.

Most of the visible fight was being waged in court or in the newspapers. And in court, separate-but-equal theories were losing with such tiresome regularity as to suggest that sooner or later the South would be forced to accept integration of public housing tenants. Last month's developments:

▶ Federal Judge Frank L. Kloeb gave the Toledo Metropolitan Housing Authority until Oct. 23 to begin moving Negroes into vacancies in public housing projects heretofore occupied only by white families. Background: on Jan. 8, the housing authority, facing 53 vacancies in its three white projects in East Toledo and a waiting list of 800 eligibles for its four Negro projects, voted to shift to a nonsegregation policy. Property owners raised such a storm that the authority deferred action. Four Negroes then filed suit. Judge Kloeb held that the 14th amendment bars the housing authority from denying occupancy "where vacancies exist, solely on the ground of race or color."

▶ In Indiana, Federal Judge William E. Steckler smashed down the contention of the Evansville Housing Authority that there was no discrimination so long as facilities were separate but equal. In the same phrase as Judge Kloeb, he declared it unlawful to "deny occupancy to eligible applicants where vacancies exist solely on the grounds of race or color."

▶ In Washington, the National Capitol Housing Authority voted to end segregation gradually—on a project-by-project basis—and promptly became the target of crossfire for 1) going too far, and 2) not going far enough. The National Association for the Advancement of Colored People damned the authority for deciding that two projects will remain all-white and all-Negro, respectively, because they were in neighborhoods where no school or recreational facilities were available for both races. Said NAACP: An "effective means of forcing citizens to live in segregated areas." Cried Rep. James C. Davis (D, Ga.): " . . . A group of bureaucrats who have not been elected by the people, promulgating their crackpot theories in direct contravention of the often expressed policy of Congress."

▶ In Houston, the housing authority faced the same problem as Toledo: 473 vacancies out of 1,666 units for whites, and a waiting list of 1,020 for the 897 Negro units. Nobody was mentioning nonsegregation. Auhority Director Thomas Booker hoped to find ways of making the white projects more attractive by persuading private capital to build nearby shopping centers, by increasing recreational facilities. If that fails, mused Booker, maybe the authority would have to consider raising income ceilings for admission.

Los Angeles liquidation. When Los Angeles elected Congressman Norris Poulson as mayor (AF, June '53, News), most Angelenos figured the city's embattled 10,000 unit public housing project was on its way out. Poulson had campaigned with a pledge to curtail public housing in deference to last year's Los Angeles referendum in which the vote for abandoning the program was 379,050 to 258,777. After only eight days in office, Poulson persuaded the feuding Los Angeles Housing Authority and city council to accept a compromise deal to do so. Then Poulson and LA officials flew to Washington and won agreement from HHFAdministrator Albert M. Cole, for what would become a precedent-making basis for halting public housing in mid-flight.

For Los Angeles, it involved abandoning two projects not yet started, thus cutting the 10,000 units to 4,300 and slicing the cost from $137 million to $42 million—the amount the federal government had already underwritten. The federal government would absorb $8 million already spent for planning and administrative overhead on the canceled projects, less what sale of the sites brings (estimate: $2 million).

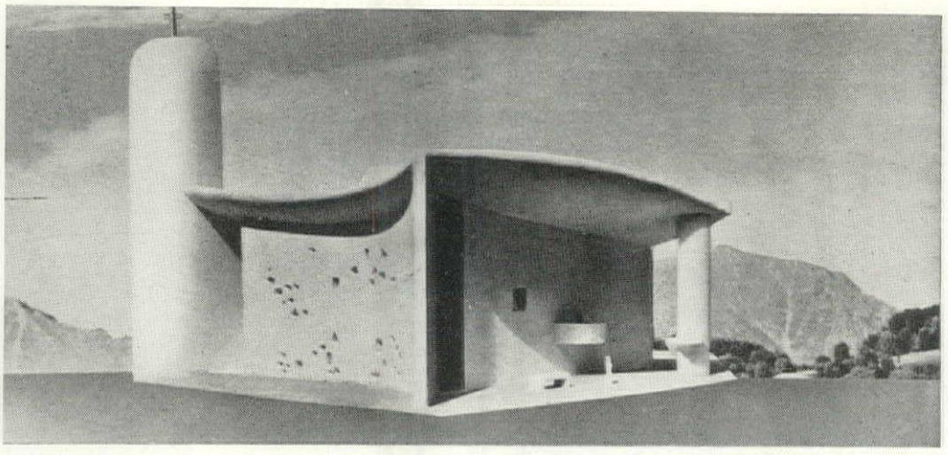
The deal required Congressional approval. To get it so late in the session, administration leaders planned to write the deal into the Independent Offices appropriation bill in conference. Thus, when the measure reaches the floor of the House and Senate for final passage, pro-public housers will be effectively balked from defeating it. HHFAdministrator Cole, while not too happy with the compromise, called it "better than any alternatives."

Blast from Congress. Operations of the Los Angeles Housing Authority, meanwhile, came under attack by Congress. A House government operations subcommittee led by Rep. Clare Hoffman (R, Mich.) reported after Los Angeles' hearings that millions of dollars of Federal public housing money had been poured into political and lobbying activities "in brazen disregard of Federal criminal statutes." The subcommittee called for an investigation by the Justice Department, with prosecution, if warranted, of "apparent violations of both the Corrupt Practices and Hatch Acts."

ODM seeks 42% expansion in structural steel capacity

Defense officials have joined critics who contend the steel industry has too little capacity for producing structural shapes (AF, Aug. '52). Last month, the Office of Defense Mobilization called for a 42.5% increase by July 1, 1955, in the nation's capacity for wide flange structural steel shapes used principally in building, shipbuilding and heavy machinery.

Fast tax amortization will be allowed on new facilities to boost capacity from 2 million to 2.85 million tons a year, ODM announced. This month it approved fast write off under this program for a little over 50% of the cost of a $30 million Bethlehem Steel project at Bethlehem, Pa. to expand production about 300,000 tons a year. Inland Steel, it disclosed, has sought fast write-off approval for a plant of 240,000 tons capacity.

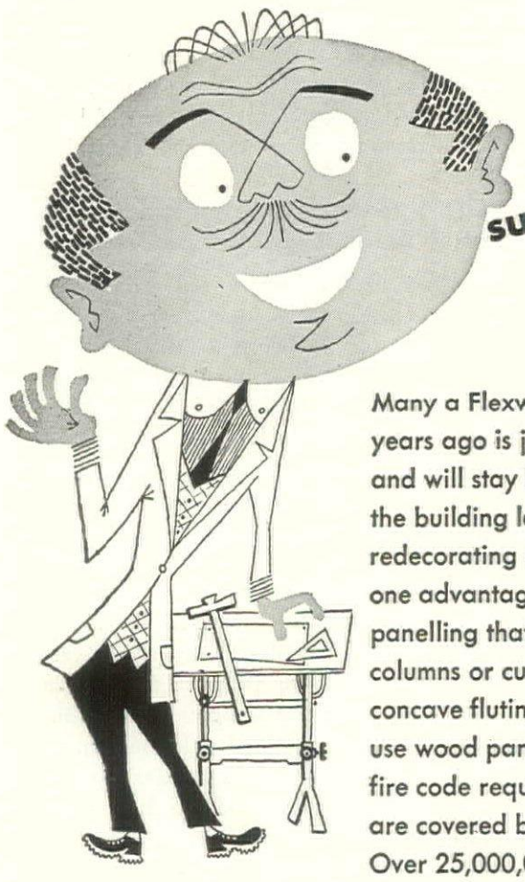


Corbusier designs a hilltop chapel shaped like a fiddle

In 1944, allied bombing wrecked the Notre-Dame-du-Haut chapel erected in the 13th Century on a Vosges Mountains hilltop near Ronchamp, France. After the war, a diocesan art commission asked Le Corbusier to design a replacement, but he refused. He did not design churches; trails leading to the chapel site were too narrow to lug stones up; his reinforced concrete construction methods "should only be for utilitarian structures."

Later, as a "tourist," the famed architect visited the site, changed his mind. He scrambled around the hilltop squiggling notes furiously, then departed for Paris to work out a model (above). Exclaimed Le Corbusier: "This chapel harmonizes scrupulously with the countryside. Its acoustic architecture, in the shape of a musical instrument, will make it 'sing' among the Vosges mountains. . . . This Notre-Dame-du-Haut is the pearl of my career."

Ronchamp parishioners viewing the model were divided. Traditionalists growled: "It's a blockhouse . . . no, that's not it, it's an oriental dwelling." Modernists defended it just as staunchly, said it was ideally suited for its mountain-top location.



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N. W. Ayer Co., Phila., Pa.	1946	Eli Lilly Co., Indianapolis, Ind.	1934
Bethlehem Steel Co., Bethlehem, Pa.	1943	McDonnel Aircraft Corp., St. Louis, Mo.	1949
Wm. H. Block Co., Indianapolis, Ind.	1936	Pittsburgh Post Gazette, Pittsburgh, Pa.	1937
General Motors, Chevrolet Motor Div., Detroit, Mich	1935	Temple U., Phila., Pa. (Dean's Office)	1944
D'Arcy Adv. Co., St. Louis, Mo.	1948	Toledo Public Library, Toledo, O.	1935
Ethyl Corp., Detroit, Mich.	1935	University Club, San Fran., Cal.	1937
J. L. Hudson Co., Detroit, Mich.	1935	Zurich Accident & Liability Ins. Co., Chicago, Ill.	1935
Illinois Bell Tel. Co., Chicago, Ill.	1938		

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James Follin named HHFA redevelopment chief; long-stalled Detroit project proceeds

For the $15,000 a year director of HHFA's division of slum clearance and urban redevelopment, Administrator Albert M. Cole picked a veteran of construction both in and out of government: lanky, florid James W. Follin, director of the office of contract settlement at the General Services Administration.

Reni

FOLLIN

Follin, 61, was chief of the homebuilding services of the Home Loan Bank Board and HOLC from 1935 to 1939, drafting improvements in home construction standards. From 1940 to 1946, he was managing director of the Producers' Council. Since then he has been with GSA, but was loaned to NPA to organize its construction controls division, then to DPA as chairman of its subcommittee on waste in building. Follin succeeded Nathaniel S. Keith, a business and financial writer before he became a federal housing official in 1940, and head of urban redevelopment since the division was created by Title I of the Housing Act of 1949.

Fewer housing units. A redevelopment division study issued this month reported there will be a net reduction of about 20% in area devoted to residential use, and a 30% reduction in dwelling units, in 92 of the first 128 projects it has approved for final planning or development. (Excluded from the study: 36 projects that reached this stage but were ended or suspended.)

All 92 projects start with at least a portion of their land in residential use, but after redevelopment only 48 will be entirely or predominantly residential, six will have only minor residential reuse, and 38 will be entirely nonresidential. Their initial residential area totaling 2,000 acres will decline to 1,567 acres, and 51,540 initial dwelling units will be replaced with only 36,182 units.

Families occupying the sites before redevelopment totaled 48,893, of which 31,589 (or 64.6%) are nonwhite. Data available on 47,557 (or 97.3%) of these families indicated that 50.9% were eligible for relocation in public housing, 49.1% ineligible. Only six redevelopments will include public housing units, however, and these will total only 2,030, compared with 34,152 new private units (24,593 for rent).

Of the 44 entirely or predominantly nonresidential redevelopments, 17 will be commercial, 18 industrial and 9 public projects.

Detroit land sold. Involved procedures make Title I projects slow to take shape. First come city-federal subsidy contracts, then site acquisition resales and tenant relocation. Last month, Detroit's-Gratiot project, started by the city in 1946 (before Title I was enacted), was finally about to produce some building.

At an auction a year ago, Detroit homebuilders opposed to proposals for public housing on the site were scheduled to bid on the 48 acres of this project allocated for residential redevelopment. But a last-minute dispute arose over how many dwelling units per acre they could build. The auction went bidless. In May the site was offered again, at an upset price of $926,380. Warner-Kanter Co., of New York and Cincinnati, outbid a Detroit syndicate, paid $1,266,000.

This month Warner-Kanter was applying for FHA mortgage insurance for 1,750 apartment units they planned in 2½-story garden apartments on 30 acres of the site, and multistory structures on 15 acres (the other three acres were reserved for a shopping center). Some apartments would be Sec. 207 rental units, others Sec. 213 cooperatives, the exact number in each category to be determined by market conditions as construction got underway this fall.

UP

CHICAGO'S LAKE MEADOWS redevelopment project reached a milestone last month. As families moved into the first 12-story building (above), it became the first privately-financed redevelopment in the nation to be occupied. New York Life Insurance Co. (which will pay full taxes) was charging the building's 110 families (all but three are Negro) $28.50 a room rent. Three other 119-family, 12-story buildings also designed by Skidmore, Owings & Merrill were nearing completion and a fifth will be started next year. Eventually, the 20 block site of one of Chicago's worst slums will get two 23-story towers, 11 two-story garden apartments.

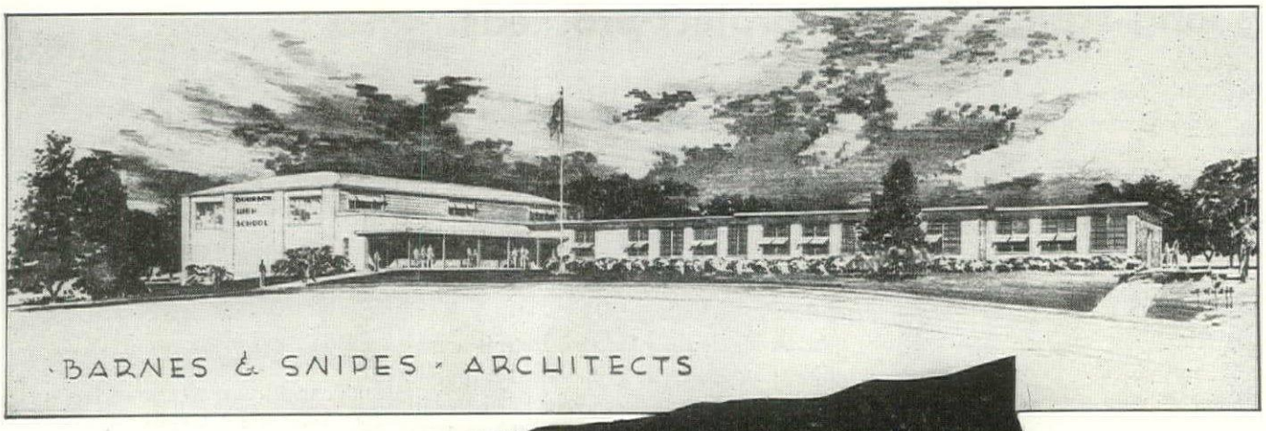
Another 81 acres of the Gratiot project were being redeveloped with public schools and playgrounds, parking areas, a neuropsychiatric hospital and clinic and an expansion of Wayne University.

SIDELIGHTS: Contract for FLLW's Price Tower lowers cost estimate; MIT approves Saarinen's chapel

Frank Lloyd Wright last month announced that the H. C. Price Co. Tower in Bartlesville, Okla. will be built for $1,250,000, excluding architect's fee and furnishings. In a subsequent announcement, Price named Culwell Construction Co. of Oklahoma City as the general contractor on a cost-plus-fixed-fee basis. Wright's figure for the total indicated a cost of "about $20 per sq. ft.," which would be well below current New York City skyscraper costs and well below FORUM's preliminary estimate (AF, May '53).

Cylinder chapel. *After months of argument, MIT officials last month approved Architect Eero Saarinen's design for a windowless cylindrical chapel for its Boston campus (AF, Jan. '53). The chapel is lit through arches which reflect light from a moat and by a glass bell tower spotlighting the altar. Six months ago, MIT officers approved Saarinen's accompanying auditorium—a revolutionary concrete dome resting on three points; it is under construction. But they balked at the chapel. Said Building Committee Chairman Robert M. Kimball: "Seeing it for the first time, a person wonders if this is really a church. It wasn't until we began to get the feel of what Saarinen was trying to create that we really appreciated the design."*

Washington inside. The military reorganization bill took effect June 30 with no change in Frank R. Creedon's status as watchdog over Defense Dept. construction. The reorganization abolished Creedon's job as director of defense installations. But pending the authorized appointment of six new assistant defense secretaries (one would head up facilities and installations), Creedon along with heads of other scuttled departments was named a special assistant to the secretary. Many Congressmen think he is doing a Grade A-job. Before the House appropriations committee, Creedon admitted publicly what he told FORUM privately six months ago: Air Force objections were holding up his waste and cost-cutting standards for barracks and mess halls. Testified Creedon: "The Air Force would not agree to live in the same plumbing limitation as the other two services. They wanted . . . plumbing fixtures in individual rooms."



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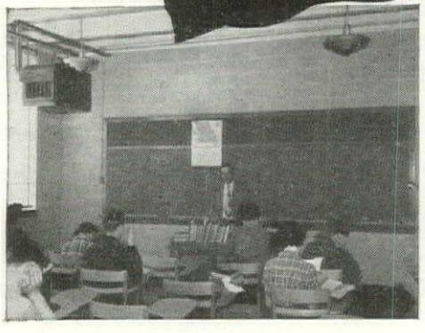

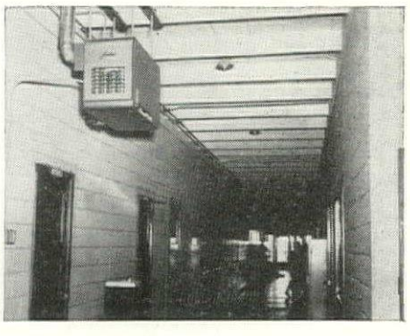

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Hotel construction booms in US and overseas

It was nothing like the construction wave of the late Twenties. Hotelmen even shied away from the word "boom." But the fact was that US hotel building was having one of its biggest years since pre-depression days.

Back in 1925, for instance, government statisticians counted $220 million invested in new hotels in 262 cities. And that was with a dollar that would buy at least twice as much construction as today. Recently, dollar outlays for new hotels and motels have run like this according to BLS:

1950	$84 million
1951	37 million
1952	51 million

The American Hotel Assn. puts the outlays far higher, but their figures include furnishings:

1950	$110 million
1951	93 million
1952	160 million

For the first five months of this year, BLS counted outlays of $28 million on 1,067 big and little hotels, indicating a year second only to 1950. But hotel association tabulations showed hotelmen made plans during just the first six months of this year to spend a whopping $153 million for new construction! Even after discounting the bulge triggered by the end of materials' controls, 1953 thus would produce at least a boomlet in hotel building.

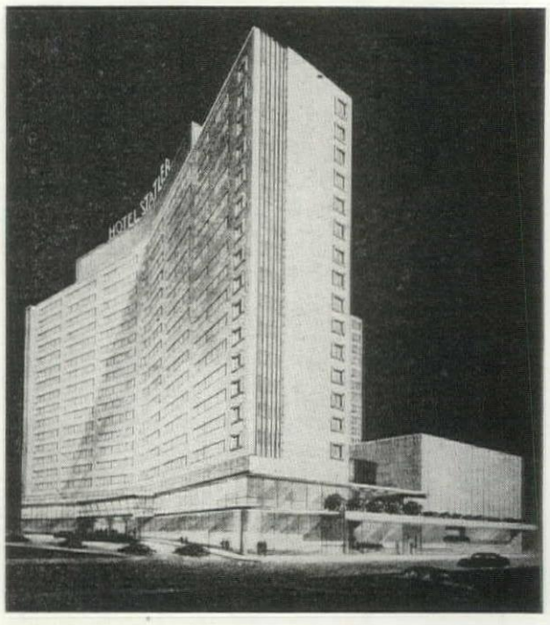
Store-hotels. Among new hotels, the need for making ground-floor space provide a handsome return was leading more and more operators to follow the lead of Cincinnati's Terrace-Plaza (AF, Dec. '48) in planning combination department store-hotels or office-hotels. Items:

▶ Realtor William Zeckendorf announced plans for a combination hotel-merchandising center-parking garage on Courthouse Square, Denver's most valuable unimproved downtown property. The first four floors would be store—either one department store or a combination. Atop that would be a ballroom with a glass blister roof. Set back and rising four more floors would be convention facilities and above that, perhaps to a total height of 30 stories, would be the hotel—to be operated by Statler, whose president, Arthur F. Douglas, told Denver newsmen no contract was signed yet, but added: "Zeckendorf and I get along—so don't worry about it." Construction is to start in August, 1954.

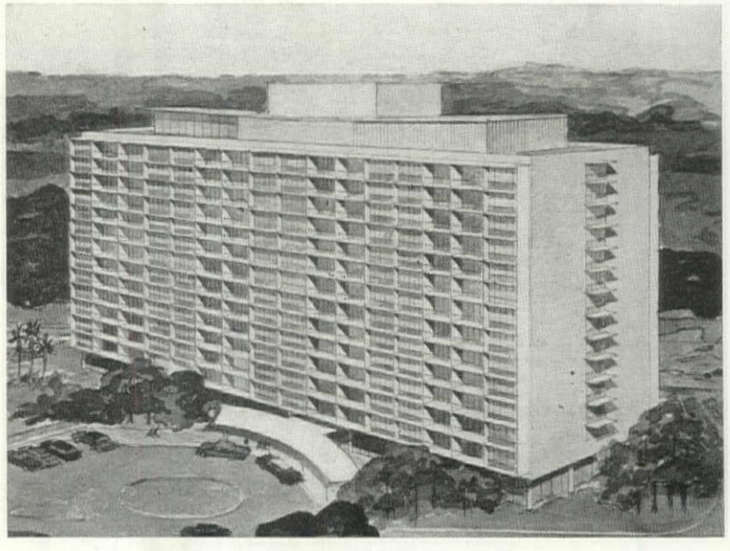
▶ In Houston, Shelby Construction Co. (of New Orleans) signed a long-term lease on a site facing the Shamrock Hotel, planned a 17-story, $5 to $6 million annex with a department store on the first two floors, 175,000 sq. ft. of office space above it, and 200 rooms from the 11th floor up. August Perez & Associates were developing plans. The deal emphasized development of a whole new business center around the four-year-old Shamrock—so far mainly small stores, offices, and restaurants —6 miles from downtown Houston.

▶ In Philadelphia, the Sheraton Corp. announced it will build a $14 million, 1,000-room hotel about 30 stories high above a two-story arcade in the new Penn Center development (AF, Feb. '53

SAN SALVADOR hotel, designed by Reisner & Urbahn, to be built by local capital with some government aid is typical (though somewhat smaller than most) of score of US-planned hotels for foreign nations. It would cater to commercial travelers. Seven-story structure of reinforced concrete faced with stuccoed native block would have center courtyard, exterior sunshades to cut air conditioning cost. Estimated cost: $950,000.



DALLAS STATLER, designed by Architect William B. Tabler, will have floors cantilevered 8′ from columns. The 1,001-room structure will be air conditioned, have glass and metal curtain wall à la Lever House. Statler is currently studying bids from six contractors.



Harper Leiper Co.

HOUSTON luxury apartment-hotel, a $6 million, 14-story structure designed by Architects Lloyd & Morgan, will face Texas Medical Center. Developer is Melvin A. Silverman.

TAMPA hotel being planned by New Yorkers M. I. Schaffer and K. B. Weissman will rise on site of old courthouse recently torn down. Tentative design by Architect Alexander Zamshnick calls for department store on lower floors, 400- to 600-room hotel above at cost of $10 to $12 million. Tower is TV antennae for tenant station.

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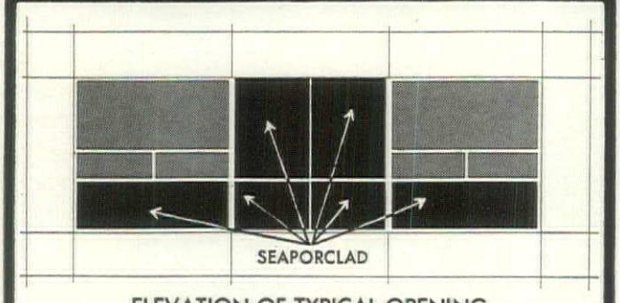
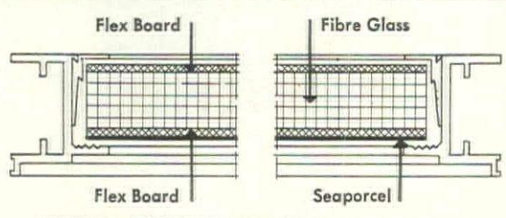


ELEVATION OF TYPICAL OPENING



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et seq.). Sheraton said its staff architects headed by Mrs. Mary Kennedy would do the designing.

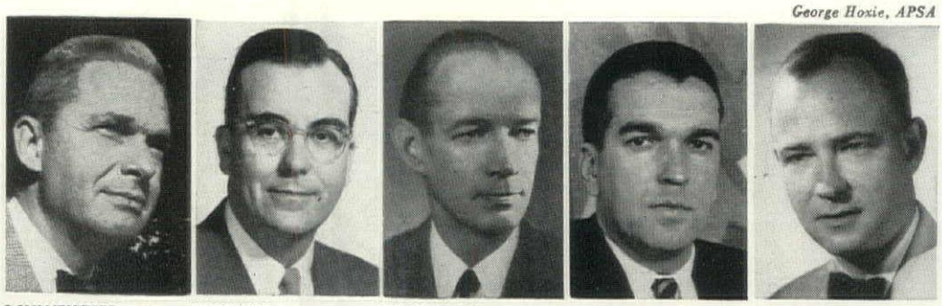
Overseas empire. Abroad, US hotelmen were eyeing nearly every major city in the world as a hotel site. Hilton opened the 350-room Castellana Hilton in Madrid this month, was building a Hilton hotel in Turkey, had advanced negotiations underway for others in Rome and London. Hilton people were most tickled with a $10 million hotel in Havana, being designed by Architect Welton Becket. The hotel will be owned by the Cuban Culinary Workers Union. In a similar deal, Dallas Builder Leo Corrigan, whose US properties include Los Angeles' Biltmore and Dallas' Adolphus hotels, would lease a $3 million hotel under construction in Nassau to woo more American tourist dollars. Intercontinental Hotels Corp., a Pan American subsidiary, was opening three Latin American hotels this year. Because low-cost air travel and longer vacations have extended American travel boundaries, IHC President Wallace Whittaker thinks the world hotel business "hasn't even started yet."

Remodeling strong. Big as it was, the surge in new building was pint-sized compared to the continuing boom in hotel modernization and renovation. The American Hotel Assn. (which includes such new construction as new wings in its figures) puts remodeling outlays by US hotels at $2½ billion in the last five years. Currently, estimates Executive Vice President Charles A. Horrworth, modernization is hitting a $500-million-a-year clip.

Philadelphia's Bellevue-Stratford, for instance, announced last month it will spend $4 million for structural renovations, air conditioning and interior redesign. Many a hotel was converting rooms designed for maids and other help into profit-boosting guest rooms. Chicago hotels were amidst a $12 million expansion program to offset the city's lack of a public auditorium for conventions. Kansas City's Muehlebach signed a contract for a 12-story annex.

Motoring menace? Hotelmen's biggest problem remained: how to attract the increasingly large segment of people who travel by auto. In the crowded East, one answer was typified by plans for the new Penn Sheraton, which will include an auto lobby where motoring guests can register and whisk upstairs in an elevator without going through the main lobby. In the wider spaces of the West, new hotels (nobody has put a specific definition on where a hotel ends and a motel begins) were spreading out in one- and two-story structures geared to the auto age. The American Hotel Assn. figures 40% of this year's outlays for modernization will go for facilities for the guest who arrives by car.

George Hoxie, APSA



SCHWEIKHER PICKENS DINWIDDIE DANFORTH STOUSLAND

Seven new deans, chairmen named to head US architectural schools and departments

For the second straight year, turnover among college deans of architecture reached sizeable proportions. Last month brought announcements of seven new deans or department heads for architectural colleges or departments to fill vacancies caused by transfers, retirements and deaths.

Chicago's **Paul Schweikher** was named professor of architecture at Yale University effective July 1. He will become chairman of the department of architecture in February when **George Howe,** who has held the post since Jan. 1, 1950, retires. Schweikher, 50 on July 28, is widely known for his contemporary houses, but with his partner, Winston Elting, has also designed housing projects, churches and other buildings. He received his fine arts degree at Yale in 1929, in recent years has been visiting professor of architecture at the Chicago Art Institute and a number of state universities.

New face in St. Louis. As dean of its school of architecture, Washington University in St. Louis named **Buford L. Pickens,** director of Tulane University's college of architecture since 1950. Pickens, 47, was president of the Society of Architectural Historians in New Orleans in 1950. He was an assistant professor at Wayne University from 1938 to 1945. He succeeds **Kenneth E. Hudson.**

Tulane brought fresh blood into architecture's academic house, was replacing Pickens with practicing architect **John Ekin Dinwiddie,** designer of many modern residences and other structures in the San Francisco Bay area.

Western Reserve University at Cleveland converted its college of architecture into a deparement of architecture in a new division of architecture and visual arts. As 65-year-old Dean **Francis R. Bacon** retired, art department chairman **Ransom R. Patrick** was appointed director of the new division, and **George Edson Danforth,** from the Illinois Institute of Technology architectural staff, was named chairman of the department of architecture.

Yale NB: Albertus *Don Berg*

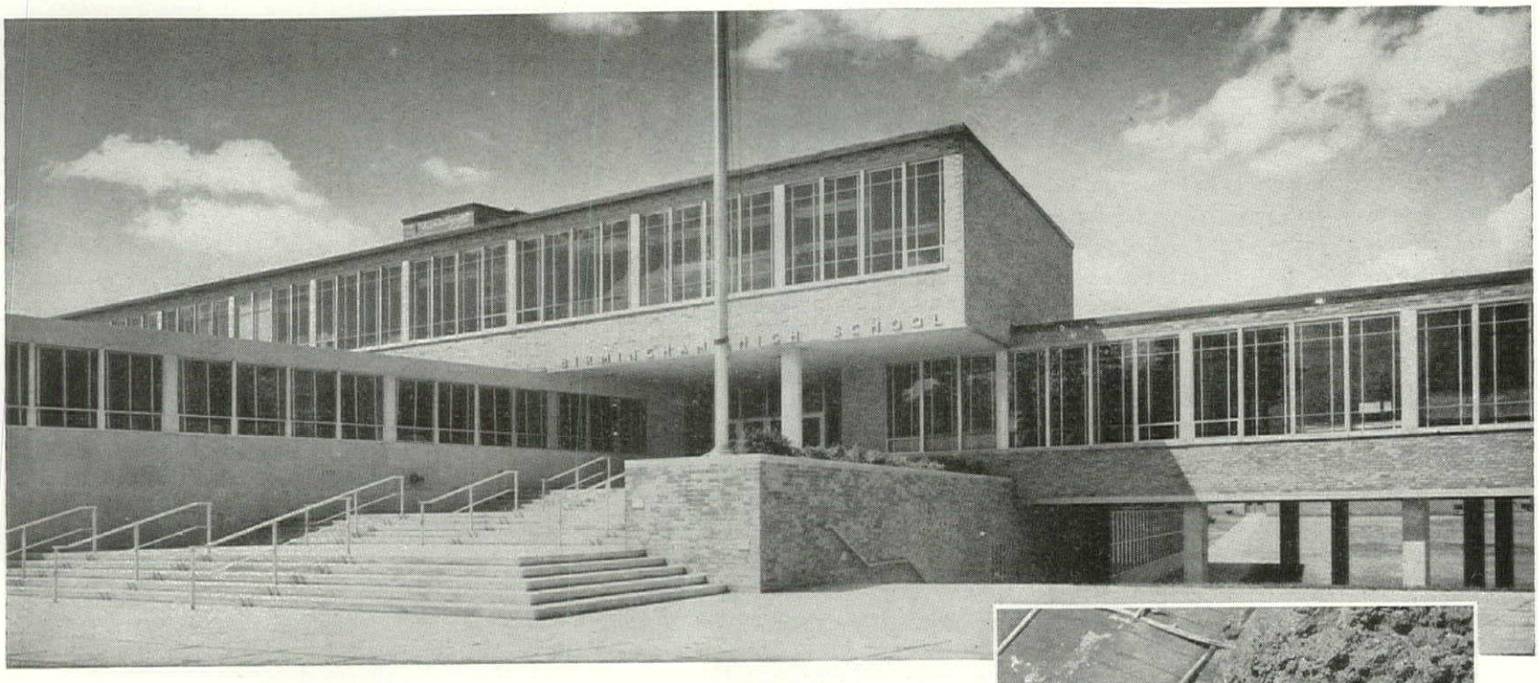
HOWE JONES

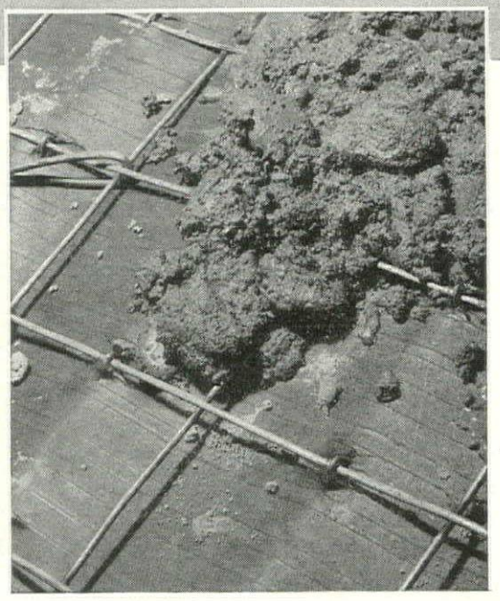
Two years ago the University of Virginia recalled Prof. **Fred'k Disque** from retirement temporarily because of the death of Dean Edmund S. Campbell. This month, Disque re-retired and **Thomas K. FitzPatrick,** 43, took over the chairmanship of the university's division of architecture and McIntyre School of Fine Arts (FORUM, March '53). FitzPatrick, university architect and head of the department of architecture at Iowa State University since 1944, was also appointed a member of the National Architectural Accrediting Board last year, has headed the Ass'n of Collegiate Schools of Architecture since 1950.

To fill the Iowa State vacancy, Prof. **Leonard Wolf,** 44, was elevated to department head. Wolf was assistant professor of architecture at University of Oklahoma in 1936-37, then joined Iowa State's architecture department, was made associate professor in 1943, full professor in 1946. He was AIA Iowa chapter president (1944-46), and at AIA's annual convention in Seattle last month was elected Grand Scribe of Tau Sigma Delta, honorary architectural and allied arts society.

At Miami University, Ohio, **Charles Stousland,** 32, was appointed head of the department of architecture late last summer, following the death in February, 1952, of Leicester B. Holland. Stousland was assistant professor at Miami for a year after he obtained his bachelor of architecture degree from Yale in 1947, taught at the University of Arkansas for three years after obtaining his master's degree from Rice Institute in 1949.

Retired on June 30 after 40 years at the University of Minnesota school of architecture: Prof. **Roy Childs Jones,** FAIA,





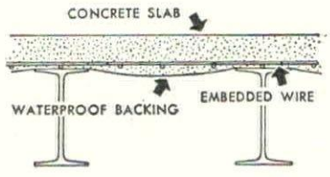
Broad decks of this modern function-engineered school poured over STEELTEX FLOOR LATH

When architect J. Robert F. Swanson and his staff at Swanson Associates in Bloomfield Hills, Michigan, set out to design the splendid new Birmingham, Michigan, Senior High School, they did far more than simply construct a handsome structure to house a specified number of students. For two years they joined in study with Birmingham school officials to exactly determine local educational philosophy and objectives, and crystalized their thinking with an on-the-spot survey of the best school facilities throughout the free world. The result was a low, wide-spread campus-type of structure, requiring many thousands of feet of concrete decks.

The architects specified that the concrete be poured over Steeltex Floor Lath, and they did so for very good reasons. The strong welded-wire mesh added great strength to the slab, while the tough water-proof backing permitted work on the floor below and assisted in proper curing of the concrete. These inherent virtues tended to allow greater latitude in deck design.

If you are not completely familiar with the use of Steeltex in concrete floor construction, it may well be of profit to you to contact us or consult our catalog data in Sweet's before designing your next structure. For details, write for Catalog D.S. 133, Dept. AF, Pittsburgh Steel Products Company, Grant Bldg., Pittsburgh 30, Pa.

Note, in the cross-section and close-up that the weight of the wet concrete forces the backing away, which permits the galvanized welded wire mesh to assume its proper position in the slab. Steeltex Floor Lath also performs two other functions. It permits work on the floor below while pouring is in progress and retains moisture to assist proper curing.



Pittsburgh Steel Products Company

A Subsidiary of Pittsburgh Steel Company

school head since 1936. Jones, 68, has been president of the National Architectural Accrediting Board since 1943.

Harvard changes. When **José Luis Sert** succeeds retiring **Joseph Hudnut** as dean of the graduate school of design at Harvard in September (AF, Jan. '53), he will serve additionally as chairman of the department of architecture, the university announced this month. Sert's design faculty was listed by the university in the department of architecture: **Serge Chermayeff,** new professor of architecture; practicing Architect **Huson Jackson,** of New York, and **Ronald Gourley** (from M.I.T.), new associate and assistant professors of architecture; Prof. **Walter Bogner,** senior design critic; Assistant Prof. **Jean Paul Carlhian,** design critic; **Robert M. Becker, August L. Hesselschwerdt** and Associate Prof. **Edward K. True,** building construction and technical course instructors.

In the newly combined department of city and landscape planning: Prof. **Reginald R. Isaacs,** new chairman; **Hideo Sasaki,** new assistant professor of landscape architecture and city planning, and landscape architecture design critic; **Naum Gabo,** new professor of design research (both departments); Associate Prof. **Norman T. Newton,** landscape design critic; Associate Prof. **Walter L. Chambers,** construction in landscape architecture and city planning; **Perry L. Norton,** city planning critic.

Federal lease-purchase bill pushed by new administration

Companion bills to let the Federal Government lease-purchase buildings were inching toward floor action in both Houses of Congress this month after approval by government operations committees. But despite the prospect of stimulating new construction or the resale of existing property, realtors were disturbed at the prospect that lease-purchase could remove as much as $7 billion more property from local taxation.

If provision could be made at the outset for payments in lieu of taxes where property reverted to federal ownership under the scheme, NAREB thought its objections would be largely overcome. It was inclined to like the general idea.

To GSA officials, the realtors' complaint seemed farfetched and even a trifle ridiculous. They had already made it clear to Congressional committees, they recalled, that they had no intention of buying existing buildings. They only wanted to acquire new space where long-term requirements justified it. Moreover, no property covered by lease-purchase contract could become federally owned before eight years. It could be as long as 25 years.

PEOPLE: Belluschi tangles with Salem, Ore. on memorial sculpture; Daniel V. Terrell nominated for ASCE chief

Would Pierre Auguste Renoir's plump *Venus Victorieuse* make a fitting monument "in memory of Oregon pioneers?"

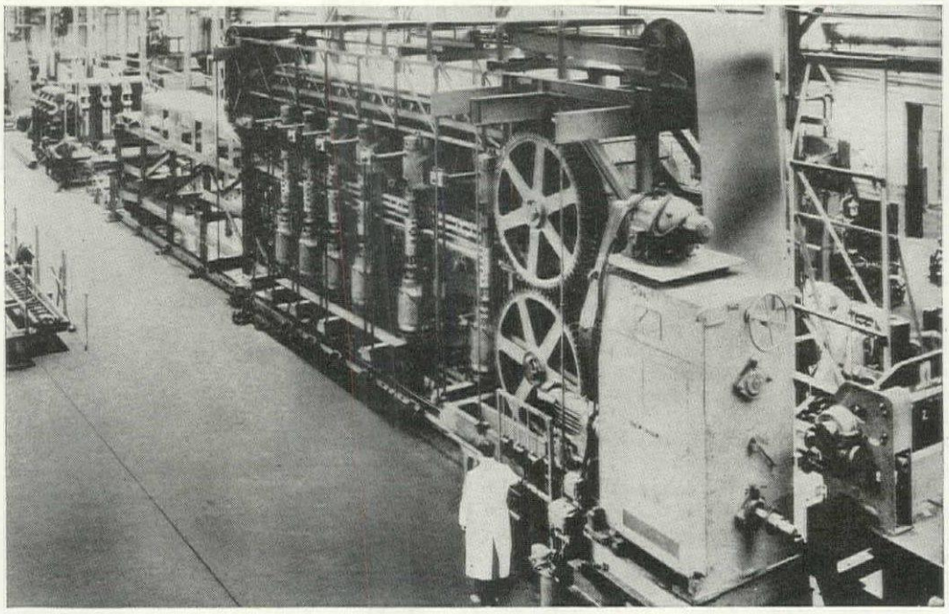
Yes, said Architect **Pietro Belluschi,** dean of the M.I.T. school of architecture and designer of the new Marion County Courthouse in Salem, Ore. No, roared Lions and Kiwanis clubs and outraged Salem women who deluged Mayor Al Loucks with protests. Innocent cause of the controversy was the late Carroll B. Moores, one-time janitor in Salem's Supreme Court building. In his will, he directed that the "remainder" of his estate (about $30,000) be spent for a pioneers' memorial. He did not specify what kind. After authorities decided a statute on the lawn in front of the new courthouse would be appropriate, Mayor Loucks appointed Belluschi to the committee to select a proper work. He persuaded the group to buy Renoir's black Venus (cost $18,000), to be set on a simple pedestal behind a small reflecting pool. As Belluschi explained last month at the height of the uproar that arose as soon as pictures of the French masterpiece were published: "This is one of the finest pieces of sculpture done in the last 100 years. With a proper inscription, the proper setting, it will be a more suitable memorial to the pioneers than a little man with a racoon hat. . . . After a while people forget . . . the purpose of a memorial . . . and will just enjoy it as a beautiful piece of art. Future generations will be grateful and wonder how Salem ever managed to get it."

Valentin Galleries

VENUS VICTORIEUSE

Belluschi's views did not still Salem objections. Said one Lions clubber: "We want a pioneer woman in a gingham dress and sunbonnet, the kind of respectable lady [sic] who came out here, and not this trash." Upshot: *Venus Victorieuse* was retired in defeat.

Detroit was anticipating a happier wedding of sculpture and architecture this fall at the United Auto Workers' new $2 million Solidarity House headquarters. Philadelphia's Sculptor-Architect **Oskar G. Stonorov,** a friend of UAW Chief Walter Reuther, helped design the building, also made an 11'-6" statue of a typical UAW member: "A clean-cut young man going ahead with full confidence. It is not naturalistic and not condescending to the



British press turns wood wastes into continuous strip board

Shavings, slabs, edging and other wood and fibrous waste are converted into 4' wide, 3/6 to ¾" thick board strip by the British-made Bartrev Press, the first automatic machine to produce board strips in a continuous, 24-hour process. Using more than three tons hourly of normally wasted wood materials, the machine can turn out 8 miles of board a day at a cost of 3 to 9¢ per sq. ft. The board can be nailed, sawed, drilled and jointed like ordinary wood while decorative papers, textiles, laminates, etc. can be bonded directly to it during the manufacturing process. In addition to the 200-ton press, the complete Bartrev process requires a materials preparation plant to maintain a flow of uniformly sized fiber particles. Developed over a 14-year period by a team of 200 engineers headed by William Fischbein, the press can be operated by a three-man shift. A complete installation will cost about $1.8 million in the US. The press alone will sell for about $615,000 at the company's plant in England.

tastes of a great many people. . . . But we hope people can understand it without any intellectual complications." Last month, the Stonorov plaster was shipped to Italy to be cast into bronze. Total price tag would be "not much more than $10,000," said Stonorov. A picture? Not until the unveiling.

Stocky, white-haired Dean **Daniel V. Terrell,** 66, of Kentucky University's college of engineering, was nominated last month for president of the American Society of Civil Engineers, slated for formal election in the fall. Characteristic of the friendly, camera-toting dean is his favorite hobby: helping high school graduates obtain scholarships and inducing donors to provide the funds. This fall, his college will award some 70 scholarships worth more than $30,000. Kentucky-born, Dean Terrell obtained engineering degrees from the state university in 1910 and 1914, joined it as acting professor of highway engineering in 1912, became engineering dean in 1946. He has written voluminously on cement and concrete, currently is director of research for the State Highway Department.

TERRELL

Philadelphia's first municipal architectural contest (AF, March '53) was won this month by **Alfred Clauss** (partner in **Gilboy & O'Malley**) in a field of some 45 entrants. The competition problem: drawing preliminary plans for a $1.8 million expansion of the city's home for the indigent. The prize: the contract for final plans and supervision of construction at recommended rates of the AIA Philadelphia chapter. Entries were limited to local architects, to make sure the winner could give adequate attention to the project during construction. First and second honorable mentions: **Sydney E. Martin** and **Montgomery & Bishop.**

Robert Moses, New York's construction co-ordinator and parkway, bridge and tunnel expert, achieved profitable distinction in another role last month. In a field of 44,000 entries, he won the $25,000 first prize in General Motors' better highways essay contest. Moses proposed a boost in federal oil and gasoline taxes and some state levies to help increase total road-building expenditures to about $5 billion a year for 10 years (double present outlays).

CONGRATULATIONS: To **Clinton W. Blume,** New York Giants pitcher (1922) who entered real estate in 1924, and who will be inducted Sept. 8 as president of the

Real Estate Board of New York succeeding title firm Executive **Lee Thompson Smith; Brig. Gen. David H. Tulley,** new chief of the military construction division, Corps of Engineers; Architect **Ludwig Mies van der Rohe,** awarded the 1953 Feltrinelli prize for architecture from the Accademia Lincea in Rome.

NAMED: Executive Vice President **Carl D. Franks** as president of the Portland Cement Assn. succeeding the late Frank T. Sheets (who died in Nov., 1951), and Vice President **G. Donald Kennedy,** made executive vice president; **Harold V. Krotsch,** head of the Riverside County (Calif.) Building and Safety Department, as technical-secretary of the Pacific Coast Building Officials Conference; **John M. Ferry,** building and construction chief for the New York Telephone Co. and chairman of the NY Real Estate Board building laws and regulation committee, as special assistant for installations to supervise all Air Force base construction in the US and overseas; Vice President **T. D. (Ted) Wakefield** as president of the new Wakefield Brass Canadian subsidiary, Wakefield Lighting, Ltd.; **Leslie C. Beard Jr.,** assistant director of the Socony-Vacuum Laboratories, as president of the American Society for Testing Materials.

DIED: **Robert David Kohn,** 83, fellow and former president of the AIA (1930-32), honorary corresponding member of the Royal Institute of British Architects, designer of hospitals, public and commercial buildings, city planner, director of housing for PWA (1933-34), June 16 at Ossining, N.Y.; **Walter Stevenson Finlay Jr.** 70, executive vice president and a director of the J. G. White Engineering Corp., consultant to the United States Atomic Energy Commission, June 17 in New Rochelle, N.Y.; Engineer **Theodore C. Tuck,** 74, partner in Tuck & Eipel, New York, who aided in designing the Morehead Planetarium, Chapel Hill, N. C. and the Wharton School of Business, Pennsylvania University, May 21 in New Rochelle, N. Y.; **Dana Somes,** 68, architect and chairman of the Boston Zoning Board, May 23 in Boston; **Martin Koenig Jr.,** 63, Baltimore consulting engineer who aided in the construction of University Hospital and many other Baltimore buildings, June 2 while enroute to Hawaii; **William G. Demarest,** 69, manager of the Clay Products Assn. of the Southwest, June 15 in Austin, Tex.

KOHN

NEWS continued on p. 46

Slum articles jolt Chicago; super housing agency proposed

Among the US cities where building men are battling slums, Chicago is almost the only one where significant support has been forthcoming from local newspapers. The *Tribune* has faithfully recorded the more flagrant cases of illegal conversions and dwellings in need of rehabilitation or condemnation. But no Chicago paper had undertaken the formidable job of exposing the slum picture in its entirety—the misery, the greedy property owners who profit from it, the indifferent or dishonest city officials who let them get away with it. Six months ago, the *Daily News* considered the story. Explained Managing Editor Everett Norlander: "We hadn't gone to work on it because a job like this ties up too damn much of the staff and doesn't usually produce the flashy sensation of a crime exposé."

Rat-bite decision. On March 27, Lottie Crenshaw, nine months old, was chewed to death by rats as she lay in her slum crib. "The rate-bite case did it," said Norlander. Former Nieman Fellow Roy M. Fisher and seven other reporters began eight weeks of painstaking research. Last month, the results went into a 10-day series that pulled no punches:

▸ "Here are the names of 20 of Chicago's slum makers," wrote Fisher in his second story. "They are the men who, more than any others, can be blamed for the wretched conditions that threaten to destroy Chicago as a decent place to live." (Among the 20: Oschatz, Ratiner & Wittert, whose Alfred Wittert is treasurer of the Chicago real estate board.) Reporters found evidence of rats on every visit to slum properties owned by the 20. Three out of five times the owners were called into court, they got off free. Other times, the average fine was $20.23.

▸ The taxpayer, wrote Fisher is the sucker in slum profits. "Chicago is spending $250 million per sq. mi. to rebuild slums such as these 20 men own. Much of the high cost . . . is caused by inflated values put on dilapidated slum buildings. These values are based on the huge income that results from overcrowding and overcharging. The city could condemn such property and order the owner to tear it down at his own expense. Strangely, this power has never been used against any of these 20 operators."

▸ Out of the building department's files, *Newsmen* dug photostatic evidence of reports falsely certified as "complied with." First-hand checking proved the falsifications. Said one inspector: "If we think a violation notice has been kicking around long enough we just mark it 'complied' to get rid of it." Commented Christiansen: "Well, I'm surprised."

Shake up voted. Slowly, the series began to move Democratic Mayor Martin Kennelly and his administration to action. First, the mayor gave a hint Christiansen might be replaced; he observed that the commissioner had been "sick" for a year. On July 2, the city council without debate adopted a report based on a Public Administration

continued on p. 48

"CONCRETE JOIST FLOOR CONSTRUCTION WAS SELECTED BECAUSE OF ITS ECONOMY AND PERMANENCE"

LaRue Carter Memorial Hospital, Indianapolis, Indiana
Architects: Daggett, Naegele & Daggett, Inc.

DAGGETT, NAEGELE & DAGGETT, INC.
ARCHITECTS

1537 CENTRAL AVENUE
INDIANAPOLIS 2
INDIANA

ROBERT FROST DAGGETT, F. A. I. A.
ROBERT FROST DAGGETT, JR., A. I. A.
F. HAROLD NAEGELE, A. I. A.

March 30, 1953

Mr. Harry C. Delzell
c/o Concrete Reinforcing Steel Institute
38 South Dearborn Street
Chicago 3, Illinois

Dear Mr. Delzell:

Concrete Joist floor construction was used in the recently completed Indianapolis LaRue Carter Memorial Hospital. This type of construction was selected because of its economy and permanence.

With the use of Concrete Joists, material was saved and dead floor weight reduced. Consequently, smaller framing members could be used, appreciably lowering costs. Using prefabricated, removable forms saved construction time which also resulted in lower costs.

This permanent type of construction, monolithic and rigid, with all members poured in place, lessens deflections and vibrations and the attendant expensive maintenance. This construction stands up well under the normal stresses of use and weather as well as the possible impact of fire or shock.

The space between the concrete joists was used to house pipes and conduit where suspended acoustical ceilings occurred. In those locations not requiring flat ceilings, the exposed concrete joist floor construction was pleasing in appearance.

We are well pleased with the results.

Sincerely yours,

Daggett, Naegele & Daggett, Inc.

By Robert Frost Daggett
Robert Frost Daggett

CONCRETE REINFORCING STEEL INSTITUTE

38 S. Dearborn St.
Chicago 3, Ill.

Service study that proposed most sweeping changes in all of the city's building department and housing agencies—unless the council later hedges or rescinds its action.

If the Legislature gives its approval the adopted report would require that the present Housing and Redevelopment office, headed by Realty Analyst James C. Downs Jr., be raised to major city department status and assigned responsibility for virtually everything related to construction, housing, conservation and rehabilitation. It would transfer to Downs' department "as soon as possible" the neighborhood conservation program and all other functions of Christiansen's bureau of inspection. It also would require the corporation counsel to draft legislation to abolish the Chicago Housing Authority and the Chicago Land Clearance Commission, assign their activities to the central department. If this were done Chicago would be the first major city with a single department that could coordinate all its slum clearance, new public housing, urban redevelopment, neighborhood conservation and rehabilitation.

Other developments in the aftermath of the *News'* hard-hitting reports:

▸ Harold J. Andelman, owner of the house where Lottie Crenshaw was gnawed to death, was fined $2,200, ordered to demolish the building. But after razing it he pleaded destitution. Municipal Court Judge Emmett Morrissey reduced his fine to $1,020 with this explanation: "We have compliance to the degree there are no violations. A bad condition has been corrected. The case has been well prosecuted. If we had the same vigor in all cases we might get rid of the slums."

▸ Assistant Chief Justice Joseph H. McGarry of the Municipal Court discontinued the special emergency building and conservation court that was established with fanfare in January to expedite "serious" violations (FORUM, Feb. '53). Judge McGarry denounced Christiansen for "blaming the courts" for an accumulation of 10,000 unprosecuted violation cases, said housing and building court judges were reduced to "twiddling their thumbs" because Christiansen's department didn't move more cases to trial.

Other rehabilitation developments:

▸ New York City realtors moved from talk to deeds. After gingerly discussing the problem for almost a year, the realty board last month began consulting with other organizations to establish a city-wide committee to develop a "workable" program.

▸ The Life Insurance Association of America and the American Life Convention appointed a joint insurance industry committee that is studying special mortgage problems connected with loans on older houses and the feasibility of rehabilitation loans in deteriorated areas. Chairman Milford A. Vieser of Mutual Benefit Life said insurance lenders will probably have to work downward into rehabilitation—i.e.: begin with loan policies to conserve sound but aging properties, then to upgrade fringe properties, then try rehabilitation loans.

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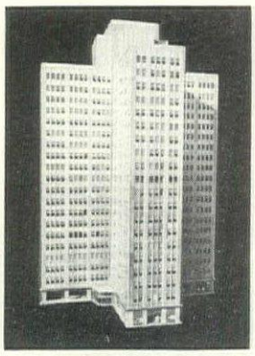


Architects: Eggers & Higgins
Irwin Clavan

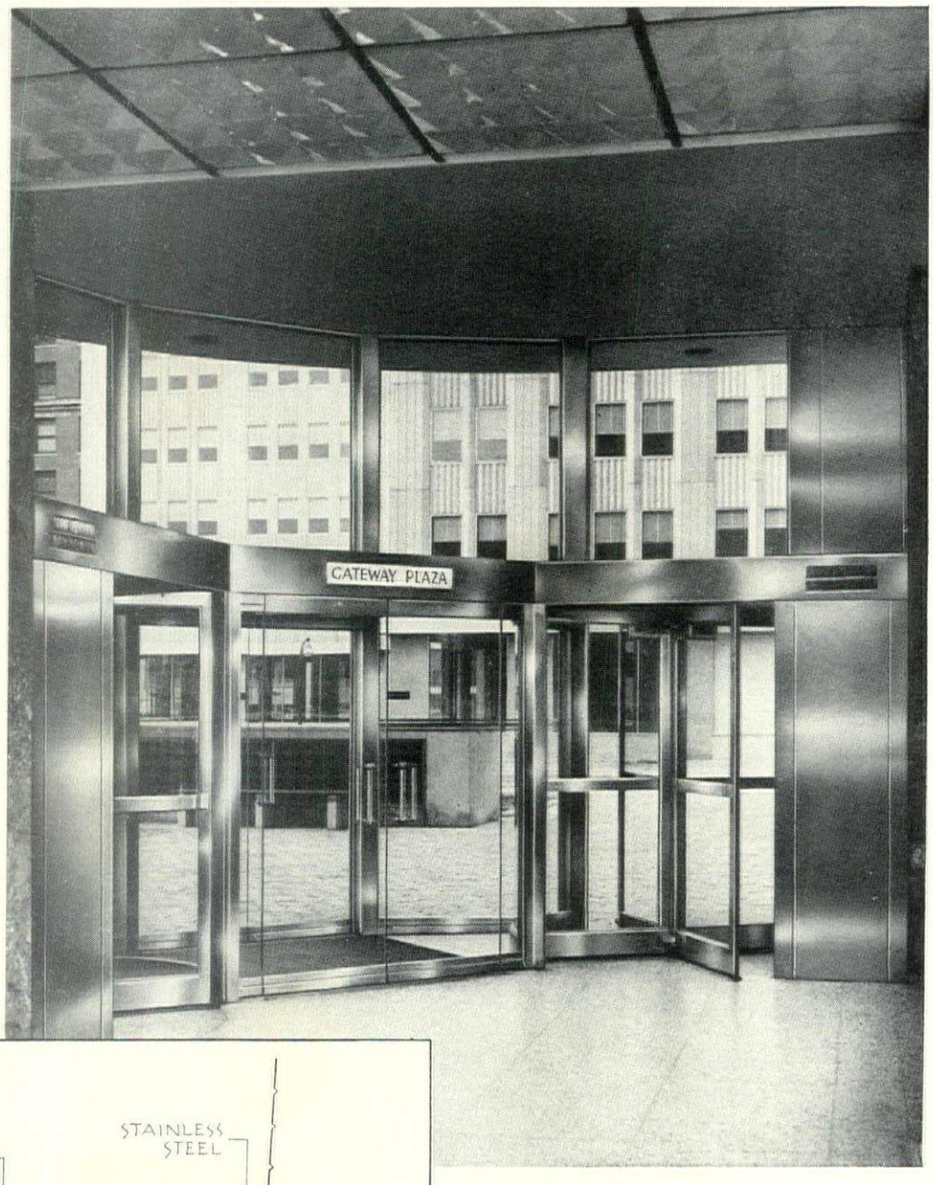
Armco Stainless Steel in Gateway Center

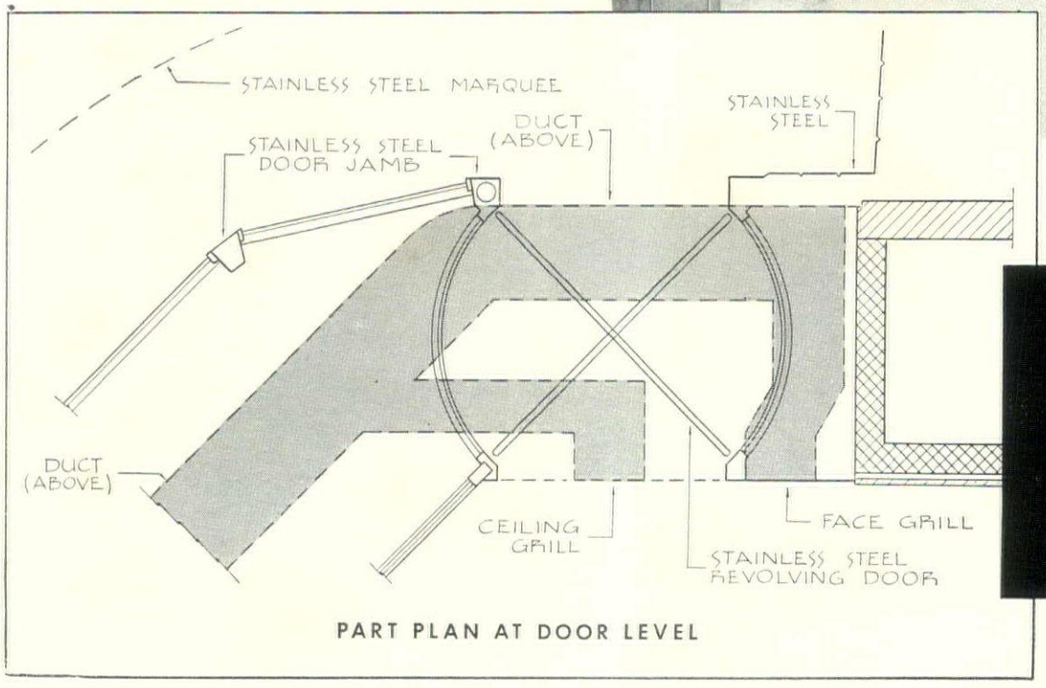
Armco Stainless Steel was used in pilasters, mullions and spandrels in the Gateway Center Development in Pittsburgh. It's all Armco Stainless Steel for entrances, canopies, store-fronts and trim in the first three buildings of the Gateway Center to be completed.

On this project unrestricted chromium stainless steel, Type 430, was used throughout. This time-tried stainless steel possesses a high degree of permanence and is easy to fabricate. Like other stainless steels, it cuts maintenance costs because it's so easy to clean and keep clean.

The drawing shows details of the air-conditioning ductwork over an interior entrance. Here Armco Stainless Steel helps solve the exposed ductwork problem in a simple and effective manner.

For complete information on Armco Stainless Steel in architectural applications write us at the address below.





PART PLAN AT DOOR LEVEL

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Fort Lauderdale, Florida

Abbott, Merkt & Company—*Architects*
Caldwell-Scott Constr. Co. Inc.—*Builders*

Main facade of brilliant turquoise blue matte architectural terra cotta, 2'4" x 2'4". Four units with "V" rustication make up large panels approximately 5' square.

ANY COLOR UNDER THE SUN!

BIRD BUILDING
CLEVELAND ZOOLOGICAL PARK

Conrad, Hays, Simpson & Ruth—*Architects*
H. F. Juergens—*Builder*
Viktor Schreckengost—*Sculptor*

Polychrome Architectural Terra Cotta was specified for 29 handsome bird panels. Five large panels are 5' x 8'. Twenty-four smaller panels are 18" x 18".

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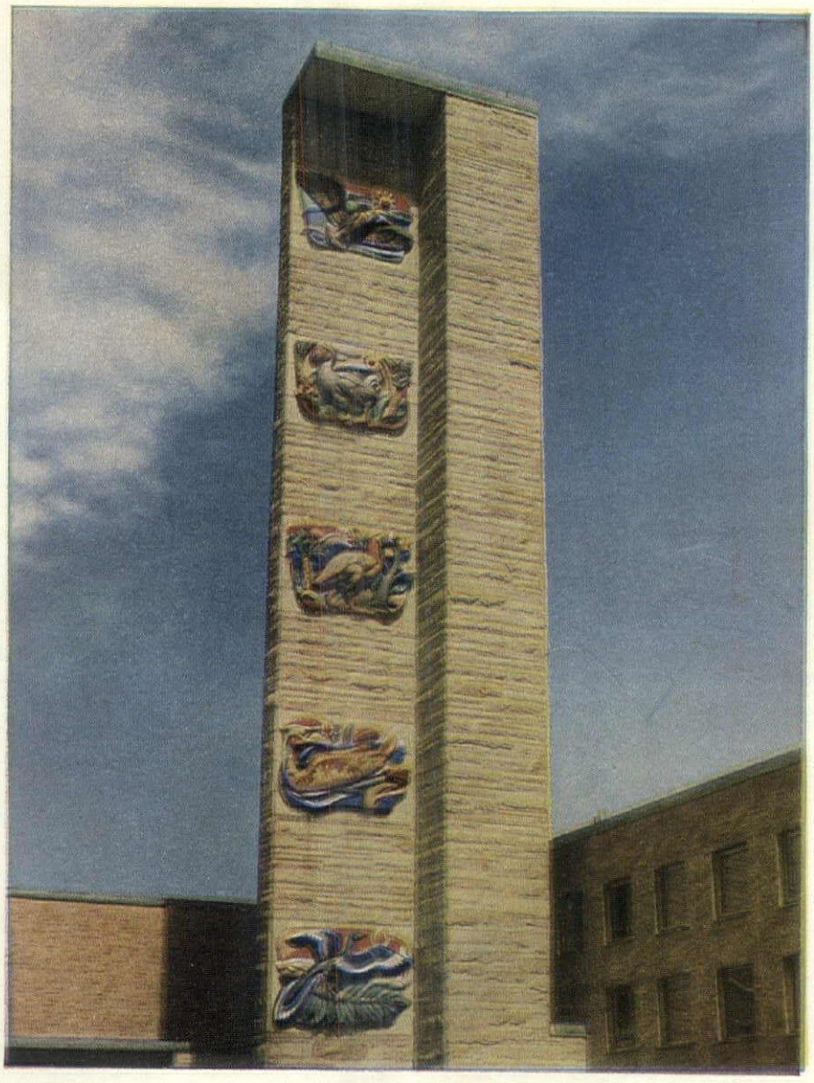

F S T C

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PLANTS AT PERTH AMBOY AND SOUTH AMBOY, N. J.

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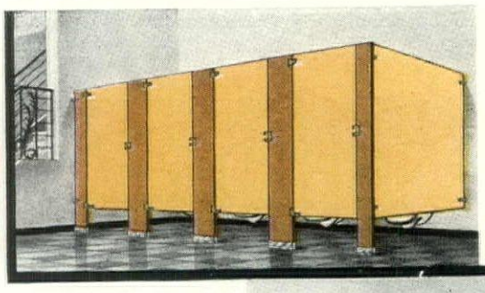
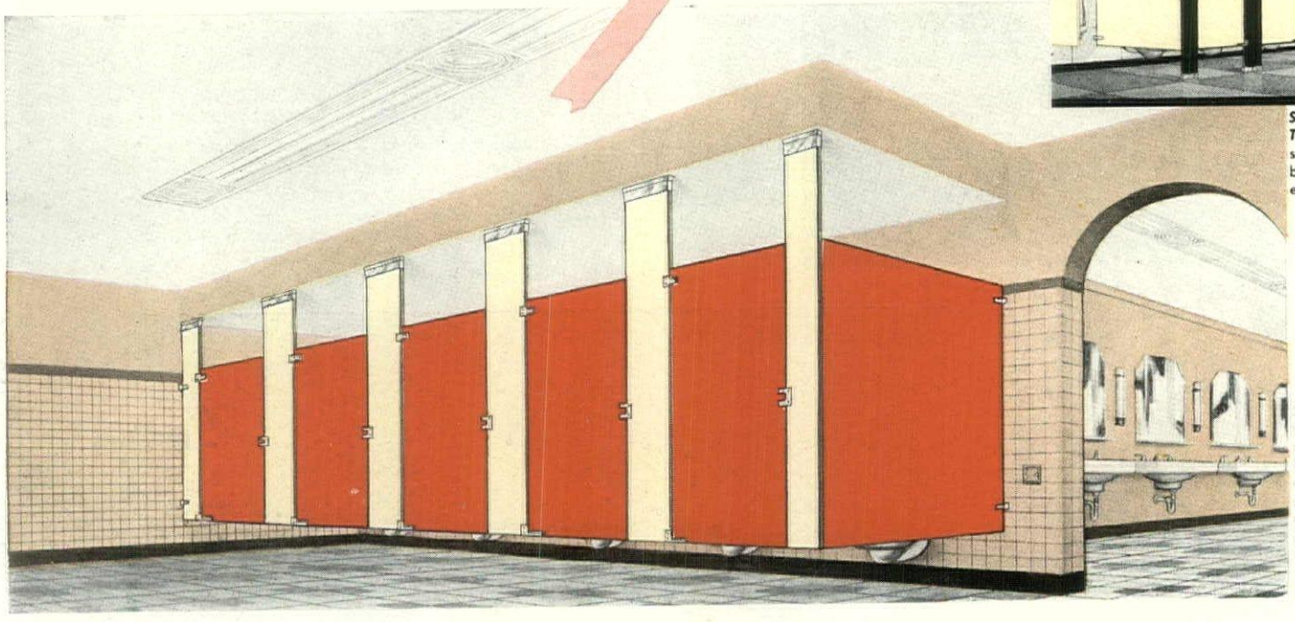
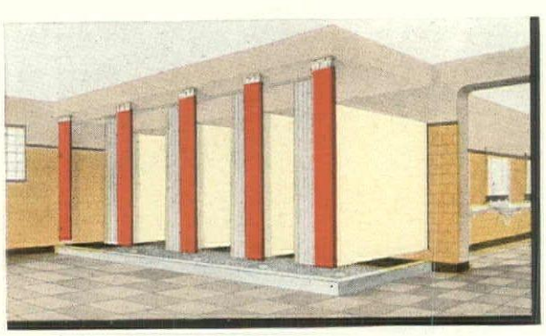


Sanymetal NORMANDIE Type Toilet Compartments endow a rest room environment with dignity and good taste.

Sanymetal ACADEMY Type Toilet Compartments are suitable for conservative but modern rest room environments.



Sanymetal CENTURY Type Ceiling Hung Toilet Compartments offer the utmost in sanitation and provide modern, distinctive rest room environments for schools, institutions, terminals and other public buildings.



Sanymetal CENTURY Type (Ceiling Hung) Shower Stalls of Sanymetal "Porcena" (Vitreous Porcelain on Steel) Partitions and Pilasters, as arranged for a typical club installation. Also available in Sanymetal "Tenac" (synthetic enamel baked-on over Galvanized, Bonderized* Steel).

It is obsolete before it is completed according to today's standards. To insure against *untimely obsolescence* consider wall-type plumbing fixtures installed with Sanymetal ceiling-hung toilet compartments.

Sanymetal offers several different types of toilet compartments. Sanymetal also offers and recommends Two Full Purpose Metal Base Materials which combine colorful attractiveness with long years of service life and effect important day-after-day savings in cleaning and maintenance costs. These Two Full Purpose Metal Base Materials—Sanymetal "Tenac" (Galvanized, Bonderized** Steel), and Sanymetal "Porcena" (Vitreous Porcelain on Steel), the ageless and fadeless, rustproof material—are described herein. Sanymetal Toilet Compartments are also available in cold rolled steel.

Sanymetal Toilet Compartments and Shower Stalls embody the results of over 39 years of specialized skill and experience in making over 500,000 toilet compartment and shower stall installations. Ask the Sanymetal representative in your vicinity to demonstrate the worthiness of Sanymetal Toilet Compartments as protection against *untimely obsolescence.*

This is Sanymetal "PORCENA"

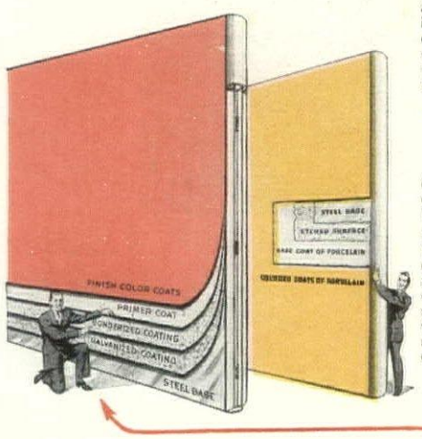
(Vitreous Porcelain on Steel)

A metal base material that is impervious to moisture, odors, cleaning and uric acids, oils and grease. It is rust proof. Available in 21 glistening colors.

This is Sanymetal "TENAC"

*(Baked-on Paint Enamel over Galvanized, Bonderized** Steel)*

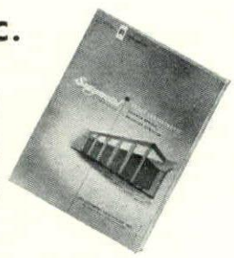
A metal base material that is notable for the positive adhesion of the baked-on paint enamel to the metal and its resistance to corrosion. Its lustrous, protective finish assures long-lasting newness. Available in 21 gleaming colors.



THE SANYMETAL PRODUCTS CO., INC.

1687 Urbana Road • Cleveland 12, Ohio

Sanymetal Toilet Compartments embody the results of specialized skill and experience in fabricating over 500,000 toilet compartments in all types of buildings. Ask the Sanymetal representative in your vicinity for information about planning suitable rest room environments that will always stay new. Refer to Sanymetal Catalog $\frac{21b}{Sa}$ *in Sweet's Architectural File for 1953 and Catalog* $\frac{13a}{Sa}$ *in Sweet's Industrial File for 1953.*



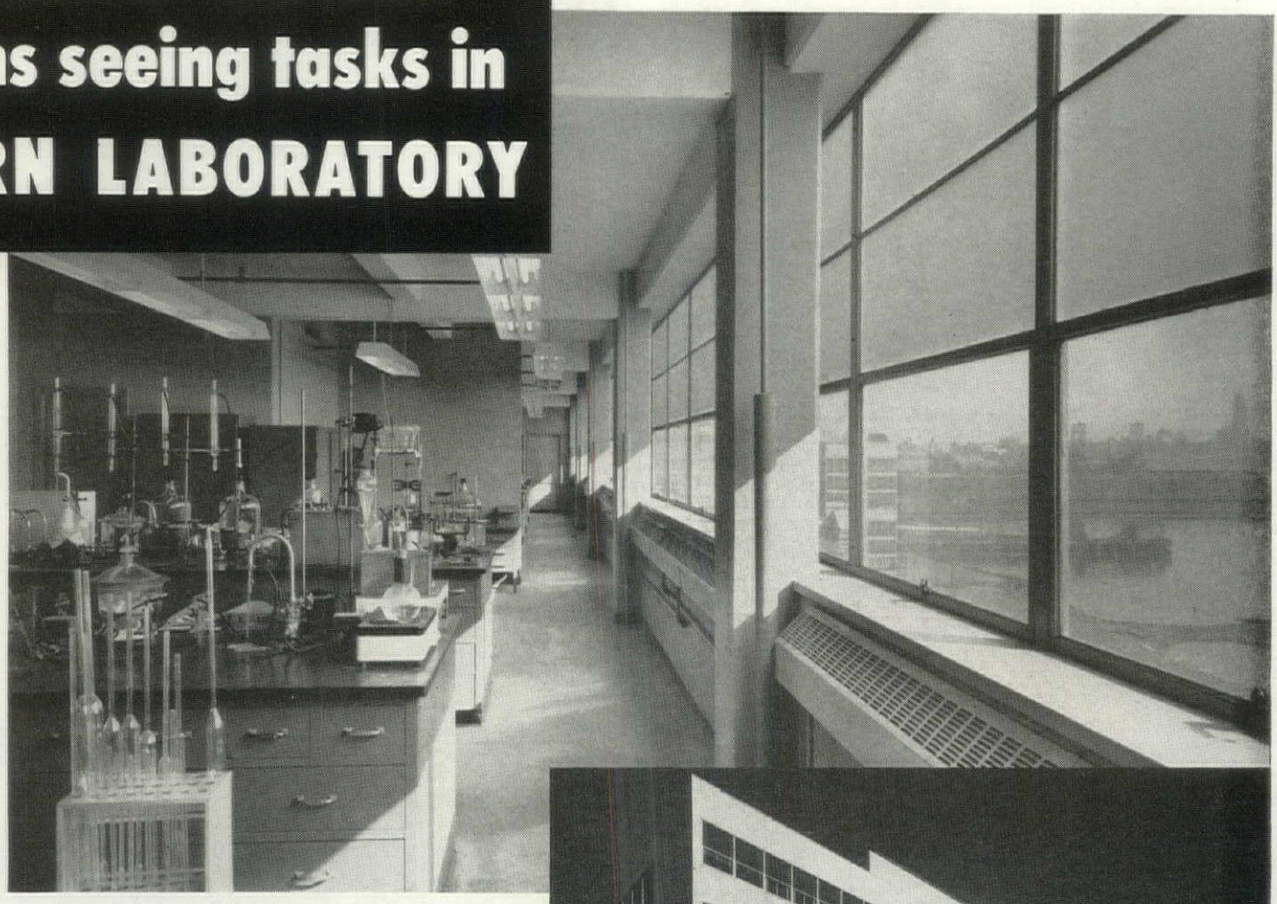
Sanymetal*

*Trade Mark Reg. U. S. Pat. Off.

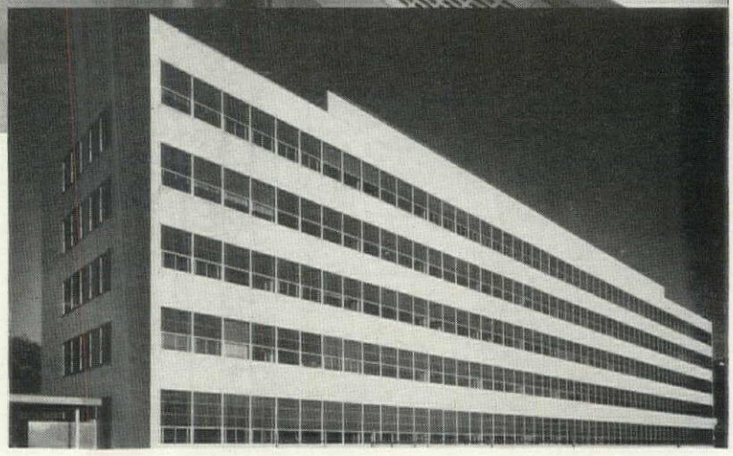
**Treated with "Bonderite", a product of Parker Rust Proof Company

TOILET COMPARTMENTS SHOWER STALLS AND DRESSING ROOMS

COOLITE GLASS lightens seeing tasks in MODERN LABORATORY



Installation of Coolite, Heat Absorbing and Glare Reducing Glass glazed in combination with clear vision strip.



New Lever Bros. Research Center, Edgewater, New Jersey. Architect: Skidmore, Owings & Merrill. Constructor: Bechtel Corporation. Glazing Contractor: F. H. Sparks Company.

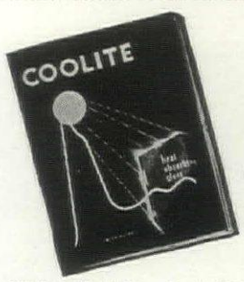
22,000 Sq. Ft. of Heat Absorbing and Glare Reducing Glass Installed in New Lever Bros. Company Research Center

High levels of natural illumination help protect high standards of product quality and research in this carefully engineered structure. Luxlite Coolite filters out the unwanted factors in "raw sunlight"... reduces glare, absorbs excess solar heat... makes interiors cooler, more comfortable. Technicians see better, work better, feel better under softly tinted, filtered daylight. Coolite helps reduce eye fatigue in trying and important tasks. It helps create a pleasant working atmosphere... contributes to improved employee morale. But Lever engineers specified Luxlite Coolite for other important reasons — for glass and glass alone offers the time-tested performance needed for better daylighting at lowest cost.

Specify Coolite for new construction or in modernization. The installation of Coolite glass is a positive investment to reduce rejects, cut maintenance costs and boost production.

There is no Substitute for GLASS!

It is non-combustible... won't burn. It is rigid... doesn't sag or warp. It has a permanently hard, impervious surface, not affected by time, abrasion or exposure to the elements. It won't corrode or stain. It resists chemicals—acids, solvents, etc. It is easily installed, maintained and cleaned by conventional methods.



Send for free catalog, "Coolite Heat Absorbing and Glare Reducing Glass." Samples on request.

MISSISSIPPI *Glass* COMPANY

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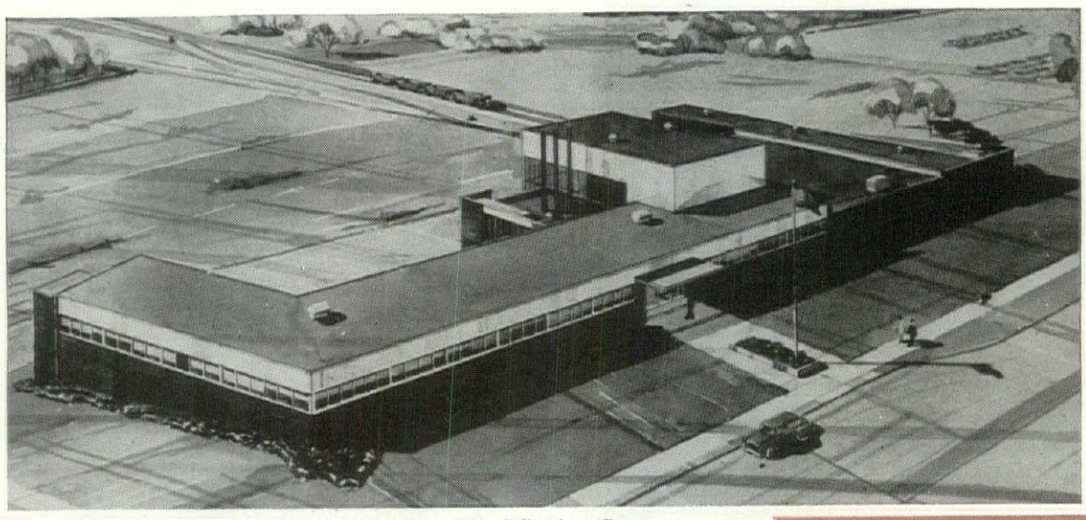
see our catalog in ARCHITECTURAL FILE or write for copy

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS



Why as the

TECHNICAL CENTER, National Malleable and Steel Castings Company, Cleveland, Ohio.
Architects and Engineers: Dalton-Dalton Associates, Cleveland.
General Contractor: The Leonard H. Krill Company, Inc., Cleveland.
Structural Steel: Builders Structural Steel Corporation, Cleveland.
Panel Fabrication and Erection: The H. H. Robertson Company, Pittsburgh.

THE INSTALLATION of exterior Stainless Steel wall panels on the Structural Steel framework. The panels are mounted on 2″ x 3″ unequal-leg angle base girts on concrete. The elevated girts are 8″ channels, located horizontally on 6′ centers.

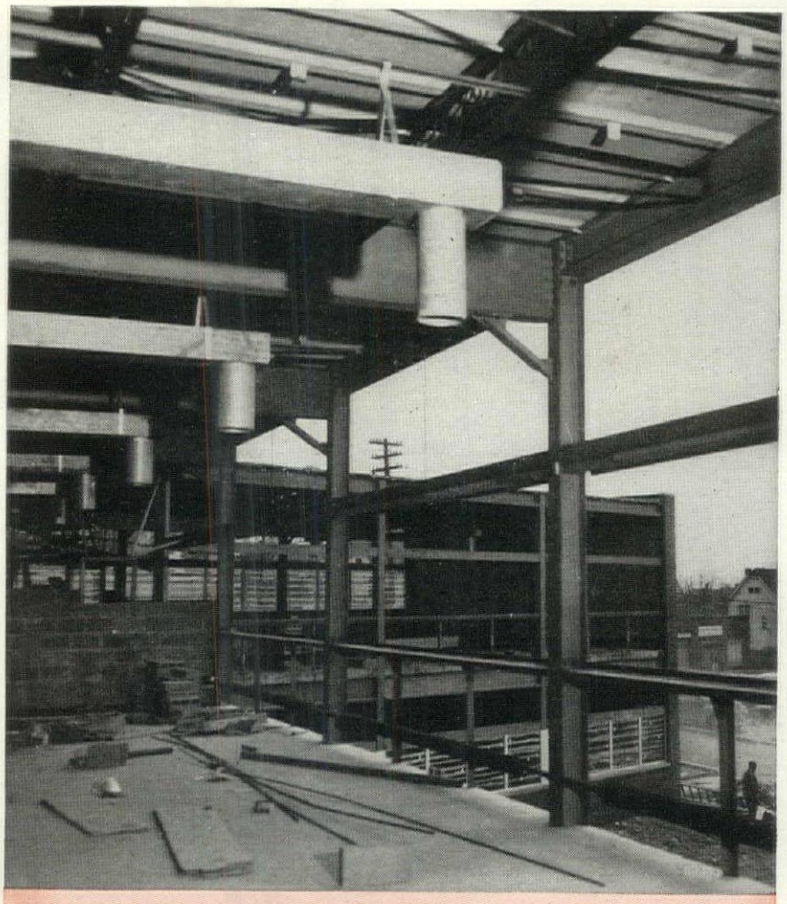
Structural Steel was chosen "backbone" of this new technical center

SOUND engineering and economic reasons dictated the use of structural steel in the framing of the new office and laboratory building for the National Malleable and Steel Castings Company, at Cleveland, Ohio.

Structural steel is the most economical load-carrying material. It effectively resists tension, compression, shear, and torsion, and will withstand more abuse than other structural materials. Enclosed in buildings, steel will last indefinitely, for it requires no maintenance. Steel beams are fabricated indoors where weather cannot affect the quality of workmanship. And most important, steel can be erected in any weather where men can work. It is versatile in its various methods of erection—riveting, bolting, or welding. And complete visual inspection is possible, thus eliminating the human element in field work.

Here in the ultra-modern National Technical Center, the steel "backbone" supports 9000 square feet of insulated Stainless Steel wall panels, plus other exterior wall materials of concrete, face brick, concrete block, heat-absorbing corrugated glass block, and metal sash. Interior partitions consist of steel, concrete block, and plaster.

For further information on construction with steel, write to the United States Steel Corporation, 525 William Penn Place, Room 2815-D, Pittsburgh 30, Pa.



THE STEEL "BACKBONE" supports steel wall panels, concrete, face brick, concrete block, corrugated glass, glass block, and plaster more effectively than any other structural material.

See next page for further details of construction ▶

UNITED STATES STEEL CORPORATION, PITTSBURGH
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA.
UNITED STATES STEEL SUPPLY DIVISION, WAREHOUSE DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U·S·S STRUCTURAL STEEL

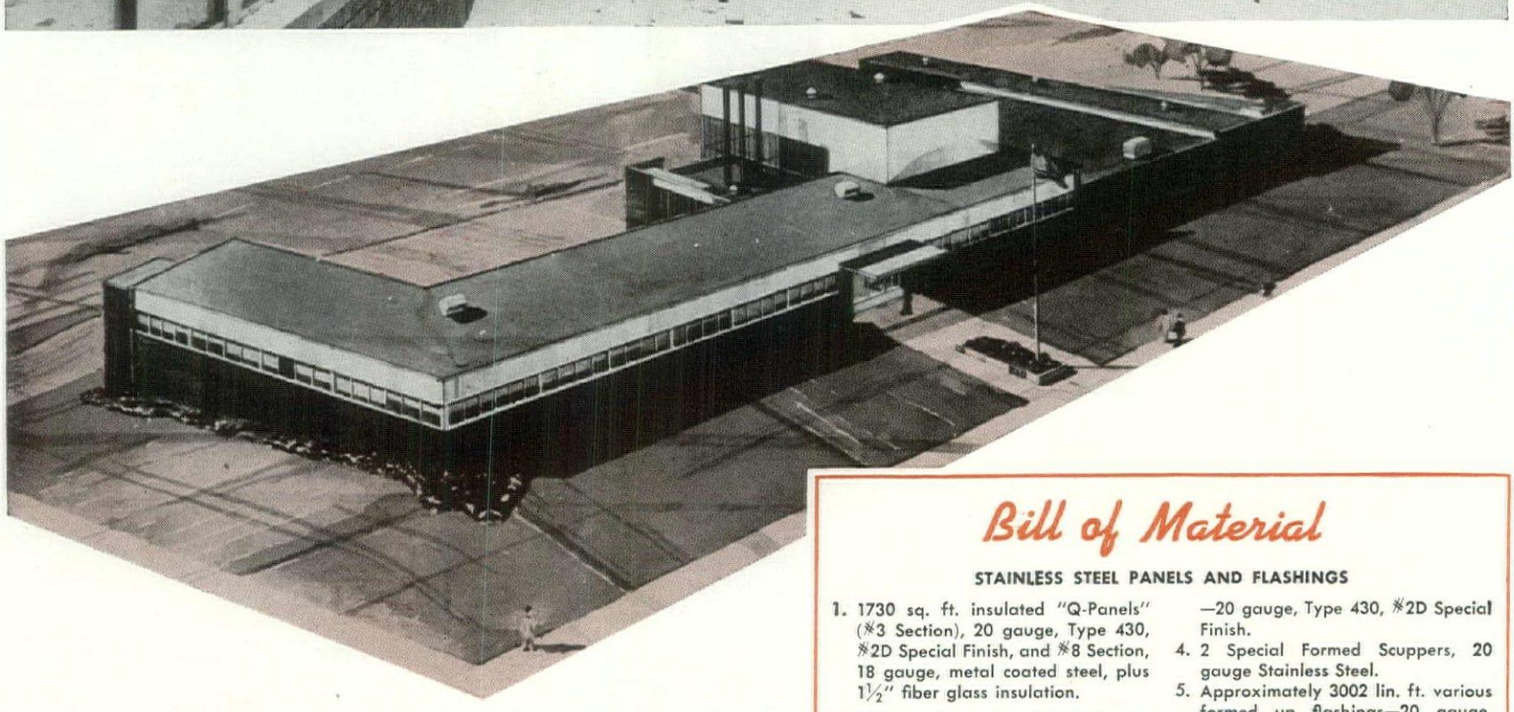
USS TRADE MARK

3-868

UNITED STATES STEEL

Insulated panels of —used effectively with

INSULATED PANELS of U·S·S 17 (Type 430) Stainless Steel and face brick make an eye-appealing combination on this elevation of the National Malleable and Steel Castings Company Technical Center. Glass block and corrugated glass are also used on the building.



Technical Center, National Malleable and Steel Castings Company, Cleveland, Ohio.
Architects and Engineers: Dalton-Dalton Associates, Cleveland.
General Contractor: The Leonard H. Krill Company, Inc., Cleveland.
Panel Fabrication and Erection: The H. H. Robertson Company, Pittsburgh.

Bill of Material

STAINLESS STEEL PANELS AND FLASHINGS

1. 1730 sq. ft. insulated "Q-Panels" (⅜3 Section), 20 gauge, Type 430, ⅜2D Special Finish, and ⅜8 Section, 18 gauge, metal coated steel, plus 1½" fiber glass insulation.
2. 7449 sq. ft. insulated Wall Panels, Type 430, ⅜2D Special Finish, and 1" tectum insulation.
3. 32 Special Formed Mitered Corners —20 gauge, Type 430, ⅜2D Special Finish.
4. 2 Special Formed Scuppers, 20 gauge Stainless Steel.
5. Approximately 3002 lin. ft. various formed up flashings—20 gauge, Type 430 Stainless Steel.
6. Approximately 750 pieces standard notched corrugated closers, 20 gauge, Type 430 Stainless Steel.

STAINLESS STEEL FASTENERS

1. ⅜" x 3" RHSS Bolts (Fasten Panels to Girts).
2. ⅜" x 1½" RHSS BOLTS.
3. ⅜12 x ¾" RHSS Wood Screws.

U·S·S 17 (Type 430) Stainless Steel

other materials—highlight this new technical center

RECENTLY completed for National Malleable and Steel Castings Company, Cleveland, Ohio, this combination office and laboratory building demonstrates how effectively insulated panels of U·S·S 17 (Type 430) Stainless Steel can be combined with other wall materials.

In many previous applications, insulated Stainless Steel panels covered the entire exterior wall surface of the buildings, but here the architects have used this modern material in conjunction with face brick, glass block and heat-absorbing corrugated glass.

The new National Technical Center—with 18,400 square feet of office area and 14,012 square feet of laboratory area—is of concrete and steel frame construction. Stainless Steel panels cover approximately 9,000 square feet of surface.

Since the structure is completely air-conditioned, the low heat transmission coefficient ("U" factor) of these insulated panels is extremely important. And insulated panels of Stainless Steel have a host of other advantages to recommend them—striking beauty, superior corrosion resistance, freedom from costly maintenance, quick erection without regard to weather conditions, and an initial cost well in line with comparable materials.

For full information on this modern material of construction, send for our new book containing the latest data on construction with panels of U·S·S 17 Stainless Steel. Use the coupon below.

EVEN SEVERE WINTER WEATHER didn't halt erection of Stainless Steel panels on this laboratory and office building. Fast erection without regard to weather conditions is only one of the advantages of this type of construction.

U·S·S STAINLESS STEEL

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☐ Please send me your new booklet on U·S·S 17 Stainless Steel for industrial buildings.

☐ Please arrange to have fabricators of Stainless Steel wall panels send me literature on their particular type of construction.

Name ..... Title .....

Address .....

City ..... State .....

United States Steel produces only the Stainless Steel sheet and strip from which panels of this type are made; the panels themselves are fabricated by a number of our customers.

UNITED STATES STEEL CORPORATION, PITTSBURGH · AMERICAN STEEL & WIRE DIVISION, CLEVELAND · COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
NATIONAL TUBE DIVISION, PITTSBURGH · TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA. · UNITED STATES STEEL SUPPLY DIVISION, WAREHOUSE DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

3-801A

UNITED STATES STEEL

EVENTS

Sao Paulo Exhibition—International Exhibition of Architecture at Sao Paulo Museum of Modern Art. Entries must arrive not later than Aug. 15; entry forms must be sent by **July 15**, addressed to: Secretariat, II Bienal do Museu de Arte Moderno de Sao Paulo, Rua 7 de Abril 230, Sao Paulo, Brazil.

School Plant Planning Workshop conducted by Department of Architecture and Architectural Engineering, University of Colorado, **July 27-Aug. 14** at Boulder, Col.

City and Regional Planning course, conducted by M.I.T.'s School of Architecture and Planning **Aug. 24-Sept. 4,** offers intensive review of administrative and technical aspects of urban and regional development to men and women in the fields of building, investment and industry, as well as to practicing professionals. Tuition for two-week program, $100; enrollment limited. For details, application blank, write: Office of Summer Session, Room 3-107, M.I.T., Cambridge, Mass.

Acoustics—Special summer session program in noise reduction **Aug. 24-Sept. 4,** Acoustics Laboratory, M.I.T., Cambridge, Mass.

Civil Service Architects—Until further notice, the US Civil Service Commission will accept applications for positions as architect in various Federal agencies. Salaries $3,410 to $10,800 a year. No written test; applicants must have had appropriate education or experience. For information and application forms apply US Civil Service Commission, Washington 25, or most post offices.

Pennsylvania Society of Architects' annual convention **Sept. 18-19** at Lancaster, Pa., as guests of the Central Pennsylvania Chapter, AIA. Theme: "Research—and Things to Come"; expected participants in the program: Edmund Claxton, research director, Armstrong Cork Co.; Walter Taylor, AIA; Leonard Haeger, NAHB; William Scheick, BRAB.

Third International Congress of Architects at Lisbon, Portugal, **Sept. 20-28.** All architects invited. For information and program, address: Secretario do Congresso, Rua de S. Bernardo 14, Lisboa, Portugal.

Midwest Conference of Building Officials & Inspectors at the Hotel Lowry, St. Paul, Minn., **Sept. 21-23.**

National Electric Industries Show at the 69th Regiment Armory, New York, **Sept. 29-Oct. 2.**

International Churchman's Exposition at the Chicago Coliseum **Oct. 6-9.**

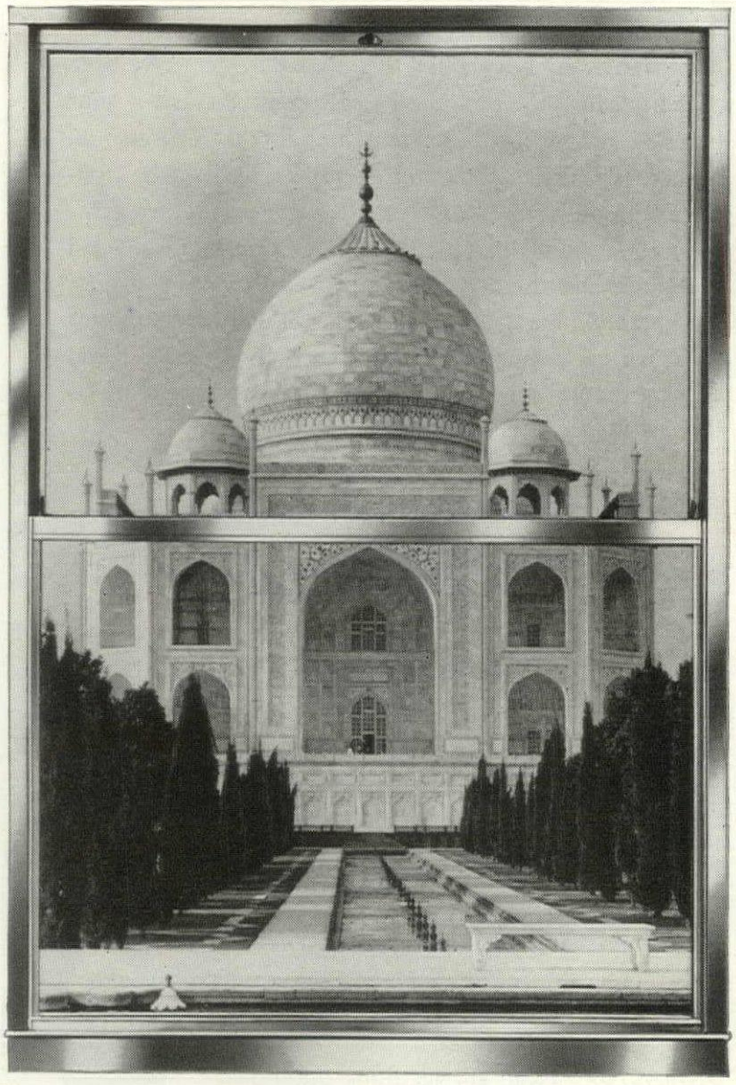
New York State Association of Architects' convention, **Oct. 8-10,** Lake Placid Club, Lake Placid, N. Y.

California Council of Architects' convention, **Oct. 14-17,** Coronado Hotel, Coronado, San Diego.

National Savings & Loan League's fall conference, **Nov. 8-11,** Casablanca Hotel, Miami Beach.

National Association of Real Estate Boards' annual convention, **Nov. 8-14,** Statler and Biltmore Hotels, Los Angeles, Calif.

Mortgage Bankers Association of America's annual convention, **Nov. 13-19,** at Miami Beach.



What?

Adlake windows in the Taj Mahal?

Unfortunately, Shah Jahan didn't have access to ADLAKE Aluminum Windows when he began the Taj in 1632...but we believe that, *had* ADLAKE Windows been installed, they would still be in perfect operating condition today!

...for, with no maintenance whatever,

Adlake Aluminum Windows will last longer than the building!

Every ADLAKE Window gives these "PLUS" features

- Woven-pile Weather Stripping and Exclusive Patented Serrated Guides
- Minimum Air Infiltration
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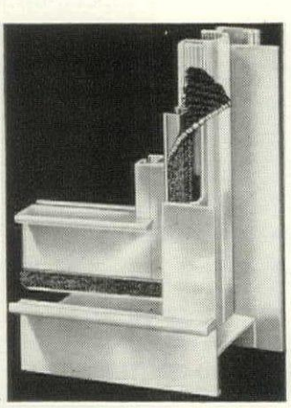
- No Painting or Maintenance
- No Warp, Rot, Rattle, Stick or Swell



ADLAKE Windows pay for themselves by eliminating all maintenance costs except routine washing. Once installed, they'll keep their good looks and easy operation for the life of the building, with no painting, scraping or other maintenance whatever! What's more, their woven-pile weather stripping and patented serrated guides give an everlasting weather seal!

ADLAKE Aluminum Windows assure lifetime value, beauty and efficiency. Write for full details...you'll find ADLAKE representatives in most major cities.

Adlake 96th year of serving the transportation and building industries

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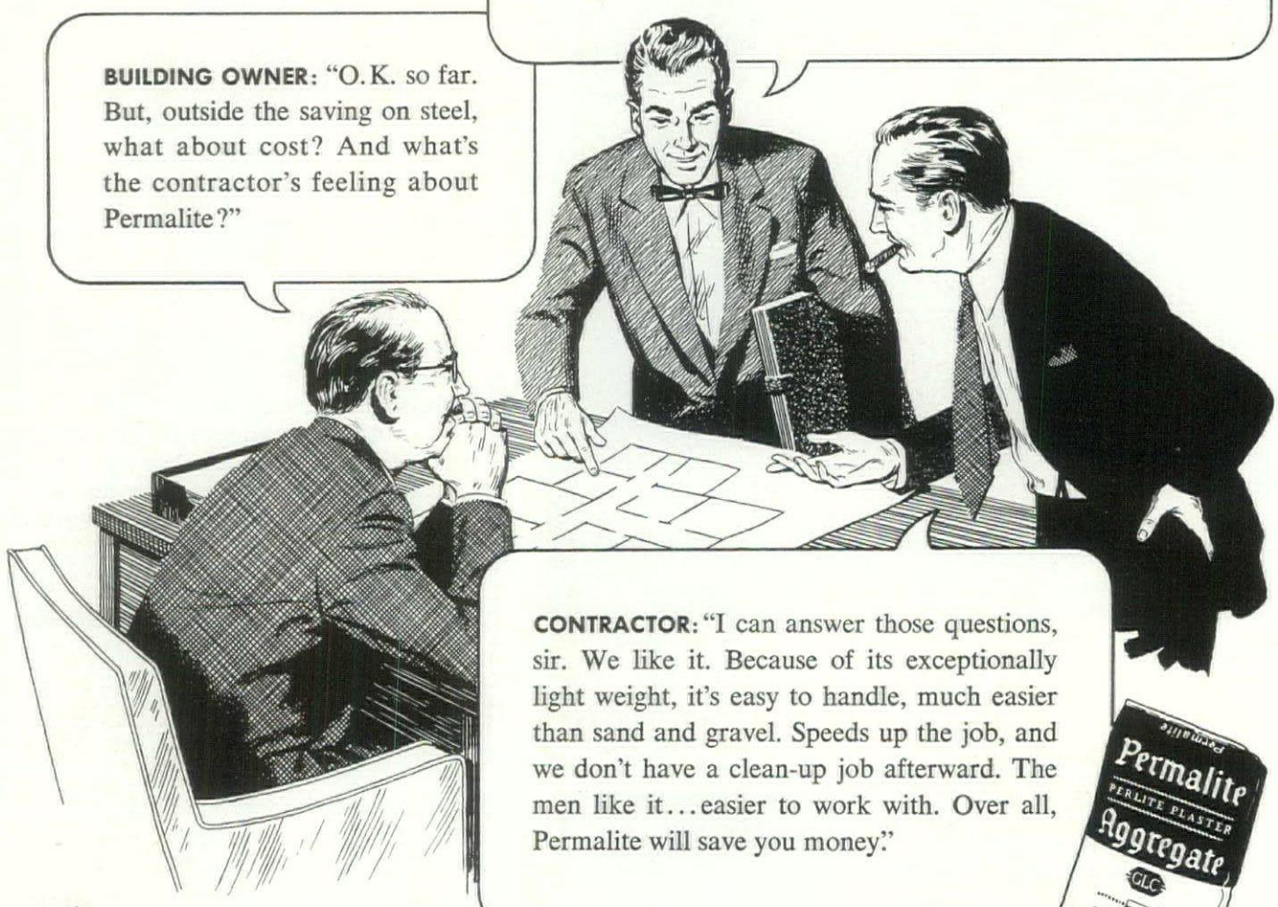
There are lots of advantages in every sack of PERMALITE...

ARCHITECT: "As I explained to you earlier, sir, we've been able to reduce the structural steel requirements on your building by figuring to use Permalite for both concrete and plaster. With Permalite as the aggregate, we'll have a concrete with only one-third to one-half the weight of regular concrete—and with ample strength. Our curtain walls can be lighter and thinner, with improved insulating values. And here, on the columns and ceilings, Permalite/plaster will give us tremendous savings in both dead load and expense... and meet all code requirements by giving us up to 4-hour fire-ratings, too."

BUILDING OWNER: "O.K. so far. But, outside the saving on steel, what about cost? And what's the contractor's feeling about Permalite?"



CONTRACTOR: "I can answer those questions, sir. We like it. Because of its exceptionally light weight, it's easy to handle, much easier than sand and gravel. Speeds up the job, and we don't have a clean-up job afterward. The men like it... easier to work with. Over all, Permalite will save you money."

To get the full story on Permalite, send today for your free bulletin. Write Great Lakes Carbon Corporation, Dept. I-337 —612 So. Flower Street, Los Angeles 17.

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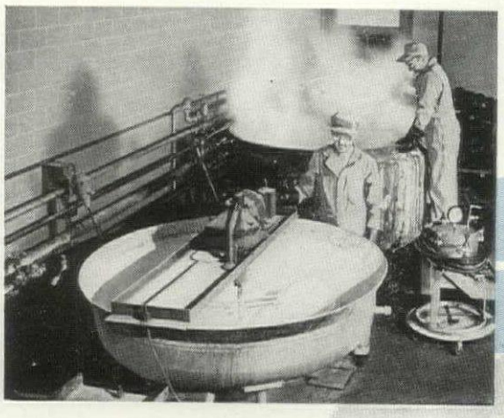
IT'S FACING TILE . . . *No other single building material gives you so much for so little*



when you have to wall in a modern WITCHES' CAULDRON

New chemical processes—modern equivalents of a steaming witches' brew—are dictating design and materials of more and more of today's industrial plants. That's one reason why you'll see interiors of Facing Tile in so many advanced new buildings of this type.

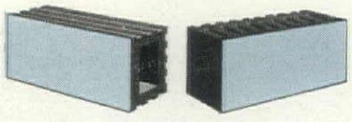
Facing Tile's hard-burned surface is impervious to fumes, odors and most acids—a strong bulwark against chemical attack. And remember, only Facing Tile offers all these other advantages, too:

It washes down easily, withstands hard usage, never needs any type of refinishing.

It builds a wall and finish at the same time, goes up fast, reduces cutting and fitting.

It makes "color-engineering" possible—you can use Facing Tile's scientifically-developed colors to boost plant productivity.

For full data on Facing Tile, glazed or unglazed, just write us. Address: Desk AF-7 of our Washington or New York offices.



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This seal is your assurance of FTI *highest quality Facing Tile.*

In the interest of better Facing Tile construction these companies have contributed to the preparation of this advertisement.

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THE CLAYCRAFT CO. Columbus 16, Ohio
HANLEY CO. New York 17, New York

LETTERS

CRITICISM VS. STATESMANSHIP

Sirs:

I have read your editorial "Criticism vs. Statesmanship" (AF, May '53), and I completely endorse your attitude. The general response to Miss Gordon's article is really shocking, whether in fury for or against. A nation that can take such nonsense seriously has come to a dangerous psychological pass. A sane admonition followed by a hearty laugh from a "Trade Journal" was called for and forthcoming, thanks to you.

GEORGE HOWE, *chairman*
School of the Fine Arts
Department of Architecture
Yale University
New Haven, Conn.

Sirs:

What respect could the public have for the medical profession or what confidence could it have in its members if the doctors scourged each other in national publications; each charging the others with malpractice or accusing them of filching methods for treatment?

What respect could the public have for the legal profession or what confidence could it have in its members if the lawyers scourged each other in national publications; each accusing the others of plagarizing or ridiculing their plea before the court?

Are we architects practicing a profession or are we members of jealous unethical cliques for the purpose of merchandising building constructions and foisting upon the public our little selves; and don't we know that we too will pass?

Too much of the publicity concerning architects and architecture these days causes me to wonder:

1. Where is the client?
2. What is an architect?
3. And who is God?

JOHN LLOYD WRIGHT, *architect*
Del Mar, Calif.

Sirs:

Your reply to the pretty lady on the soapbox is a masterpiece (AF, May '53).

It would have been easy to be destructive about the *House Beautiful* article. Your reply is more effective because it is constructive—and also perceptive, accurate, adroit and kind. I wish there were more chance for *House Beautiful* readers to see your editorial.

ELIOT NOYES, *architect*
New Canaan, Conn.

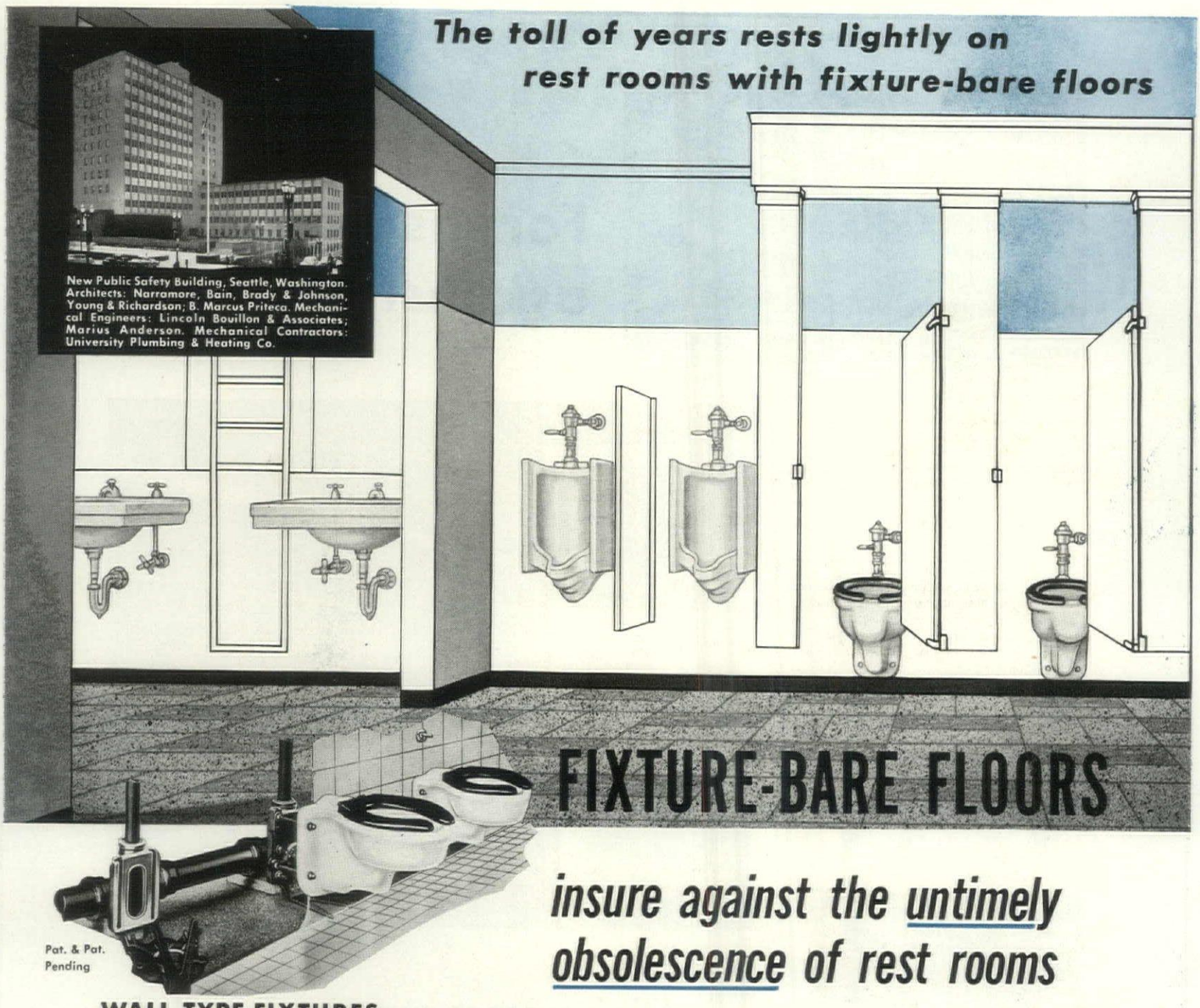
Sirs:

Yes, I have heard the ugly noises, noticed the confusion and the false prophets of late with growing alarm.

I am glad that you, with courage and insight, picked it up and set it straight.

Mrs. E. G. in her sudden discovery of the "threat" to America forgot the fact that it was greatly the imported yeast that made the

continued on p. 66



Pat. & Pat. Pending

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Make Possible Fixture-Bare Floors

Over 500,000 Wall-Type Fixtures Now Installed With ZURN SYSTEMS in Buildings of Every Type From Coast to Coast. Write for list of buildings having rest rooms with fixture-bare floors.

insure against the untimely obsolescence of rest rooms

With plumbing fixtures off the floor, *the entire floor area is intact and free of obstruction and it remains so throughout the years.* Off-the-floor plumbing fixtures *give greater flexibility in the choice of floor constructions and wall constructions and give more freedom in planning modern rest rooms that will win your clients' approval.* The installation of wall-type plumbing fixtures effects major savings in quantity of materials and in time costs. Zurn Systems for installing wall-type fixtures can be assembled into an almost limitless variety of installations. Installations of wall-type toilets have horizontal drainage lines, up to where they connect to the stack, installed above the floor, behind the toilets, behind the wall. A Zurn System is available for installing all types of wall-type fixtures. Write for free booklet,"You Can Build It and Maintain It for Less A NEW WAY".

J. A. ZURN MFG. CO., ERIE, PA., U.S.A.

*T. M. Reg. U. S. Pat. Off.

PLUMBING DIVISION

Sales Offices in All Principal Cities

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WRITE FOR BOOKLET Entitled, "You Can Build It and Maintain It for Less A NEW WAY". It contains up-to-date factual information for planning modern rest rooms.

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I want to know more about the influence wall-type plumbing fixtures can have on the over-all cost of a building. Please send booklet entitled, "You Can Build It and Maintain It for Less A NEW WAY".

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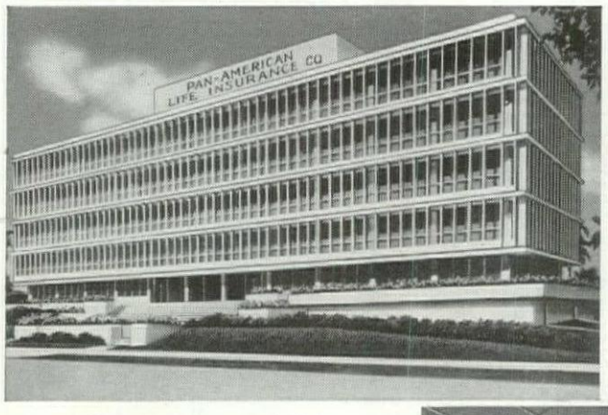

For insurance against noise

Thousands of square feet of J-M Sanacoustic are installed in the new Pan-American Life Insurance Co. building in New Orleans . . . a recent "Office of the Year" award winner.

A Johns-Manville Sanacoustic Ceiling provides quiet comfort and a cheerful atmosphere in the cafeteria of the new Pan-American Life Insurance Co. building.

. . . this insurance company installed Johns-Manville SANACOUSTIC*

J-M Sanacoustic is a highly efficient noncombustible acoustical unit ideally suited for institutional and commercial installations.

Johns-Manville, the pioneer in sound control, developed Sanacoustic to provide acoustical comfort, fire safety and easy maintenance for offices, cafeterias, schools, restaurants, auditoriums, hospitals, etc.

The complete Sanacoustic unit is manufactured by Johns-Manville. It consists of a perforated metal panel backed up with a noncombustible, sound absorbing element of high acoustical efficiency. J-M Sanacoustic Ceilings will not burn, rot or disintegrate. A baked-enamel finish makes them easy to keep clean. They may be applied over new or existing construction; and can be painted and repainted without loss of acoustical efficiency.

An exclusive J-M patented construction system permits interchangeability of flush-type fluorescent lighting and acoustical ceiling units.

Other J-M Acoustical Ceilings include Fibretone*, a drilled fibreboard panel, Permacoustic*, a textured noncombustible tile, and perforated Transite* Acoustical panels. For a free brochure "Sound Control," write Johns-Manville, Box 158, New York 16, N. Y. In Canada, write 199 Bay Street, Toronto 1, Ontario.

*Reg. U. S. Pat. Off.

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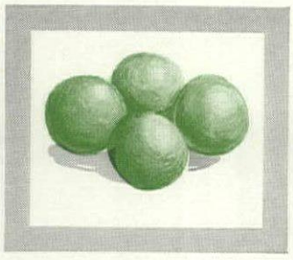
40 years of leadership in the manufacture of acoustical materials.

Like  in a pod...

. . . all diffuser types in the new Aerofuse Type 'P' Series are identical in appearance with beautifully styled matching facial contours and the same number of rings. This outstanding feature insures uniformity when more than one type—or more than one size—is installed in a conditioned area.

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Write for copy of Catalog No. 105 . . . complete information, selection charts, engineering data.

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LETTERS *continued*

cake she is enjoying so much.

Hope you spoiled her appetite.

Thank you, indeed, and more power to you.

J. R. DAVIDSON, *designer*
Los Angeles, Calif.

SIRS:

HOUSE BEAUTIFUL SURE TWISTED THE FACTS, BUT YOU CUT THE GORDON KNOT. JUST RETURNED FROM A SIX WEEKS' TRIP IN EUROPE WHERE I FOUND THAT AMERICAN ARCHITECTURE IS GREATLY ADMIRED AND SERVES AS AN INSPIRATION. WHEN EUROPEANS SAY AMERICAN ARCHITECTURE, THEY MEAN, MORE OFTEN THAN NOT, THE WORKS OF THOSE MEN WHOM HOUSE BEAUTIFUL SEEMS TO DISLIKE SO THOROUGHLY.

VICTOR GRUEN, ARCHITECT
HOLLYWOOD, CALIF.

Sirs:

I have read your editorial with great interest and I am aware of the somewhat hysterical blasts from other quarters that occasioned it. Of course I agree with you.

Modern architecture must have begun to grow up. How can there be any criticism of various schools of thought in the Art of Architecture? Certainly the painters of France experimented with many techniques—even grouped themselves together under odd names. And modern painting received a much needed shot in the arm, still being felt today.

ROBERT CARSON, *architect*
New York, N. Y.

Sirs:

Without intent, the FORUM's May editorial seeks security. Wright is not a refuge for the unsure nor is it fashionable or intelligent to question the leadership of Mies, despite the invincibly ignorant *House Beautiful*. The fact that architecture and man are a unity of emotion (imagination) and reason is not a new gospel. It should be clarified that emotional reaction is individual. You are either "sent" or you're not. The Gospel pertaining to the discussion is Luke 7, 31 through 35.* Many are going to continue to pipe, but no one has to dance. As the Lord indicates, we can rationalize anything, so why beat our brains out justifying ourselves. Put our emotions and intelligence to work and we might produce some architecture.

WILLIAM A. GANSTER, *architect*
Waukegan, Ill.

* "And the Lord said where unto them shall I liken the men of this generation? And to what are they like? They are like unto children sitting in the market place, and calling one to another, and saying we have piped unto you and ye have not danced; we have mourned to you and ye have not wept. . . ."—ED.

Sirs:

I am an ARCHITECTURAL FORUM-*House Beautiful* fan from way back, and I believe in modern architecture to the extent of a $130,000

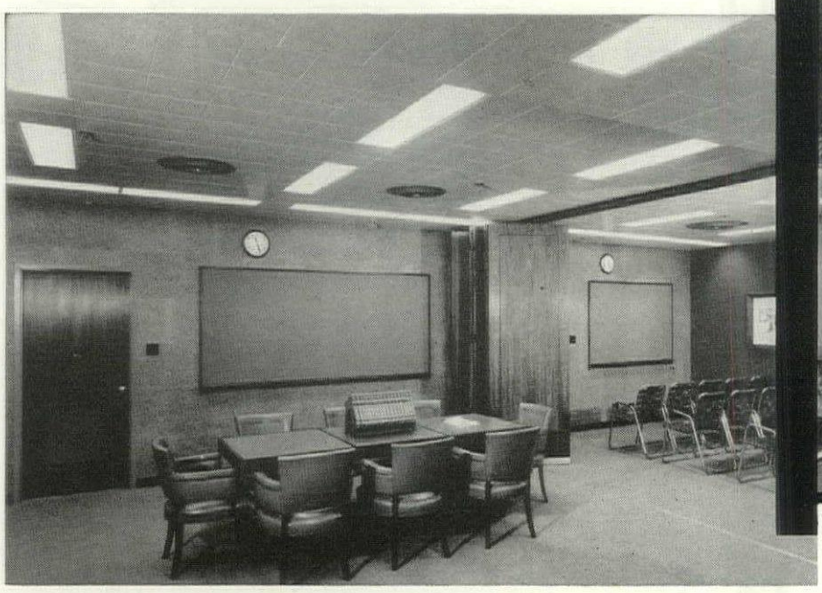
continued on p. 70

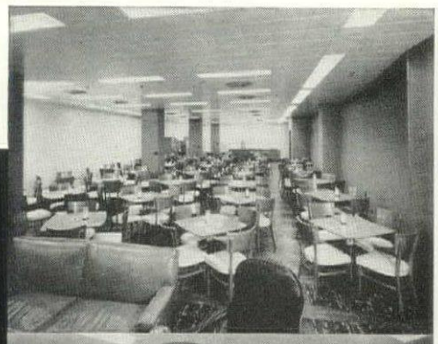
Installation: World Book Encyclopedia and Childcraft Field Enterprises, Inc., Educational Division, Merchandise Mart, Chicago 54, Illinois

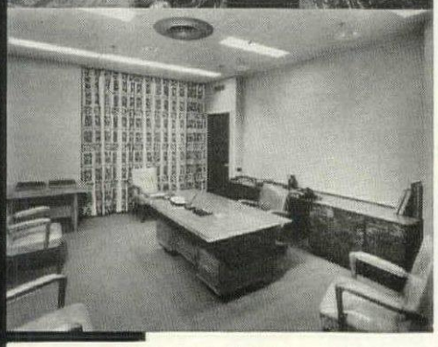
Architect: Naess & Murphy, Chicago, Illinois

Fixture Manufacturer: Day Brite Lighting Company, St. Louis, Missouri

Electrical Contractor: White City Electric Company, Chicago, Illinois







Reflection factors

Ceiling, acoustical tile—80% (approx.)
Walls, various color tones—50% (approx.)
Floors, variegated—30% (approx.)

How Chicago architects chose lightingware to accent striking design

Offices and classrooms of great educational concern use over 1¼ miles of glass panels to light 66,000 square feet

Nothing has more influence on the design of an office and the morale of its employees than the appearance and performance of lighting glassware.

Take, for example, the World Book Encyclopedia and Childcraft offices in Chicago's Merchandise Mart.

Here, fresh, modern and inviting furnishings show at their best under attractive, efficient Corning engineered Unilite lens panels.

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More than 1¼ miles of glass panels — in approximately 1600 four-foot, two-lamp troffers — light 66,000 square feet. Average illumination levels are 60-foot candles maintained (at no place could less than 50 f.c. or more than 70 f.c. be found).

Lens panels offer other advantages, too. Installation is easy and economical because of their light weight. And, being glass, Corning lens panels cannot fade, warp or discolor as other materials often do. They add to appearance whether lights are on or off.

Unilite lens panels are only one of several types of Corning engineered glass lightingware. You can also achieve distinctive effects with combinations of flat and curved Twinlite lens panels, Alba-Lite, Fota-Lite, Crysta-Lite and Lenslites.

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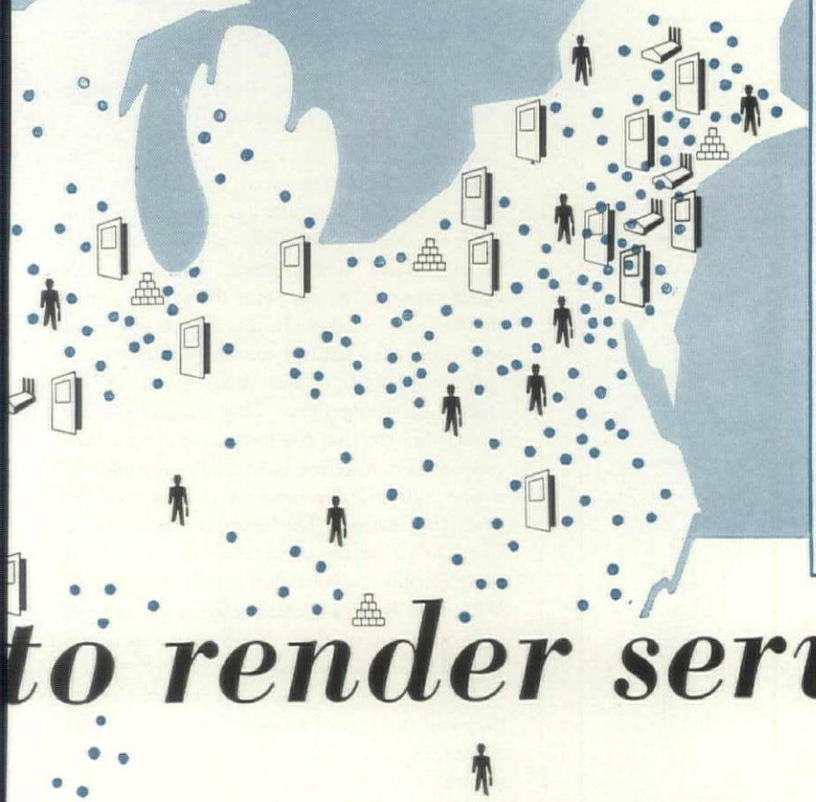

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LETTERS *continued*

house done by a Frank Lloyd Wright disciple, Abram Dombar.

I doubt that the editor of *House Beautiful* has the personal stake in organic architecture that I have, yet I would hesitate to label organic "all good," or international "all bad." I love my house and would have no other, but there are many FLLW houses which offend my eye, and I can think of no more delightful sight than Mies van der Rohe's twin towers on Lake Shore Drive in Chicago.

For my personal use and happiness, "organic" fits the bill, but many people feel that way about the so-called "international" school. The truth is the perfect house has yet to be built, and that is what makes modern architecture such an exciting hobby for me.

Congratulations again on a tolerant, understanding article.

MRS. BETTY E. BENJAMIN
Cincinnati, Ohio

Sirs:

The commotion stirred up by Elizabeth Gordon's article is a significant phase in a revolutionary change but, like growing pains it is essentially unimportant. When a bold spirit expresses a new point of view he shocks the staid and stodgy. In this age of new ideas re-action is the natural counter-action.

House Beautiful has long stood as the Queen of Gadgetiers. This magazine's acknowledgment that the horse and buggy have passed, that America is over the threshold of a new cultural development is a belated but gratifying action. The reaction expressed in *The Threat to the Next America* is natural. Miss Gordon's advertising public demands it. Why should deep-breathing souls be aroused over a question that, it seems to me, was settled many years ago?

Architecture has always expressed the culture and thought of an age. Let us not be disturbed by lack of thought. It, too, is human, natural and after all, life is fun. Neither our architecture or culture is yet of age, as all this hubbub over a publicity stunt demonstrates too well.

RALPH S. TWITCHELL, *architect*
Sarasota, Fla.

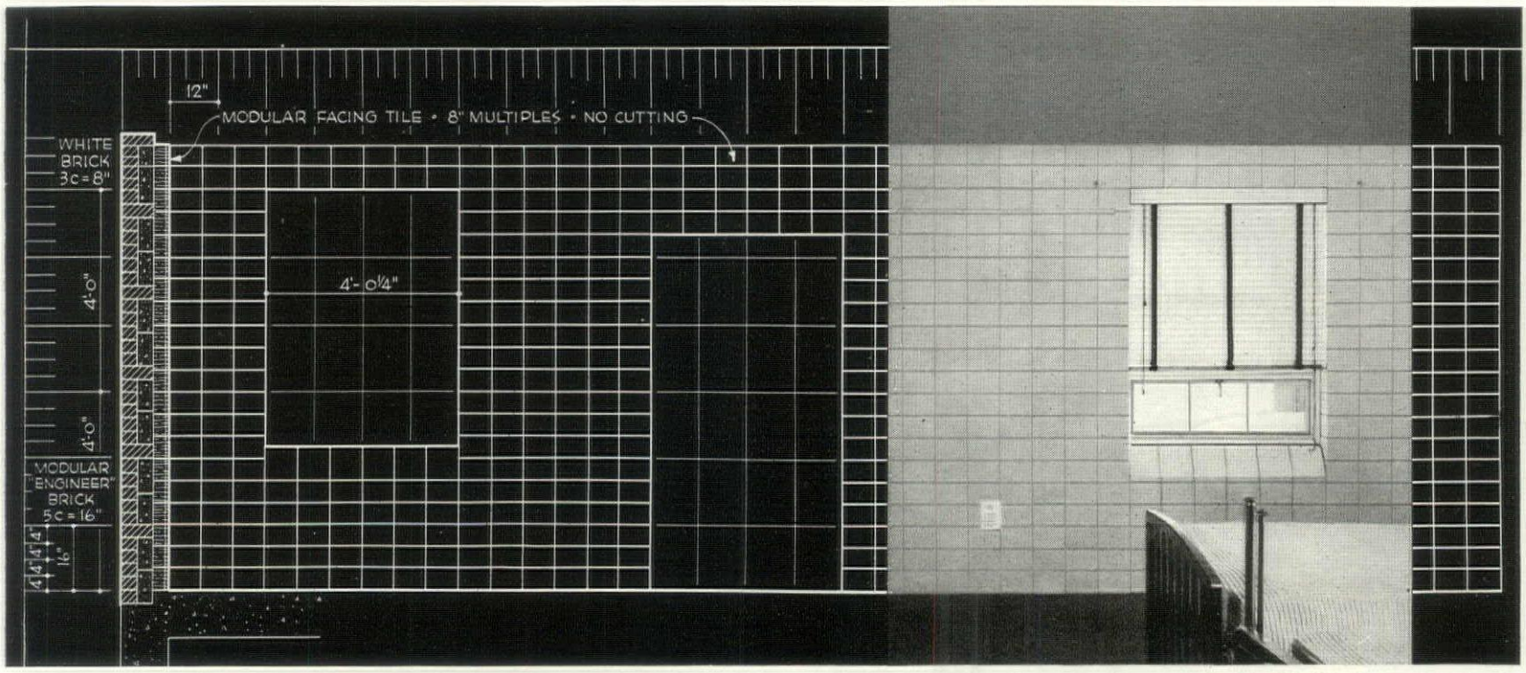
Sirs:

It is difficult to assess the current trend in the arts. Our current social organization is fluid. Only the acutely observant and the learned have a right here to pass judgment, which in itself will be qualified by such scholars as opinions, subject to change.

We are passing through (have for years) a social revolution, which reflects itself in the arts. In addition and as a part of it, our basic democratic educational methods encourage the free spirit, personal liberty and individuality, and the inquiring mind. It follows that we are in the greatest renaissance in architecture the world has seen.

All building today is modern building, and

continued on p. 72



Elevation and section show how architects Lorenz and Williams use modular-sized brick and structural facing tile to eliminate cutting and fitting, simplify construction. Note clean appearance of patients' bedroom (above). Facing Tile units are coordinated with window openings on a 4" module.

modular brick and tile

cut convalescent hospital's cost, speed construction

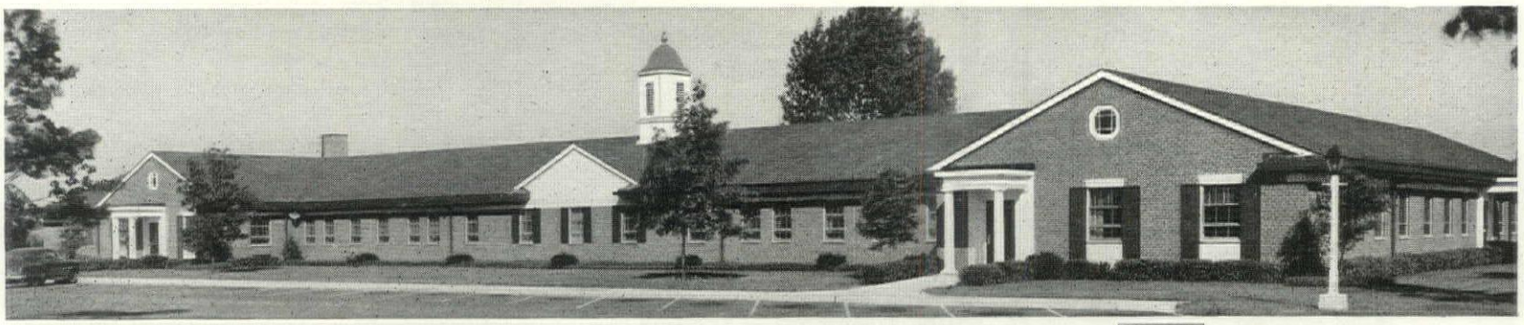
In this friendly, 50-bed convalescent hospital for crippled children, coordination of all structural elements on a 4" module helped to save time and money for both architects and builders.

>> Architects Lorenz and Williams employ modular-size, double-face structural clay facing tile units for non-bearing partitions and single-face units as the inner wythe of exterior walls. The exterior is faced with modular red brick and white brick trim. Modular dimensions throughout reduce costly on-site cutting and fitting around openings. And the materials themselves save maintenance and provide a colorful, informal environment for young patients.

>> Says the general contractor, "With designer, manufacturer and craftsman working to the same fixed unit of measure, job costs and construction time were reduced, permitting earlier occupancy by patients."

Add these two free booklets *to your file on modular design: "The ABC of Modular Masonry," "Modular Sizes of Brick and Tile." Address AF-7.*

Barney Convalescent Hospital, Dayton, Ohio. Architects: Lorenz and Williams. General Contractor: Maxon Construction Company.



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LETTERS *continued*

can be classified as good or bad. It is so now and always has been in other great construction periods. Building design and construction is concerned with the social organization of the future, not the past human needs. Judgment of the buildings of today should be in the hands of the sensitive artist or historian or architect, and must be concerned with the whole of its organism. We recognize the right of free speech and we cannot deny that right to anyone. That which gives the lesser voice speech also gives us ours. So we look and listen carefully sometimes, and more often do not pay too much attention; it depends upon who does the talking, and all good architects talk more eloquently with their works than their words. Their works are their words.

I am for the literature of looking and feeling and living.

GEORGE FRED KECK, *architect*
Chicago, Ill.

FLLW'S SKYSCRAPER

Sirs:

We certainly enjoyed your articles on FLLW's Prairie Skyscraper and FLLW's Lexicon in the May issue. Our office copy is well worn. . . .

S. D. FOWLER
Ft. Worth, Tex.

Sirs:

FORUM and FLLW tried too hard on the Bartlesville "bottom of the barrel" scraper. It is 1922 Aztec modern and I find my eye constantly searching for the marquee which announces brightly and bravely "The Bijou."

IRVING D. SHAPIRO
Berkeley, Calif.

Sirs:

What do you mean, Wright's Oklahoma prairie-flower tower has no "simplicity"? Is a birch tree simple? It is. Let's stop "sylloping" all our good words into distractions.

Dr. Farnsworth's glass polar bear cage in the Fox swamp is not simple. Prof. Lessismore's North Shore steel "filing case" complicates the whole community—body, soul and transport (and no transport!).

Wright is trying to head us back *toward* simplicity; to stymie the weaseling of all of our "either-or" disputations. He shows up today's production-line style-form "bozart." He will have no part of the "one-way-street" internationalistic "choose-with-no-choice" arguers.

WILLIAM GRAY PURCELL, *architect*
Pasadena, Calif.

Sirs:

As an enthusiastic follower of Frank Lloyd Wright and as a reader of your journal since my early college days, I have been constantly pleased by your presentations of Mr. Wright's varied works, and by your sympathy for his basic philosophies.

continued on p. 74

For the Newest in Wood Walls

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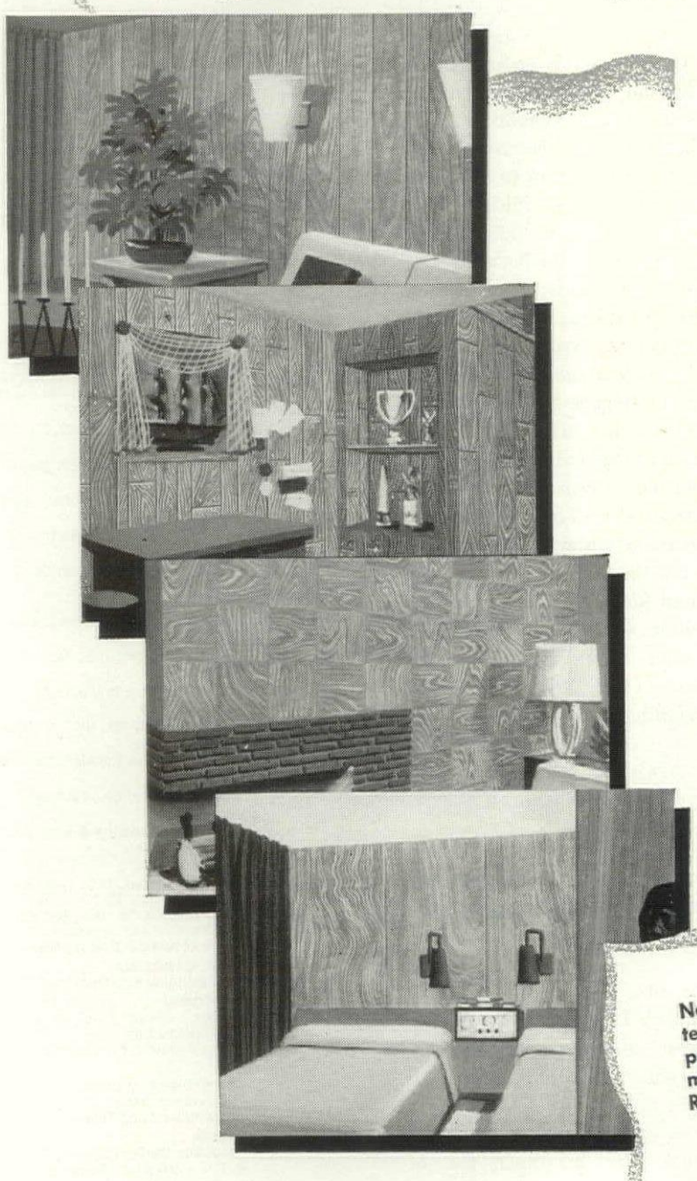

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LETTERS *continued*

Now, after your presentation of the proposed H. C. Price Tower for Bartlesville (AF, May '53), my immature mind is beginning to question the FLLW planning.

Typically Wrightian is the basic unit of design—in this case the 30°-60° parallelogram—but the results that this unit produces in some elements gave me pause.

Foremost in these "compromises for the sake of the basic unit" are the angled staircases, especially the narrow apartment-level connections. Can you—or Mr. Wright—believe that this is a comfortable way of changing elevation? Or is it merely an esthetic dig at those Infidels who would believe that an elevator might someday cease operation?

I think the bathtubs also deserve a slight mention. Without any objection to the use of stainless steel or to the high initial cost, I question again the comfort of the parallelogram as, in this case, a tub for bathing. Certainly our production methods have somewhat sacrificed comfort in fixtures, but how can any man with two legs of approximately the same length lounge in such a tub? Would it be precocious of me to suggest that Mr. Wright peruse the work of his erstwhile student, Richard Neutra, in the field of living comfort?

Far be it from me to censure the work of America's architectural trail blazer. His trials have made contemporary practice far easier in many respects, but the reasons for his disregard of the human form and human comfort, in a luxury dwelling, are not clear to me. Perhaps an explanation will aid me in filling the gap in the growth of the Wright philosophy . . . a gap beginning with your May 1953 issue.

A. Calvin Hoiland, *architect*
Great Falls, Mont.

Sirs:

While perusing with my usual avid interest the May Forum, I found myself pausing with a start on page 102 over the following statement:

"The evolving idea of the Price Tower traces back to Frank Lloyd Wright's famous Chicago skyscraper project, the ill-fated National Life Insurance Co. building plan of 1924."

The company to which I assume you refer was the National Life Insurance Co. of the United States of America at Chicago, and I am sure you will appreciate our sensitivity resulting from the striking similarity between the name of that company and the name of this company. We always have taken particular pains to differentiate ourselves from the ill-fated Illinois company, as you might readily understand, and we were particularly pleased when in Oct. 1933 your sister publication, Time, while relating the story about the National Life Insurance Co. of the United States of America, included the following footnote on page 47:

continued on p. 78

MR. ARCHITECT!

...these Simpson Certified Acoustical Contractors (list at left) offer you better acoustical installations with better materials (many types) and better workmanship

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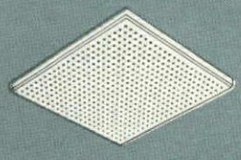

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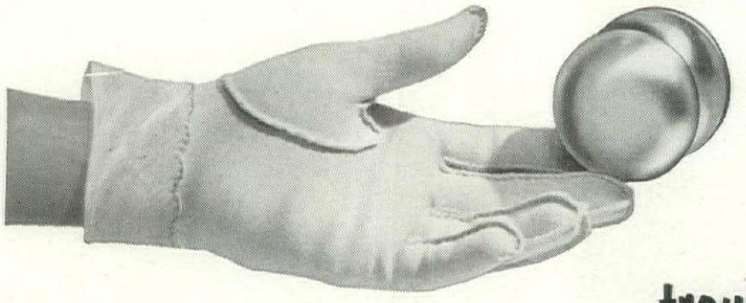

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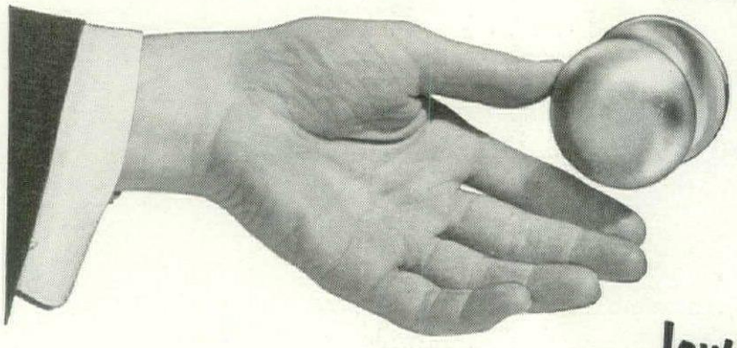

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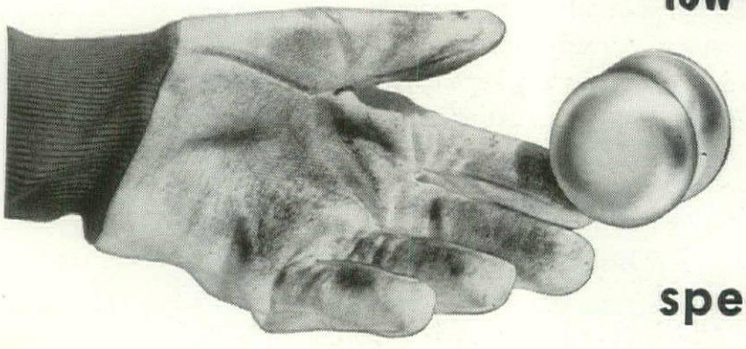

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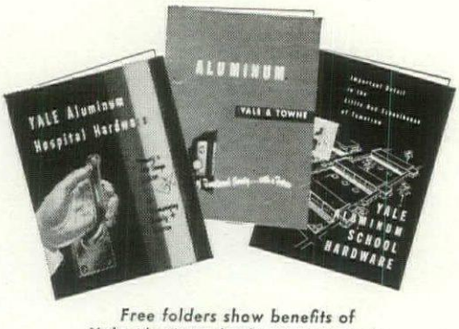
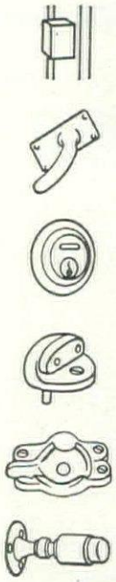


Free folders show benefits of Yale Aluminum for hospitals, schools and other types of buildings



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LETTERS *continued*

"Not to be confused with rock-sound National Life Insurance Co. of Montpelier, Vt., one of whose founders was Statesman Henry Clay."

Perhaps we are oversensitive on this subject, but should you see fit in another issue to point out the difference between the companies, any sensitivity which we might be experiencing duly or unduly would be allayed with our deepest thanks.

L. DOUGLAS MEREDITH
Executive vice president and chairman, committee on finance
National Life Insurance Co.
Montpelier, Vt.

HARVARD'S FACULTY

Sirs:

Your news item on the Harvard School of Design (AF, May '53, p. 43) requires correction.

Contrary to your correspondent's statement that "most of last year's faculty" resigned in protest of appointments made by Dean Luis Sert, it is a fact that all terminations of contract and all resignations but two were made prior to the appointment of the new dean.

These two, Mr. Stubbins and Mr. Burchard, resigned in order to devote their full time to private practice.

Mr. Chermayeff was appointed professor of architecture, but not chairman of the department of architecture. Mr. Sert will serve as both dean of the School of Design and chairman of the department of architecture. This combination of positions and titles existed prior to Mr. Hudnut's deanship and is being reintroduced in the coming academic year. . . .

WALTER F. BOGNER
Acting dean of design
Harvard University
Cambridge, Mass.

KUDOS

Sirs:

. . . I have been a continuous subscriber to FORUM for some 45 years and have always considered it the sanest and best architectural publication edited.

FRANK E. TRASK, *architect*
Kansas City, Mo.

Sirs:

We have heard some very favorable comments on your urban traffic article as well as the article on shopping centers and garages (AF, Apr. '53). Your magazine is to be congratulated for the major public service it is performing in focusing attention on these key problems.

C. D. LOEKS, *planning director*
The City Planning Board
St. Paul, Minn.

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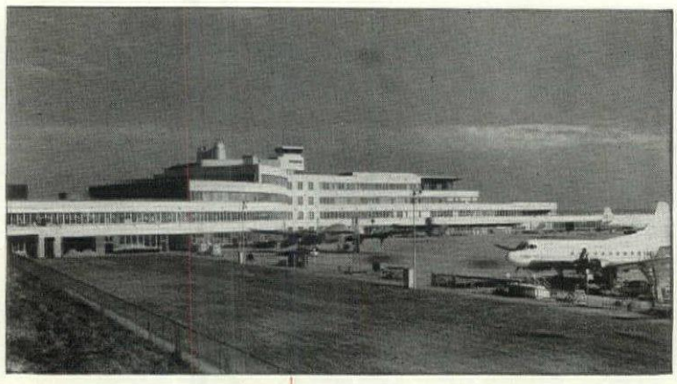


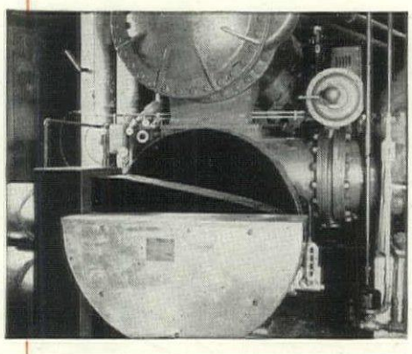
Terminal Building, Greater Pittsburgh Airport, Pittsburgh, Pa. Joseph Hoover, architect; Theodore F. Rockwell and Elwood F. Tower, mechanical engineers; McGinness, Smith, McGinness Company, heating and air conditioning contractors, all of Pittsburgh.

The Greater Pittsburgh Airport, 14 miles west of Pittsburgh's famed "Golden Triangle", provides practically every convenience that the public desires. Literally a small city in itself, this most complete commercial air terminal in the world offers the ultimate in service and comfort.

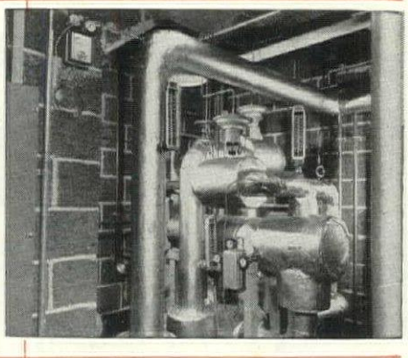
The gigantic, seven-story terminal building is air conditioned throughout and includes hotel facilities, offices, motion picture theater, dining room, coffee shop, cocktail lounge, night club, post office, exhibit rooms, retail shops and public areas.

These diverse services present many different temperature regulation problems, most of which are solved *automatically* by the proper application of Johnson Control. All the way from the control of individual room temperatures, for human comfort, to the protection of delicate electronic devices associated with the safe operation and guidance of aircraft, the Johnson "Planned-for-the-Purpose", "Installed-for-the-Purpose" Control System solves the problems effectively.

The same systems which are applied to the most intricate temperature regulation problems in the nation's outstanding buildings are also available to you. Whether your building presents a multiplicity of problems or a relatively simple application of automatic temperature control, call a Johnson engineer from a nearby branch. He has the benefit of the many years of experience which has been accumulated by the only nationwide organization devoted exclusively to manufacturing, planning and installing automatic temperature control systems. JOHNSON SERVICE COMPANY, Milwaukee 2, Wisconsin. Direct Branches in Principal Cities.



Johnson T-901 Remote Bulb Submaster Thermostats, readjusted by S-222 Gradual Switches, control the capacity of each of two 350-ton Carrier centrifugal refrigerating machines that furnish chilled water for the cooling system.



Behind the scenes, in machine rooms, Johnson T-800 Master Remote Bulb Thermostats, measuring the outdoor temperature, readjust T-901 Submaster Thermostats which control V-185 Valves on the steam supply to the converters.

Hotel guest rooms have units supplied, during the heating season, with hot water and, during the cooling season, with chilled water controlled by Johnson Submaster instruments. Many individual offices in the building have Johnson T-432 Heating-Cooling Room Thermostats in addition.

T-800
Remote Bulb
Master Thermostat

T-432
Heating-Cooling
Room Thermostat

JOHNSON *Automatic Temperature and Air Conditioning* **CONTROL**

MANUFACTURE • APPLICATION • INSTALLATION • SINCE 1885

At the

DANTE PLACE

Housing Project...

(BUFFALO, N. Y.)

IT'S WHEELING SOLID PLASTER

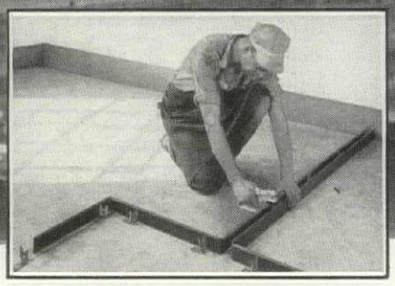
The new Dante Place Housing Project in Buffalo, N. Y., is an outstanding example of how progressive planning can economically convert a sub-standard area into a desirable, low-rent housing development. Overlooking Lake Erie, Dante Place's seven 12-story buildings provide modern housing for 616 families.

Solid plaster partitions, utilizing Wheeling Metal Lath and Metal Base, were used throughout. With this highly efficient combination, the builders were able to speed construction, cut costs, and save valuable floor area... meeting every requirement demanded of any rental housing: economy, durability, fire safety.

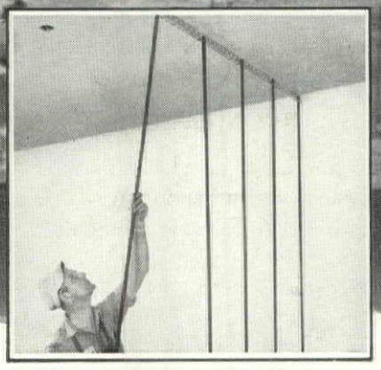
WHEELING CORRUGATING COMPANY • BUILDING MATERIAL DIVISION

ATLANTA BOSTON BUFFALO CHICAGO COLUMBUS DETROIT KANSAS CITY LOUISVILLE MINNEAPOLIS NEW ORLEANS

Architects:
Backus, Crane & Love, Buffalo, N. Y.
General Contractors:
The John W. Cowper Co., Buffalo, N. Y.
Corbetta Construction Co., New York, N. Y.
Lathing and Plastering Contractor:
Sherman Plastering Corp., New York, N. Y.
Materials sold through:
Buffalo Builders Supply Co., Inc., Buffalo, N. Y.
Owner: *Buffalo Municipal Housing Authority*



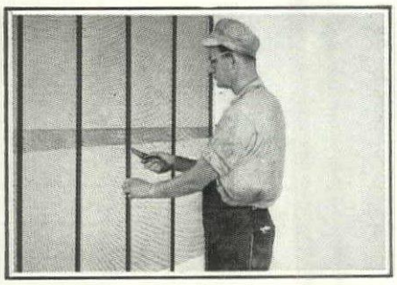
Wheeling Metal Base firmly locks into position on both sides of Floor Clips. Ceiling Runner goes up easily using stub nails or rawl drives.



Wheeling Channel Studs are inserted in Ceiling Runner slots at same intervals as Base Clips.

PARTITIONS

The Wheeling line of building materials includes: Steelcrete Reinforcing Mesh, Expanded Metal, Metal Lath and Metal Lath Accessories, Metal Base, Tri-Rib Steel Roof Deck, ExM Angle Frame Partitions and Steelcrete Vault Reinforcing.



Wheeling Metal Lath ties flat to Channels with Wheeling Hank Tie Wire. Plaster is applied on both sides to form an effective solid partition.

WHEELING, WEST VIRGINIA

NEW YORK PHILADELPHIA RICHMOND ST. LOUIS

Wheeling CORRUGATING COMPANY

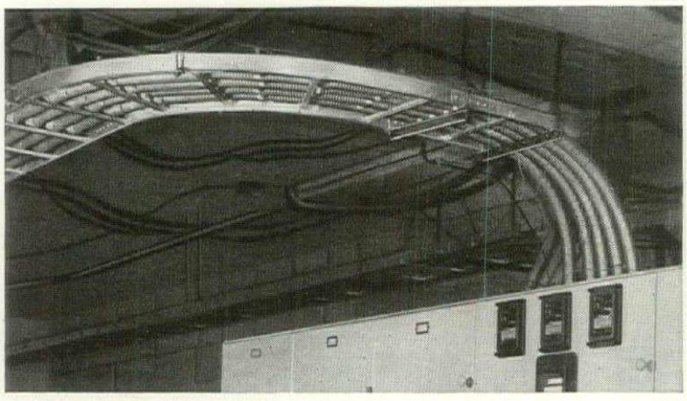
METAL LATH FOR STRENGTH
PLASTER FOR BEAUTY

How to cut cable feeder costs in a multi-story building

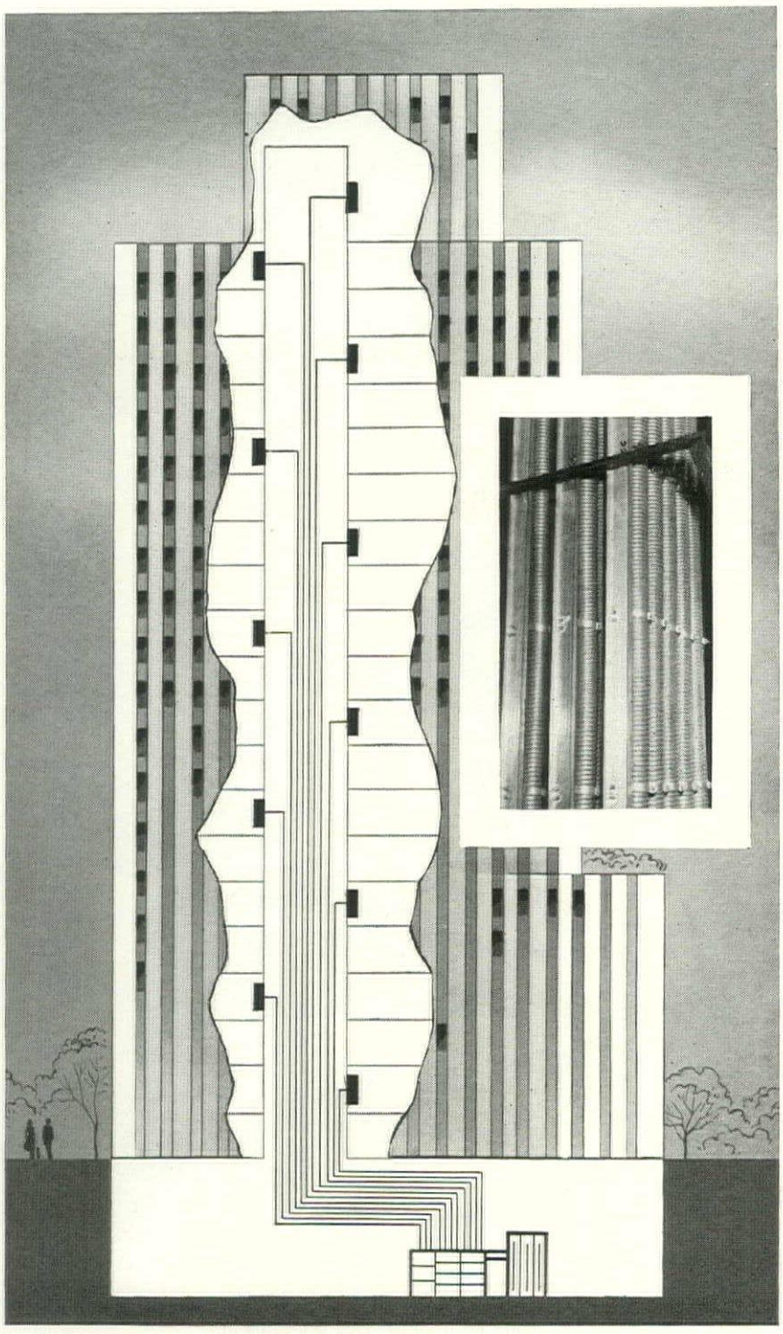
Whether you're planning new construction or modernizing an existing multi-story building, it is possible to cut the material costs of cable feeders as much as 20%—by using a General Electric V-c interlocked armor cable system for power distribution. In a typical 20-story office building these savings can amount to $14,000, as shown in the tabulation below.

G-E interlocked armor cable saves both engineering and installation time on a tight building schedule, too. From basement load center units it can be run easily around corners, over beams, up the shaft, and off at floor levels. No conduit to thread, fit, or pre-bend. The cable is strung on low-cost aluminum racks and spliced with simple mechanical joints. Each rack is used to carry several feeder circuits. And the circuits are well protected by strong metal armor. To our knowledge, no installation has ever suffered mechanical damage sufficient to cause electrical failure.

For more information on the economies of interlocked armor cable, or any other G-E wiring system, write Section W98-74, Construction Materials Division, General Electric Company, Bridgeport 2, Connecticut.



THE CABLE, strung on aluminum racks, leads from the basement load center unit to a vertical shaft. Note the neat apearance. It bends easily, so corners and projections present no installation problem.



G-E V-C INTERLOCKED ARMOR CABLE is run up a shaft on racks to carry power to the upper floors. Sturdy armor construction protects the circuits. Simple installation saves both time and cost.

ESTIMATED MATERIAL COSTS OF VCI ON RACKS VS. CABLE IN CONDUIT AS CABLE FEEDERS IN TYPICAL 20-STORY BUILDING

Estimated Cost in Dollars

Item	VCI on Racks	Type RH in Conduit	Type R in Conduit
Cable*	$43,145	$39,491	$50,963
Racks or Conduit	5,462	10,951	10,951
Hardware and Fittings	3,458	4,515	4,515
TOTAL MATERIAL	$52,065	$54,957	$66,429

*Conductors based on NEC ratings.

You can put your confidence in—

GENERAL ELECTRIC

1878 75 1953 YEARS OF ELECTRICAL PROGRESS

New thinking on DEPARTMENT STORES

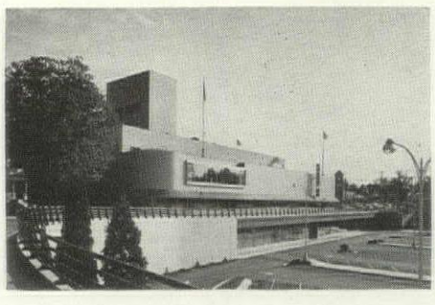
The flight to the suburban fields continues, but with a difference—the fields are harder to conquer. On the next 21 pages, examples of the kind of merchandising design it takes these days. Merchants do not simply set up shop any more. First they look at a map; then they get population characteristics and apply them to the map (for a Southwest example see p. 100) and then—if they are smart—they hire a skilled architect before doing more.

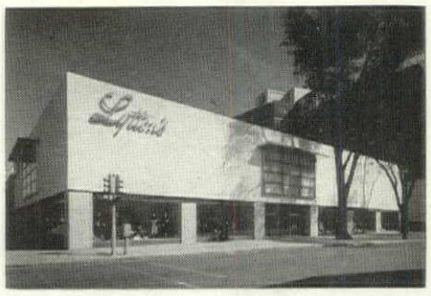
The merry romp of department stores from downtown to the suburbs is not quite so easy for merchandisers as it was when the fields were nearly all full of corn, or eager customers. Branch-store operation is now becoming an intensely competitive field, for a simple reason—the initial demand has been met, and the shoppers are *shopping* now.

In a way this makes things more difficult for architects too, but in a good way. For even though any proficient contractor can make a branch store look more or less like the one down the road, it takes a *better* architect to make it look better and sell better.

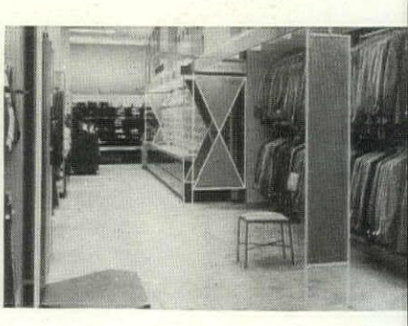
On the following pages are four thought-provoking examples of what good architects are doing to help department stores plan and design more sales into their new buildings:

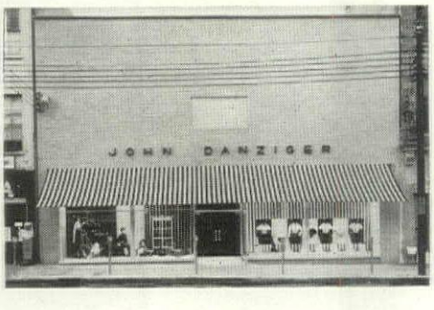
In Maryland, *Hutzler's-Towson, by Architects James R. Edmunds Jr. and Ketchum, Gina & Sharp—a large-scale reproduction in the suburbs of a fine old Baltimore institution, a branch which is a large department store in its own right, with a new lighting scheme (p. 84).*





In Illinois, *Lytton's Evanston, by Architects Shaw Metz & Dolio—outside, contemporary dignity; inside, hard and fast merchandising (p. 94).*





In Alabama, *John Danziger store, by Architect Benjamin Baldwin, interiors by Baldwin-Machado—a striped specialty store for women (p. 97).*

In the Southwest, *a line of fixtures for Fedway by Architect Meyer Katzman—prefab factory-made interiors for an expanding store system (p. 100).*

New lighting, new parking

Two entry levels *for Hutzler's branch department store were created by elevating a cross street and building out under it*

deeper stock . . .

Parking space, *sunk below ridge line on which store sits, will also serve future general shopping center*

. . . These ideas help make this new suburban branch of a great old department store an object lesson to planners of other stores large or small

The customers were the ones who clinched it. They kept congratulating the Hutzlers on the fine "new" lines of merchandise in their new suburban store. But the Hutzlers knew that the "new" merchandise at their Towson branch was identical with what they were selling in downtown Baltimore. What was happening was that the customers were seeing it, quite literally, in a new light.

The basic idea behind this new kind of lighting was so simple one might be ashamed to mention it: the idea of lighting the goods and not the aisles. It is none the less a "must" study for every store owner and designer from here on out because of the way Architects Ketchum, Gina & Sharp handled it (pp. 89 and 142).

Blakeslee-Lane, Inc.

Downtown Hutzler's store *sprawls through nearly all buildings shown in this drawing.*

The same with some of Hutzler's other "simple" innovations—in parking, for example. Many a new suburban store offers adequate parking. But where else has a store rebuilt a street so customers could come in quite so conveniently and inevitably *under* it? (View, opp.)

These are two examples of the kind of intense study and innovation given this store in nearly all its aspects, including:

Site (see p. 86). A frantic traffic knot untied without losing any strands of customers . . .

Access (p. 86). Entrances on all sides and on two levels with a virtually inescapable entrance from the parking field . . .

Character (p. 87 et seq.). The sharp edges of design buffed down; no intrusive esthetic, no flamboyance, but a pervading sense of much good merchandise . . .

Display (pp. 90-91). No windows to be dressed, but glass from sidewalk to ceiling—*everything* on display . . .

Fixtures (pp. 90-91). The excitement of a self-service atmosphere with the suavity of full service . . .

Store size (p. 89). Space for more than just a sample line from downtown; *depth of stock*, which is the major factor in the suburban branch competition now forming . . .

Color (pp. 90-91). Pleasant colors—but not straight primary colors—to tie the many busy vistas of the store interior together . . .

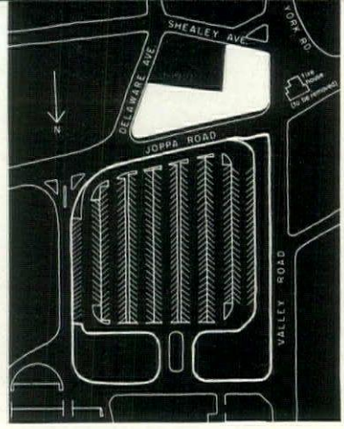
Construction (p. 92). Building on rock and on the water table too; a steel frame put up without alienating the neighbors; reverse plenum air-conditioning returns . . .

The future (p. 92). A store on bought land to dominate a controlled shopping and community center on leased land. A chassis to take two more shopping floors and another wing.

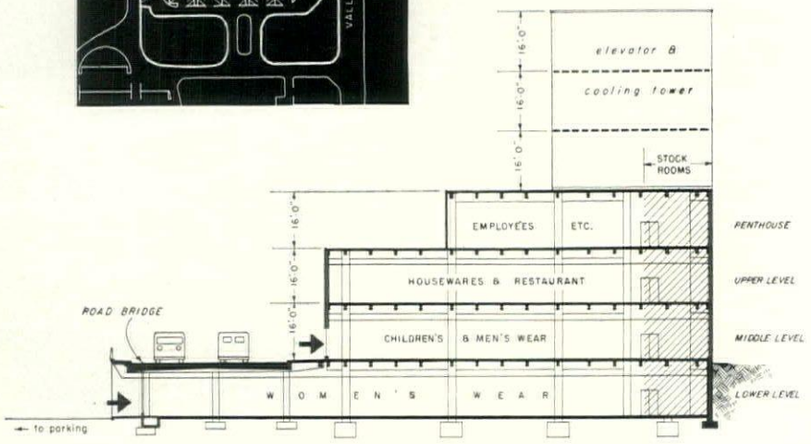
Site. *This is one of the few department stores that ever built an automobile bridge.* This was necessary because Towson is medievally complicated in traffic, and the new branch store set out to make this an asset instead of a liability. The land the store uses actually is in two parcels: the store site itself, which Hutzler's bought, and the parking space, across the road from the first parcel, which Hutzler's leased long term from nearby Goucher College.

This put Hutzler's in a remarkable convergence of main roads, but there was one major drawback: customers would have to cross an important road to get from the parking field into the store. The solution was architectural; Hutzler's designers lifted the intervening road one story up, and built the store out under it, smack up to the parking field. This bridge cost $300,000, but it was worth it for other reasons besides access. The raised road eased the grading problem for the parking space, and also made this parking space much more private to Hutzler's by building a barrier of height around it. The only way to get out of it without going through the store is to walk a tall story uphill. The other, of course, is by escalator—provided you walk by a great deal of Hutzler's alluring merchandise to reach it.

Access—there's lots of it. The main entrance is at the depressed level, as is the deep main floor (deep by virtue of the width of the street overhead), and the ocean of parking space washes right up to it. Other entrances for customers are on that street overhead and on the streets which run to other sides of the new store.



Convergence of streets *makes store a major traffic focus. Fire house is to be demolished.*



Cross section: *Heating and cooling plant is in penthouse high above present selling floors for two reasons: 1) foundations of store sit on stubborn rock, and 2) water table laps near surface (15 gals. per min. are pumped from the present basement). By placing mechanics very high, designers allowed room for two added selling floors without getting mixed up in the machines.*

Parking-space view *shows store just before opening last Christmas; large panel of glass in opaque high wall is restaurant*

Street-level view *shows essential simplicity of store shape. Awning canvas does not roll up, will be replaced when weathered. Left down all year, it kills reflection.*

JAMES R. EDMUNDS JR. and
KETCHUM, GINA & SHARP, associated architects
J. E. GREINER CO., consulting engineer
CROUT, SNYDER & CRANDALL, structural engineers
HENRY ADAMS INC., mechanical and electrical engineers
STANLEY McCANDLESS OF CENTURY LIGHTING CO., lighting consultant
CONSOLIDATED ENGINEERING CO., general contractor

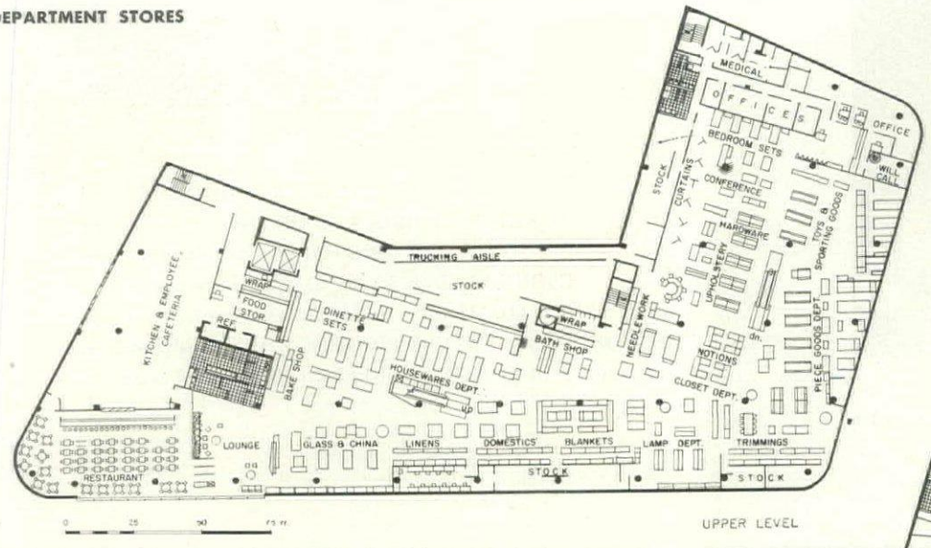
Photos: © Ezra Stoller

Broadway lighting *in shoe department trains spots only on display and fitting areas*

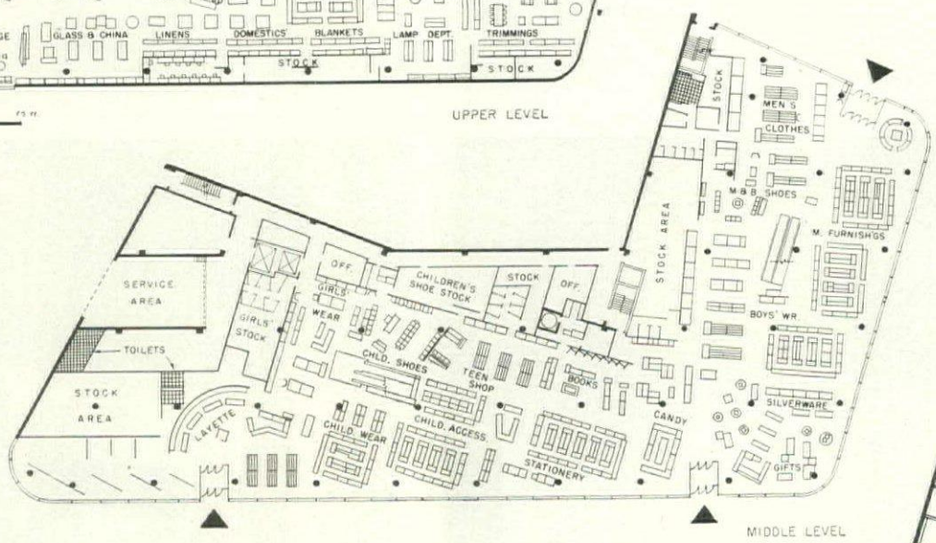
Careful character building is evident in this store. There is an air of modest opulence, which was attained at comparatively little expense by including luxury touches without the full luxurious treatment—here and there a piece of precious finish such as marble or walnut, presented dramatically. But mostly the store is an intricate maze of merchandise, its own decoration. In merchandise display it is a supermarket.

There are five deliberate "extravagances": 1) A number of "living rooms" are scattered through the store, with good furniture for customers to sit and rest in. 2) No hard-floor surfaces meet escalator landings, as is usual at this spot of heavy wear, but instead there is carpeting, for foot comfort and store quiet. The carpet is a continuous one which can be replaced in sections. 3) There is a striking marble "hat bar"—see color photo, p. 91—to key the important women's department. 4) There is sparing but effective use of planting indoors, such as the fig plants in the dining-room foyer. 5) A long set of murals is on the wall of the dining room. But all such lavishness added less than half of one per cent to the cost, according to the estimate of the architects.

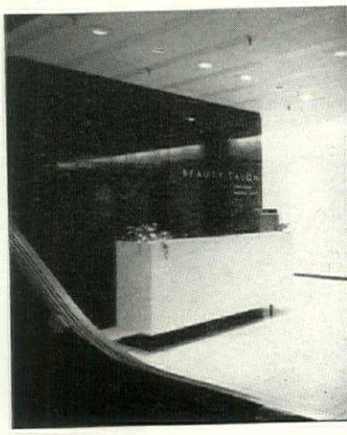
Slanted ceiling panel *defines main-floor apparel section without necessity for partitions.*



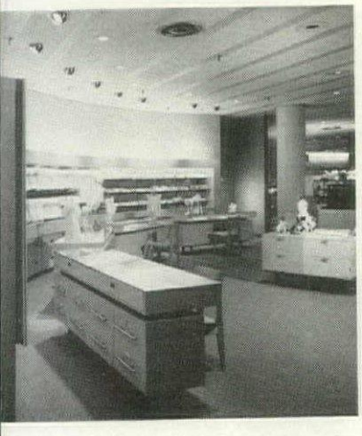
UPPER LEVEL

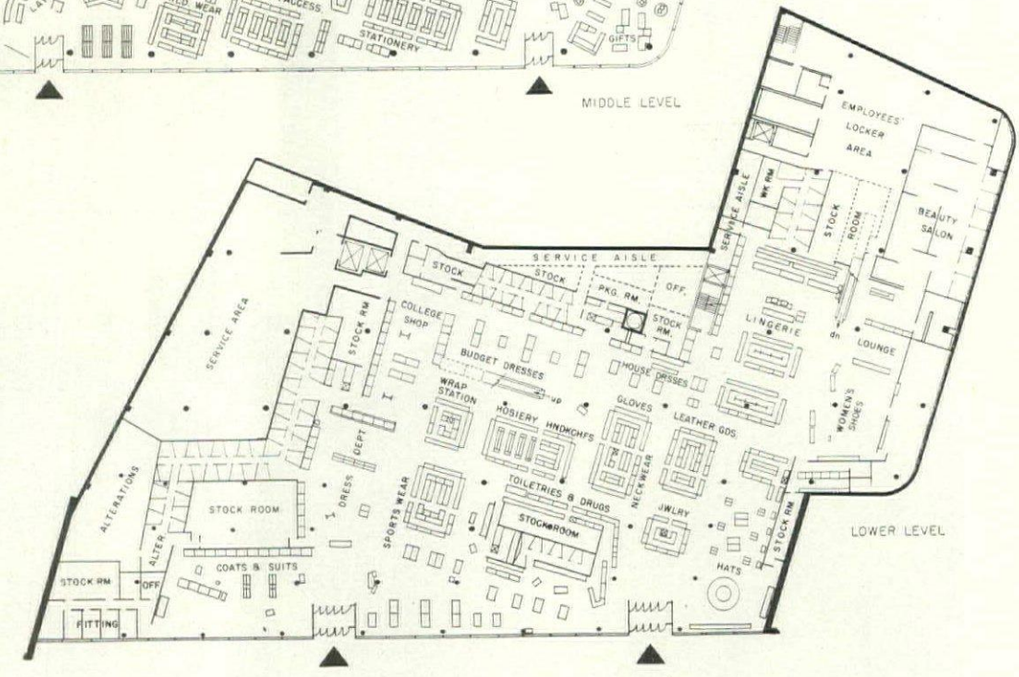


MIDDLE LEVEL



Babies' wear department

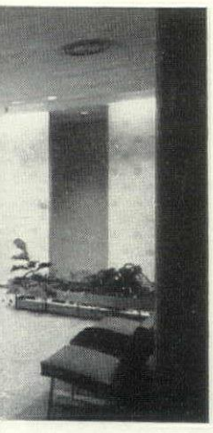




LOWER LEVEL

Over-all show window *viewed from parking level displays entire stock, not just selected items.*

Photos: © Ezra Stoller



Beauty salon *is one of few places where swank was allowed to prevail over merchandise display. Walls are marble and monogram wallpaper.*

Controlled lighting *is directed only on displays and counters. Note contrasting darkness on the floor*

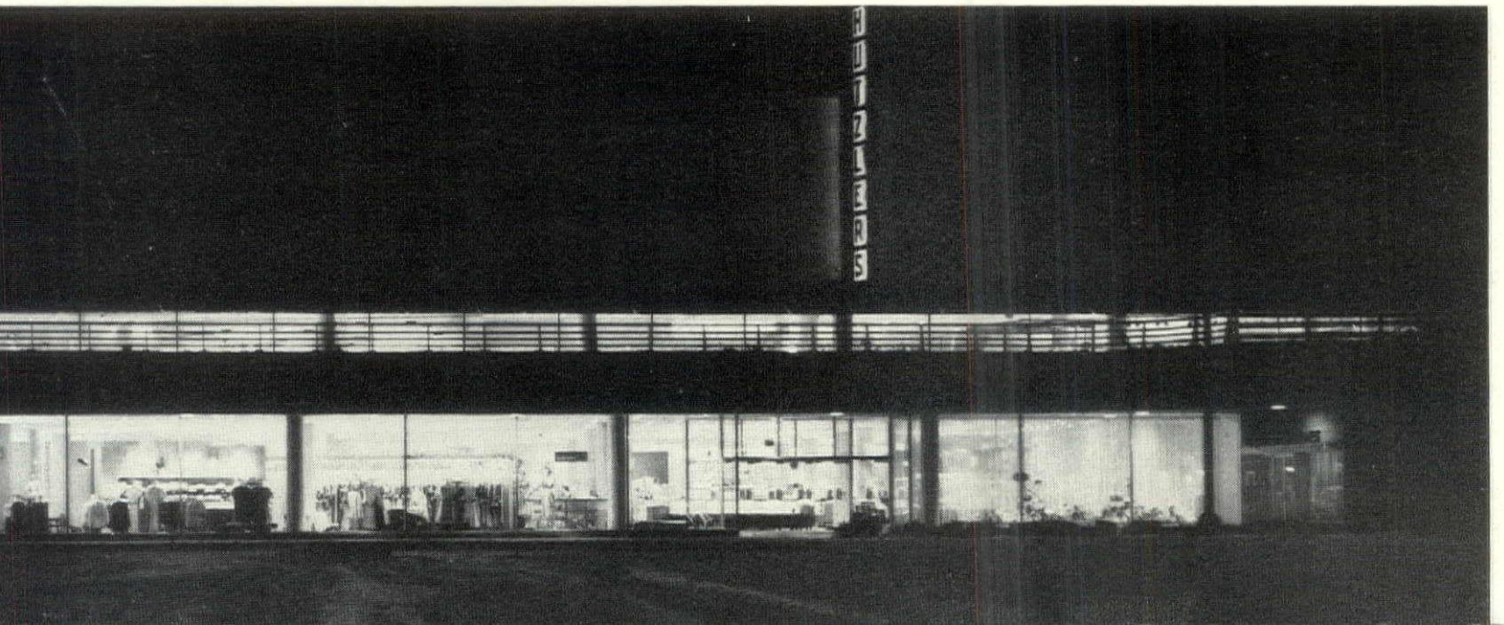
The size of this store is significant. It reflects the management's shrewd determination not to have too small an entry in any shopping sweepstakes that may develop north of Baltimore (rivals are already making moves). In studying other branches, Hutzler's found customers happy the stores existed but unhappy about their shallow stock; they had to make too many shopping trips to find what they really had in mind, so Hutzler's decided to make this a one-trip store.

Note split escalators in plan to pull customers past much merchandise. The restaurant is up top for a good view out into the country, also for a good view of merchandise on the diner's path up.

Theatrical lighting is low on what is not for sale, high on the goods. The general excitement of over-all peak lighting was relinquished in favor of the specific directed excitement of intensely illuminated items for sale. This is accomplished almost entirely by incandescent spots in the ceiling, aimed at merchandise; spillage illuminates aisles sufficiently but not distractingly. This light models three-dimensional goods, makes all goods sparkle, and in its "dappled" effect curiously enlarges apparent space in contrast with usual flat lighting.

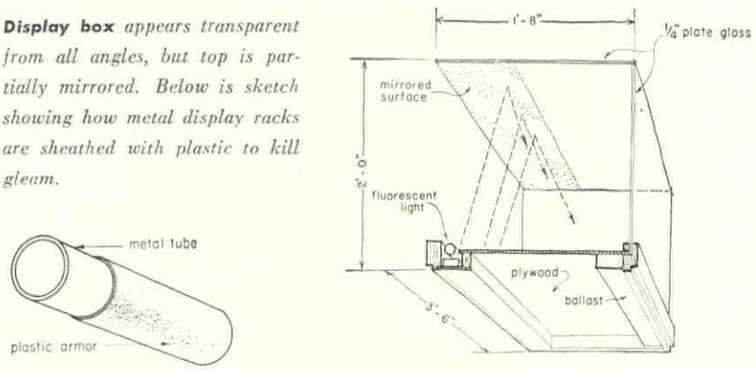
Spots can be inserted easily in hung panel ceiling (for details see pp. 142-143). Undisturbed sweep of completely flat ceiling adds greatly to spacious feeling of store.

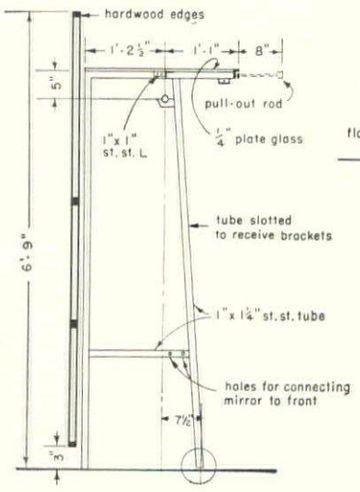
Elevated road is silhouetted above first floor, cutting off view of street-level glass wall

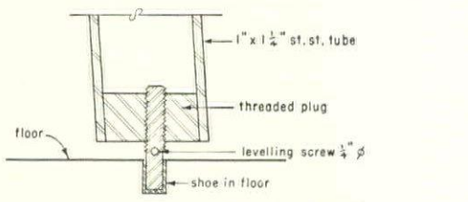


Toy department *is decorated with its own wares (see also cover)*

Display box *appears transparent from all angles, but top is partially mirrored. Below is sketch showing how metal display racks are sheathed with plastic to kill gleam.*







Detail *of adjustable foot*

Display rack *is reduced to minimum, has glass dust shelf to emphasize lightness.*

Color. The designers proved in these interiors that the simple contemporary idiom can be just as rich and playful as the trick nonfunctional commercial schmalz which clutters up stores from coast to coast. The clearest demonstration of this is in the colors they used. They are bright without being stark primaries, rich without heaviness. And, above all, the colors are always at work inobtrusively selling the goods.

Each department in the store has its own basic hue within the general range, either in paint or wallpaper. The binding color, used in transition stretches of wall between more vivid hues, is a bland grayed green, called putty. (This color is also used in departments where the merchandise itself is bright; in the book department, for instance, where the book jackets provide plenty of visual excitement.)

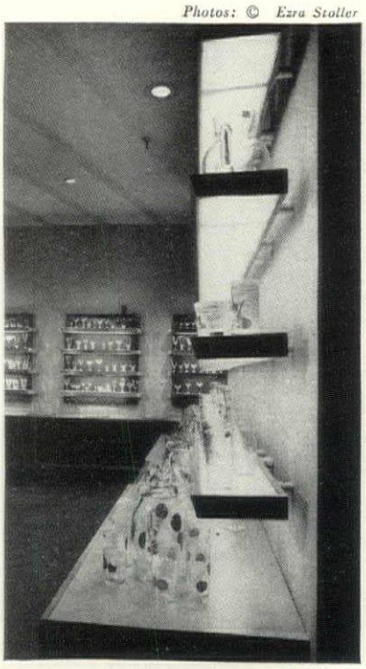
Care is taken to keep all background colors from competing with merchandise. In the women's fashions departments, for instance, a figured wallpaper is used to create a neutral background, but not a dead one. Another special consideration here: from season to season women's fashion colors change abruptly, so the background had to be one which would fight with none of them. A special wallpaper featuring Hutzler's Brothers monogram—HB in a gold cartouche on white—appears on walls throughout the store where such noncommittal, nonclashing animation was wanted. The demountable wall panels which are used throughout the store were completely factory prefabbed, including painting, to eliminate the delays which always result when painters have to wander around the building laying on finish colors. It is estimated this saved almost a month in finish time.

Fixtures. Flexibility and clear vistas were the twin requirements. They were met by using standard brackets to support most display cases and by building almost all island displays low—away from the ceiling. Islands actually interrupt the visual sweep of the floors only when complete stocking for an isolated department is contained in the unit, such as in the cosmetic and silverware departments.

The designers were dedicated to displaying *merchandise*, not *design*, and went so far as to upholster hangers in dull plastics to cut glitter which might distract from what was hanging on the hangers (see sketch).

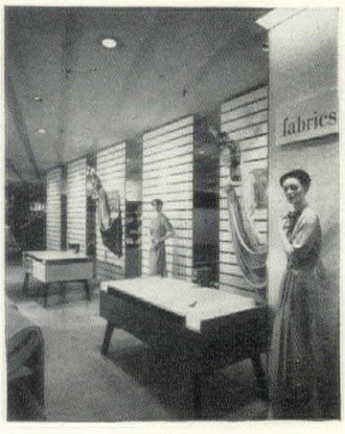
Display. From outdoors the shopper gets an impression of vast quantities of merchandise waiting for her inside, and this is exactly what the designers intended. To that end they left out conventional display windows, but glazed the street walls of the two lower floors entirely, from floor to ceiling. Since this is a store meant to be approached by automobile, they reasoned that the trouble and expense of display sets would be lost on most potential customers. Money saved here is spent on island displays throughout the selling floors.

Photos: © Ezra Stoller



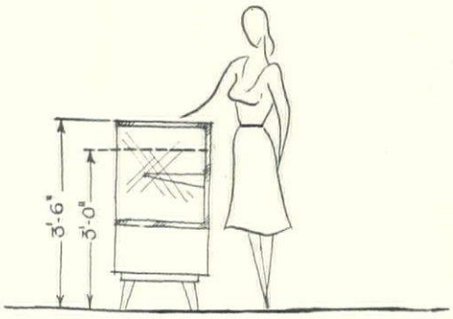
Display shelves *are self-illuminated to favor glassware, but most lighting comes from ceiling spots.*

Dress department, *higher-priced section, is opulently appointed, discreetly spare in display*

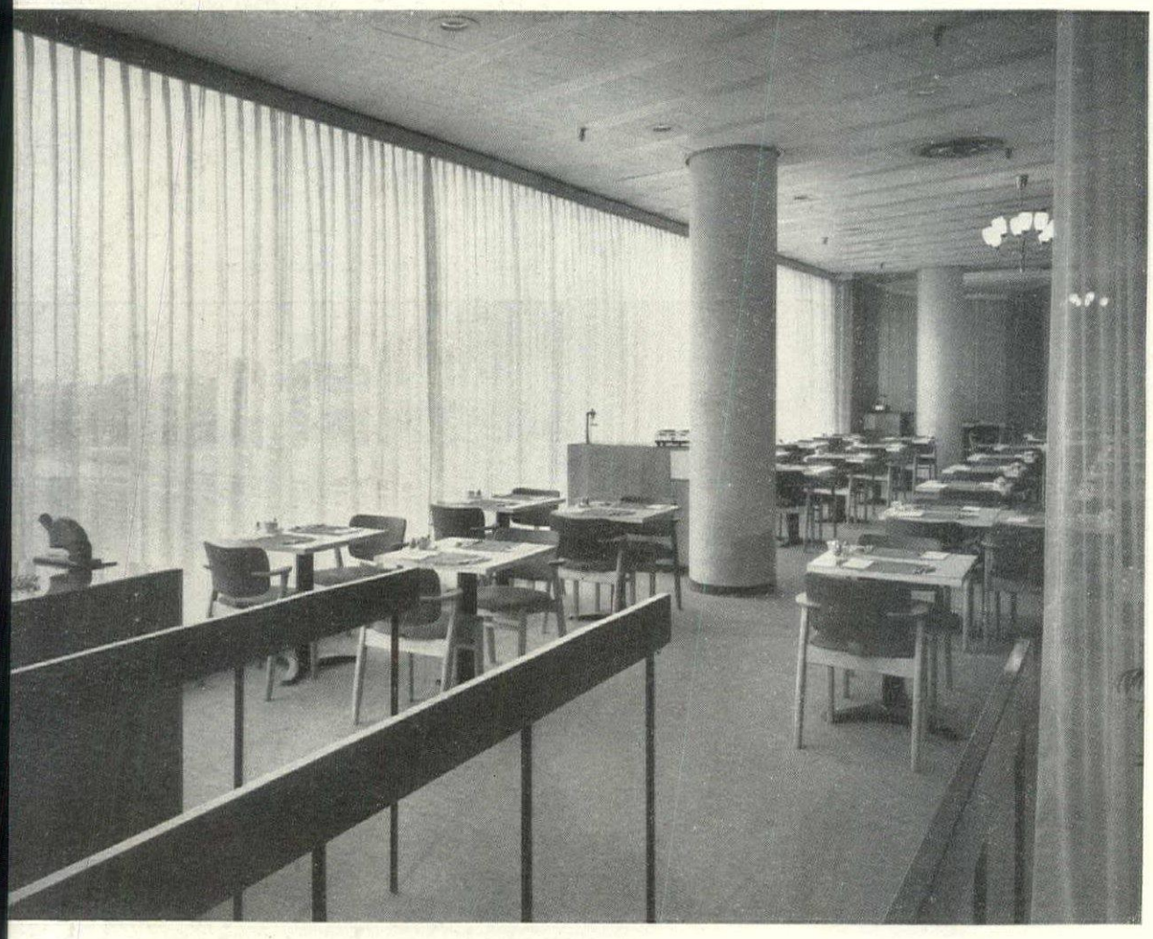


Ceiling-high screens *shield stock, but are exceptional in store. Store is more notable for uninterrupted sweep of floors, is relatively partitionless, like a supermarket.*

High counter *is comfortable not only for average shopper but for shorter ones too, according to Hutzler management.*



Hat bar, *special fixture, is disc of rich marble—warmed to the touch by lamps underneath*



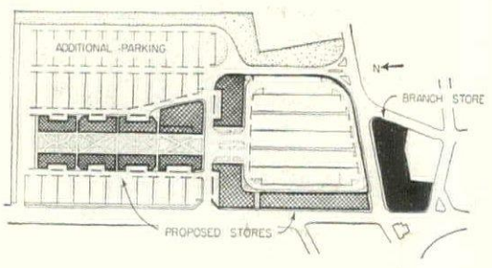
Restaurant *uses translucent drapes to cut glare on bright days; on duller days these are pulled back, exposing a sweeping valley view.*

Dining counter *at interior end of restaurant is enlivened by mural.*

Restaurant foyer *serves also as meeting place, with pay telephones included in services. Phones are mounted on panels of acoustical material and partitioned by glass sheets.*

Downstairs dock *for shoppers who use the parking space will be equipped with outdoor furniture.*

The future. Hutzler-Towson may eventually be the dominating castle over a small city of stores and other services, if present plans are enacted. On part of the leased area now filled by parking space, and beyond it, the program is to set a community of shops of all kinds to make a shopping Mecca for the countryside. At that time parking facilities will be expanded (see drawing below). Stores along the sides will also have parking on their roofs, at the upper street level. Other building types will include a professional building and a theater. Hutzler's will retain by far the longest frontage on the parking space.



Air conditioning. *Two 250-ton absorption units are in the penthouse, together with the steam boilers which power them and the heating system. These units are particularly appropriate to this roof-top job because they have few moving parts and thus a minimum of vibration, and are lighter than usual compressors. The reverse plenum ceiling for return air is also particularly apt for this job because returning air also drains off heat from the myriad incandescent spots in ceiling. System is high velocity (3,500 cfm), similar to that in Kauffman's in Pittsburgh.*

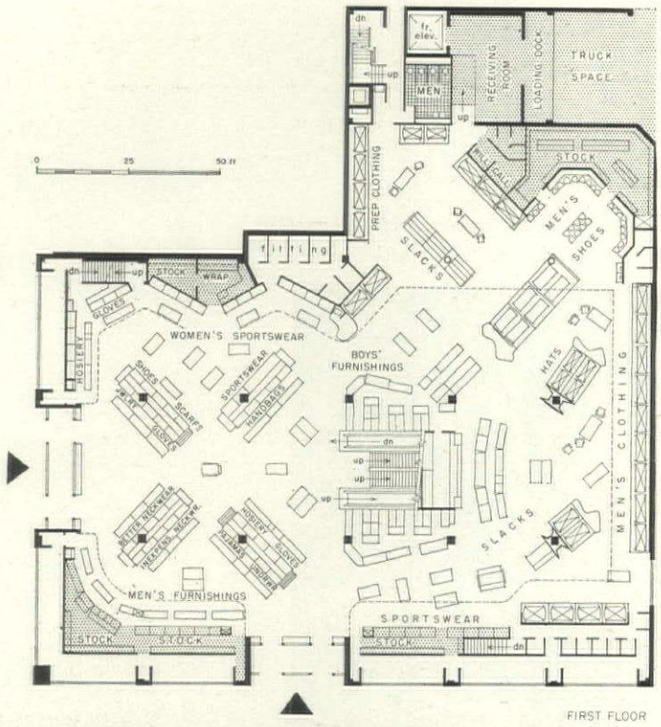
Construction. *The structural frame is designed to support several extra floors, and location of machinery in a penthouse allows for orderly expansion of this area to accompany expansion of its task. Steel frame was connected with high-tension bolts, which disturbed neighbors less than riveting.*

SHAW, METZ & DOLIO, architects

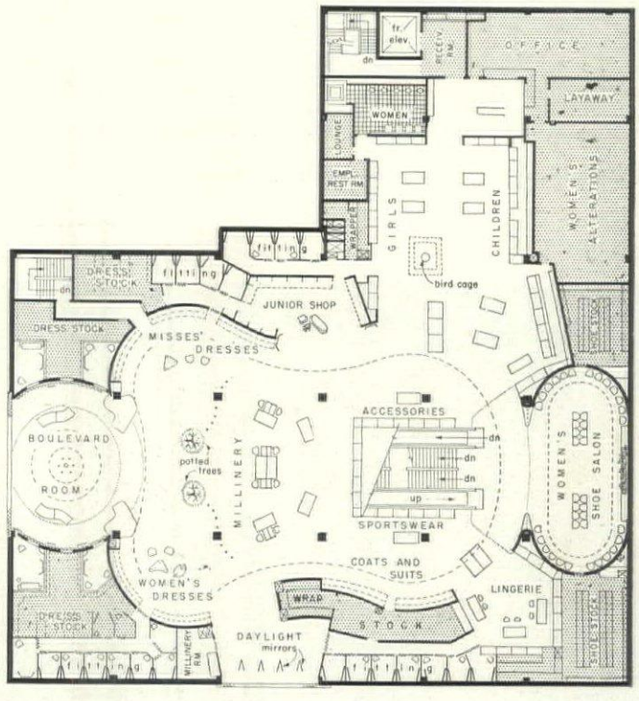
A. H. DAHME, Grand Rapids Store Equipment Co., merchandising layout and design

WILLIAM E. SCHWEITZER & CO., general contractors

Sculptural lighting *marks "Boulevard Room" in second-floor women's department*

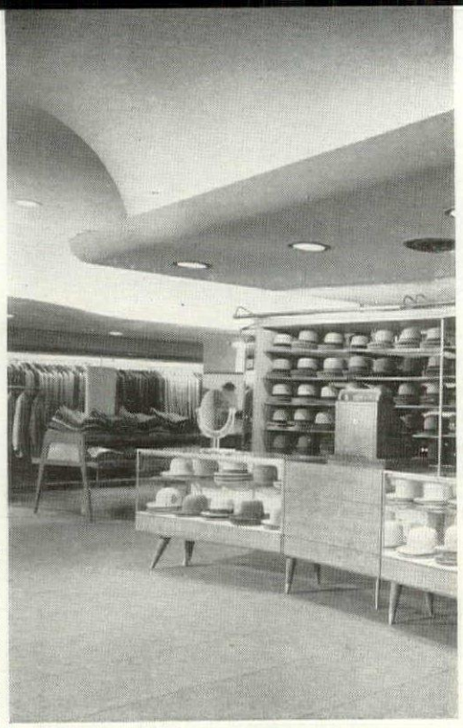


FIRST FLOOR



SECOND FLOOR

Typical sales area *on street level (men's furnishings) is packed with fixtures, but in a canny, orderly, unobstructing way. Ceiling is cove-lighted to define various selling alcoves but all concentrated illumination is on goods.*



Photos: Hedrich-Blessing

***Hat department** is emphasized by ceiling swoop*

COST BREAKDOWN

Metal decking	$ 36,625
Roofing, insulation and waterproofing	7,700
Store front, glazing doors	18,846
Lathing and plastering	35,085
Millwork	16,843
Plumbing	16,857
Heating, temperature control and refrig.	53,403
Ventilation	42,424
Pipe covering	20,588
Elevator, escalator	53,973
Electrical	59,090
Partition tile and fireproofing	11,250
Structural steel	64,600
Painting	11,760
Concrete and cement finishing	43,634
Concrete formwork	23,400
Masonry	53,095
Carpentry	25,757
Flooring	7,324
Wrecking and foundations	43,763
Miscellaneous	115,706
	$765,723
Architect's fee	45,823
	$811,546

***Facade symmetry** sets store firmly in the conservatively informal character of the suburb. Trees were spared to decorate facade with shadows.*

BENJAMIN BALDWIN, architect
BALDWIN-MACHADO, interiors
BEAR LUMBER CO., general contractors

Behind a quiet exterior **a restrained design carnival**

in which good design promotes lively competition between departments

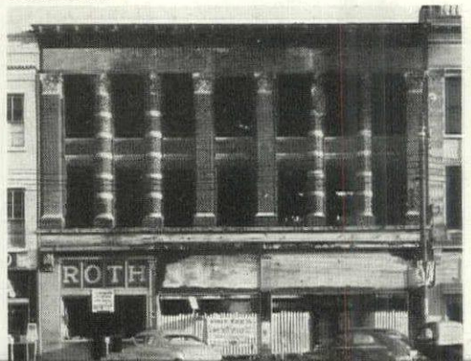
A major part of the business in this good-sized ladies' specialty shop is done on Saturday, when Montgomery, Ala. swarms with farmers. This is more than a commentary on the general state of southern agriculture and meat raising (Alabama is a booming beef state); it is also notification that the farmers' ladies want to stay down on the farm and have "Paree" too. This suave, sophisticated store does it for them.

In their success, the designers rendered their biggest problem invisible; this was the problem of multiple tenancy. A number of the store's departments are run as concessions, just as in a good many supermarkets. Although there is no duplication of departments, each proprietor naturally wanted to have the outstanding housing, and—to a measure—had to be convinced that he did have it. The designers accomplished this diplomacy honestly (yet without destroying the consistency of their work) by emphasizing different features in the various departments—introducing an eggcrate ceiling in one, backing others with cypress, emphasizing others in plan location, etc. By varying the objects of their attention, department to department, they avoided strident visual competition.

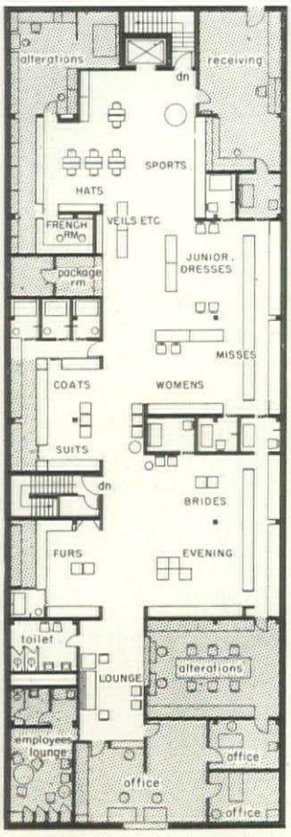
The other paradox involved tying the whole store together coherently designwise without dulling or drowning out each department's individuality. They started with a carnival theme for general atmosphere, and even after the onslaught of all the other considerations, actually succeeded in carrying it through (see next page).

Paul Robertson

Before:



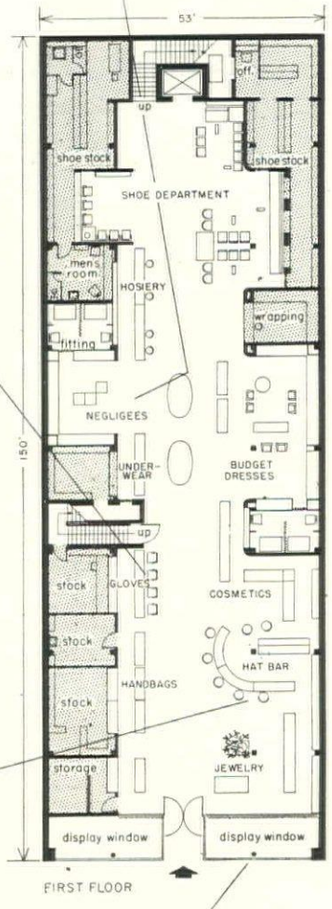
site was occupied by elaborate vintage structure



SECOND FLOOR

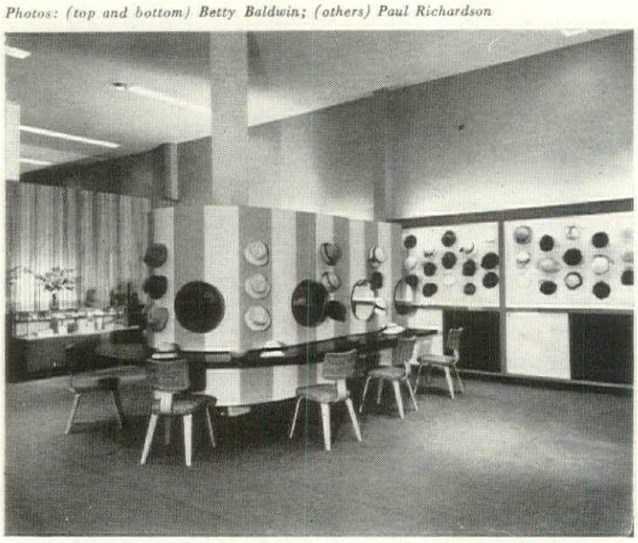
Dress department *is defined by luminous ceiling, which is also a sympathetic, shadowless way to light try-ons.*

Handbags: *chi-chi chairs contrast sharply with efficient built-in storage cabinets.*



FIRST FLOOR

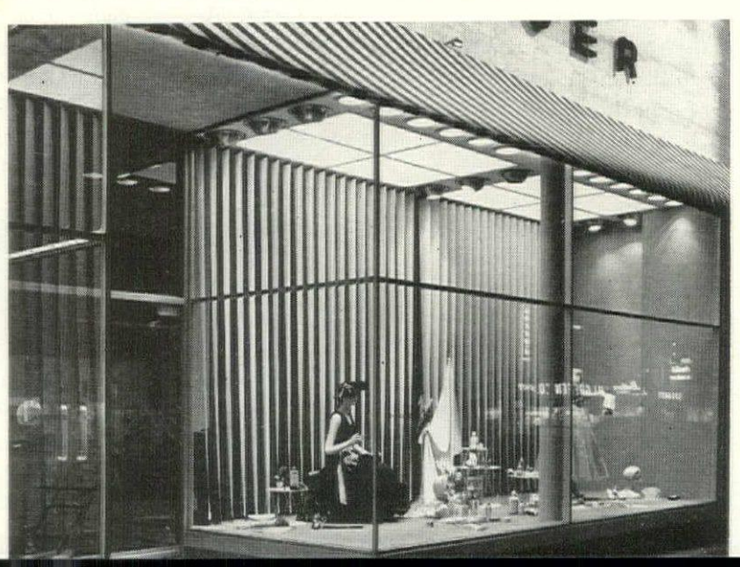
Photos: (top and bottom) Betty Baldwin; (others) Paul Richardson



Hats, *arranged in polka-dot pattern, are played against blue and white stripped pattern of display fixture.*

Stripes. *The unifying thematic device which the designers used to tie together all the diverse departments of this women's store was a carnival and circus expression: stripes. In the awning outdoors (p. 97 and right) stripes have a special old tradition; in the sun-break behind the show window, vertical blinds (right and across fold) were used to advantage; in store areas like the millinery section, above, stripes were made milder by widening.*

Display window *has geometrical background of vertical fabric blinds. Fully retractable, blinds may be adjusted to produce varying degrees of light and visability.*



Rear of main floor *features spacious main aisle and inexpensive wood partitioning of elegant design*

Photos: (above) Betty Baldwin; (below) Paul Robertson

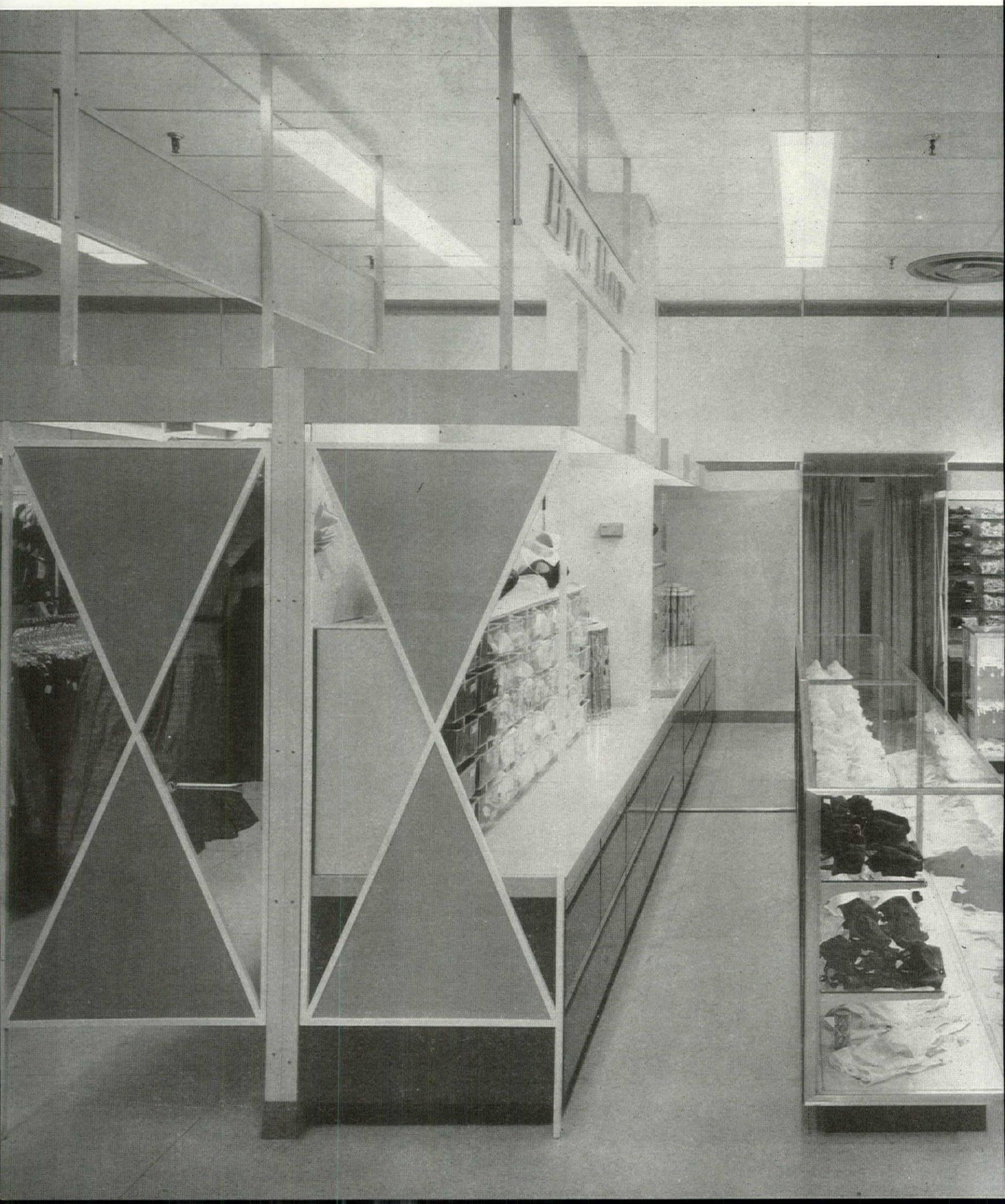
Front of main floor *repeats sense of spaciousness, makes ample room for future addition of concession-departments*

COST BREAKDOWN

Structural steel	$ 16,000
Masonry labor	5,506
Carpentry, concrete, steel labor	9,311
Misc. materials	23,092
Plumbing	4,034
Electrical	10,037
Ductwork	2,865
Roofing	2,963
Stucco	180
Plastering labor	3,958
Lath and channel labor	1,860
Elevator	9,025
Glass	2,600
Terrazzo	162
Contractor's overhead and profit	12,553
Structural engineering fee	1,498
Mechanical engineering fee	502
Miscellaneous	961
Demolition of old building	1,521
	$108,624

CUSTOM-MADE FIXTURES

Display stops *define departments with racquet-press motif*



FOR $6 PER SQUARE FOOT

MEYER KATZMAN, architect
THE AUSTIN CO., engineers and builders
FRANK CHASE CABINET MAKERS INC. and
COLUMBUS SHOWCASE CO., store fixtures

An architect designs a sleek, imaginative, economical line of display and storage units for Fedway's expanding department-store chain

If the merchandise is the most important decoration in a store, the most important architecture should be the racks and cases which display this merchandise. The managers of Fedway's fast-growing chain of department stores have endorsed this view by turning to the same architect who is designing their stores to get a line of fixtures to use consistently in all their roomy, light-flooded new locations. They have been rewarded with a design that has these six important qualities:

Flexibility—All connections are dry, and there are only a handful of standard parts, repeated on a 4′ module. Floor connections are made on a shoe shot into the floor; structure meets the ceiling in plugs at acoustical panel corners. It is all easily removable and reusable for departmental changes.

Adaptability—The two basic walls, freestanding (metal frame) and peripheral, are further variable for storage or straight display; the double-faced freestanding space divider (across page, left) can be bracketed, shelved or inserted with stock cabinet units. Three basic floor units (p. 102) complete the line.

Economy—Fedway has to spend only $5.50 to $6 per sq. ft. of floor area compared with a usual tab of $8 to $10 for comparable quality fixtures.

Prefab-ability—All elements are factory-made in New York or Columbus and shipped to the site. This includes finish painting. Since the structure is light, freight bills are light too.

Consistency—The merchandisers wanted the fixtures to express a standard of quality, just as their goods do, from one branch store to another. This design accomplishes a coherent consistency by the repetition of a very few elements a great many times. There are no whimsical touches, which would soon become tiresome. There also is consistency on another level: the designers carried the 2′ x 4′ ceiling module down the walls and partitions into the vertical dimension.

Drama—There is just enough artistry and novelty in the proportioning and slim structure of this line to make the store atmospheres sing without screaming, to make them lively and memorable without overbearing the merchandise. There is strength and dash, lightness and durability. For the ingredients, turn the page.

Storage-display unit, *freestanding, is steel-framed, has perforated back for mounting displays, as in knitting department.*

Amarillo

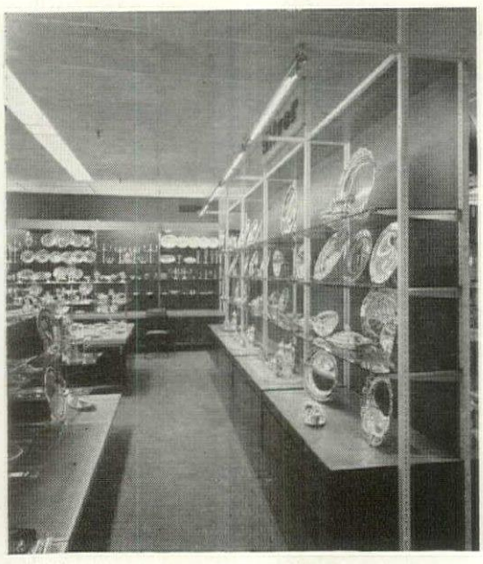
Wichita Falls

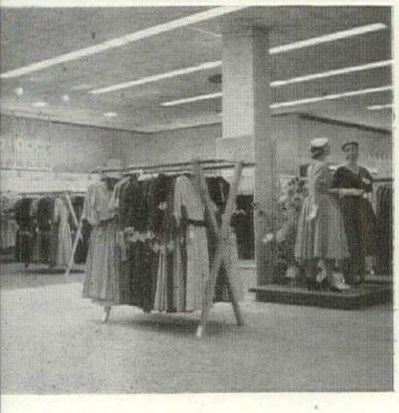
Longview

Corpus Christi

The client: *Fedway, the most dynamic new operator in the department-store field, is an offshoot of Federated Department Stores, one of the biggest national chains. Today Fedway is moving into eight new locations (Wichita Falls, Corpus Christi, Amarillo and Longview, Tex.; Albuquerque, N. M.; Westwood, Pomona and Bakersfield, Calif.), the beginning of a campaign to harden what is considered a soft-selling section of the merchandising world, the small-city department store. Fedway has been a scientific operation, undertaken after three years of statistical culling and mulling that established the Southwest as the fastest-growing, richest-growing section of the continent. In the initial group of cities chosen in this prime cut of geography, population had increased by 80% over 1940, as compared with a 15% increase for the US as a whole.*

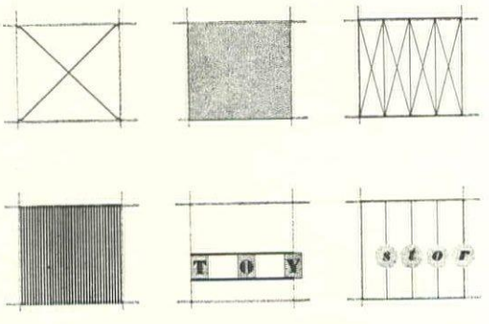
Typical storage units *are combined to form basic peripheral wall treatment (left) and freestanding rack (right). For detail of first see bottom of page. The freestanding storage unit was designed to stand at right angles in plan to the peripheral treatment; its steel frame is backed with panels of ¾" plywood. Left, men's shirt department; right, silver.*



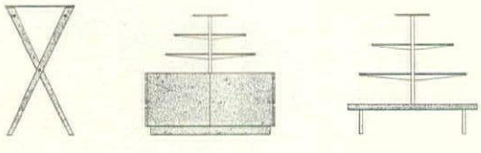


X racks, *custom designed for Fedway, have since been adopted by a fixture manufacturer as part of his standard line. Simple and light, they can be moved easily and do not present a formidable obstacle. Left, women's apparel; right, piece goods.*

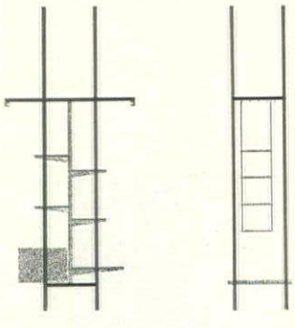
Display island, *freestanding, in ladies' apparel department omits panels from steel frame for four-way visibility.*



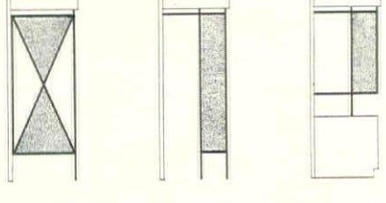
Top soffit units *serve as masks and signboards*



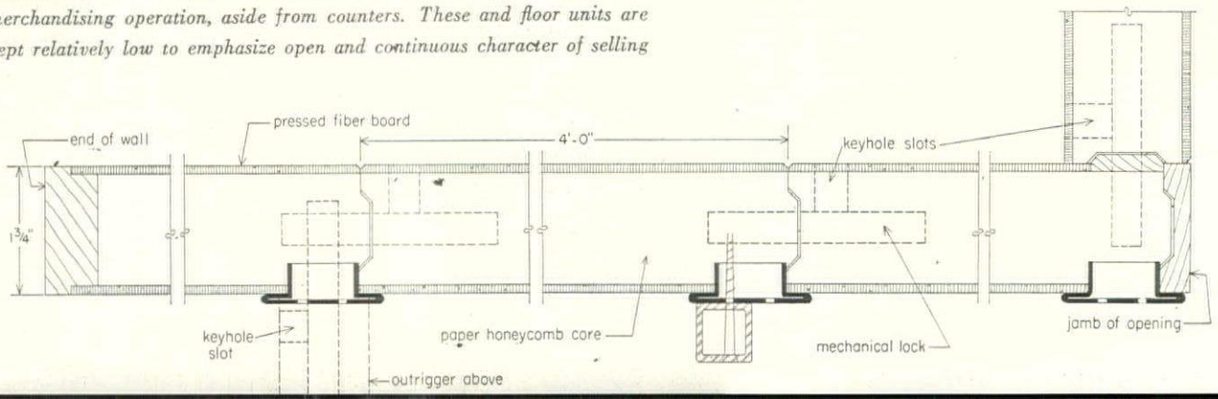
Floor units *include the X rack and "Christmas trees"*



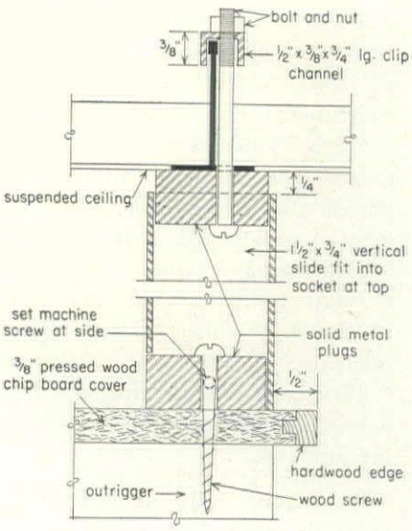
Storage units, *freestanding, are framed two ways* **Divider panels** *are used to end departmental runs*

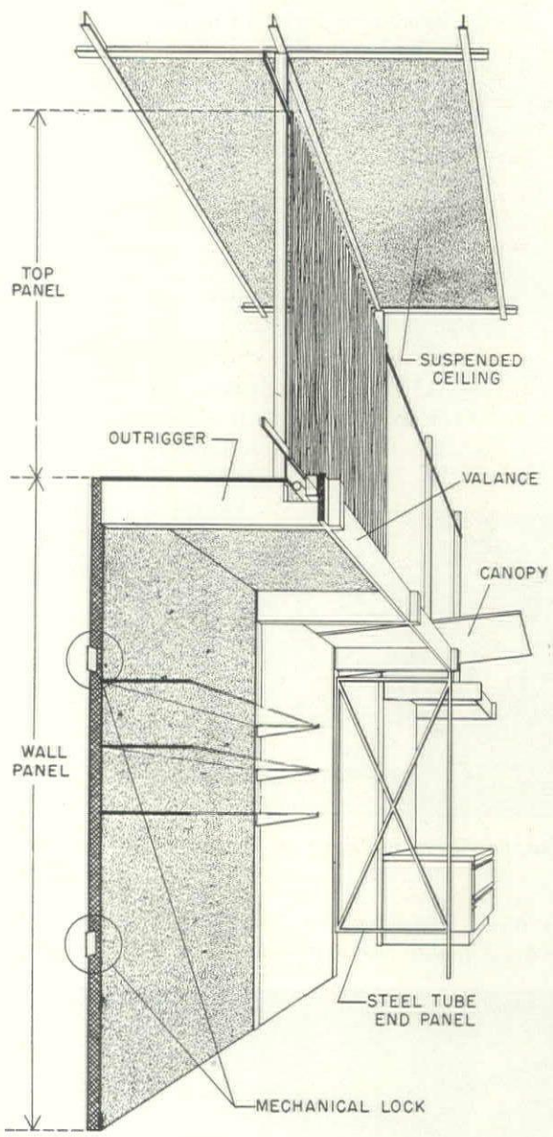


Fixture vocabulary, *shown in diagrams above, includes a rack for every occasion in this merchandising operation, aside from counters. These and floor units are deliberately kept relatively low to emphasize open and continuous character of selling space.*



Overhead departmental definition, *like that in men's shoe department (right), can be very light and rather fanciful using top panels hung from ceiling. Below, detail of typical head and foot connections.*





Composite drawing *of all units is shown above. Tool department (right) demonstrates how extensively this chain of department stores goes in for "touch selling"—display that raises no barriers against the informal, complete examination of wares.*

AIA CONVENTION

urges improved product literature

Throughout a week of mostly brilliant, cool weather, 1,500 architects and their wives last month carried on AIA's 85th annual convention in the Northwest at Seattle.

A gay crowd went, 500 of them, on a grand tour managed with split-second efficiency by Simpson Logging Co. to see giant trees topped, felled, reduced to veneers; to watch birling contests, to picnic, to return happy with the tour leadership of Seattle Architect George Wellington Stoddard.

More seriously the architects registered opinions, undertook action on many building problems:

Research. They adopted the Chicago chapter's proposal for a pilot inquiry with a manufacturer or association to set up: 1) standard criteria of material performance; 2) standard tests to be supplemented by architects' field experience reports; 3) terse methods of reporting field results to improve product literature. The precedent: Britain's Building Research Station.

Costs. They noted their board's resolution that more complete cost data be assembled and disseminated so architects could give clients closer estimates. (The board credited the forum conducted jointly by AIA's public relations committee and ARCHITECTURAL FORUM for instigating the idea and offered a resolution of thanks.)

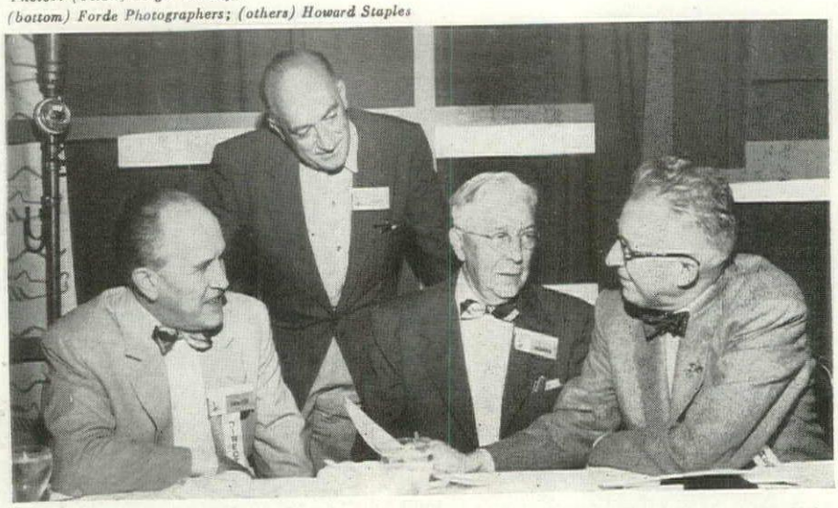
New Board of Directors

Seated left to right:
Norman Schlossman
Maurice Sullivan
Clair W. Ditchy
George Cummings
Howard Eichenbaum

Standing, left to right:
Philip Creer
Charles Matcham
C. Storrs Barrows
W. Gordon Jamieson
Clyde Pearson

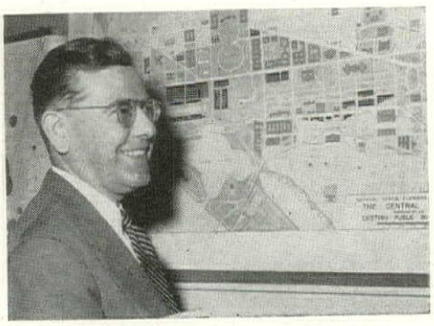
Marcellus Wright
Raymond Kastendieck
Waldo Christenson
G. Thomas Harmon
Edgar Berners
Edward Wilson
Leonard Bailey

Photos: (below) Roger Dudley; (bottom) Forde Photographers; (others) Howard Staples



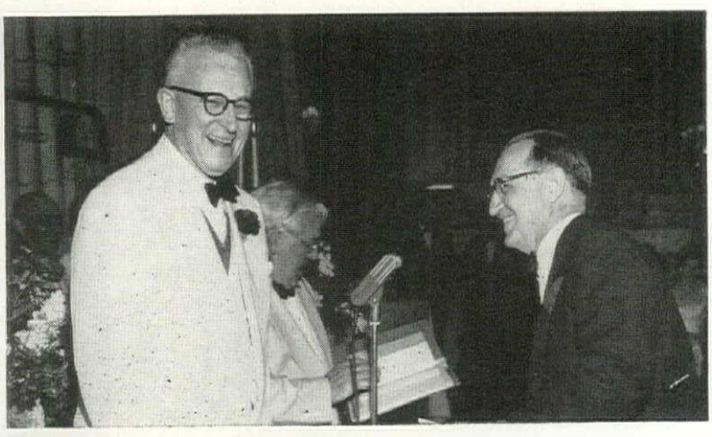
New president *Clair W. Ditchy (left) of Detroit and retiring president Glenn Stanton (right) of Portland, Ore., congratulate two award winners: Stain-glass Artist Emil Frei (standing) of St. Louis for craftsmanship and Architect Gerrit de Gelleke of Milwaukee for outstanding service to the AIA.*

Ditchy is 62 years old and a specialist in school, hospital and housing design. A graduate of the University of Michigan (B. Arch., 1915), he first worked with Industrial Architect Albert Kahn, later was an instructor at his alma mater and a special writer on architecture and building for the Detroit Free Press. *He has been AIA's national secretary since 1947, has held almost every office in the Detroit Chapter and was once a director of the Michigan Engineering Society. He is married and has three daughters.*



Host, *Paul Thiry, studies map of Washington Mall*

Retiring president *Glenn Stanton presents Certificate of Fellowship to Kenneth Welch of Grand Rapids, one of 30 architects so honored.*



For the month's news of other industry developments see page 33

and better cost data, elects Clair W. Ditchy president

Civil defense. They heard Morris Ketchum report US cities are an open invitation to attack, saw promise in a Seattle pilot study by National Security Resources Board and Department of Commerce with AIA participation.

Washington's mall. They urged quick measures to remove the World War I and II eyesores.

Government control. They voted opposition to Congressional proposals for a federal art commission, feared it might end in control and censorship.

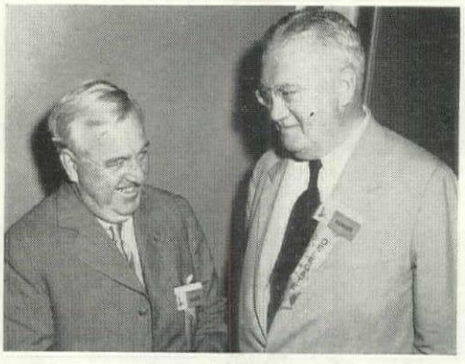
Building activity. They heard regional directors report 20 to 30% higher activity in Texas, up to 47% higher in Northwest states and only a little higher in many sections of the Sierra Nevada. Slightly lower levels were reported in Central States, Middle Atlantic States, and some parts of New England. Some concern was expressed over possible effects of administration policies of deflation.

Honors. They gave honor to men who had promoted the cause of architecture. The Institute Gold Medal, recently conferred on veteran modern leaders Wright and Perret, went this year to distinguished traditionalist and Beaux-Artist William Adams Delano (born 1874).

In accepting for Delano, Architect

Roger Dudley

Washington Mall discussion *engages seven AIA directors: (left to right) Wilson, Richards, Silling, Creer, Berners, Smith and Jamieson. They would rid mall of its "temporary" buildings.*

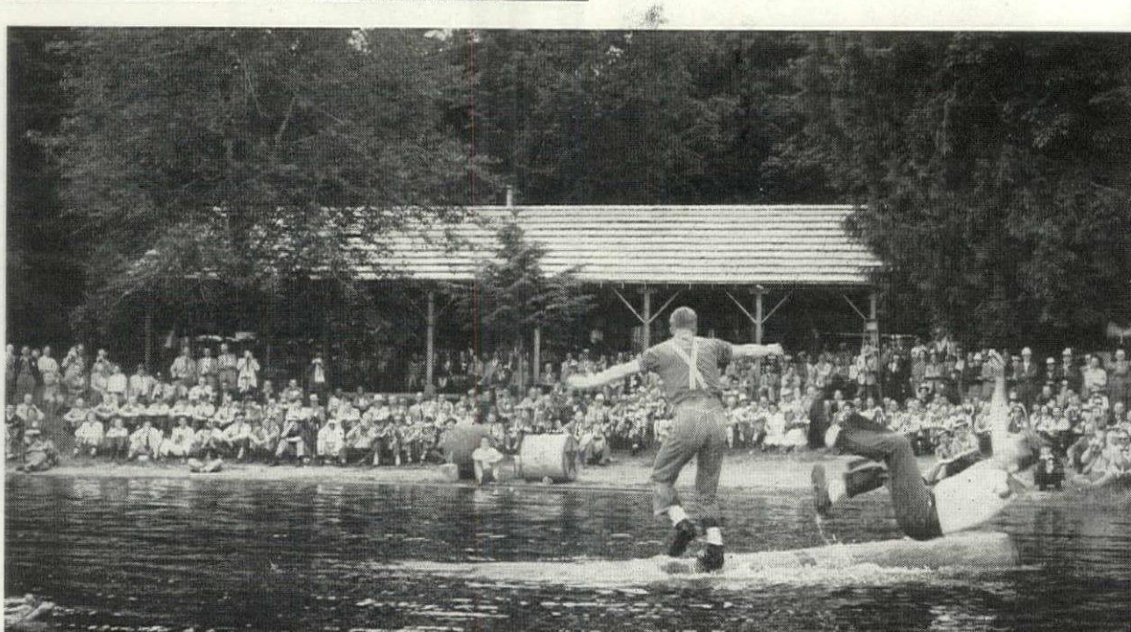


Partners *Ralph Walker and Max Foley of the New York firm of Voorhees, Walker, Foley & Smith discuss convention program.*

Side-line discussion *by Ex-president Raymond Ashton of Salt Lake and Director Norman Schlossman of Chicago.*

Photos: (below) Forde Photographers; (above, right) Howard Staples

Lumber camp side show *attracted 500 conventioneers into the woods for demonstrations of lumbermen's skills (right, below) and for a picnic: (right) the Morris Ketchums of New York with the Harris Armstrongs of St. Louis; (below) Marion Manley of Miami and Marshall Shaffer of the US Public Health Service.*



Photos: Howard Staples

Cabaret evening *was highspot on convention's social docket*

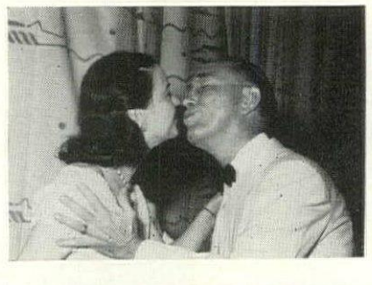
Travelog: *William Furer (right) explains Hawaii to Leon Chatelain of Washington.*

Executive director *of AIA, Edmund Purves of Washington, has attention diverted.*

New Fellow, *Otto Teegen of New York, earns an approving smile from Mrs. Teegen.*

MIT Dean, *Pietro Belluschi, with Mrs. Morgan Yost, gave closing address.*

Convention kiss *is bestowed on bride of venerable John Fugard by C. E. Silling.*



Polite smile *by Mrs. Thomas Harmon greets joke between C. E. Silling (right) and Mr. Harmon.*

Edgar Williams read a letter from President Eisenhower enthusiastically endorsing the White House balcony and other White House alterations to which Delano acted as consultant, over vigorous opposition, for President Truman. Said retiring AIA President Stanton: "Architecture is nonpartisan." Said Delano in a transmitted message; "I had the luck to practice in the first half of the century when architecture had a more personal touch."

Others, not architects, received recognition: Stained Glass Artist Emil Frei of St. Louis got the craftsmanship award, Sculptor Donal Hord of San Diego, the fine arts medal. To Architect Gerrit J. de Gelleke of Milwaukee went the Kemper award for distinguished service to the Institute.

Outstanding buildings were honored also, with special emphasis on industrial structures. The two honor awards went to the GM Technical Center, Detroit, by Architects Saarinen, Saarinen & Associates and Smith, Hinchman and Grylls, architects-engineers; and to the Raleigh, N. C., State Fair pavilion by the late-brilliant Matthew Nowicki and by William Henley Deitrick, architects, with Severud-Elstad-Krueger as engineers. No top honor award was given this year to houses.

Awards of merit—ranking below honor awards—went to George Vernon Russell of Los Angeles for his Republic Supply Co. office and plant at San Leandro, Calif. and to Harrison & Abramovitz for their Corning Glass Works at Corning, N. Y. and to three West Coast architects for their houses.

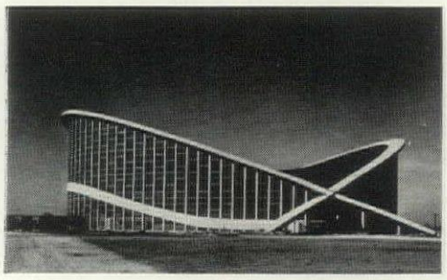
All buildings were modern; all were FORUM or HOUSE & HOME selections recently published or now scheduled.

Election: The promised contest for president was killed by the withdrawal of Candidate Kenneth Wischmeyer of St. Louis because of illness. Long-laboring, devoted, genial and progressive Clair Ditchy of Detroit was elected at the head of a slate generally known as progressive. The only con-

GM Technical Center, *Detroit*

Republic Supply Co. office, *San Leandro, Calif.*

Prize winners: *in addition to three houses, these four nonresidential buildings won official AIA praise. Three have already appeared in* FORUM; *the fourth by George Russell of Los Angeles (above with wife) will appear next month.*



North Carolina State Fair pavilion, *Raleigh*

Corning Glass Center, *Corning, N. Y.*

test, and a close one, was for second vice president. Howard Eichenbaum of Arkansas, the popular and devoted director of the Gulf States region, nosed out George B. Allison of the Los Angeles firm of Allison & Rible. Norman Schlossman advanced from second to first vice president. The new secretary is George Bain Cummings of New York State. Maurice J. Sullivan of Houston was re-elected treasurer.

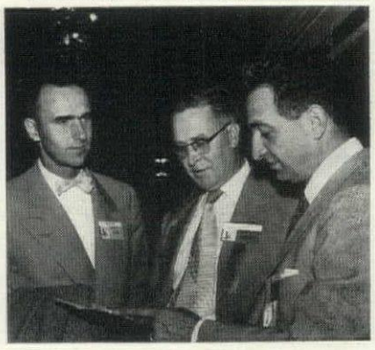
There was just one flare-up when a resolution was offered asking that the AIA membership be polled to determine whether or not the members would prefer direct election of top officers (except regional directors). This motion, a hardy perennial since the 1950 Washington convention, was lost by a close vote of 98-95, which some thought might have been reversed had the chairman permitted a roll call.

Convention-goers spent spare hours viewing 53 exhibitions embracing "materials in action." The architects gave certificates of exceptional merit to Steel Joist Institute of Washington and Overly Mfg. Co. of Greensburg, Penn. for their product literature, gave 11 certificates of merit and 24 honorable mentions to others.

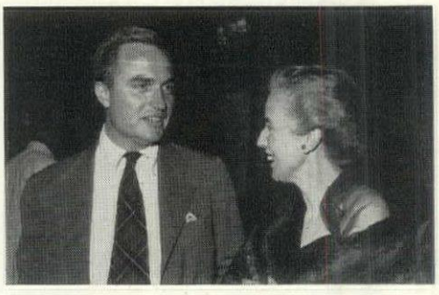
When not visiting and politicking, architects listened to an array of speakers both technical and inspirational. Said Pietro Belluschi in his closing address: "Architecture is so multifarious there exists no single set of standards and criteria to evaluate it."

Photos: (top right, and below) Howard Staples

Friendly argument *in front of prize-winning displays engages Waldo Christenson (left) of Seattle, Minoru Yamasaki of Detroit and Victor Steinbrueck of Seattle.*



Program study: *Harry Berry (left) of Pullman, Wash., Thomas L. Hansen of Boulder, Col., James Chiarelli, Seattle.*



Shop talk: *Carl Koch of Boston with one of the few lady delegates to the convention, Chloethiel Woodard Smith of Washington.*

Warm welcome *is given George Lenham (left) by Byrle Price of Philadelphia—schoolmates who had not seen each other in 25 years.*

Six Texans, *a small part of the Lone Star delegation (left to right): Louis Southerland of Austin, Murrell Bennett of Dallas, Albert Golemon of Houston, Arthur Thomas of Dallas, Bartlett Cocke of San Antonio and Preston Geren of Fort Worth.*

Central corridor *of typical nursing floor is reserved for personnel and patients; visitors use balconies to reach patients' rooms. Decentralized nurses' posts serve eight patients each on typical floor, are supervised from one headquarters station per floor. Medication and utility units occupy corridor wall nooks between nurses' posts.*

WORK-CORRIDORS are one of the many ingenious tricks in Kaiser's new West Coast hospitals

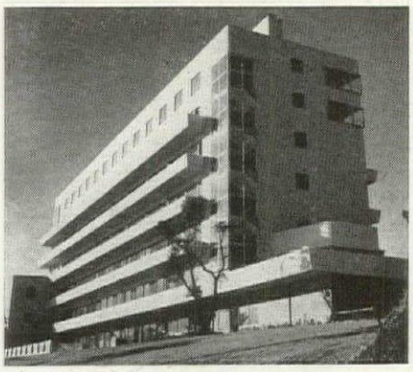
For years Dr. Sidney Garfield, director of the Kaiser Foundation's West Coast hospitals, has been jotting down ideas for his "dream hospital."

Last month a 224-bed version of his dream, by architects Wolff and Phillips, was a functioning reality in Los Angeles, fuller of ingenious gadgets than a new stratoliner. A second version by the same architects for San Francisco will open in the fall.

Biggest innovation is Garfield's central "work corridor" with floor nursing facilities lined against its walls. This scheme leaves all exterior space for patients—as a double-corridor system does—but this one occupies single-corridor space.

Visitors use balconies to reach patients' rooms, never go into the "work corridor." Such balcony-corridors are not entirely new for mild climates, but this work-corridor layout gives the idea new merit.

Nurses' stations are decentralized and, like the utility and medication units, are strung along the corridor. Each substation serves eight patients. Garfield figures the scheme cuts nurses' steps to 1/7 of those required by a central-station, single-corridor layout. A central control station on each floor routes visitors, requisitions, supplies.



Nursing floors *are stacked seven stories with top two for convalescents. Future O.P. wing will run from rear of low facilities wing.*

Push-button babies

How to satisfy both the mother who wants to care for her infant and the mother who wants a vacation before she gets back to her houseful of kids?

Garfield has re-thought the maternity ward and come up with an easy, flexible solution to the "rooming-in" problem: a bassinet-equipped steel drawer that shuttles between bedroom and nursery. Baby-care supplies are in the drawer. Automatic corridor-light signals show the nurse whether the baby is in her care or the mother's. The nursery-bedroom wall is soundproofed but has a viewing window.

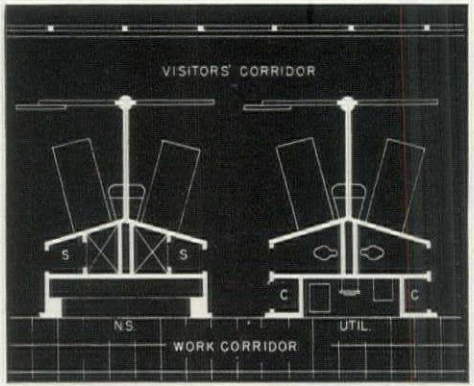
Each maternity and medical-surgical bed has a built-in cabinet beside it with hot, cold and ice-water taps. Bedside push but-

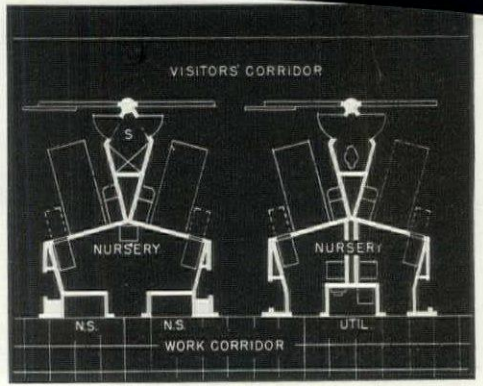
tons close draperies across the balcony windows and sliding glass doors. See plans for such other unusual features as circular operating rooms and splay-walled toilets.

The top two floors, for convalescents, have orthodox corridors, few gadgets and such ambulatory conveniences as a patients' dining room. Maids take over most patient care here.

Construction is reinforced concrete with interior partitions of metal lath and plaster. Cost including Group I equipment, air conditioning and fees was $2,394,648; $25.33 per sq. ft. figuring balconies and sundecks at one-half. The low bed cost of $10,690 is accounted for largely by full seven-story stacking of the nursing wing, space economy and omission of outpatient facilities which will be added later.

Structural engineer was Jerome A. McDevitt; mechanical engineer, Thomas E. Taylor; electrical engineers, George Pettingell, Grant Kelly & Co.; general contractor, C. L. Peck; sculpture by Norman C. Zimmer.



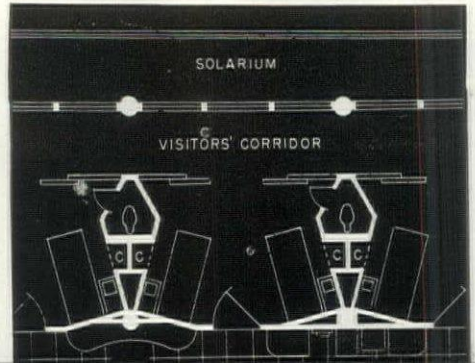


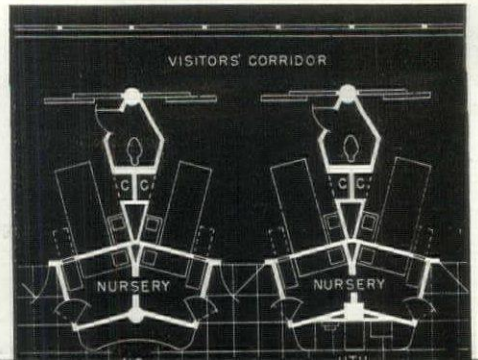
Typical room plans. *Los Angeles: nursing layout shows corridor niches. (Compare below.)*

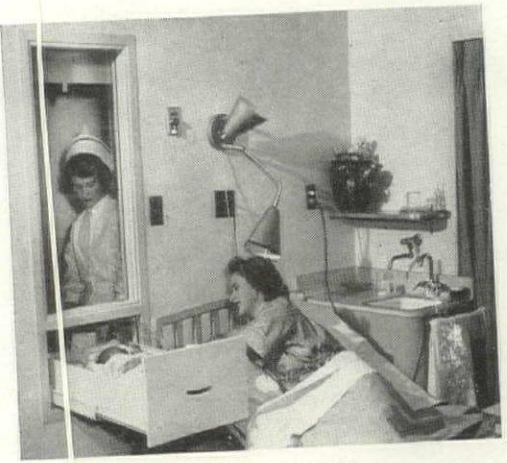
San Francisco: Refined version takes floor facilities out of niches, omits room showers.

Los Angeles: Maternity-floor layout shows neat planning for bassinet-drawer scheme.

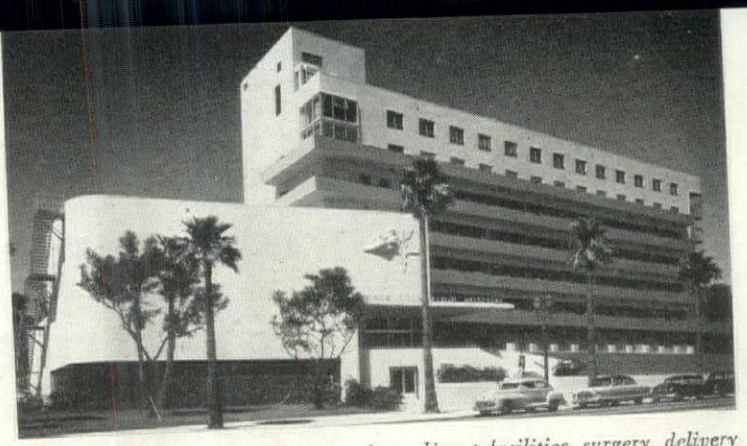
San Francisco: Refined version has private nurseries, more toilets, fewer showers.



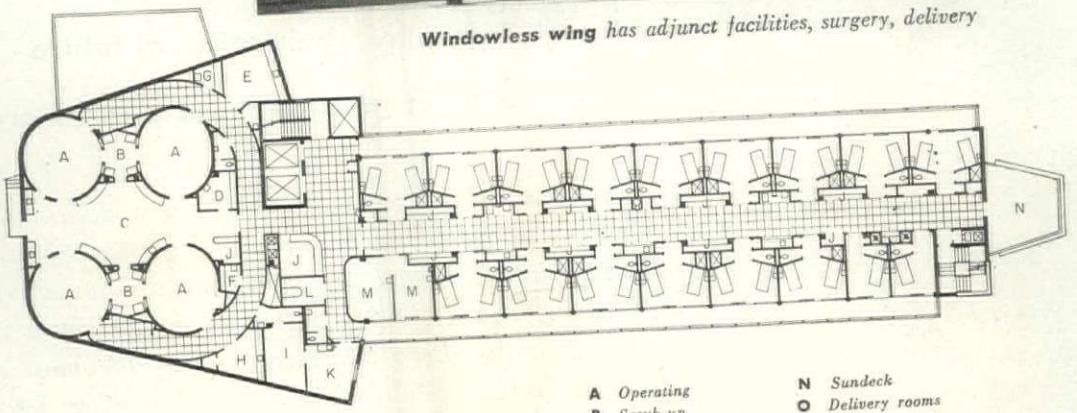




Drawer *holding plastic bassinet, baby and spare diapers slides from nursery to mother's bedside. Doctor visits and examines baby in the mother's room. Note also bedside lavatory.*

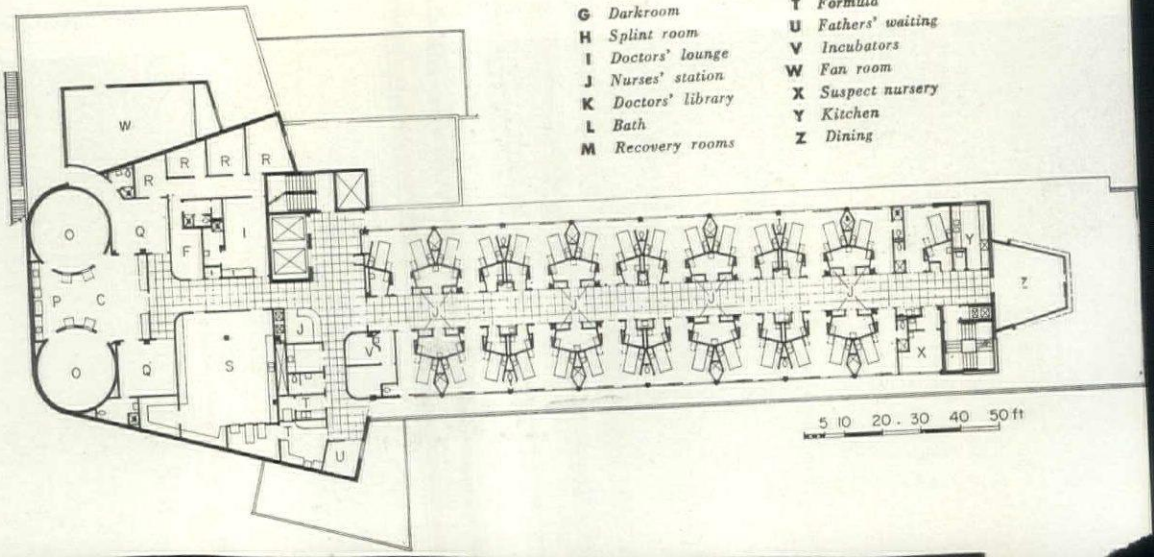


Windowless wing *has adjunct facilities, surgery, delivery*

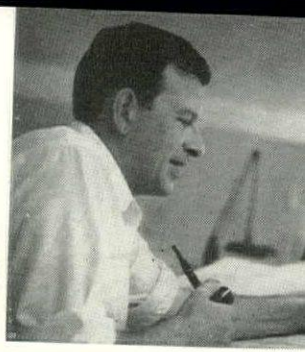


A	*Operating*	**N**	*Sundeck*
B	*Scrub-up*	**O**	*Delivery rooms*
C	*Work space*	**P**	*Clean-up*
D	*Anesthesia storage*	**Q**	*Labor rooms*
E	*Cystoscopy*	**R**	*Sleeping rooms*
F	*Nurses*	**S**	*Central supply*
G	*Darkroom*	**T**	*Formula*
H	*Splint room*	**U**	*Fathers' waiting*
I	*Doctors' lounge*	**V**	*Incubators*
J	*Nurses' station*	**W**	*Fan room*
K	*Doctors' library*	**X**	*Suspect nursery*
L	*Bath*	**Y**	*Kitchen*
M	*Recovery rooms*	**Z**	*Dining*

Operating rooms *(top plan) are centered around large work and equipment area. Patients are wheeled along peripheral corridor, never glimpse work area. Splay-walled showers, toilets and nurseries are shrewdly designed space savers.*



The six broad currents of modern architecture

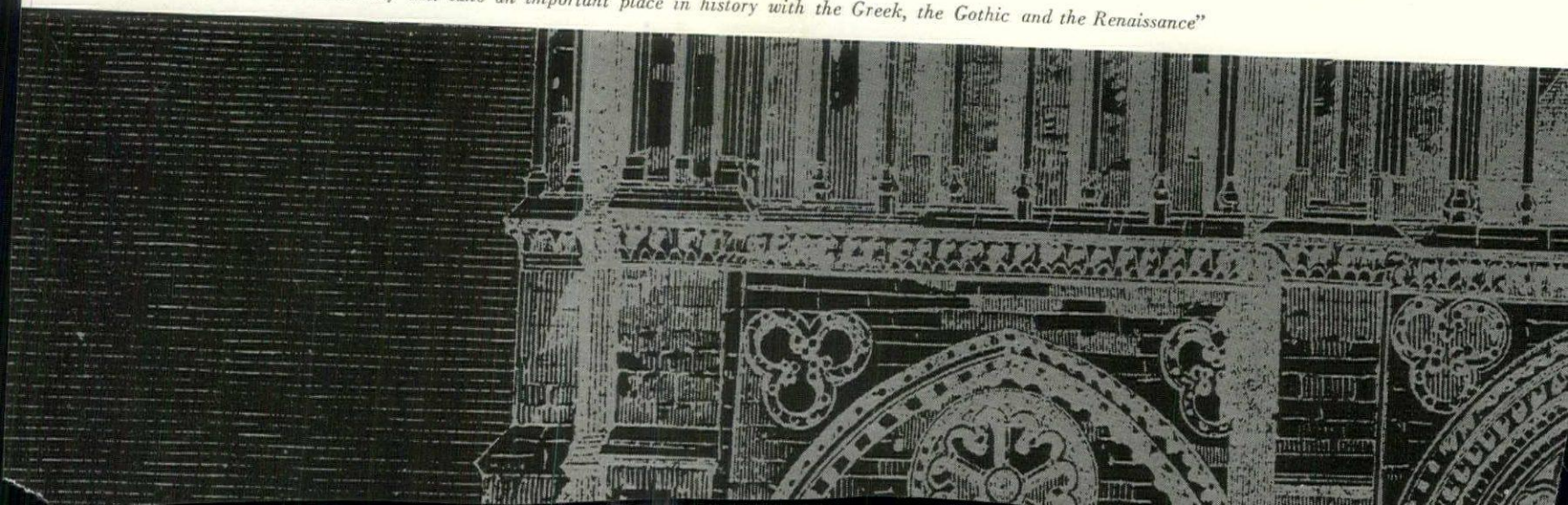


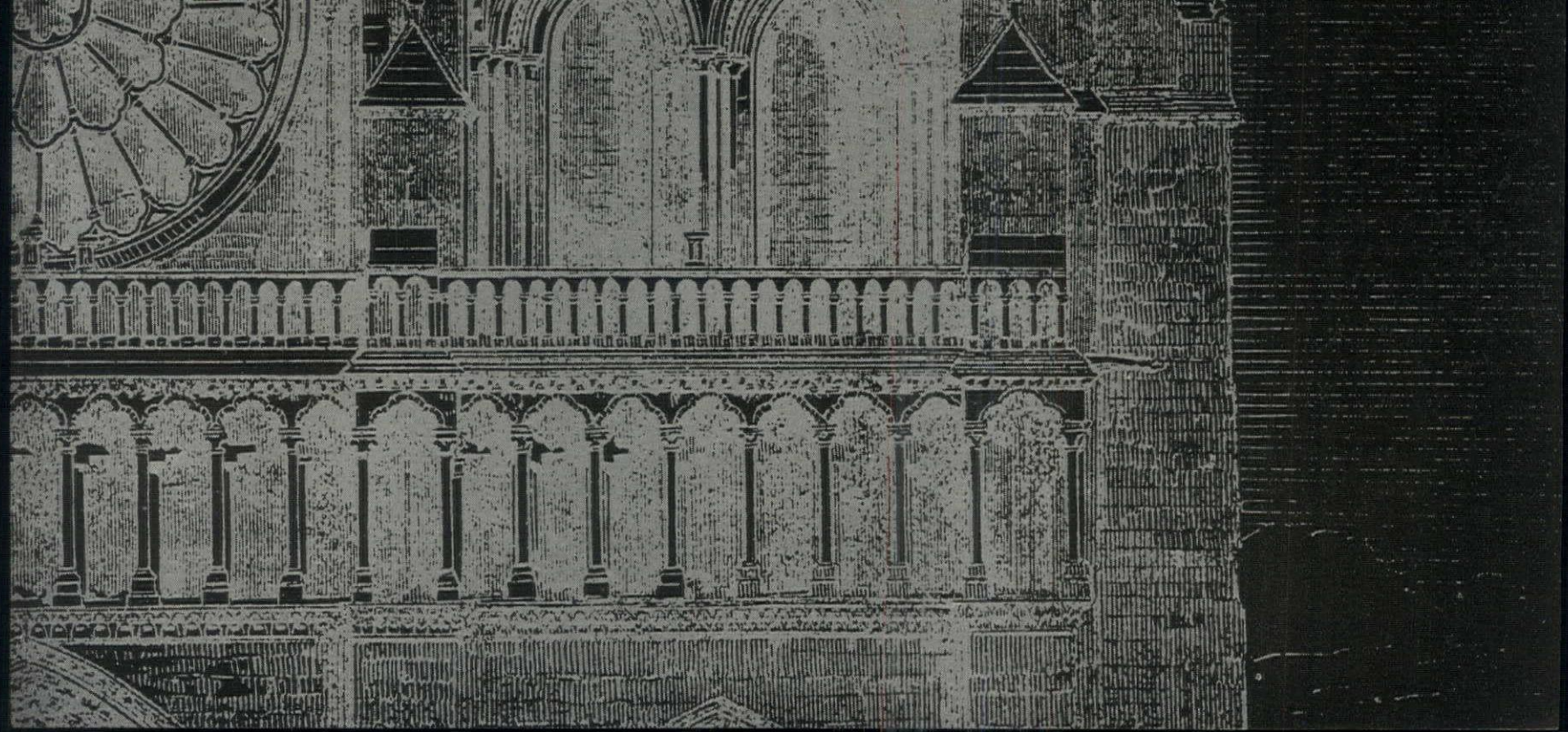
R. J. Anderson

An appraisal of their dynamic interplay, their spiritual future and their common creed that great architecture is more than efficient shelter

No longer is it possible to explain modern design as "simply functional." Yet dissension has arisen out of various efforts to ripen modern architecture into a mature art expressing the human spirit. To restore a broader view, beyond the quarreling factions, FORUM *is starting a new series of discussions. Eero Saarinen, one of the most thoughtful of the younger architectural leaders, opens it with a sober description of six major trends of today, each led by a known master.*—THE EDITORS

"Our architecture some day will take an important place in history with the Greek, the Gothic and the Renaissance"





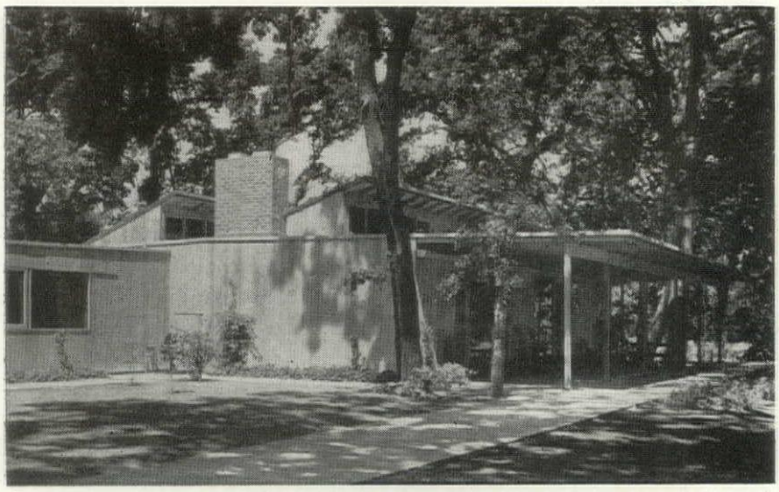
1. Wright and organic unity

The first area of investigation might be called "the expression of the individual." The strongest influence on this category emanates from the great lone genius, Frank Lloyd Wright. His tremendous contribution goes back to the early part of our century when he initiated fundamental concepts which are like the trunk of the tree from which much modern architecture has grown. Such, for instance, were his concepts of "organic" unity; his new concept of space as free and fluid; his belief in the relatedness of nature and building; his respect for natural and indigenous materials; his recognition of modular design as a logical device through which one could take advantage of standardized parts. In general, Wright himself carries his form concepts, rather than his structural ones, to their greatest heights. His form is a very personal one and a lasting school may not grow from it because this form in the hands of others seems, already, anachronistic. Today, once more, with our growing maturity, we are recognizing a new significance in Wright's work, even beyond the fertility of the great tree trunk: its spiritual quality. He expresses the dignity of man and his relation to nature in a way that touches deeply the spiritual side of architecture. This quality which permeates his work is a lesson for us to try to understand and is, perhaps, his greatest gift to modern architecture.

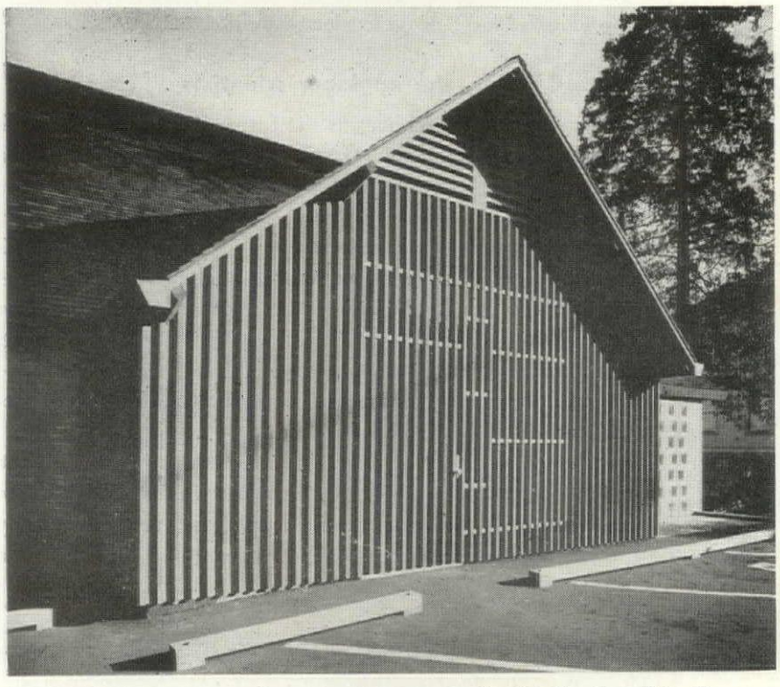
2. Wurster, Belluschi and handicraft architecture

Influenced in certain respects by the work of Wright, particularly in his reverence for nature and the materials it provides, as well as the open plan he initiated, is a strong group of individualists in America that search for their own form in architecture by a particular responsiveness to the problems imposed by local or regional conditions and traditions. They have their ears close to the ground and are sensitive to the humanistic problems. They search for individual solutions. They treat architecture as a handicraft which, in some ways, it still is—particularly when the problem is the individual house. Within sectors of this group there is today a tendency toward unchecked emotionalism

Photos: Roger Sturtevant

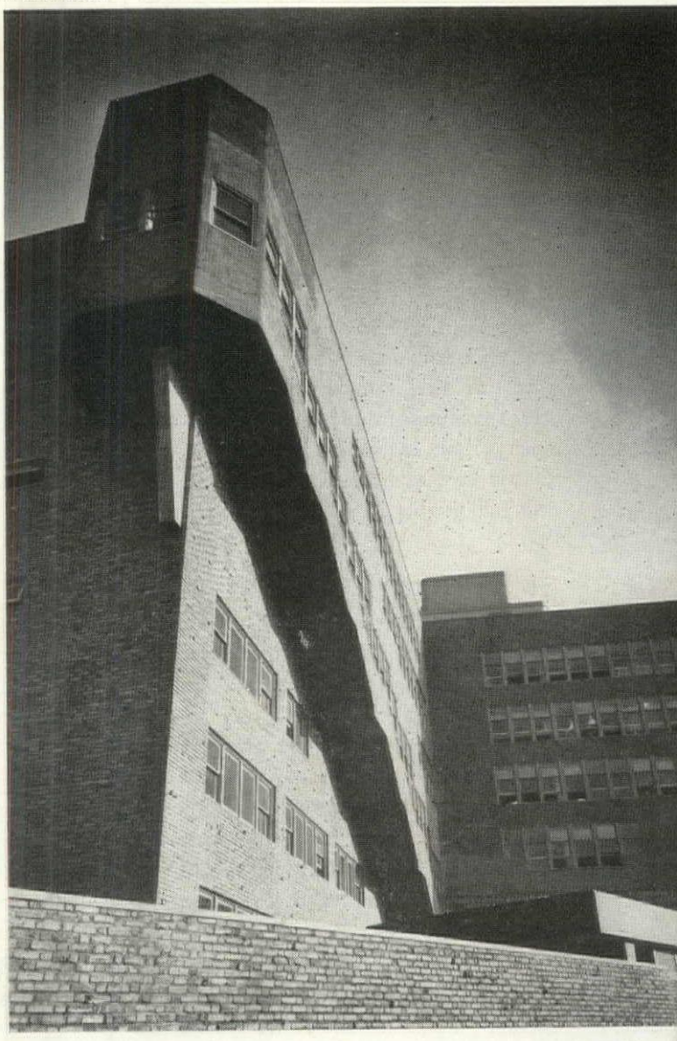


***"William Wurster** treats architecture as a handicraft"*



***"Pietro Belluschi**—a particular responsiveness to local and regional conditions"*

© Ezra Stoller



***"Alvar Aalto**—an individualist who has strayed away from the machine era into a new romanticism."*

which, because of its lack of esthetic and structural disciplines, has little future for architecture. On the other hand, there are invaluable lasting qualities to be found within the broad limits set by William Wurster, Pietro Belluschi and a few others.

3. Aalto and the European individualists

The architectural trend in the north European countries is related to the work of the US individualists and, in fact, there has been a generous exchange of ideas between the two. This north European architecture too, derives from individuals searching for their own paths. It gained its impetus from the functionalism that swept the continent in the Twenties—the doctrine of making the physical requirements of architecture establish the form, of making everything—as in a clipper ship or an airplane—as convenient and economic as possible and letting these conditions determine form. In these countries the principles of functionalism were merged happily with what was already a sound attitude toward design, and local and human needs were sensitively integrated with the influence from the Continent. This flowered into a distinct and well-accepted idiom, into the consciously refined and elegant forms which existed in all the elements of interior design as well as in architecture. It found enthusiastic reception in America in the Thirties.

All this was accomplished in northern Europe without the fanfare of revolution, and the new architecture combined sympathetically with that of the past as a part of well-arranged cities. Today some architects representing this trend have strayed away from early beliefs in the machine era and, like Alvar Aalto, into a new romanticism. The influence of the north European group on the future may not bring about a basic form world, but their value lies, like that of their American counterpart, in a healthy understanding of human and regional problems, providing a good balance to the more defined schools that always run the risk of becoming too stylized.

There is much in common among the three trends we have discussed.

On the following pages we turn to the three groups which work in the so-called "International Style."

4. LeCorbusier—function and plastic form

The fourth area of investigation is one that derives its inspiration from the same sources as asbtract painting and sculpture. It has sprung up around the genius of Le Corbusier. Like Wright and Picasso, he has unearthed a wealth of new fundamentals upon which he and his followers are now expanding. This school is based on principles of functionalism, belief in the machine age and in the validity of urbanism. Dedicated to these principles and solidly grounded in them, these men seek a further dimension by exploring the sculptural and plastic qualities of architecture. Although their forms grow basically from adherence to functional and structural dictates, there is a disciplined manipulation to create effects which, as in abstract painting and sculpture, are beautiful because of the plastic and textural qualities and the relationships of parts. In the same way that one is aware of the dramatic, sculptural effect of the great columns in the Temple of Karnak, so one is thrilled, in such a building as Le Corbusier's Marseilles apartments, by the plastic beauty, by the rich, expressive form which implies a new spiritual quality in modern architecture.

5. Gropius—an architecture for the machine age

Another strong influence came from the Bauhaus, the between-wars school in Germany, which generated a philosophy that spread over Europe and has become an influential and integral part of American thinking. Its leader and primary spokesman, Walter Gropius, saw the problem early and defined it in its broadest terms. The Bauhaus recognized that we are living in a new industrial era and it preached that the role of all design—from an ash tray to a city plan—must express that way of life. Its doctrine was to find beauty not through the handmade look of the past, but to find it through the honest use of our new tool—the machine.

Unlike the north European group, however, the Bauhaus systematically explored and experimented with materials and production processes and sought alliances between designer and manufacturer for the sake of encouraging mass production of its designs. Sensitive to economic and sociological factors, it believed that architecture should serve man by developing low-cost housing and mass-produced good design. In America, the emphasis has been more strongly on architecture than on design. But, perhaps, more important than the forms created are the philosophy, disciplines and methods which it has been teaching; for in these directions it produced a whole generation of well-trained men and has influenced many of the young architects who will be doing much of tomorrow's building.

6. Mies van der Rohe, the form-giver

The sixth branch derives from the Bauhaus in the sense of believing that the architect's job is to make a proud order out of the form-world of our industrial era. Ludwig Mies van der Rohe, the giant form-giver in this school, has deliberately limited the scope of the problem, working in depth rather than in breadth. His effort narrows to a concentration on structural clarity and the frank use of accepted methods of assembly. He seeks to find an expressive and appropriate beauty for our time by the refined, carefully adjusted, and highly ordered combination of these elements. Unlike Le Corbusier, he does not fit the shape of a building like a glove to a functional space, but frames up regular structures containing empty regular spaces which can then be internally arranged and rearranged like a theater stage to suit many successive uses, and thereby resist the ravaging effects of rapid changes in an industrial world. A considerable amount has been built on these principles in the US, where industrialization is the furthest along and, therefore, the best understood.

Mies' followers and those who respect him are laboring enthusiastically to find in structure and the complicated mechanism of today's building the clear and eloquent simplicity of this form world. Some of them seek within Mies' principles to enrich the vocabulary and widen the range, to stay true to the expression of structural clarity but to expand beyond the confining geometry of post-and-lintel. This school seems to have the potential answers to the physical problems of architecture so completely in hand that contributions beyond that are not at first apparent. However, the beauty of Mies' apartment towers in Chicago transcends the physical, making out of structure itself an abstract, coherent beauty which adds a new dimension to architecture.

Nervi and Fuller, the engineer-scientists

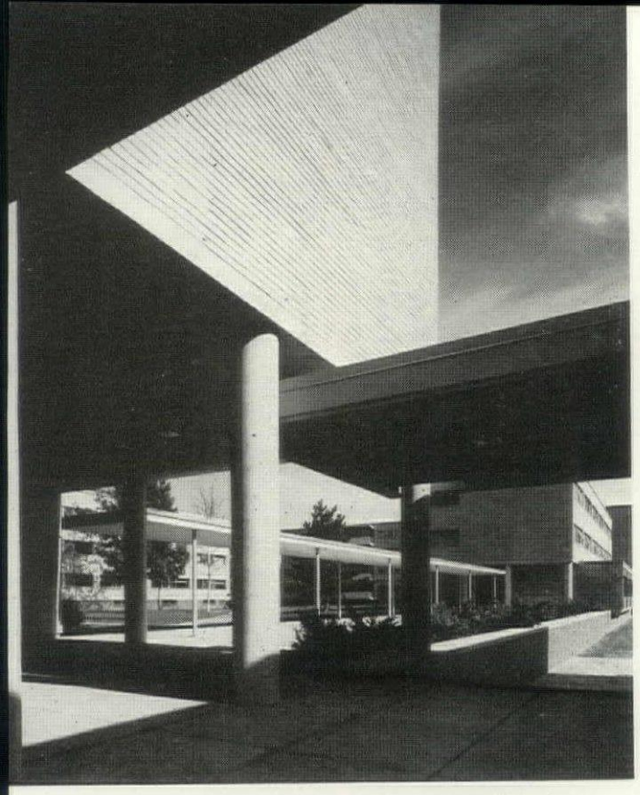
If we think of the architect as the form-giver, these six trends seem to be the essential and fruitful ones in architecture today. But there are other investigations which will play a dominant role in the shape of things to come. Closest to these trends in creation of form, but from outside of the formal limits of architecture, are some of the new exploits in engineering. The space-frames of Pier Nervi in Italy and the structures of Buckminster Fuller in America will have a profound influence on architectural thinking. From the miraculous potentials of engineering and science will come new possibilities, new materials and new problems. These will all have to be absorbed.

There are new impulses today in urban thinking which have not as yet matured into acceptable form but will have a profound influence on the future. Such, for example, are the sociologically and economically oriented city-planning concepts of Clarence Stein and the late Henry Wright.

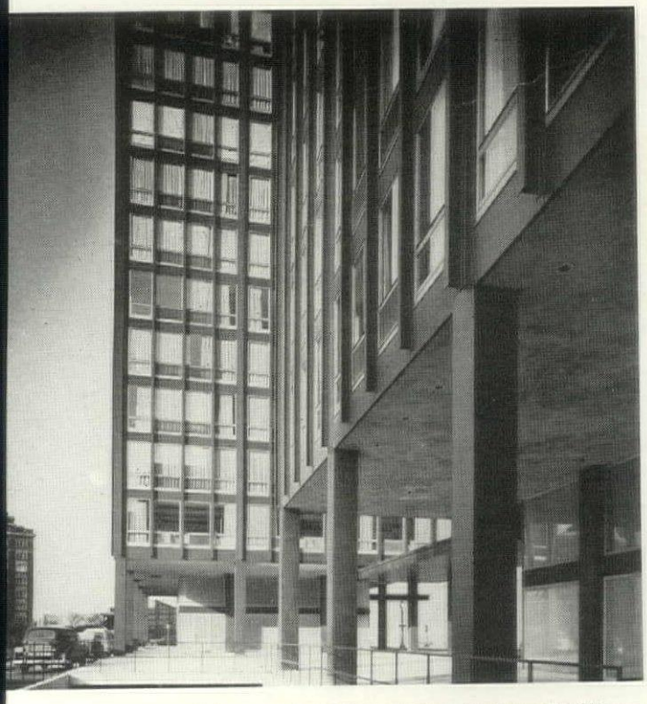
Tomorrow—another great architecture

Then, there is the large broad base of today's building—the areas where design is not conscious but where physical problems are nevertheless solved. This base can be likened to a folk art. Here, in this base, problems of architecture will be posed that, taken up and solved by creative minds, will give new generative impulses to the form of our day. We must remember, too, that even within the six trends the picture is more complicated than described. There are interactions between the schools and a crossing of lines by individual architects. It must, also, be remembered that within each trend there are men of varying capacities. There are the primary creators of form; there are those men who work with understanding within this form world; and last, there are those who use the forms inconsistently and indiscriminately, creating only confusion.

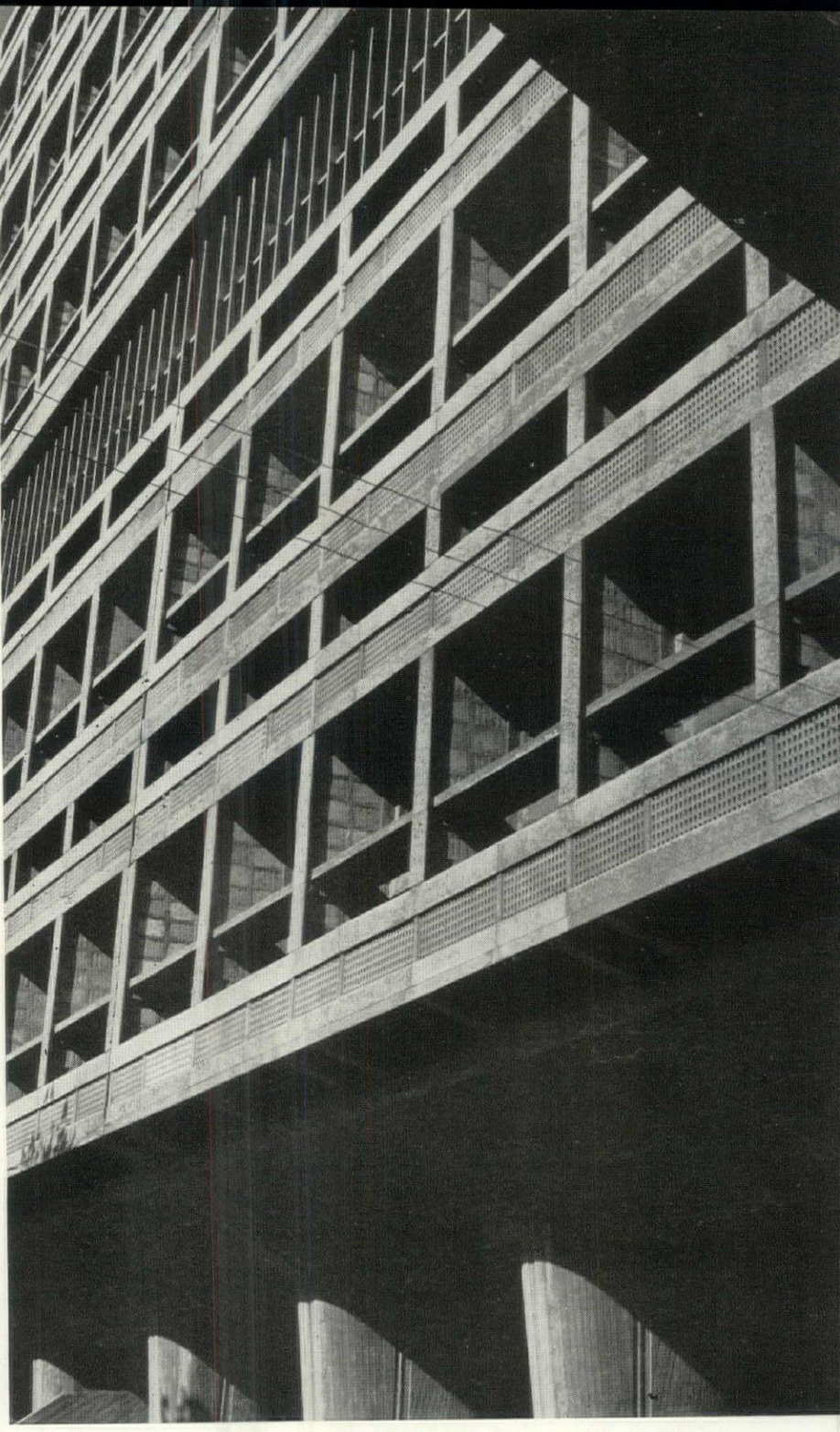
Let us now think of these six trends in relation to the definition of architecture—the art with the dual requirements, physical and spiritual. All of them are concerned with answering the physical demands. All of them, we find, also show a sincere preoccupation with the expression of spiritual values. Each seeks it in its own way. It is, therefore, logical to assume that, with the maturing of our civilization and the resulting respect for cultural, nonmaterialistic aims, spiritual qualities will flourish. They will catch up to the physical advances. Our architecture will then have the balance necessary for its flowering and some day will take an important place in history with the Greek, the Gothic and the Renaissance.



"**Walter Gropius**—*beauty through the honest use of our new tool—the machine.*"

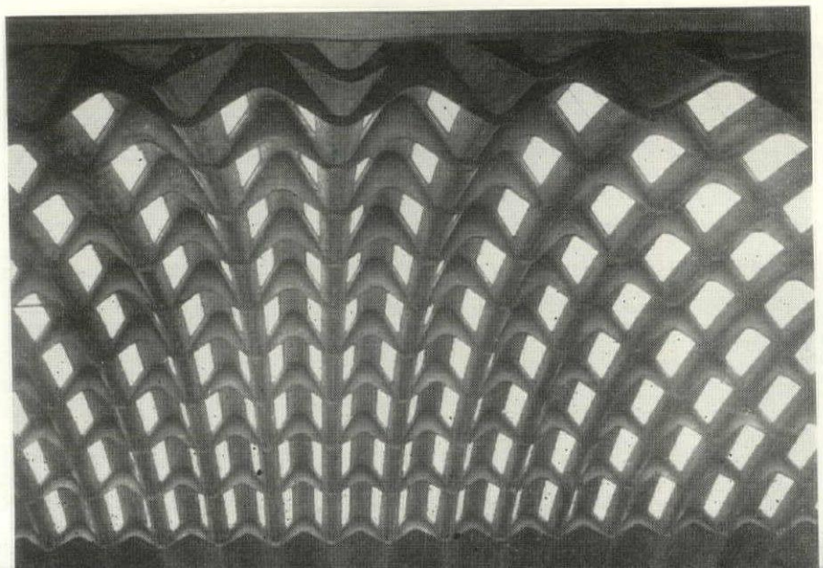


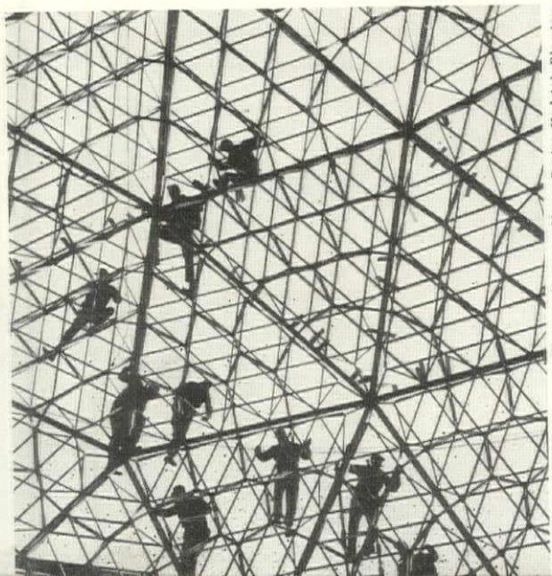
"**Mies van der Rohe's** *apartment towers in Chicago have a beauty that transcends the physical.*"



"**Le Corbusier** *seeks a further dimension by exploring the sculptural and plastic qualities of architecture.*"

New exploits in engineering by **Pier Nervi** *(left) and* **Buckminster Fuller**

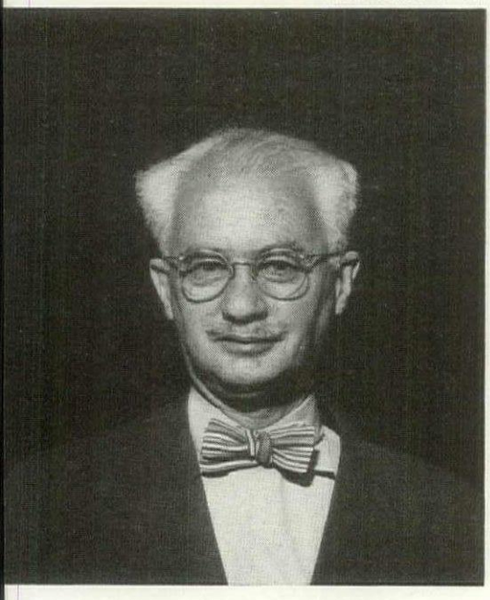




Photos: Damora; Hesse-Paris; Hedrich-Blessing; Vasari-Roma; Life—H. Sochurek.

What changes must be made

TIME: *Walter Bennett*



In its 16-year history, only its public relations have changed—and for the worse. If the program is to continue, changes must be made in its attitude toward politics, project appearance, private builders, pioneering construction and program administration

—BY HENRY S. CHURCHILL*

*** This frank appraisal of the problems faced by public housing was made at the 1953 annual meeting of the National Housing Conference. Mr. Churchill's viewpoint toward public housing is a sympathetic one; he is not only recognized as a leader in the fields of architecture and city planning, but is one of the nation's top authorities on housing. He has designed numerous public housing developments, has been a director of the Citizens Housing and Planning Council, a member of the Advisory Committee to the Public Housing Authority and a special consultant to the administrators of the national and New York State public housing programs.**

It wasn't love for humanity that put public housing over in the Thirties, but the smell of rich and redolent pork. . . ."

"Today, if public housing wants political support, it must have tangible appeal to somebody besides the tenants. . . ."

"Public housing 'projects' are different . . . and anything that is different is almost certain to be considered un-American and hateful. . . ."

"There are no very sound reasons . . . why public housing should be notably different from what the regular builder provides. . . ."

"We should look the fetish of 60-year fortress construction in the eye and recognize it for the nonsense it is. . . ."

"It is simply silly for public housing not to avail itself of the operative builders' know-how. . . ."

"Do away with all standards except two simple ones: 1) minimum area per dwelling, and 2) maximum density per gross acre. . . ."

"Public housing can play a new and important role in holding the line against area deterioration if the notion of slum clearance and 'project' is supplanted by the idea of salvage and the construction of small units which are part and parcel of the area itself. . . ."

in public housing?

At this point of crisis it is time to ask why, after 16 years of accomplishment, the public housing movement has fallen into such contempt that heroic efforts are needed to keep it alive. It is time to take a long and serious look at what is wrong. And the current crisis provides a good opportunity to say publicly things we have been saying privately for a long time, but which no one says publicly because they have an official position, or because they don't want to hurt anyone's feelings—or just because.

What I am about to say will not be popular; and one reason will be that "This is not the time to criticize." I think it is: there has been a change since 1937, in the times, in the temper of the country and in the administration.

It is time for a change, too, in public housing.

The core of the trouble can be summed up in one sentence: *There has been no new thinking, no acceptance of new ideas, no revision of approaches or concepts in the housing movement since 1937.*

Reform and the pork barrel

Public housing was the result of a long reform movement, stemming from the revelations of the frightful conditions under which people lived in the slums of New York, Chicago, Boston and other large industrial cities. It was humanitarian in its inception and noble in its purpose. However, it got nowhere until, during the Depression, it was linked to municipal bankruptcy and to the cost of crime, delinquency and disease. When to the impressive statistics of staggering municipal costs there was added, during the early days of the New Deal, the brilliant idea of giving cities money to do something about it, then public housing became a political reality. The politicians came rushing to the Federal trough hoping not only to obtain civic virtue by clearing slums but also to get some additional grease for their squeaking political machines. Those were lean times, and believe me it wasn't love for humanity that put housing over, but the smell of rich and redolent pork.

So what did the housers do? Just what the virtuous always do: instead of facing up to reality they attempted to perpetuate their own self-righteousness. Instead of playing ball with the politicians, they insisted on trying to make housing politically pure. They said, in effect, and meant it effectively, "Boys, not only will it be impossible for you to get any gravy drippings, but even the jobs will be given out by nonpaid, nonpolitical, civic-minded, holy appointees. Of course you understand this is *your* program and *your* local authority and you can do as you please, but every time you blow your little noses you must have four federal approvals certified in seven copies."

All of which was fine and in tune with 1937. Very few government programs have ever been so honestly administered. This, quite cynically, is one of the principal reasons for the program's present sorry state. It has no political support because it is not worth any politician's while to support it. If public housing wants political support, it must have tangible appeal to somebody besides the tenants who, being poor, don't count. Some political benefits must accrue, however indirectly. FHA, for instance, benefits lots of the right people, and you never hear any kicks about FHA subsidies or complaints that FHA is socialistic or subversive to private enterprise. So I should say that goal No. 1 for public housing in 1953 is realism in the realm of political-economics.

Homes, not projects

Back in 1934 when PWA began building the first public housing, it set out to clear large blocks of slums and erect large groups of buildings which for some reason or other were called "projects." There were at that time extremely cogent reasons for such a procedure, not the least of which was that they provided what scientists call a "controlled experiment" through which a lot of theories about costs, management, and so on could be isolated and measured. For years we've been building "projects," even though they have become an ill-mark of public housing and an epithet of contempt. Anyone can go to any city in the US and pick out the residing places of the deserving poor. Projects, in all their hideous conspicuousness, are a prime reason for the contempt in which the housing program is held. It is not that the buildings themselves are any worse architecturally than the stuff around them, but that they stand out from the general pattern of their surroundings like two sore thumbs on a pianist. It is not because they are ugly and dull that arouses animosity. We are quite blind to the squalor and ugliness of our cities, but "projects" are *different*. They thus call attention to themselves, and anything that is different is almost certain to be considered un-American and hateful.

I can see no reason why we should go on building projects. There are too many things wrong with them, economically, socially and architecturally. There are no very sound reasons, that I know of, why public housing should be notably different from what the regular builder provides. I think we should start building homes, not "projects," nor dwelling units ("d.u.s"), nor "housing." As homes they can, and should be, part of the normal city pattern—a long step toward normal acceptance.

But it would mean an awful lot of re-thinking of present

continued on p. 152

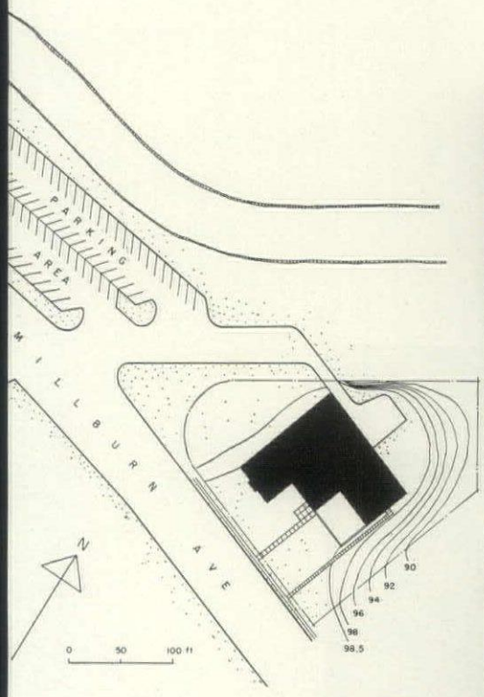
Prayer room, *lighted by clerestory over center aisle, will be enriched by multicolor curtain hung before ark between mural-like blue-glass windows. (Curtain was being made when photo was taken.)*

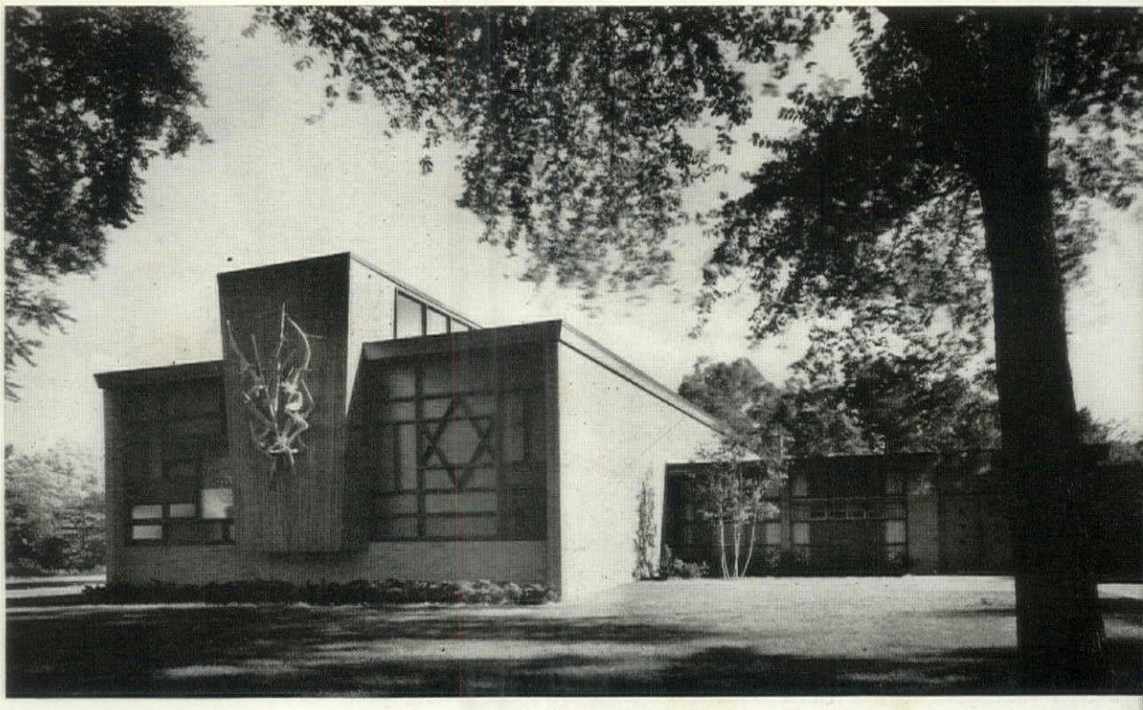
TWO SMALL RELIGIOUS BUILDINGS

1. Architect, sculptor and painters pool talents to create an exceptional synagogue

CONGREGATION B'NAI ISRAEL, Millburn, N. J.
PERCIVAL GOODMAN, architect
HERBERT FERBER, sculptor
ROBERT MOTHERWELL, mural painter
ADOLPH GOTTLIEB, curtain designer
O. A. PETERSON CONSTRUCTION CO., general contractor

Photos: Alexandre Georges





Burning bush sculpture, *mounted on cypress panel, dominates prayer-room wing, which projects toward main street.*

"Thou shalt not make thee any graven image. . . ." Strict interpretation of these words from the Second Commandment has restricted the use of art in most Jewish synagogues. Unlike Christian churches, which have generally relied on stained glass, murals, mosaics and sculpture for enrichment, the temple has usually been an unadorned and often uninspiring structure.

Not so, this small synagogue for a somewhat liberal congregation in a New York suburb.

Inside and out, it is an impressive demonstration of allied art and architecture. The facade's focal point is an 8′ x 12′ sculptural representation of the burning bush, executed in lead-coated copper and mounted on a panel of natural cypress. On the other side of this panel in front of the ark—the congregation's focal point—will hang a colorful 8′ x 19′ "quilt" of bright-colored velvet strips and rectangles with appliqué symbols in velvet tubing. It was designed by a famous painter, and is being executed by the women of the congregation. On either side of this central panel is a huge square window whose mullions are arranged to define Jewish symbols and to create an abstract Mondrian pattern. The windows are glazed with frosted, heat-resistant glass whose bluish color contrasts pleasantly with the warm tans and browns of the brick and birch interior.

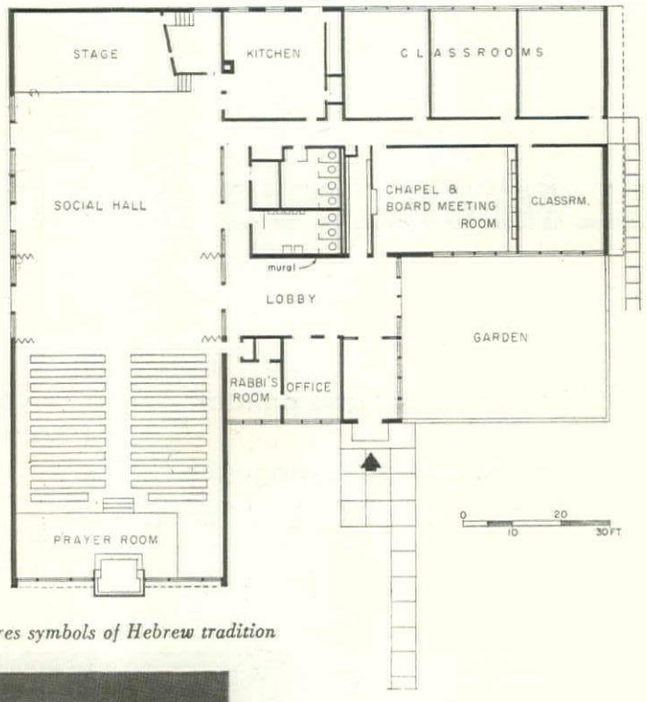
Integration of art and architecture is also demonstrated in the lobby where the architect provided space for an 8′ x 16′ mural (see next page).

Three-fold expansion

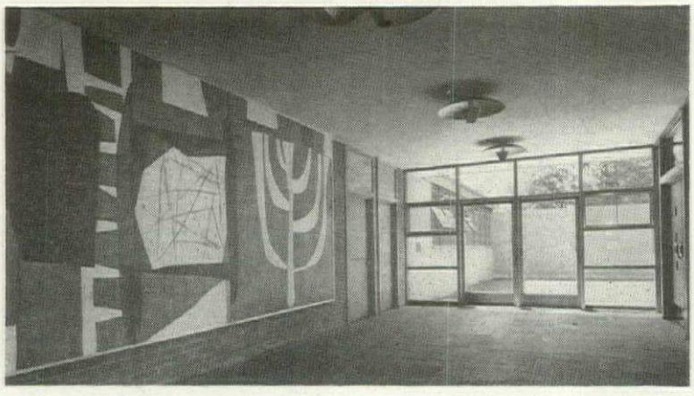
In plan the building features 1) easy expansibility, and 2) an "outdoor room." The prayer room contains 200 permanent pews —enough for ordinary week-end services—but can be extended to include part or all of the social room by sliding one or two sets of partitions aside. This lifts the capacity to 350 for special holy days, confirmations and large weddings, or to 700 for high holy day services (three days per year). Normally, both partitions remain in their "closed" position, dividing the space into three parts.

The outdoor room, a walled garden opening off the lobby, is used for outdoor weddings, as a lobby extension on high holy days

Social hall *has small stage and kitchen, is used for dinners, dances, lectures, school assembly, prayer-room extension.*



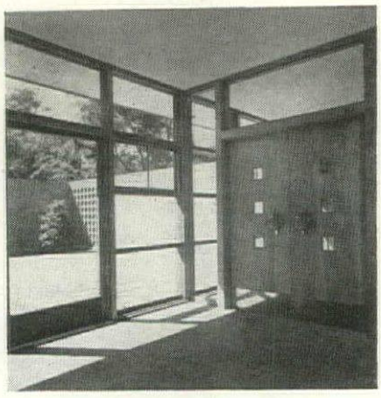
Lobby mural, *in orange, blues, tans and grays features symbols of Hebrew tradition*



and at the Feast of Booths for the erection of the Sukkoth (a booth made of branches and decorated with fruits and flowers).

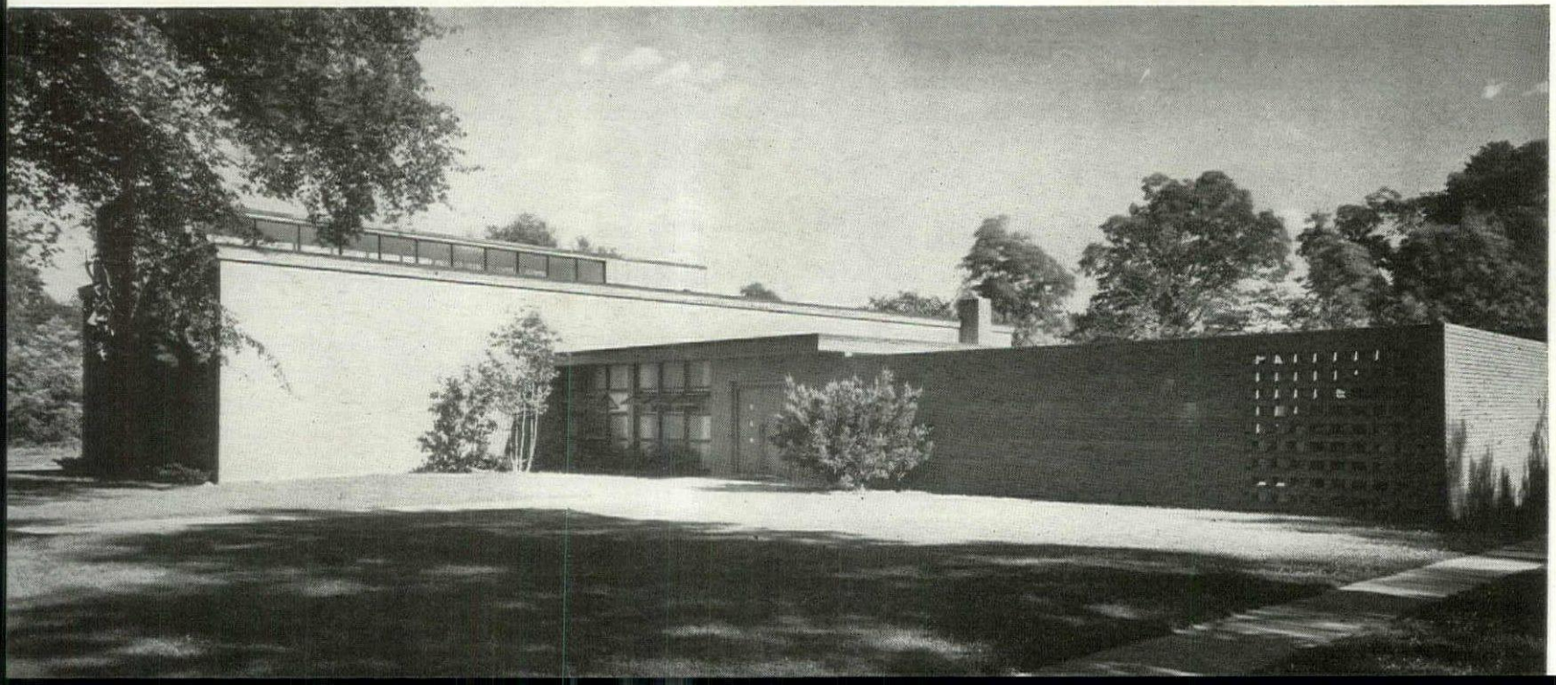
Materials were chosen for minimum maintenance: cavity brick walls, brick or colored concrete block partitions (plaster only in toilets and kitchen), concrete floor slab with radiant heating, acoustic plaster ceilings, red birch woodwork finished natural, natural cypress trim outside.

Cost: $150,000, excluding land, landscaping and furnishings, but including $10,400 architect's fee. Cost per sq. ft.: $14.40.



Walled garden *permits use of big windows without loss of privacy, is used for outdoor functions.*

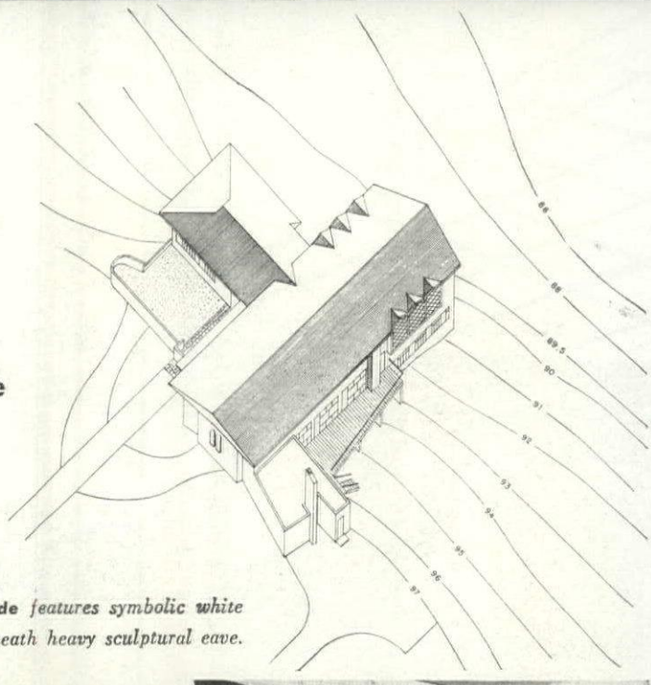
Blank brick walls *are relieved by perforations in garden wall (right), big windows at entry and cypress and glass clerestory atop prayer-room wing*



Photos: Alexandre Georges

Wooden porch *off social hall offers pleasant contrast with tan brick walls*

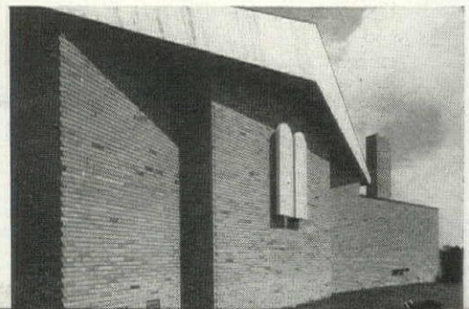
2. Expert handling of wood and brick takes the place of decoration in this small synagogue



Brick facade *features symbolic white tablets beneath heavy sculptural eave.*

Although the same architect designed this synagogue, other artists were not available for ornamental assistance. Instead, he had to rely on his choice of materials and architectural detailing to give the building its warm, informal character.

These are the devices he used on the exterior: 1) harmonious panels of tan brick and natural cypress as shown in the above photo, 2) a pitched roof of blue asphalt shingles with wide overhangs, 3) deep gable ends which give a sculptural quality to the building, 4) setbacks in the brick facade (photo right) to focus attention on its only applied ornamentation—two white tablets representing the original Ten Commandments, 5) special detailing



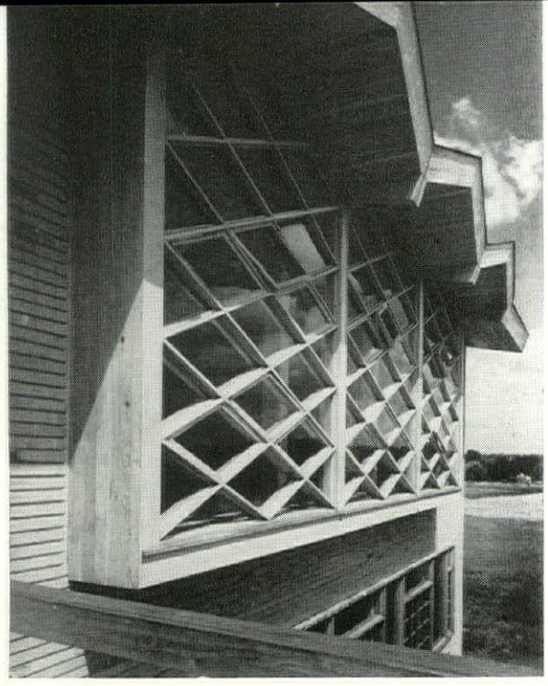
of the prayer-room windows whose deep-set diamond-shaped lights add a rich texture to the wall and are carried up above the eave to break up the long, low roof line.

Inside, these same windows provide the prayer room's sole ornamentation. The tawny browns of the interior brick walls and birch trim contrast with the white-and-lavender-painted ceilings of rough acoustical plaster.

Like the Millburn synagogue, this one features an expansible prayer room: opening of a folding partition combines it with the social hall to raise its capacity from 200 (in fixed pews) to 600.

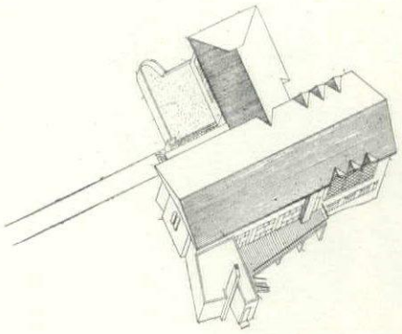
Thanks to the steep slope of the site, most of the "basement" is above grade and enjoys full windows. Six classrooms and a playroom occupy this floor.

Cost: $176,000, excluding land, furnishings and fees, or $12 per sq. ft. Furnishings and equipment cost an additional $25,000.

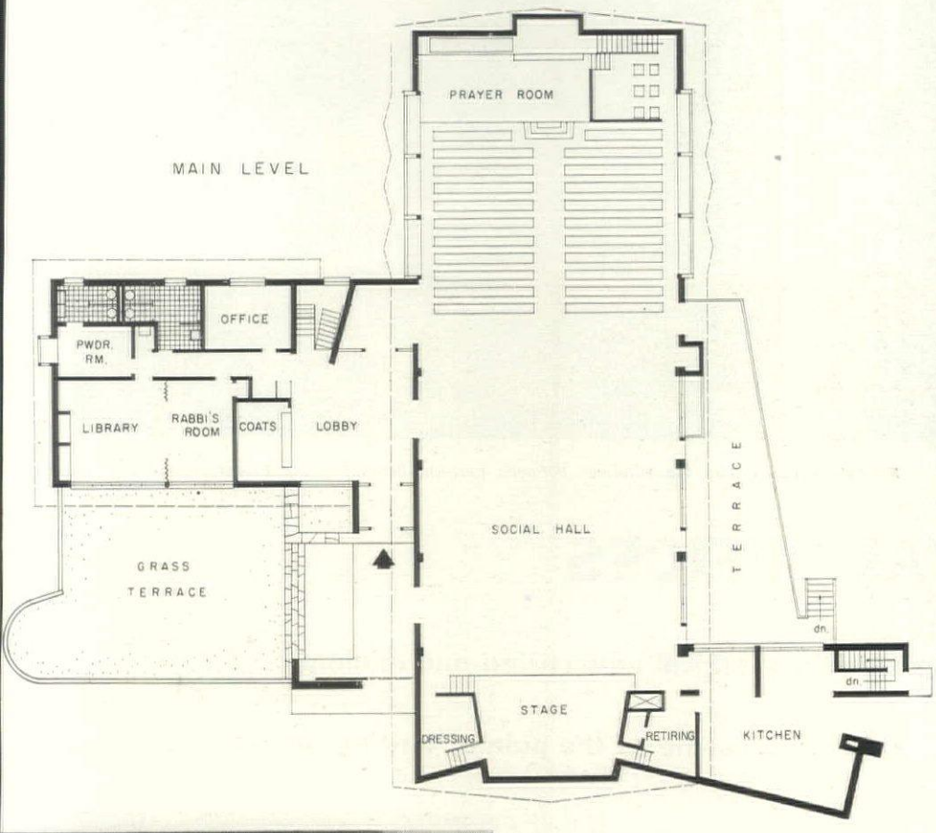


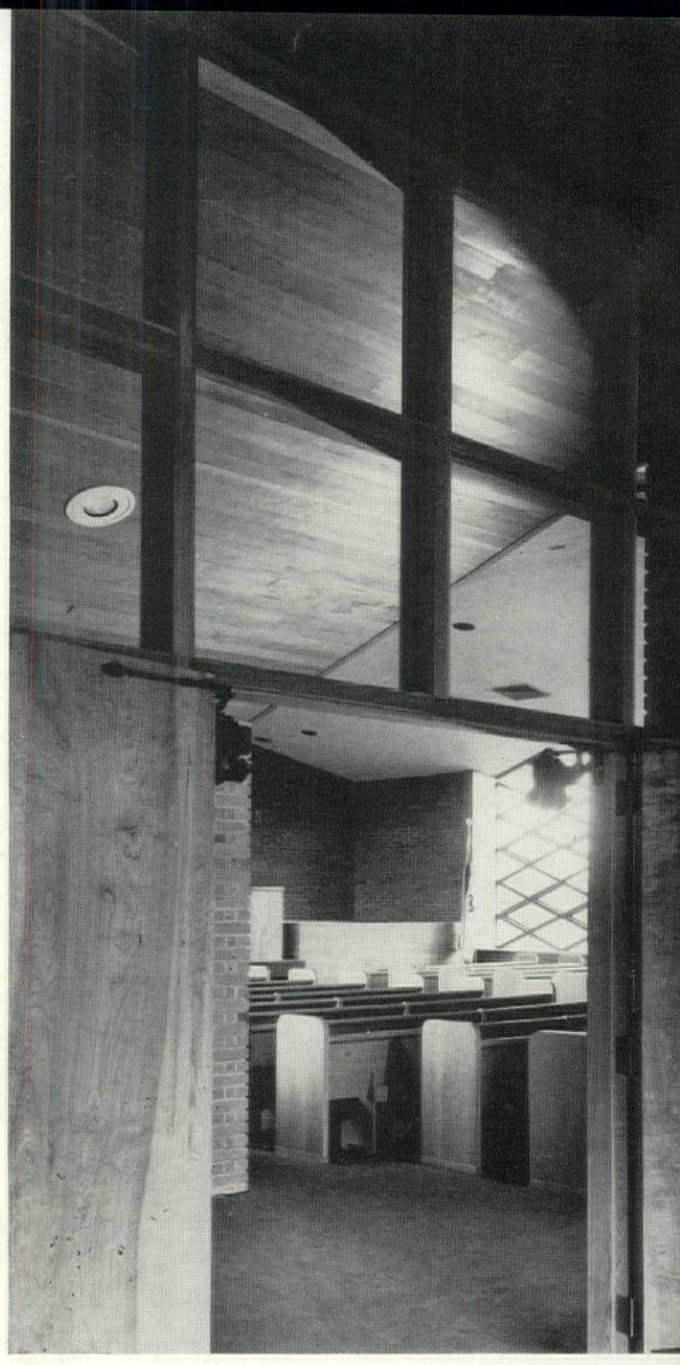
Window of diamonds *breaks roof line with three peaks, enriches the exterior as well as the interior.*

Prayer room *gains feeling of spaciousness from its gabled ceiling with its cross-modulations over the windows*

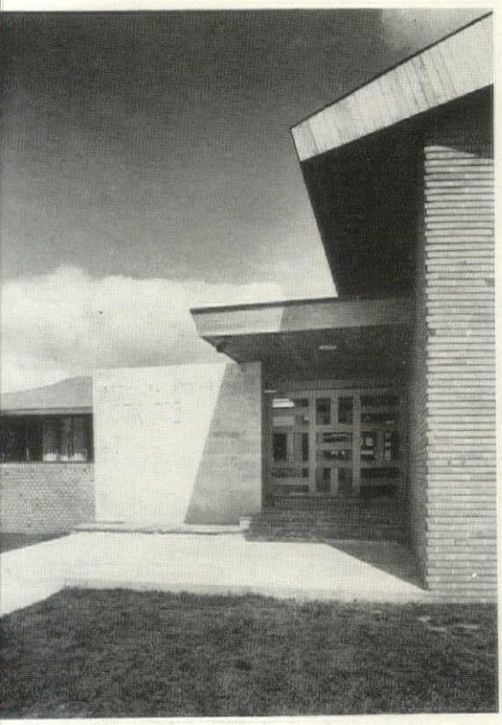


CONGREGATION BETH-EL,
New London, Conn.
PERCIVAL GOODMAN, architect
SOL B. BERNSTEIN, associate architect
JACK A. HALPRIN INC., general contractor

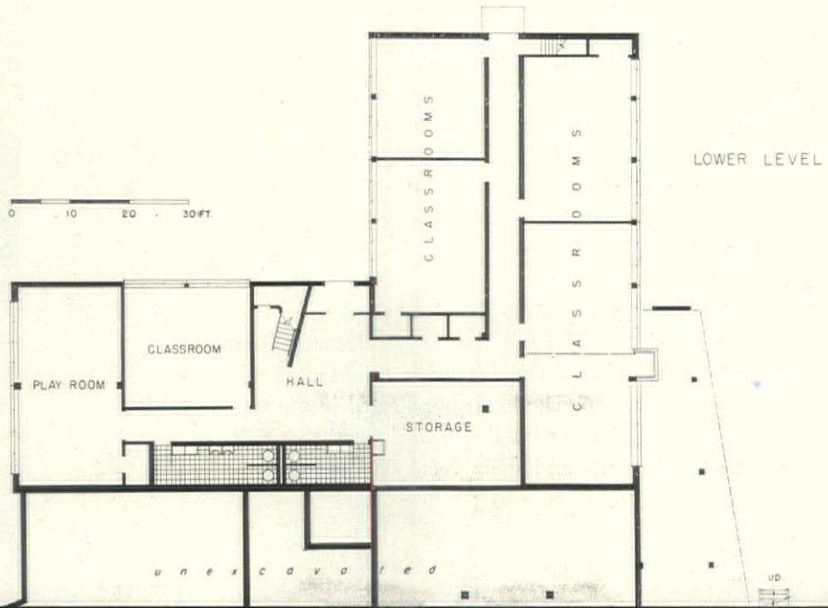




***Entry hall** between lobby and prayer room: note decorative use of varied materials.*



***Approach to main entry:** note sense of shelter conveyed by building's generous eaves.*



Reception room *uses big windows between post-and-beam framing to invite new patients*

TWO SMALL DENTAL OFFICES

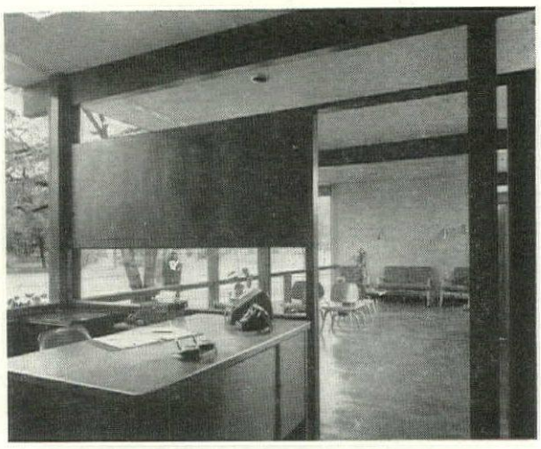
1. Contemporary design provides ethical advertising and minimum maintenance, helps kill some of the pain of visiting the dentist

This new building has more than doubled the practice of the two dentist brothers who occupy it. They attribute this to the well-situated site and to the stimulating design and use of materials—all of which have made this building an effective piece of ethical advertising.

Previously the doctors had rented "pigeonhole offices" in a downtown building—"cramped, poorly lit, no parking, no lawn, no trees, no personal delight in environment to share with patients."

The new site is in a transitional zone between residential and commercial areas, and is big enough to permit future expansion and accommodate off-street parking. Moreover, it bears several deciduous trees which are almost oddities in the pine-tree state of Oregon and which the architects treated with due respect: "Stones and trees possess qualities not found in glass, cement, plaster and plastic."

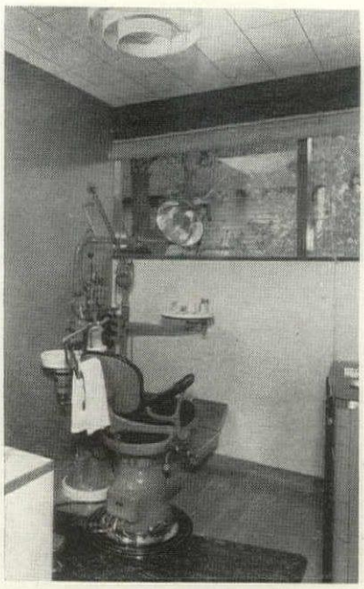
Design of the building sprang from the owner's desire for a minimum of maintenance and "an optimum of pleasure from their daily use of the building." The former is reflected in the operating costs shown on p. 126. The latter is reflected in the way this building contrasts strikingly with the typical dentist's office. Example: "Where the patients and their vocal children usually



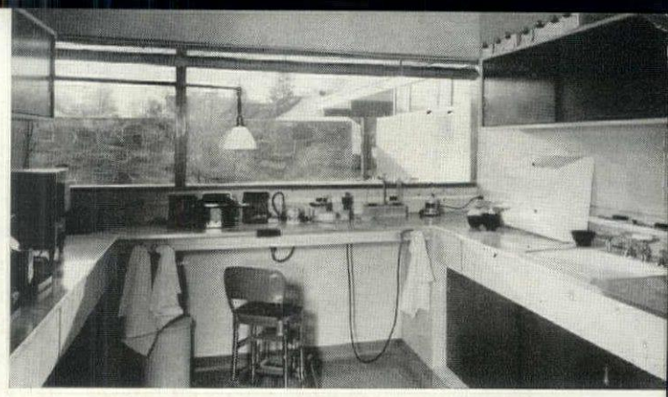
Reception desk *adjoins office area, permits attendance by dual-duty staff assistant.*

→

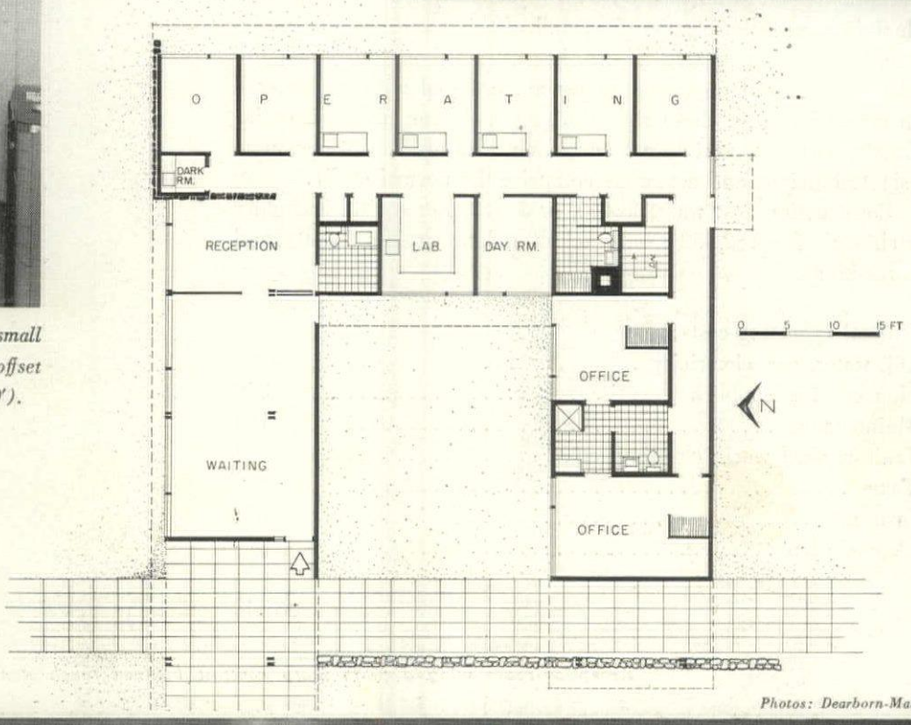
Projecting hood *shelters entry walk and dignified sign bearing doctors' names. Beyond is courtyard wall.*



Operating-room *windows are small and high for privacy, wide to offset room's small dimensions (9' x 10').*



Laboratory, *overlooking court, has efficient U-shaped counter.*



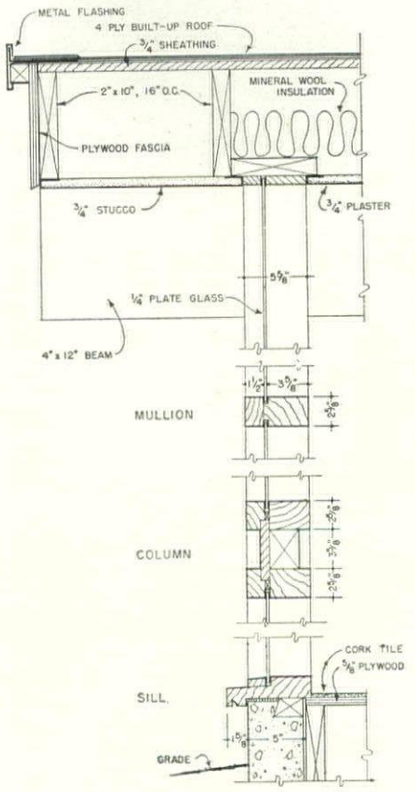
STEPHAN DENTAL OFFICES, Spokane, Wash.
J. LISTER HOLMES, McCLURE.
ADKISON & MacDONALD, architects
CENTRAL CONSTRUCTION CO., contractor

Photos: Dearborn-Massar

overflow from a pinched office into an adjoining corridor, this new building provides a garden court for such explosive situations. The garden court, shielded from the street by a stone wall and equipped with sandbox, seedlings, swing and lawn, is a pleasant place to sit out a swollen jaw for kiddo and parent alike." Other noteworthy departures from standard dental-office design: The reception room is large (16′ x 26′) yet easily controlled by one dual-duty receptionist; the glass wall of this room, which permits people to see in as well as out, has attracted new patients; the pleasant, efficient operating rooms are credited with an increase in repeat business; the design also gets credit for making it easier for the doctors to maintain a permanent staff of efficient personnel (six technicians and assistants comprise the normal staff).

Construction cost was $38,440, or $11.40 per sq. ft., including architect's fee ($2,850) but excluding landscaping ($850) and furnishings.

Annual operating costs:	
Oil, water, gas, electricity	$700
Houskeeping supplies	350
Maintenance	181
Janitor, yard work, cleaning, etc.	771
Taxes	1,275
Insurance	363
Depreciation	2,800
	$6,440



***Reception-room wing** displays sharp contrast between rough stonework and crisp detailing of wood frame*

Broad-brimmed roof *protects clinic windows from hot Oklahoma sun*

Photos: Julius Shulman

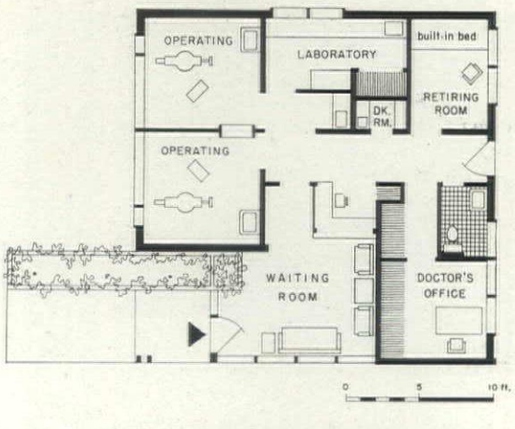
2. Office for one-man dental practice is compactly planned for a 35′ lot

CARLSON DENTAL CLINIC, Elk City, Okla.
CAUDILL, ROWLETT, SCOTT & ASSOCIATES, architects
DOYLE NEECE, general contractor

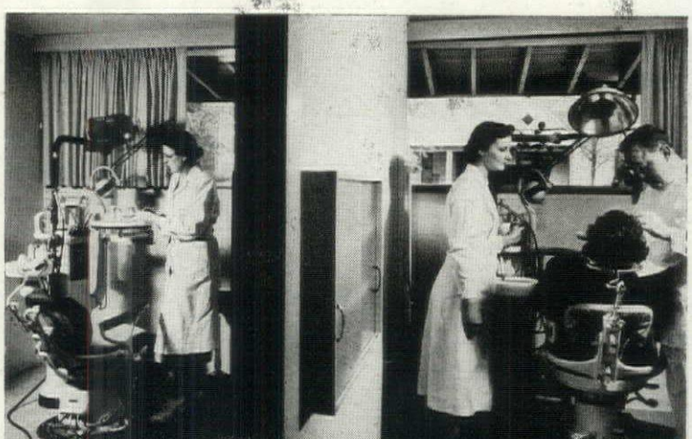
This is about as compact a dental office as any doctor could want. Within its 900 sq. ft. are packed all the facilities a busy dentist could hope for: waiting room, office laboratory, two operating rooms, darkroom, lavatory, and a "retiring room" for patients recovering from anesthesia. Yet, these facilities are so well arranged that the office can easily be managed by a doctor and a single assistant. The secret: within a plan that is almost square (29′ x 31′) the reception desk is centrally located so that the receptionist-assistant is within a few steps of every room. The absence of doors in many of the rooms and the two-way utility cabinet between the operating rooms further simplify circulation and help offset the small dimensions of the building.

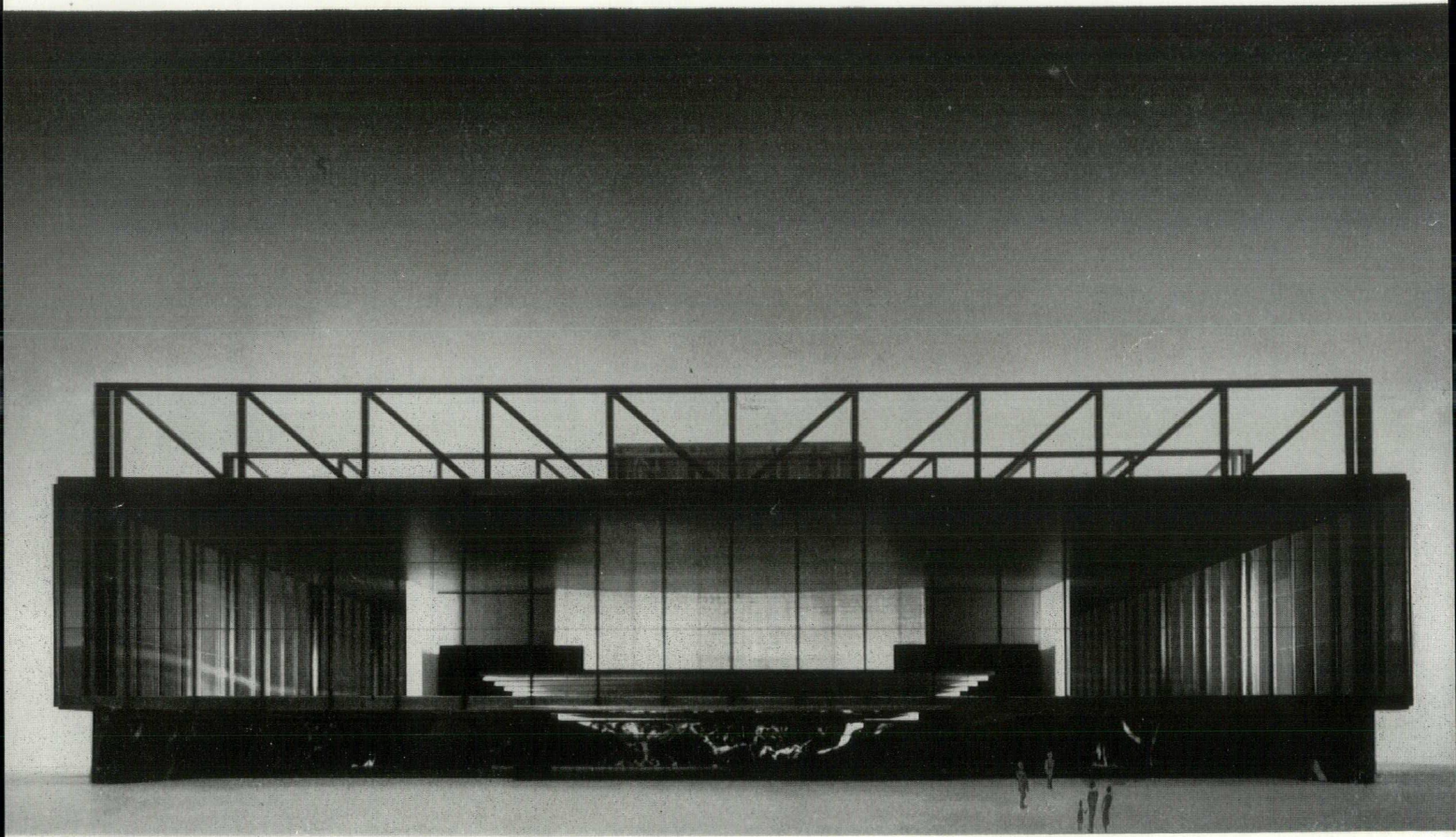
Since the office is in a residential neighborhood, it was finished to look like a house. Its 2 x 4 stud walls are brick veneered and its low-pitched roof is built up. Cost was $11,000, or about $11.50 per sq. ft. including architect's fee ($620) but excluding land, landscaping and furnishings.

Reception desk *is hub of compact floor plan*



Operating rooms *are side by side for easy use by one doctor*





Background: *Several months ago the City Council of Mannheim invited ten architects to submit projects for a new National Theater for the bombed-out center of this West German town. Among those invited were Professors Rudolf Schwarz (of church fame), Fritz Scharoun, and Ludwig Mies van der Rohe, the only US contestant.*

Most of the submissions showed a building consisting of several clearly articulated elements. Two of these elements —a large, 1,300-seat theater and a smaller one for 500— were easily recognizable by the now-familiar pie shapes. The remaining elements—foyers, dressing rooms, etc.—were generally used to link the auditorium forms.

Sole exception to this rule was this project submitted by Mies van der Rohe.

MIES VAN DER ROHE'S THEATER FOR MANNHEIM

A "Universal Space" to set form and function free

"I came to the conclusion," says Mies van der Rohe, "that the best way to enclose this complicated theater organism was to put it into a huge, column-free hall of steel and colored glass."

This is a deceptively innocent statement: it can be understood only as a restatement of the basic Mies credo that the "universal building" is more practical (as well as better looking) than the "special-purpose building."

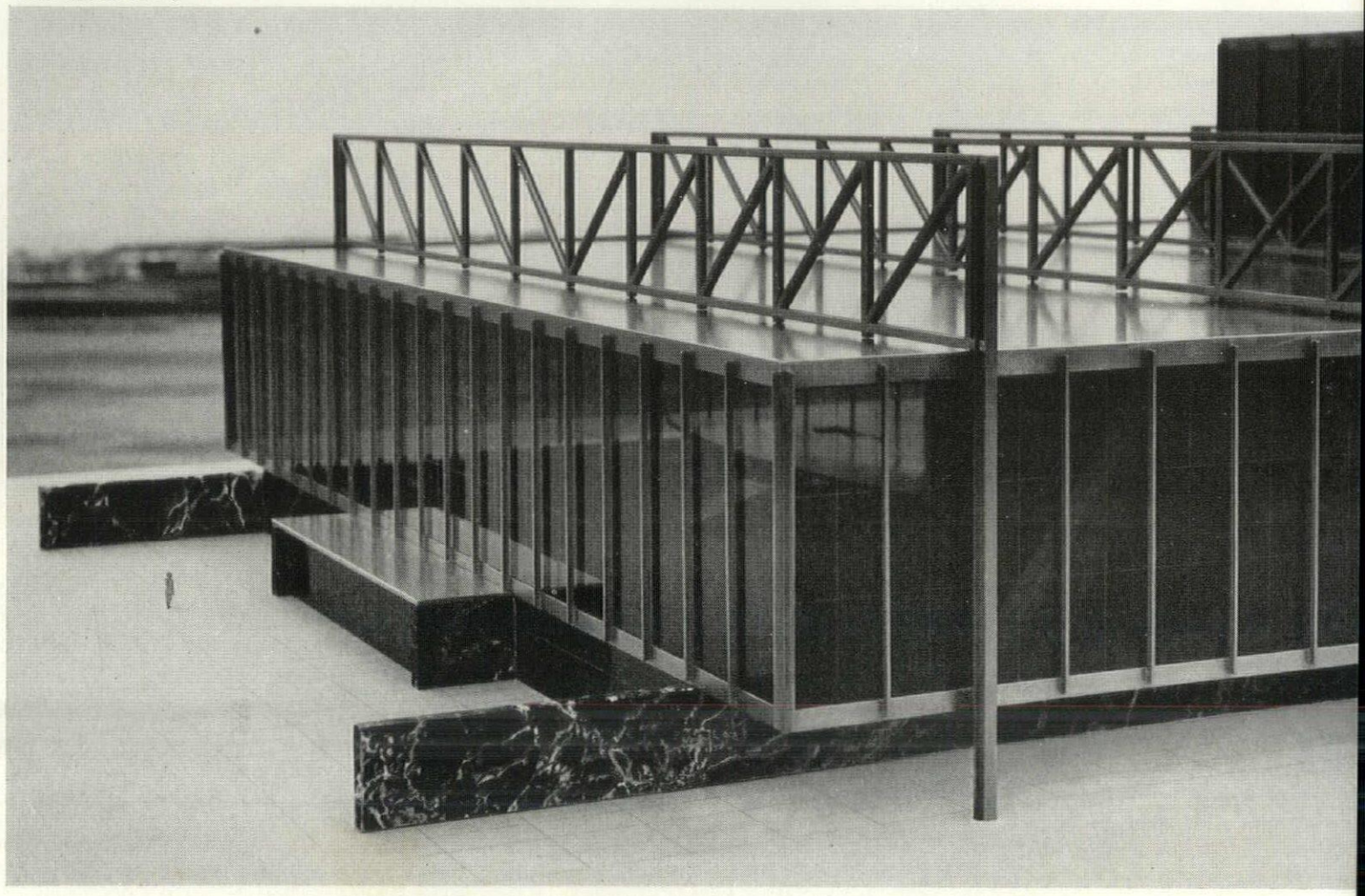
That, of course, is quite a challenge to the accepted idea that form should follow function (e.g. that theater acoustics, etc. call for a pie-shaped building). Mies' notion is quite different: instead of fitting the building skin to the building function as a glove fits a hand, he would create a vast and simple space—something like a big airplane hangar—and then place all his functional elements into that protected space. *Rather than make form follow function, he tries to set both form and function free:* form becomes free to use a simple, economical structure, and function becomes free to adjust itself with time, or even to change completely if necessary.

Does it make sense?

Like all revolutionary theories, this one still needs a lot of working out. For example, a "universal space" theater must be tailored inside with acoustic and lighting devices. A generation ago, before there were so many sound-building and sound-controlling gadgets, Mies might have found it hard to apply his universal space ideas to the theater. But now many things have changed—including the chest capacity and waist measurement needed by sopranos.

Whether or not this universal space theory will make theaters cheaper as well as handsomer is still hard to assess. Perhaps the savings from building a regular and simple structure (rather than an irregular and complex pie shape) will be offset in the end by more costly sound-control requirements.

Photos: Hedrich-Blessing



Vital statistics: *It is a vast hall about 40' high, 266' wide and 533' long. The hall is enclosed in gray-tinted glass and raised 15' off the ground, its roof suspended from seven gigantic steel frames each consisting of two heavy built-up H-columns joined by a 15' deep parallel truss. These trusses span the 266' width. Continuous steel beams, spanning the 79' dimension between trusses, carry the roof.*

Inside this glass cage Mies has disposed of his two theaters, dressing rooms, foyers, etc., in accordance with the detailed program handed to him. The floor of the main hall rests on a more conventional system of bearing walls and columns. (The lower floor does not require large, uninterrupted space, contains only foyers and services.)

This project is little more than a sketch at present. (It is an "educated sketch" because Mies has been thinking about theaters for many years.) Still, it offers no precise solutions for the knotty problems of acoustics, lighting, heating and sun protection. Presumably, curtains would be expected to keep out daylight and city lights at night; suspended baffles would be designed to control sound; galleries would be hung from the roof structure to house spotlights for the stage. *(For plans, turn the page.)*

One thing, however, is certain: there is a lot of basic, economic sense in the universal space theory because it will keep this theater from becoming obsolete *as a building* for a very long time. For this flexible theater might, conceivably, some day become a very useful supermarket, museum, television studio, apartment house or airplane factory—long after it has ceased to be useful as a theater.

In any event, the building has the kind of simple beauty that admirers of Mies have long found in his work. And beauty, in a theater structure, is no mean economic asset in itself.

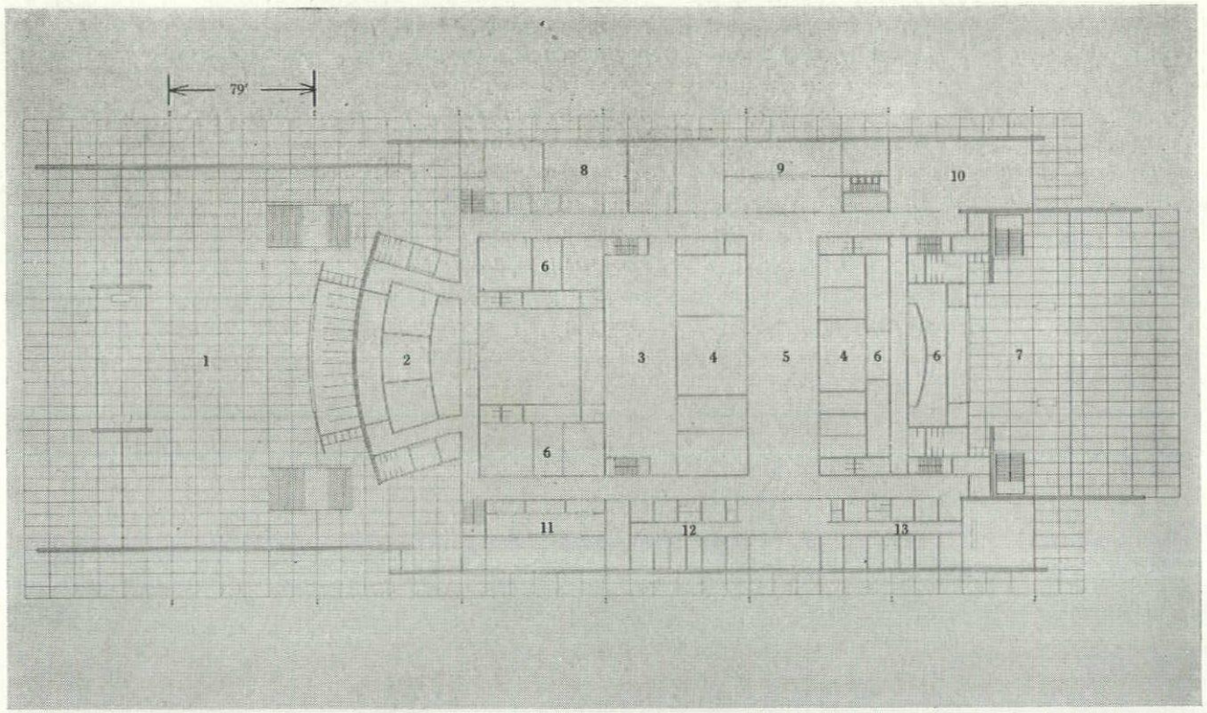
Monumental simplicity

Like many Mies buildings, this project has an air of naïve simplicity that is both its most impressive quality and its most deceptive characteristic:

- It is impressive because a gigantic building that is also unbelievably simple tends to become an impressive monument (viz. the Pyramids, Washington Monument, the Parthenon). And monumentality in a national theater is certainly a legitimate aim.
- It is deceptive because this is not the simplicity of any architectural "Grandma Moses." It is the simplicity that is the reward of long, complicated, hard work.

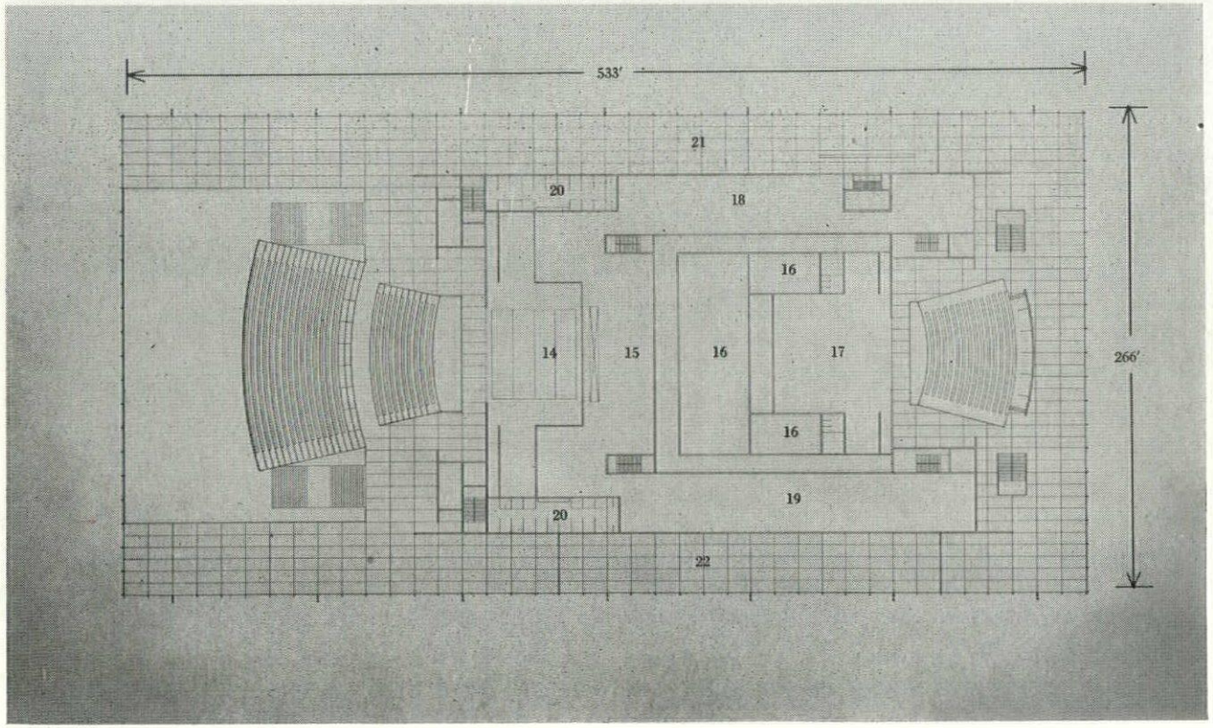
At present there are no further plans for Mies' theater. It has caused a great stir in Western Germany; it remains to be seen whether Mannheim's city fathers will build this universal space—or will take the easier way of building one of the other, handsome, but more commonplace, submissions.

Mies' project of 1953 recalls the famous 1851 Crystal Palace in London. It, too, was a disarmingly simple monument of great dimensions. And it was also a large, neutral and flexible space that served well many different purposes of display and entertainment. The critics were loud against its "emptiness—nothing to it, no architecture." But it was immensely popular and 100 years have proved the people were right. Mannheim is not nearly so radical a departure. It is basically a refined, subtle, knowing handling of the same popular concept. It suggests a Crystal Palace "grown up."



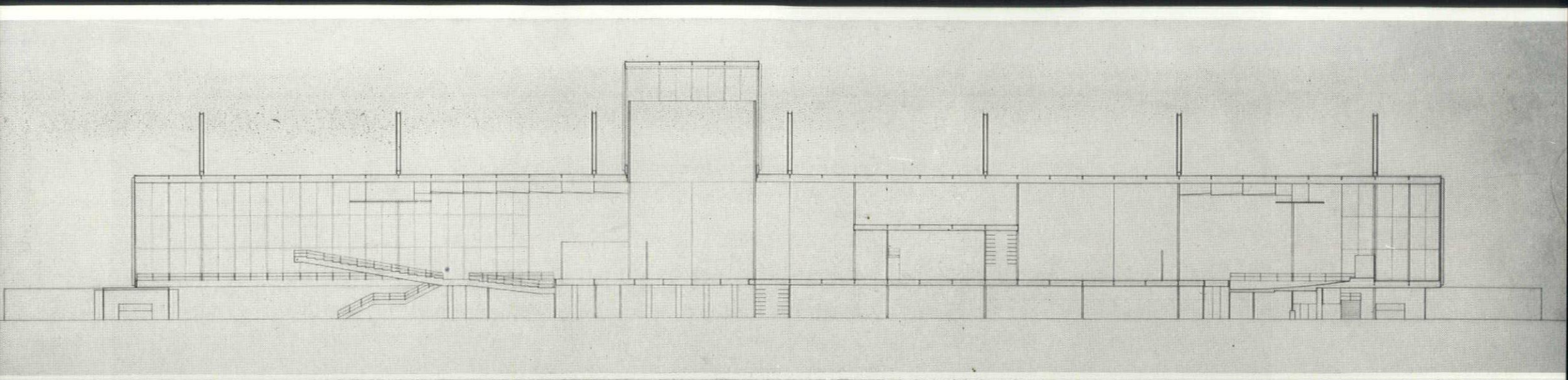
Ground floor

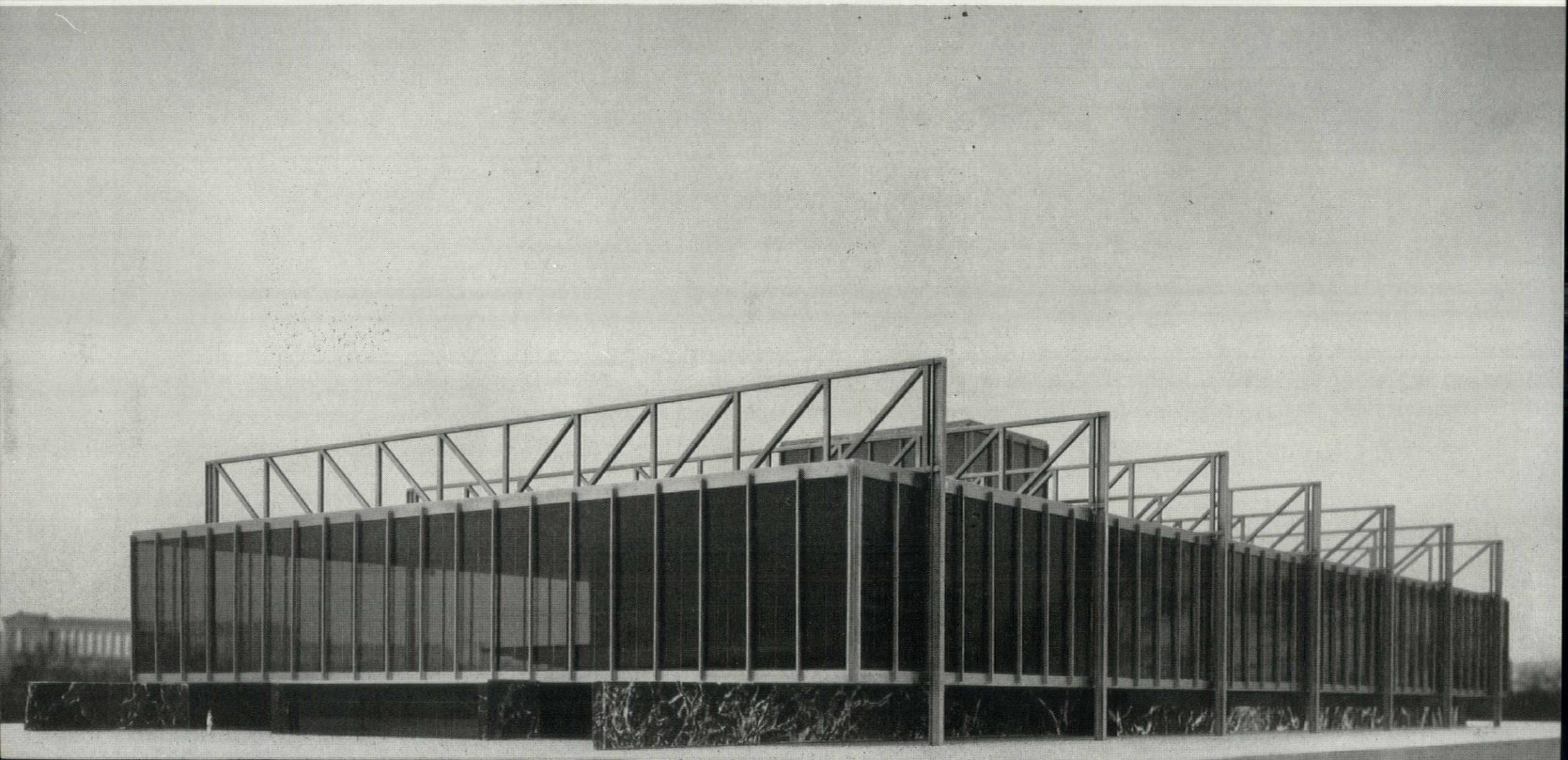
1. Entrance to large auditorium
2. Orchestra rehearsal and instrument storage
3. Costume storage
4. Rehearsal rooms
5. Lounge
6. Dressing rooms for the artists
7. Entrance hall to the small auditorium
8. Costume workshops
9. Cafeteria and kitchen
10. Delivery and garage
11. Business offices
12. Technical and design studios
13. Administration



Top floor

14. Main stage for large auditorium
15. Backstage
16. Paint shops
17. Main stage for small auditorium
18. Scenery workshop
19. Storage
20. Dressing rooms for soloists
21. Theater restaurant
22. Promenade





PHILLIS WHEATLEY SENIOR HIGH SCHOOL
LOCATION: Houston
MacKIE & KAMRATH, architects
WALTER P. MOORE, structural engineer
HOLLIS U. BIBLE, mechanical engineer
STAYTON NUNN, coordinating architect,
Houston Independent School District
FARNSWORTH & CHAMBERS CO., general contractor

DIGNITY FOR

Auditorium corner *makes the most of interplay between brick masses and cast stone lines*

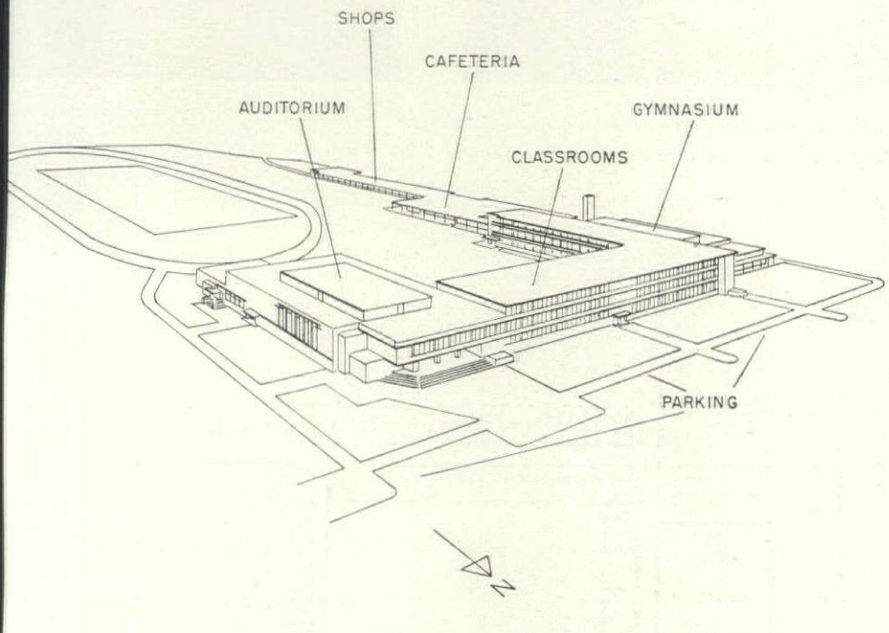
Heavily sheltered *entrance opens to exhibit hall-lobby*

ADOLESCENTS

Mass, texture and line give an economical high school the luxury of solid character

"You Americans are charmed by little children but you don't like adolescents." That was the capsule comment of Antony Part, building director of the British Ministry of Education, after a year's study of US schools.

On schoolhouse evidence Part seems to be right: in sharp contrast to the sympathy and sensitivity that characterize so much new college and elementary school building, too many high schools seem designed for dull, unaspiring creatures with a penchant for destruction, complicated utilitarian needs, and not much else. High-school Gothic and Georgian have pretty much given way to an architectural vacuum.



This school for 1,500 Negro students hints a reverse swing of the pendulum. Architects Karl Kamrath and F. J. MacKie Jr. have given their building an exuberant architectural character and a decorativeness thoroughly consistent with itself, inside and out.

The effect is somewhat anachronistic—reminiscent of Dutch Architect W. M. Dudok's work of the 1920's, which in turn was derived from Wright. This of course is one of the paradoxical ways architecture moves forward: every now and again someone reaches into the past and throws a light onto some lack felt in the present. It is interesting to be reminded of the solid, deliberate character of the earlier kind of interplay between mass and line.

It can be argued whether this character is suitable for a school and whether it is valid to employ dramatic exterior masses that have an anticlimactic meaning so far as interior plan is concerned. But this is sure: Here is a high school that does not wear its economical $12.85 per sq. ft. cost on its sleeve. It says instead: "Somebody thinks I am significant."

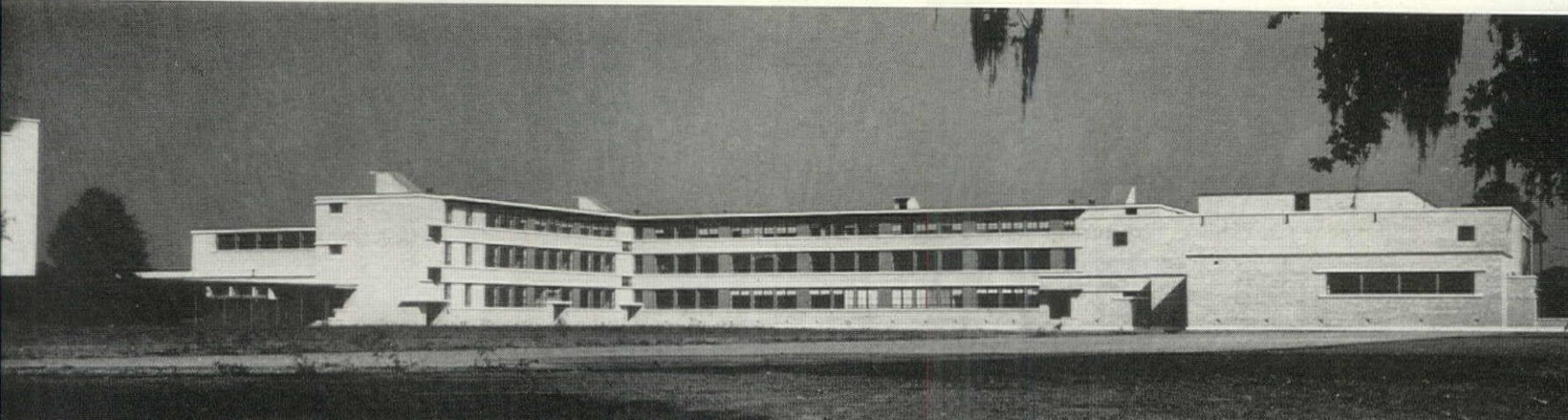
The three-story plan marks a salutary retreat from the notion that a one-story school is good no matter

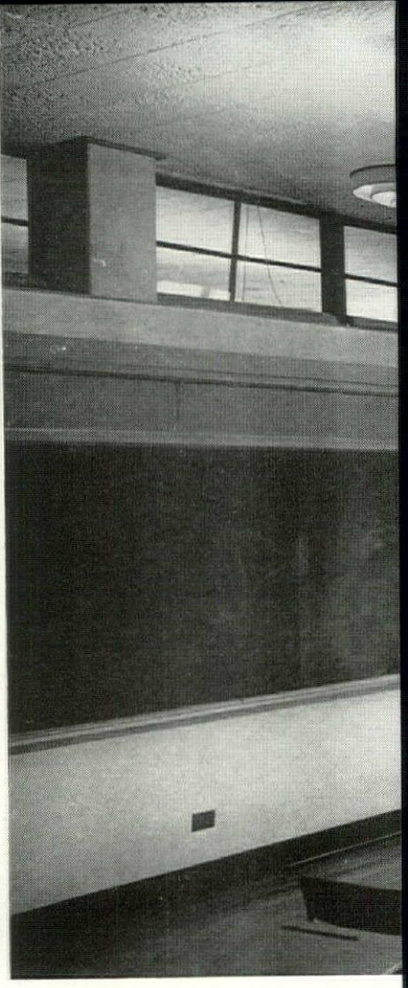
Cost data:

Total*	$1,823,094.00
Total building cost per classroom	$37,204.00
Per pupil	$1,215.00
Per sq. ft.	$12.85

*Excluding 5% architectural fee

Rear of school *flanks sports field. Shop wing can be widened and classroom wing extended in spite of tight site*





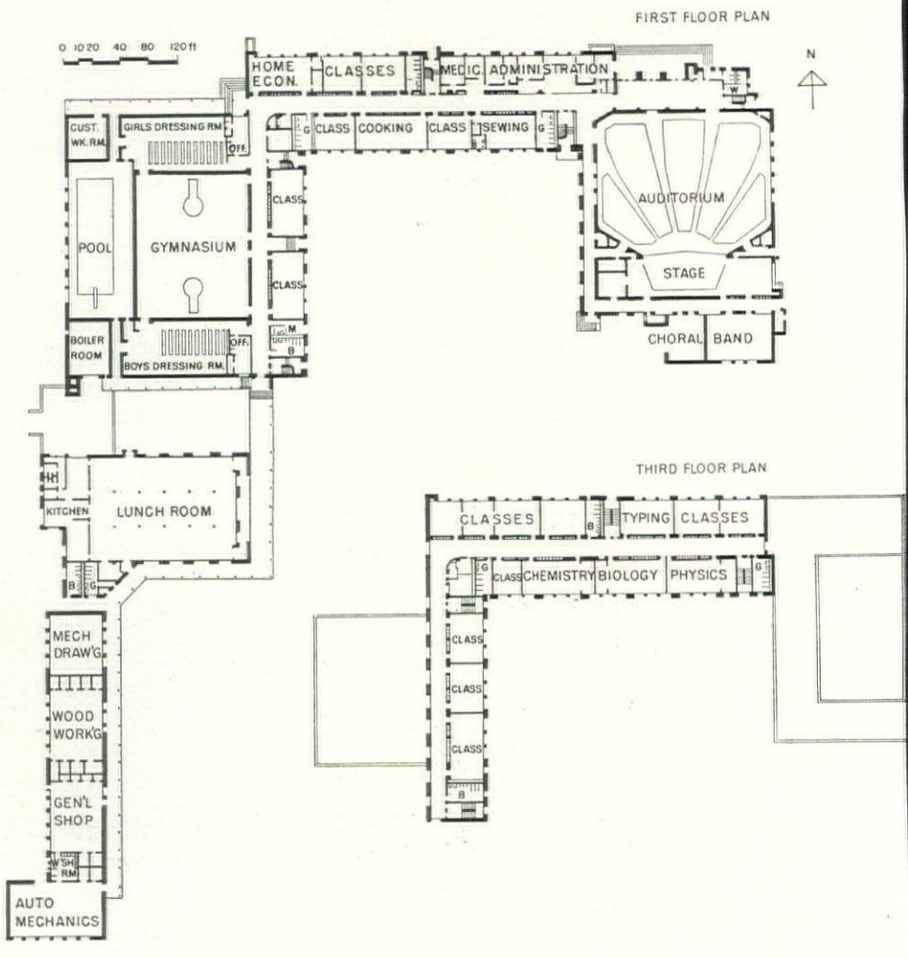
Lobby *makes decorative use of oak trim, warmly colored handmade brick, glass block walls, and gives key to decorative treatment throughout.*

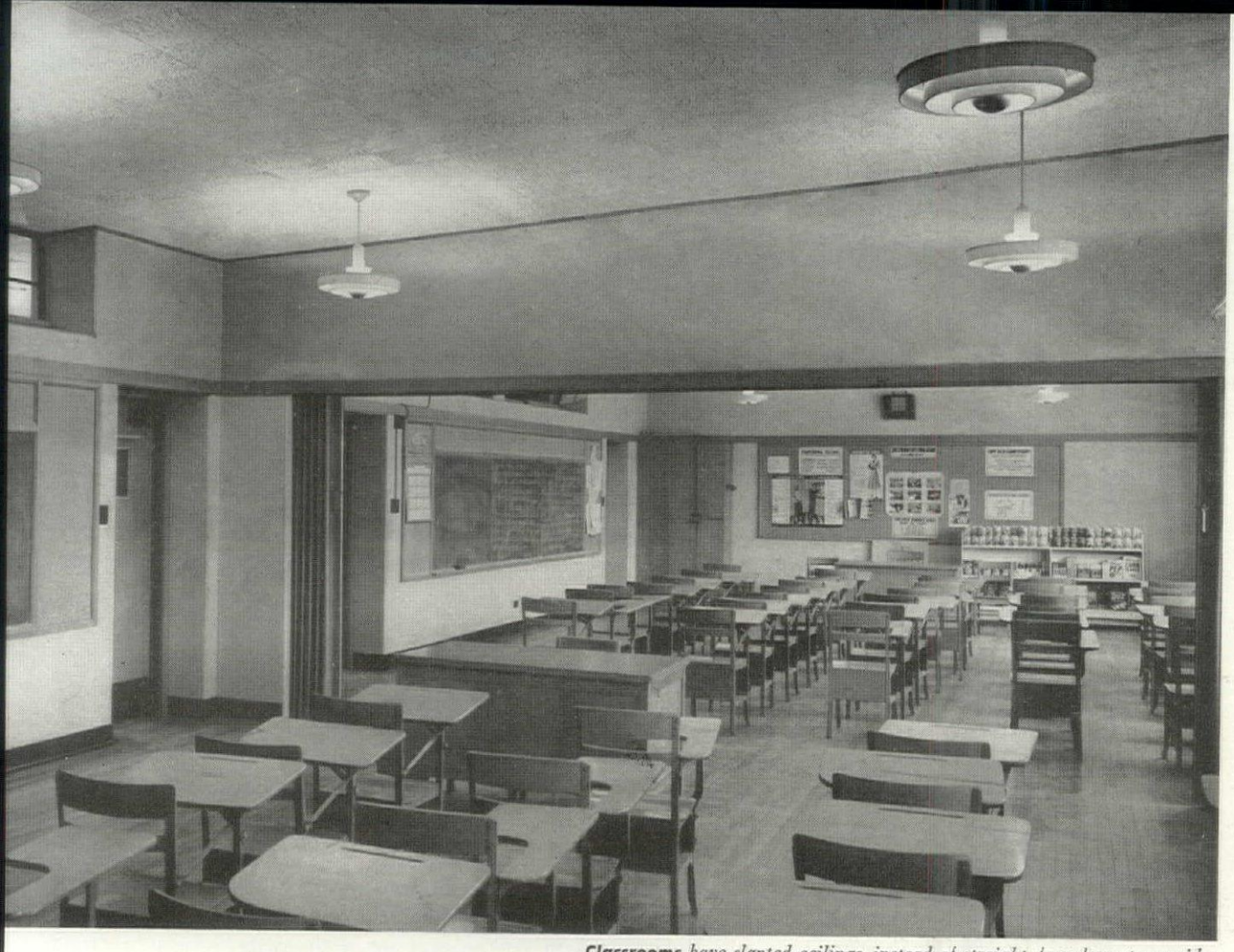
how far it sprawls. However, for this flat site with its one entrance level, the architects would have preferred a two-story classroom wing to the three stories imposed by limited acreage, sports fields and provision for expansion.

Construction cost was about 20% under other Houston schools built in the same period; savings of $500,000 under the $2,300,000 budgeted gave Houston an extra elementary school. The architects exhaustively studied local school construction, came up with 24 suggestions for cost-cutting, half of which were accepted.

The biggest saving was elimination of an auditorium balcony in favor of a broad, shallow assembly room which is excellent for live programs and unusually intimate for a 1,500-seat auditorium. Ceiling lighting and three-dimensional designs of oak molding take design advantage of the room's changing ceiling level (two parallel trusses supporting lightweight steel members). The ceiling design and undulating, asbestos sprayed back wall are acoustically excellent.

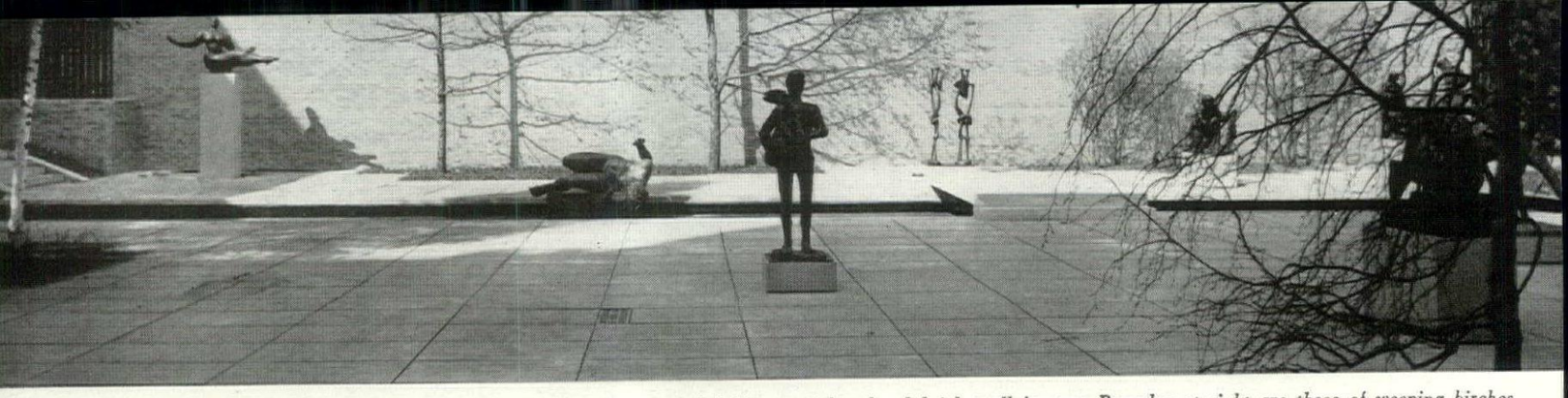
Other important savings were achieved by omitting all exterior downspouts in favor of a few interior leaders; omitting roof parapet and flashing; sloping classroom ceilings to avoid a straight 18" drop-down to corridor height; eliminating extra subfloors in the gymnasium by setting sleepers close together in mastic on the slab. The biggest proposed saving among those not accepted was slab on sill in place of a freestanding ground-floor slab giving immediate access to all pipes. Structure is reinforced concrete except for steel trusses and bar joists over gymnasium, cafeteria and auditorium. Exterior walls are brick with tile backing and cast stone trim.





Classrooms *have slanted ceilings, instead of straight drop-down to corridor height, for economy and better lighting and acoustics.*

Auditorium *omits balcony, is broad and shallow. Architects emphasized changing ceiling levels and undulating, acoustic treated back wall. Trim is oak.*



View from Museum's ground-floor galleries: *sculpture, large pool, bridge at right, glazed brick wall in rear. Branches at right are those of weeping birches*

MANY city dwellers live in solitary confinement because they have no piazzas, *piazettas*, squares or boulevards in which to meet other city dwellers. People who would never dream of buying a house without a living room think nothing of supporting cities that have no outdoor spaces in which neighbors can meet.

All this is by way of introducing this outdoor living room for Manhattan's Museum of Modern Art. Designed by Philip C. Johnson and Landscape Consultant James Fanning, this particular outdoor living room is primarily a setting for the Museum's sculpture collection. Perhaps it would be more accurate to call it an outdoor clubroom (you have to pay admission to get in) but the principles on which it is based make sense for more public centers as well.

Briefly, these principles are very similar to the principles that dictate *any* good modern living arrangement. First, you want a sense of enclosure. Second, you want a major view (indoor living rooms may have one wall removed and replaced by glass—outdoor living rooms have the roof removed and replaced by sky). And, third, you want to arrange the "furniture" (terraces, benches, trees, pools, sculpture, etc.) to get the most out of the space.

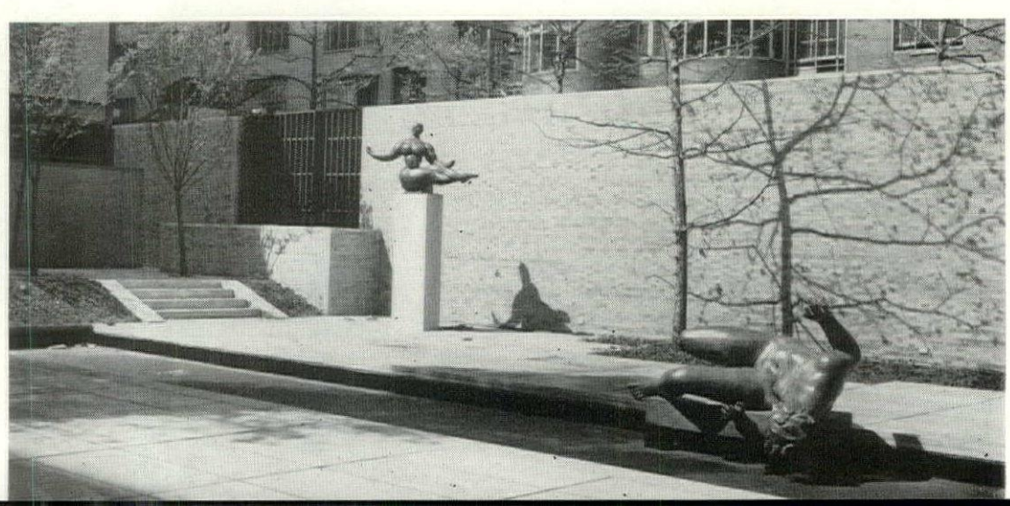
This 110′ x 200′, marble-floored living room is really four rooms that flow together. They are different in size because they serve as backdrops for sculpture of different scale. They are separated by two pools and by groups of trees. The entire space is walled in.

The designers tried to control circulation so as to invite people really to look at the sculpture as they pass through the outdoor rooms and past the sculpture in a slow procession. Short flights of steps and bridges were placed to route people as effectively as possible. Changes in level make the space seem much larger and *raise the imaginary ceiling of this outdoor living room to 14′.*

This "imaginary ceiling" is established by the height of first-floor ceilings all around the garden, and by the similar height of the brick wall. That height was fixed at 12′—too low for comfort in a huge room. As a result of the drop in floor level, the imaginary ceiling height is raised by 2′, produces a wonderful feeling of enclosure as well as spaciousness.

Like many city-center schemes that rely upon stone floors for a sense of monumentality (and lower maintenance costs), this one has not as yet overcome the glare problem. Although the islands of trees do provide shade and will provide more of it as the trees grow larger, the beautiful Vermont marble paving reflects a great deal of sun during bright summer days.

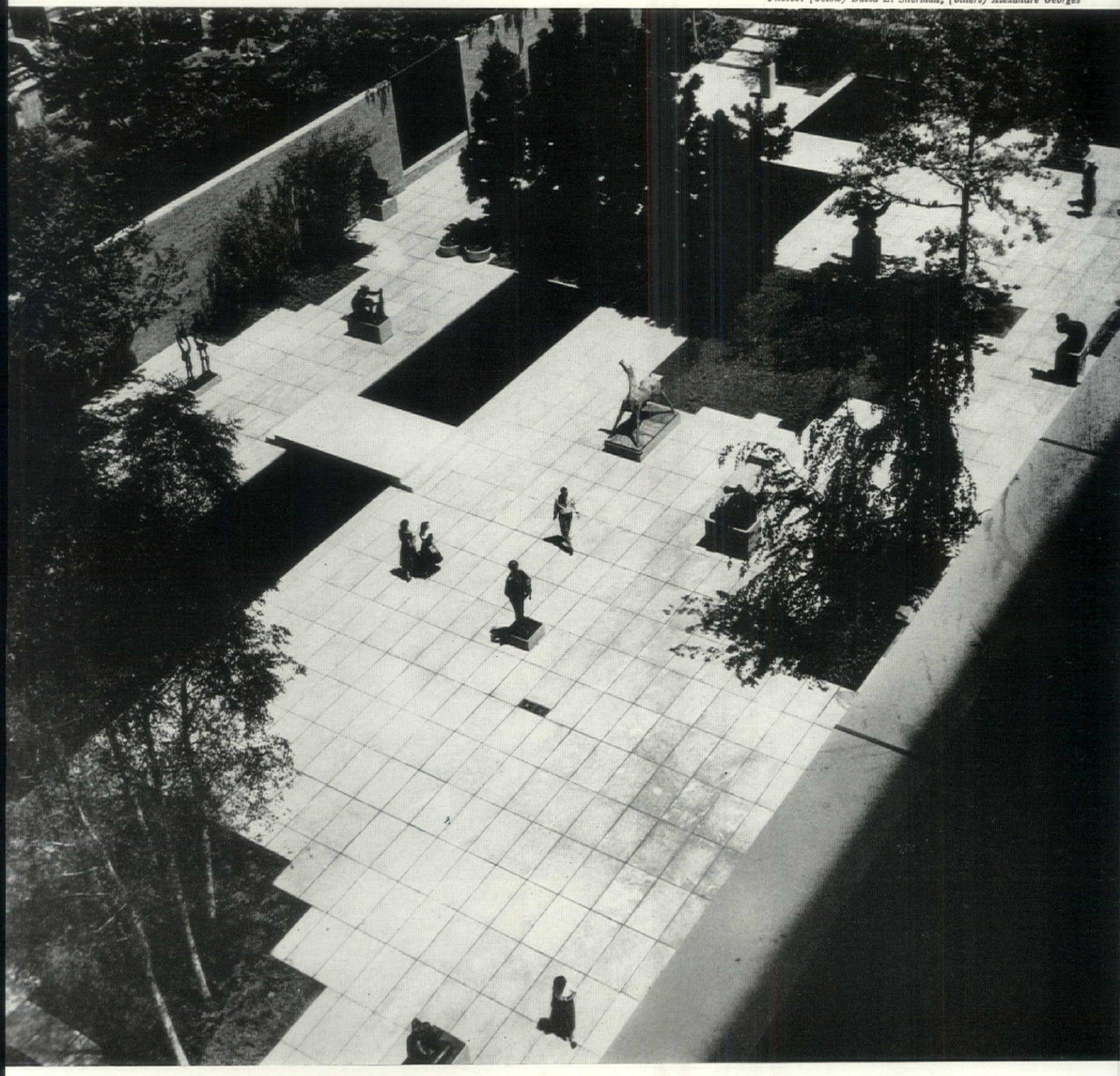
When completed, this sculpture garden will have a number of stone-slab benches to break up some of the larger spaces. It will also have a dramatic lighting system designed by Richard Kelly, who buried floodlights at the foot of trees to shine up into the foliage, and at the foot of the brick wall along the street to bathe that wall in light. In addition, spots attached to adjacent buildings will shine down on the restaurant-terrace that will complete the west end of the outdoor living room.



View from center of garden: *principal pool with Maillol figure ("The River") in foreground, Lachaise in rear. Steps lead up to terrace outside new Whitney museum.*

MUSEUM GARDEN is an outdoor living room for sculpture display

Photos: (below) David E. Sherman; (others) Alexandre Georges

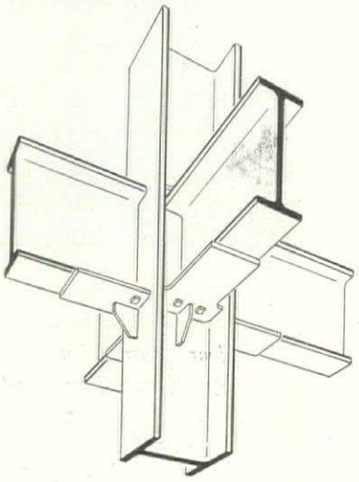


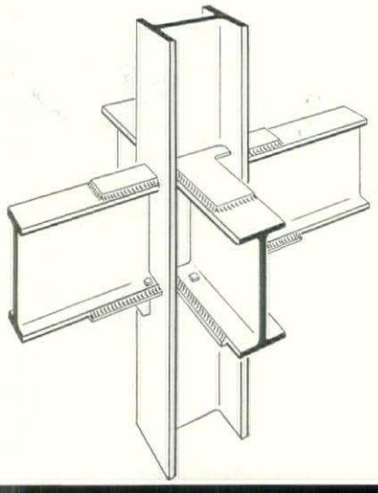
PHILIP C. JOHNSON, director of architecture, Museum of Modern Art, design supervisor
JAMES FANNING, landscape architect
GEORGE HOPKINSON, architect
LANDIS GORES, associate designer
MURPHY-BRINKWORTH, general contractors
WOODCOCK NURSERY, landscape contractor

View from Museum roof: *all of garden except raised terraces. Note division into four "rooms" that are separated by pools and groups of trees and shrubs.*

BUILDING ENGINEERING

1. **Welded framing for low cost skyscrapers**
2. **Precast arches for 100′ spans**
3. **Flexible store lighting for 68c per sq. ft.**





Corrugated floor panels *combine both formwork and reinforcing for the floor slab of this 20-story Fidelity Union Building in Dallas. Panels span 10′, are stud-welded to flanges of steel beams.*

Welding sequence *for this rigid-frame structure: 1) shear plates and lower wind connection plates are shop-welded to columns; 2) after beam is set and bolted, top wind connection plate is butt-welded to column; 3) after cooling, fillet weld is run between beam and connection plate.*

1.

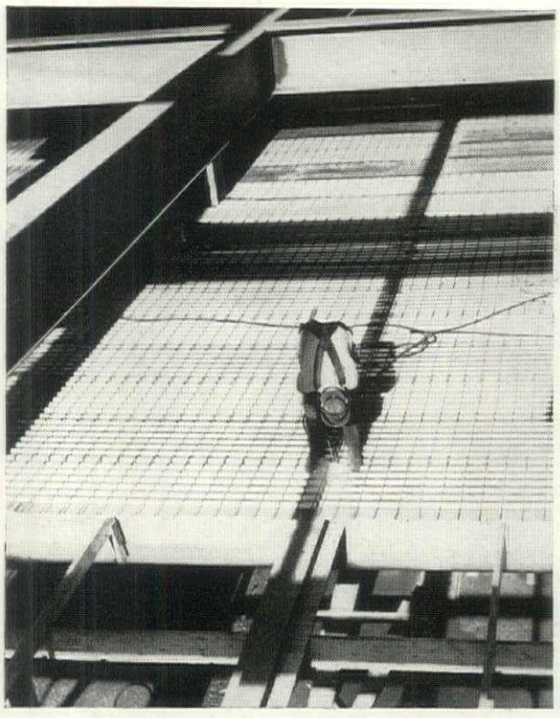
2.

Ed Hall

3.

Rhoton Gilbert

Rigid-frame skyscrapers *in Dallas by Architect Hedrick: 1) 18-story Corrigan Tower; (2) 24-story addition to Adolphus Hotel; (3) 20-story Fidelity Union.*



Galvanized steel forms *are stud-welded to beam flanges. Temporary shoring in foreground supports panels at midspan during casting.*

1. RIGID-FRAME WELDED SKYSCRAPERS

Continuous welded design proves 26½% cheaper than riveting for 20-story office building

Engineers and contractors in Texas prefer to weld rather than to rivet tall steel buildings. Of the 18 buildings over ten stories high begun in Texas since Jan. '51, 12 averaging 19 stories in height have been welded while only six averaging 18 stories have been riveted. The reason: lower costs and easier, quicker erection.

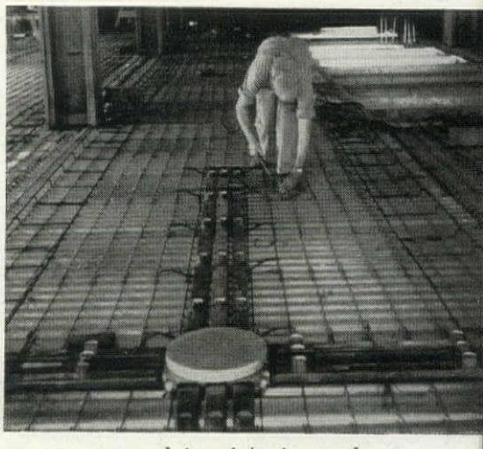
Wyatt C. Hedrick Associates, architects and engineers of Dallas, are "convinced that a saving of 5 to 20% in the cost of a steel frame can be made by welding instead of riveting." Since 1946 they have designed five multistory buildings and savings due to welding increased with each new structure. On Hedrick's latest structure, the 20-story Fidelity Union Building, comparative studies show a 26½% price advantage per ton of steel for a continuous welded design versus conventional riveting; bids came to $251 per ton for a 2,850-ton welded frame (22.8 lbs. per sq. ft.). The welded frame was topped out in 81 working days at a rate of nearly two floors per week. And the floors went in at the same speed, thanks to a lightweight concrete floor system where steel corrugated panels doubled as formwork and reinforcing. Each floor of panels was placed, and negative reinforcing, electrical and mechanical work completed at a speed of two floors a week; concreting followed at the same speed.

No shrinkage distortion was discovered in the steel frames, thanks to careful joint detailing (see diagrams opposite). Beams are connected to columns through flange plates. These plates are first butt-welded to columns and allowed to cool; then the beams are joined to the plates with fillet welds. An average of 8¾ lbs. of weld metal was used for each ton of framing steel. Ease of plumbing made this procedure inviting; continuous inspection made it work.

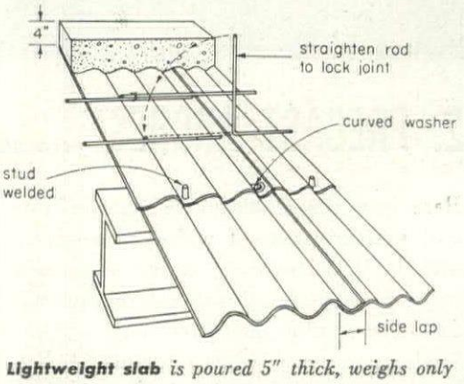
In each 24½′ x 20′ floor bay a single secondary beam spans the long dimension, creating two 10′ half-bays that are bridged by the corrugated floor panels. These panels are made of high-strength galvanized steel (yield stress 80,000 psi), 24 ga., with 2¼″ deep corrugations 4″ o.c. Panels are 32″ wide and 9′-6″ long, cut and bundled for each bay before shipping. Positive reinforcing is supplied by the panel itself, supplemented by ¼″ transverse wires factory welded 6″ o.c. across the corrugations. Ends of the panels are stud-welded to the top flanges of the beams and shored up at midspan while casting the 5″ slab.

A 10′ x 10′ grid of telephone and electrical distribution ducts is embedded in the slab, with outlets 24″ apart along grid lines. These ducts are raised off the corrugated panels in high chairs and negative steel is laid across them as required. Finally the floor is cast with a 5″ slab of 3,000 psi lightweight concrete (90 lbs. per cu. ft.). Weight of the floor panels, including reinforcing, is 1.34 psf and the slab about 40 psf. Cost of the flooring (excluding mechanical and electrical work) is $1.46 per sq. ft.—floor framing, 71¢; floor panel and slab, 75¢.

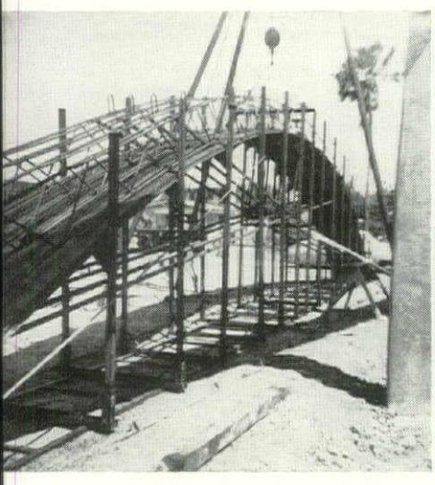
The Fidelity Union Building was designed by Wyatt C. Hedrick Associates, architects and engineers; general contractors, Inge-Hayman Construction Co. Inc.; steel contractor, John F. Beasley Construction Co. The floor system was designed and supplied by Granco Steel Products Co.



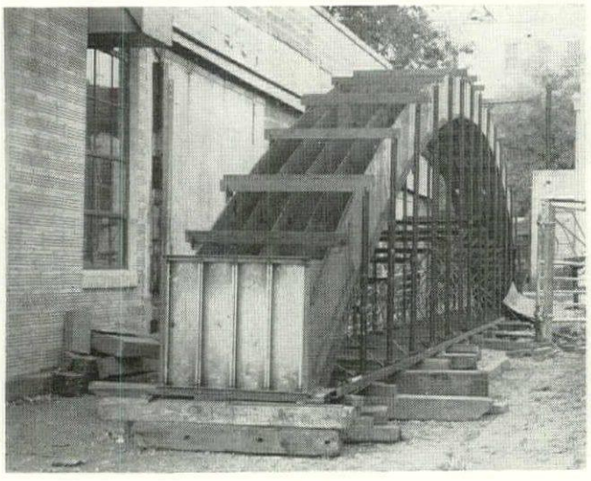
Wiring ducts *are supported in reinforcing steel high chairs to hold them flush with top of slab.*



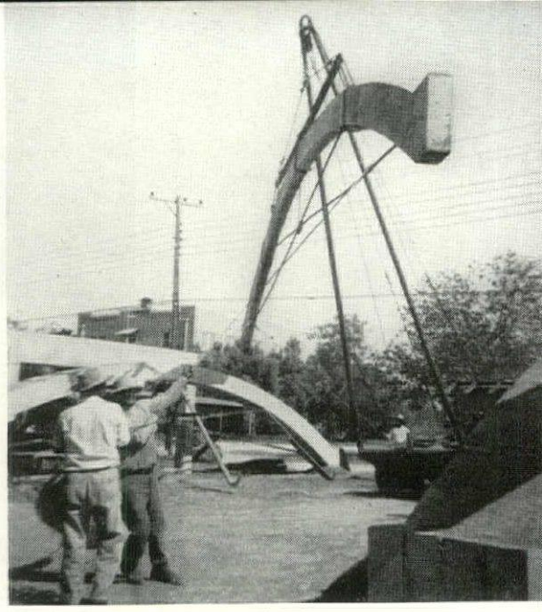
Lightweight slab *is poured 5″ thick, weighs only 40 psf thanks to expanded shale aggregate.*



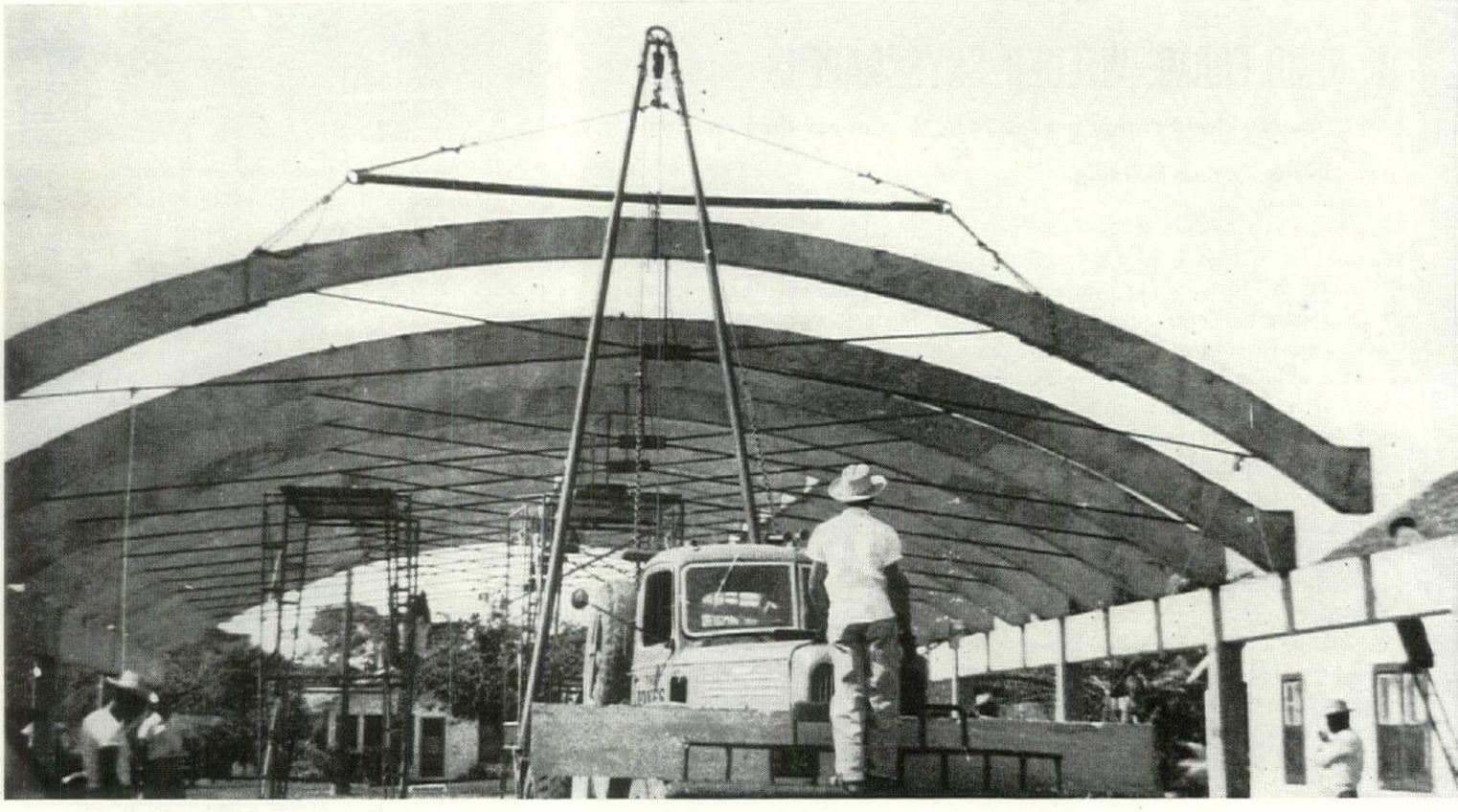
Welded reinforcing *is placed for four 50′ arches to be cast simultaneously.*



Separator plates *and forms are ready for pouring. Equipment makes four arches a day.*



A-frame hoist *raises one arch and three bridging beams every 45 min.*



Two-ton arches *go up quickly with aid of six-man crew to frame warehouse*

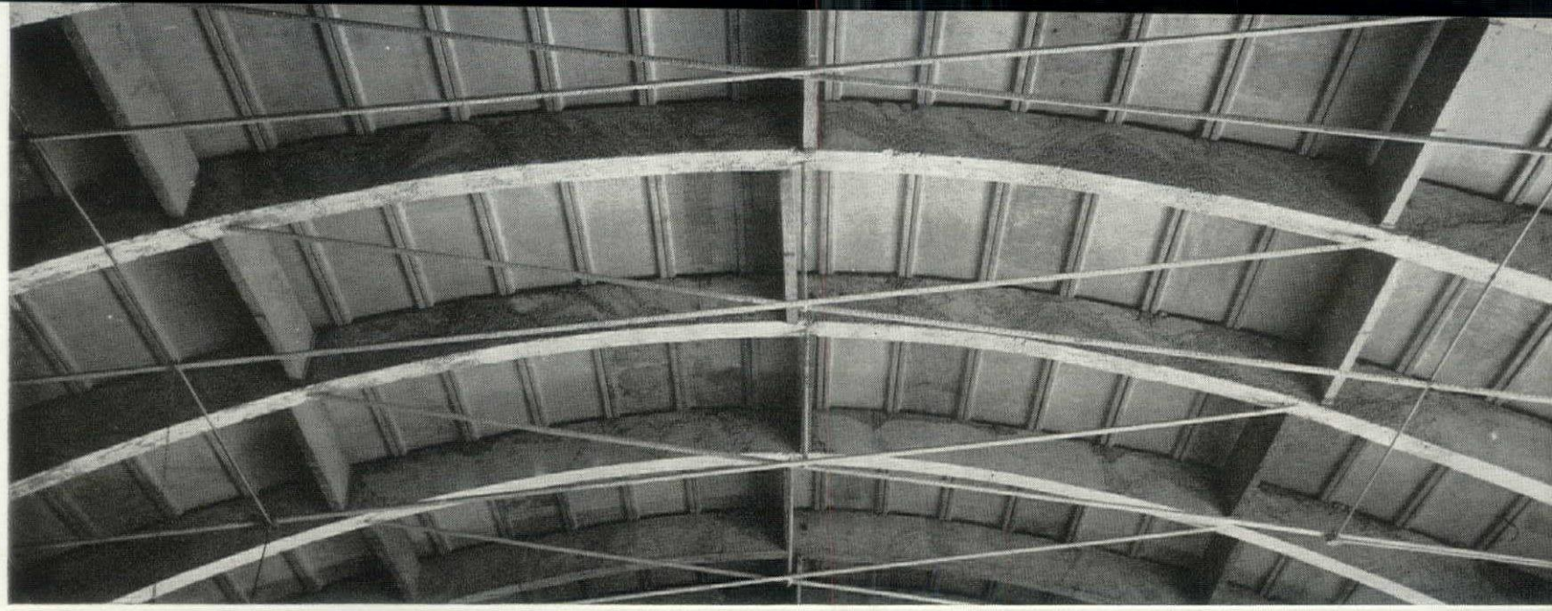
2. PRECAST ARCHES—crossed tie rods permit prefabrication of 50′ concrete arches to frame warehouse for

Here is a simple technique for the low-cost prefabrication of wide-span concrete arches. It is based on the use of crossed tie rods to absorb thrust, cut reinforcing, facilitate erection and direct only vertical loads upon the supports. Already used to build two warehouses in Harlingen, Tex., for $3.16 per sq. ft. (excluding mechanical and electrical work), this system should prove useful for warehouses, factories, supermarkets, schools—any single-story building that requires durable, fireproof roofs spanning 50′ to 100′.

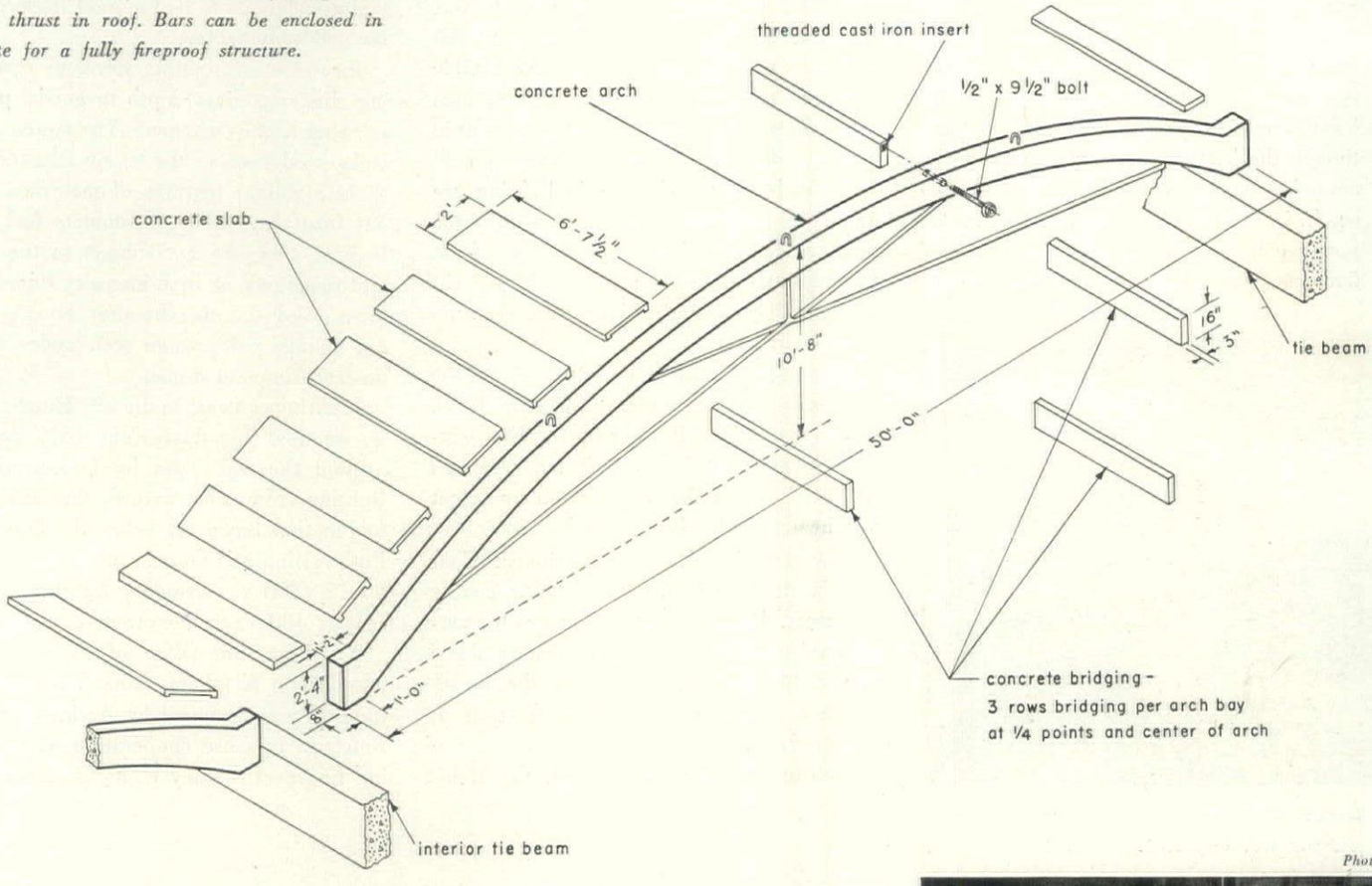
These arches are precast four at a time in steel and aluminum "gang-forms" sturdy enough to be reused indefinitely. Each franchised contractor is furnished formwork for arches and bridging beams plus a jig table at a cost of $3,000 (for 50′ spans). This equipment is supplied in sections small enough to be handled by one man. Construction sequence: 1) 16 ga. sheet steel is positioned to form the underside of four arches, which are cast in an upright position supported on pipe columns; 2) the reinforcing for each arch is welded on the jig table and positioned in the form; 3) the crossed tie rods are attached and adjusted to the proper length; 4) separator and side forms of ⅜″ aluminum plate are positioned and clamped; and 5) the forms are filled with 3,000 psi, high early strength, lightweight concrete weighing 80 lbs. per cu. ft. After 24 hours curing, the arches are stripped of their forms and cured seven days more before erection.

The technique permits rapid construction. In a single 8 hour shift six men can dismantle, clean and oil the forms, place reinforcing, erect each gang-form and pour four arches. Eight men and a hoist operator can raise and secure 10-12 arches (each with three bridging beams) per shift.

In both warehouses the 50′ arches, weighing 4,900 lbs. each, are placed 6′-8″ o.c. upon *in-situ* beams carried on concrete columns 20′ o.c. Adjacent arches are bridged by three precast beams and topped by a



Crossed tie rods *of 1" steel reinforcing bars absorb thrust in roof. Bars can be enclosed in concrete for a fully fireproof structure.*



Photos: Purnell P

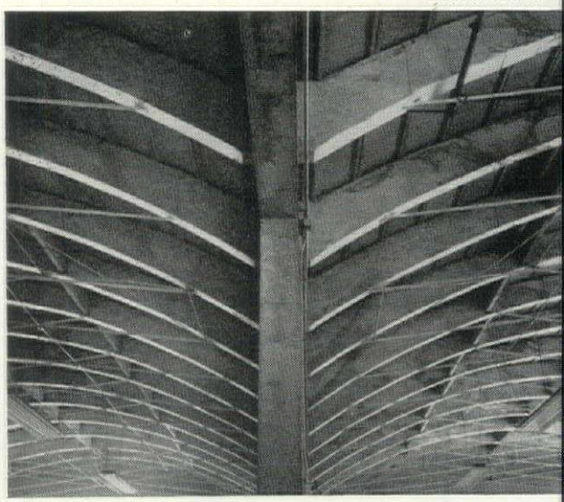
$1.40 per sq. ft.

precast deck of lightweight, insulative concrete planks and standard built-up roofing, resulting in a roof having a "U" factor of 0.52. Bridging beams weigh 150 lbs. each; ribbed roof slabs 6'-7½" long, 2' wide and 1" thick weigh 12 lbs. per sq. ft. to produce a roof structure weighing 28 lbs. per sq. ft. (including arches) for a design loading of 30 psf. These warehouses obtained a semi-fireproof insurance rating of 24¢ with tie rods in concrete.

A 40' test arch, weighing 2,860 tons with 300 lbs. of steel reinforcing and 1" crossed tie rods, was loaded with 10,500 lbs. of lead (260 lbs. per lin. ft.). This produced no measurable deflection at the crown but a spread of 1/16" at the supports, which was overcome by use of steel formwork and by tightening the tie rods before pouring.

Although lack of heavy hoisting equipment is likely to limit spans to 100', the designers believe that arches spanning 100', spaced 20' o.c., should cost no more than the present 50' spans. The 100' arches would weigh 25,000 lbs. as compared with 50' arches weighing 4,900 lbs. and containing 590 lbs. of reinforcing with 1⅛" tie rods.

This novel technique of concrete arch construction was developed by C. Lyman Ellis & Co., architects and engineers, in cooperation with Contractor Larry Hull.

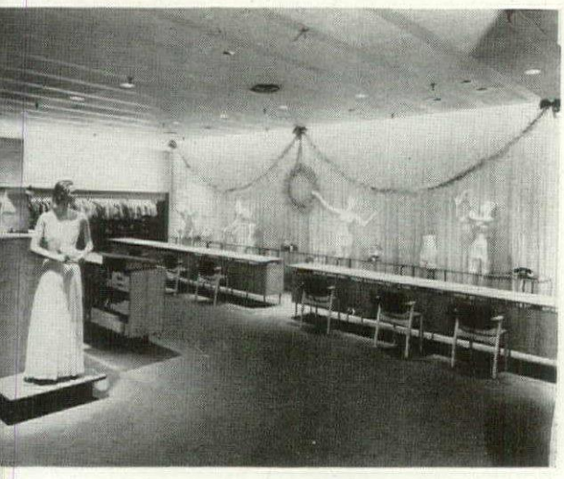


Two 50' arch spans *share a common line of supports in a second building. Roof deck is made of precast panels of lightweight insulating concrete, weighing 12 lbs. per sq. ft.*

1. CUSTOM STORE LIGHTING—incandescent spots aim 60 foot-candles at merchandise, only 8 on aisles

Hutzler's "Country Club" department store (p. 84) demonstrates a new departure in store lighting. In place of the usual regular grid of fluorescent fixtures covering the entire floor with uniform 20 to 30 foot-candles, this store wastes no light on unproductive aisle space and uses incandescent spots to put 60 foot-candles on the merchandise. (The aisles get an average of 8 foot-candles from light spilled over from the selling counters.)

Utmost flexibility of lighting layout permits fixtures to be located precisely where required. Thus superfluous fixtures are eliminated to reduce installation cost and cut power consumption. Hutzler's lighting cost 68¢ per sq. ft. compared with 75¢ for less-efficient gridiron fluorescent systems, though the latter do have a slight edge on annual operating costs—11.2¢ vs. 10.2¢ per sq. ft. in favor of gridiron fluorescent. On power consumption, whereas conventional fluorescent uses 4 w. or more per sq. ft. to produce 60 foot-candles over-all, this direct lighting consumes only 2.9 w. per sq. ft. to give 60 foot-candles of the more selective incandescent lighting.



Dark aisles *contrast with brightly lighted counters and merchandise. Lighting plan below is for area shown in photograph.*

The 11′ high ceiling is designed for speedy installation and easy relocation of lighting fixtures. Steel channels, 1½″ deep and 4′ o.c., support perforated metal acoustic panels in parallel strips 6″ wide and 24″ apart. On each side of the metal panels are ½″ wide ledges on which 12″ x 24″ acoustic tiles are simply supported. Lighting fixtures are mounted on the furring grid above cutouts in the acoustic tile.

All ceiling fixtures in each 28′ x 30′ diamond-shaped bay are attached by flexible armored cable to a central junction box. This allows each lamp to be moved within a radius of 6′ by merely interchanging ceiling panels. Minor changes in lighting are made by adjusting the lamps within the fixtures. Lamps can be tilted up to 45° from the vertical as desired; reflectors spotlight an area 2′ wide and 6′ long parallel to the sales counters.

The ceiling itself cost 75¢ per sq. ft., the suspension system another 35¢, total $1.10. It weighs under 2 lbs. per sq. ft. The lighting fixtures cost $25 to $30 and weigh 10 to 15 lbs. each. Noise reduction coefficient of the finished ceiling is 0.70.

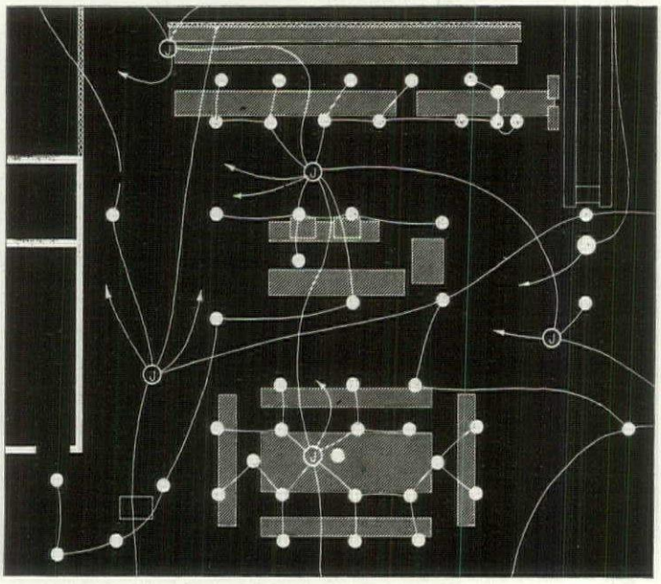
The store is fully air conditioned. Cool air is delivered through circular ceiling diffusers. Return air flows through the perforated panels to an exhaust plenum above the ceiling. Thus, heat from the incandescent lamps is removed as fast as it accumulates.

Before selecting this system, the architects compared four methods of store lighting for efficiency, effect on merchandise, first cost and maintenance cost. The methods, gridiron and irregular, both fluorescent and incandescent, are tabulated below. They recognized that uniform lighting does not necessarily give the best visibility, which is dependent upon contrast and shadows. Further, uniform lighting dampens accent lighting and is therefore wasteful. Incandescent spots directed at the selling space proved the most efficient in terms of lower cost and power consumption and are claimed to be the most flattering to the goods on display.

Incandescent lighting develops contrasting shadows, gives depth to goods, proves relaxing to the customers. The merchandise looks good because the strong incandescent spots highlight textures of materials without falsifying colors. Customers feel good because they are not subject to the glare and monotony of high-intensity fluorescent tubes, and the merchandise bought does not change color when seen under incandescent lamps at home.

Lighting contrast in the new Hutzler store is supplied by fluorescent cove lighting around the walls and by fluorescent uplighting from sales fixtures that are wired to junction boxes set below the floor slab. Both ceiling and floor lighting are supplied by 120/208 v. secondary lighting circuits fed by 480 v. feeder circuits.

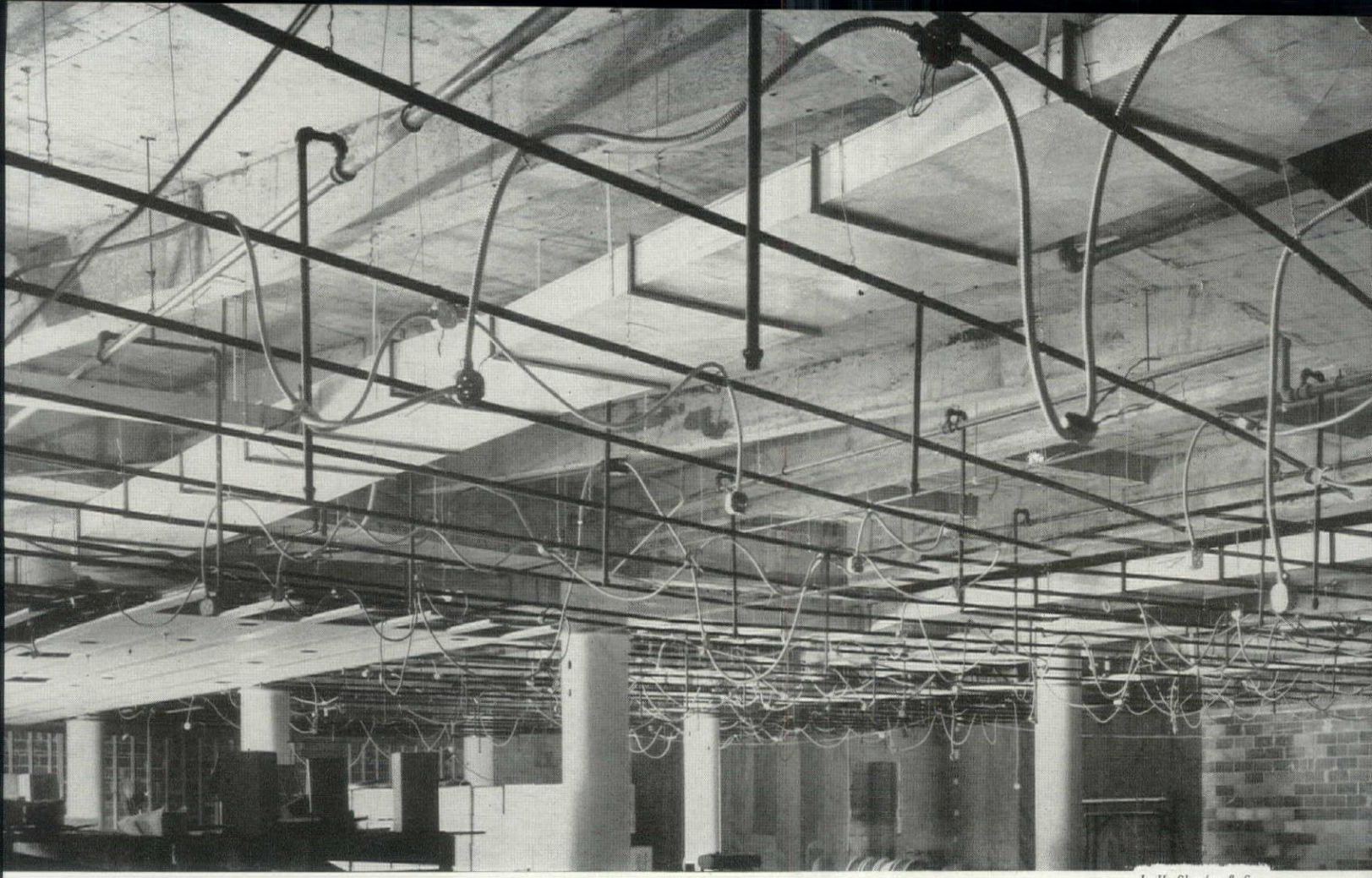
Architects are Office of James R. Edmunds and Ketchum, Gina & Sharp. The lighting was designed by Architect Morris Ketchum in close cooperation with Lighting Engineer Stanley R. McCandless.



STORE LIGHTING COST COMPARISON

SYSTEM *28′ x 30′ bay; 11′ ceiling*	REGULAR GRID PATTERN Incand.	REGULAR GRID PATTERN Fluor.	IRREGULAR CUSTOM LAYOUT Incand.	IRREGULAR CUSTOM LAYOUT Fluor.
Fixtures per bay	12	4②	11.47③	26
Foot-candles	29	33	2-60④	25-60④
Watts per sq. ft.	4.3	1.9	2.9	3.1
Initial cost per sq. ft.	77¢	75¢	68¢	88¢
Operating cost per sq. ft.①	15.1¢	10.2¢	11.2¢	11.1¢

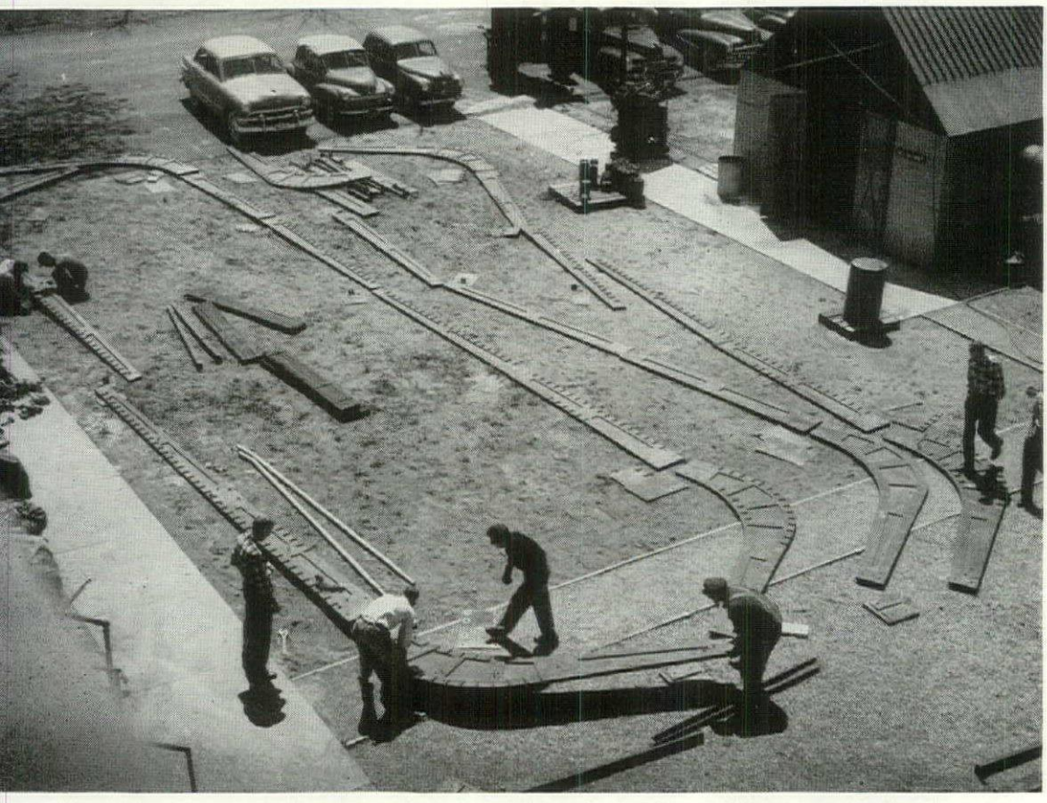
① *Annual costs, including power, maintenance, etc.*
② *Fixtures 4′ x 4′, spaced 14′ o.c. each way.*
③ *Average throughout store.*
④ *Maximum light on counters, minimum on aisles.*



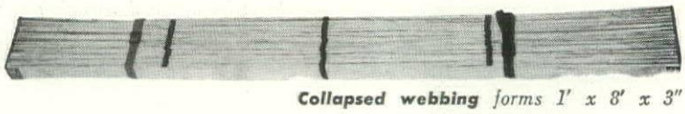
J. H. Shaefer & Son

Flexible armored conduits *connect each bay's junction box with its lighting fixtures. Slack in conduit permits rearrangement.*

Incandescent spots *can be set anywhere in the ceiling. Lamps and acoustic tiles are carried on parallel strips of metal acoustic panels.*



Roof built on ground level: *To build a maintenance hangar with Gambella, Army engineers lay laminated arches on the ground, spread the oak webs between them and haul up the completed sections.*



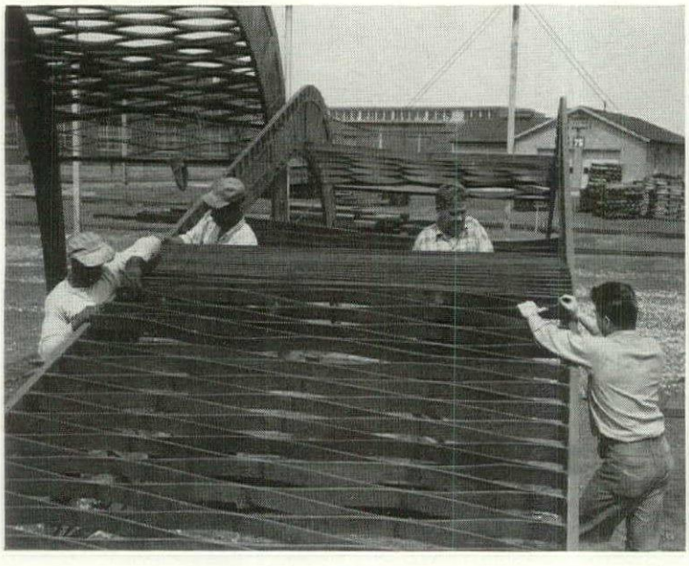
Collapsed webbing *forms 1′ x 8′ x 3″ bundle for easy delivery. Each unit expands to 64 sq. ft.*

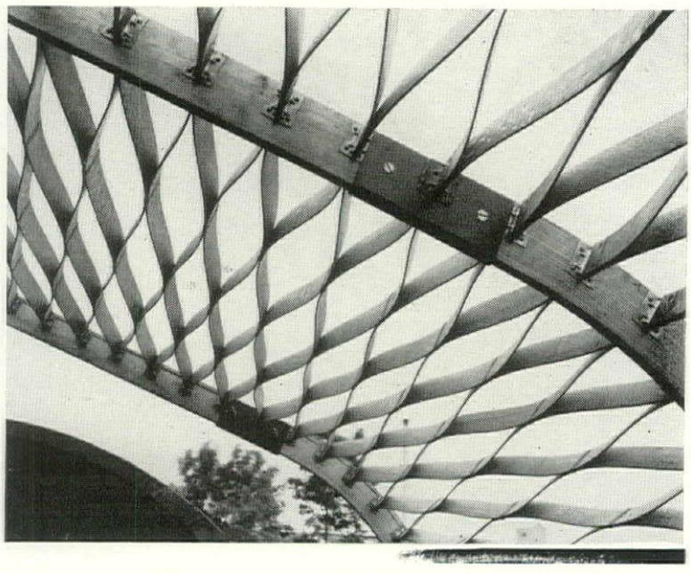
PREFAB STRESSED-ROOF STRUCTURE: modular oak-ply lattice telescopes for shipping

Utilizing the honeycomb principle familiar first in Oriental paper toys, later in aircraft and curtain wall panels, Gamble Brothers Co. has engineered a lightweight roof structure of flexible oak ribbons. The knife-thin hardwood slats are joined with stapled metal bands at staggered intervals to make up the basic 8′ x 8′ *Gambella* unit. Weighing just 50 lbs., the 3″-deep section can take a dead load of 80 lbs. per sq. ft. or a design load of 50 lbs. Each module collapses to a 1′ x 8′ x 3″ bundle for transporting. In application, it may be stretched flat and secured to conventional wood joists 8′ o.c. or curved between laminated arches. Supplied with demountable-type hardware (pictured below) attached at the factory, each section runs about $24, or about 37¢ per sq. ft.

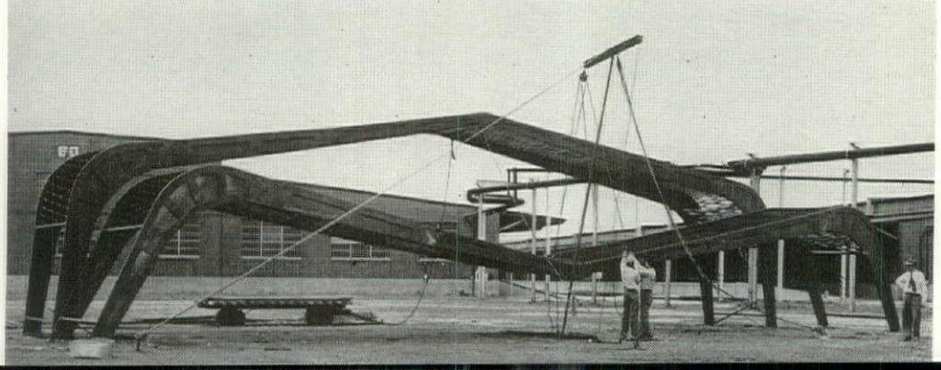
This unique *Gambella* web was originally designed as an economy, packaged structure for farm buildings and warehouses, but its quick erection with hand tools (two men can assemble the 64 sq. ft. section in about 5 minutes), compact shipping size, and demountability make it practical for military shelters and aircraft hangars as well as temporary defense housing. The same features—strength, light weight, low cost, and easy installation—also make it a good prospect for many applications in industrial and residential structures. For warehouses, it might be used with corrugated metal or translucent plastic sheet-

continued on p. 180





Simple assembly: *Hardware is attached to the honeycomb and to supporting members at the plant. The crew erecting the hangar slips the fittings together by hand, hammers them tightly in place and hoists up the finished portal frames side to side.*



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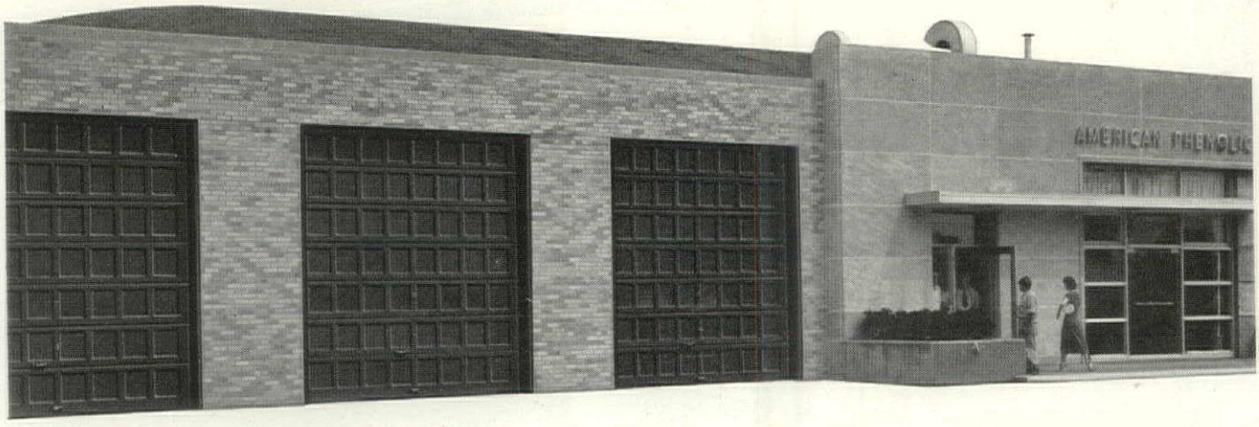

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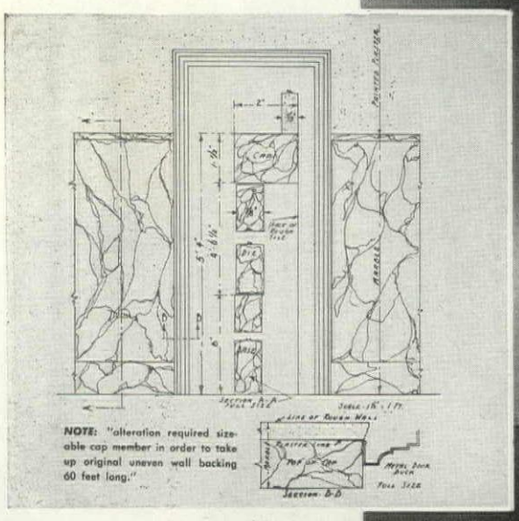

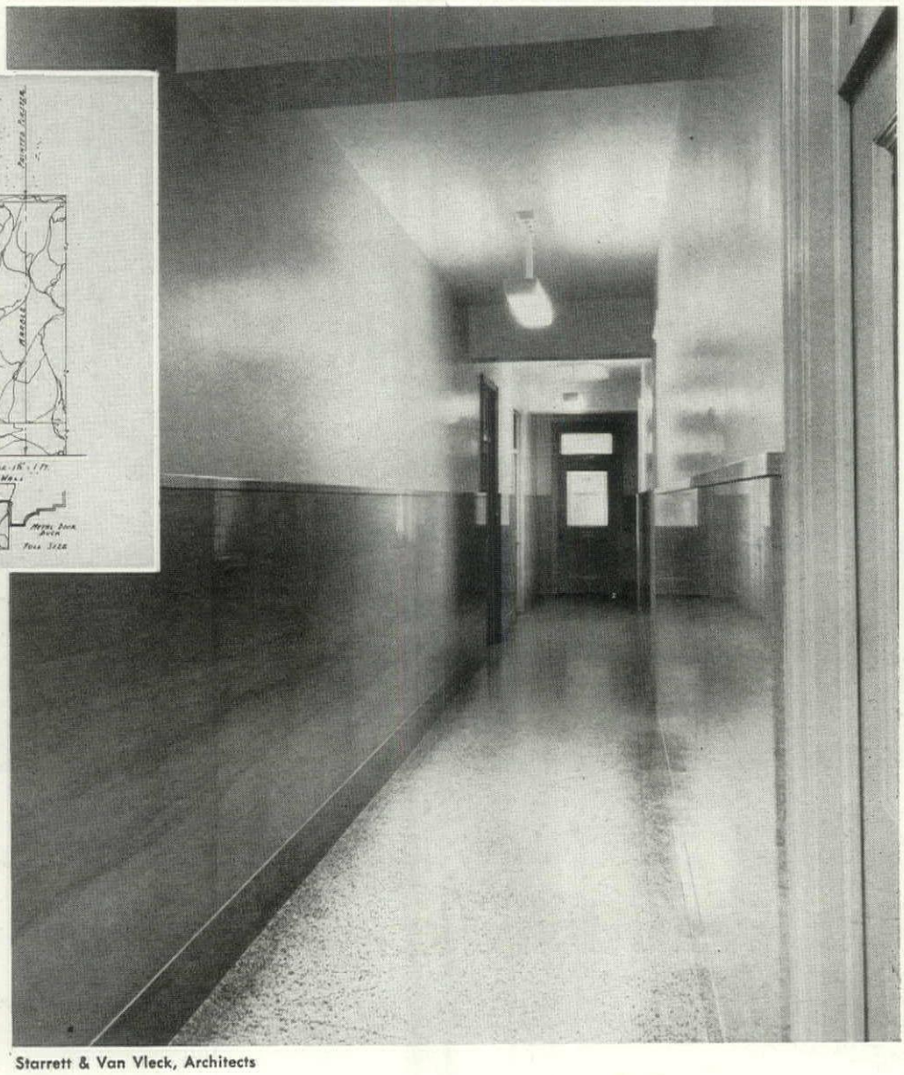

The great economy of marble is certainly important in a building this size. But equally important is the fact that marble makes each corridor a "main" corridor, each office an "important" office.

Starrett & Van Vleck, Architects

marble

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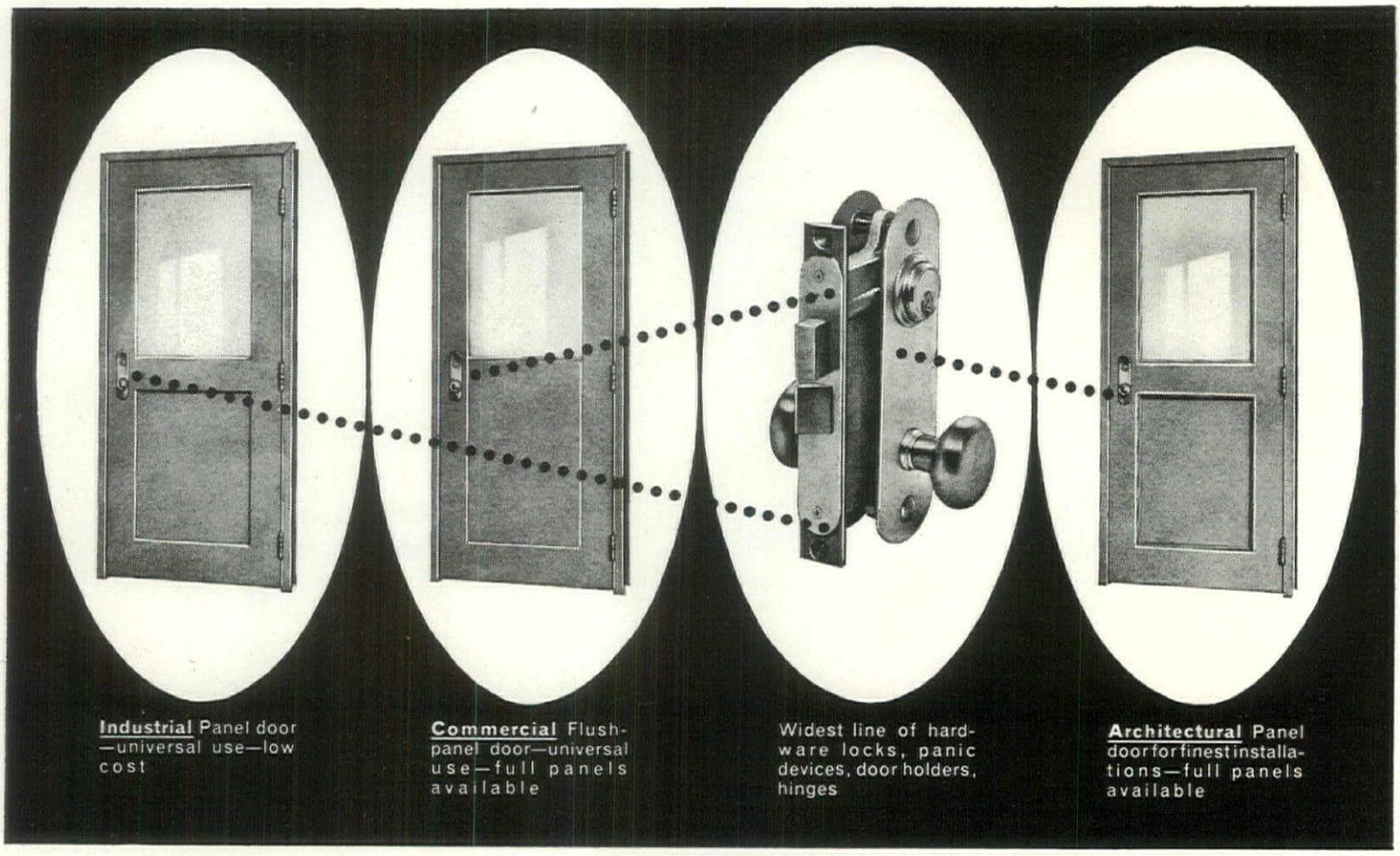

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AT HUTZLER'S

Architect: James R. Edmunds, Jr.
Baltimore, Maryland
Contractor: Consolidated Engineering Co., Inc.
Baltimore, Maryland

The architect for this fine, new Hutzler Brothers Store in Baltimore, Maryland, employed Peelle Motorstairs both functionally and decoratively. Off-the-street parking with entrance at the basement level was made possible by Peelle Motorstairs, and these handsome stairs were also used effectively as a design element.

In well-planned buildings everywhere, the Peelle Motorstair is furnishing smooth, safe, economical floor-to-floor transportation. It is based on an advanced engineering design which results in many years of smooth operation with a minimum of maintenance. The new Type "C" Motorstair illustrated can be furnished in twelve color combinations. The exclusive Peelle all-metal safety handrail adds a striking two color accent to the beauty of the entire stairway. Write for details.

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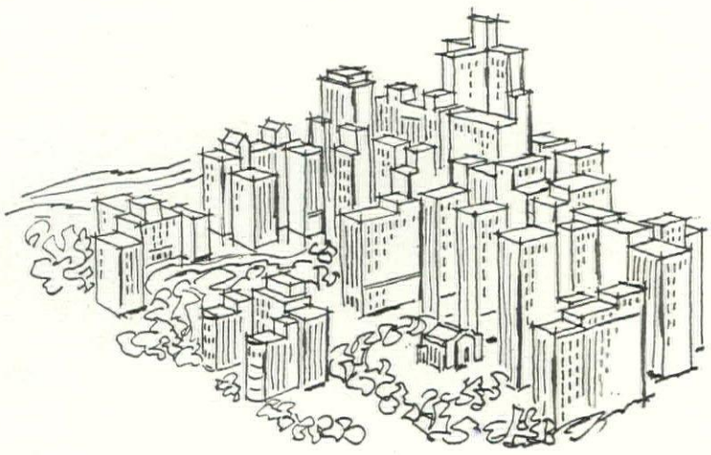


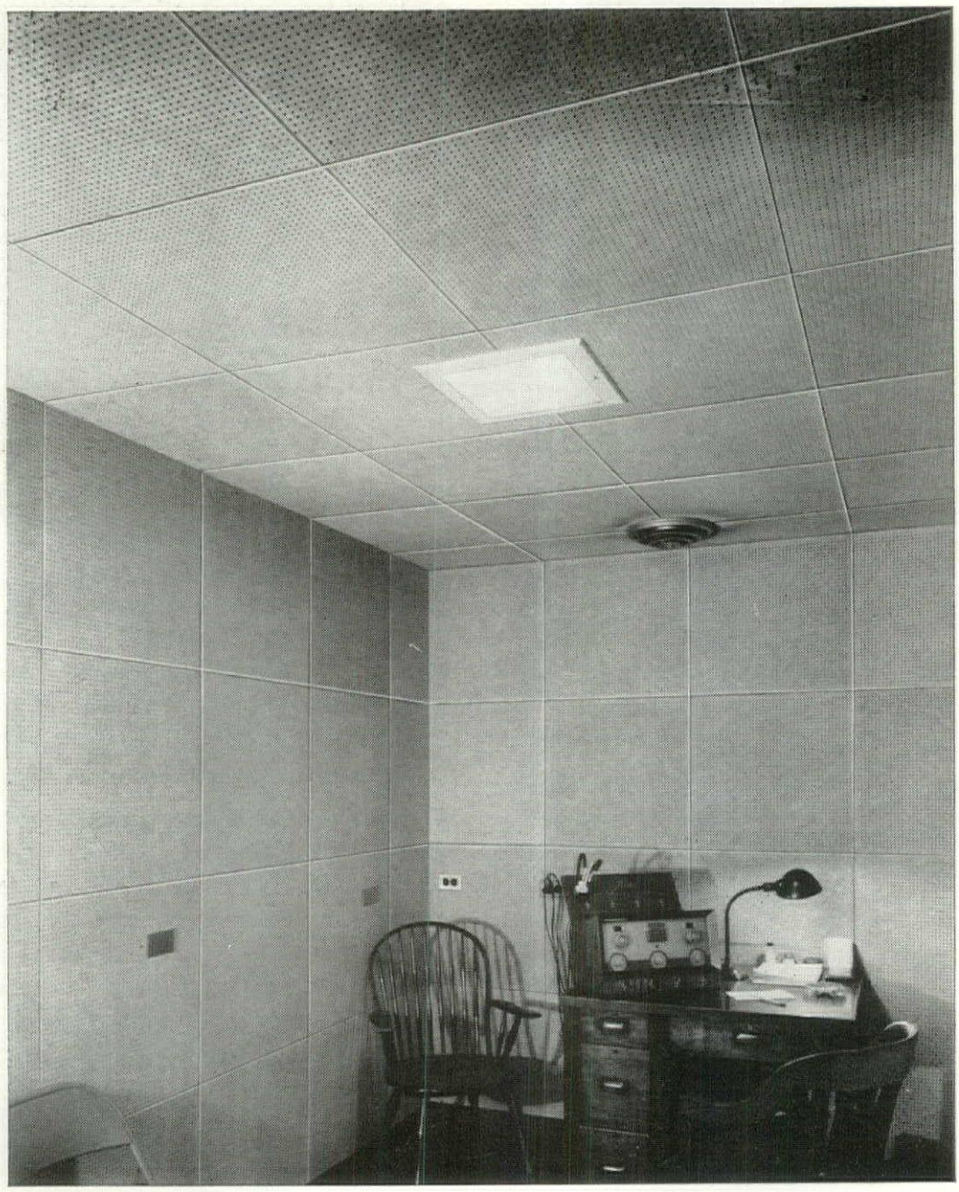
THE PRESBYTERIAN HOSPITAL

at the Columbia-Presbyterian Medical Center, New York, N. Y.

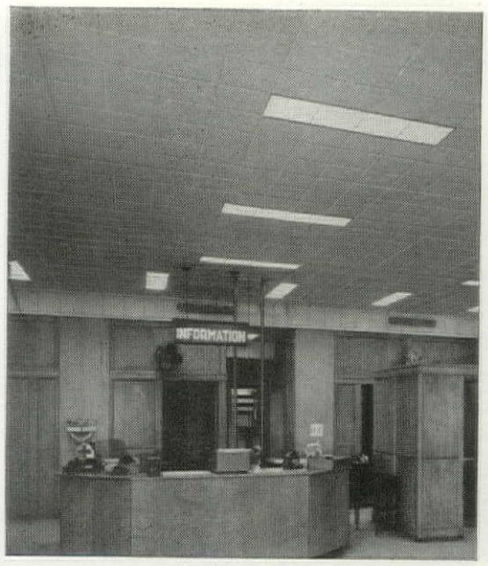
Architect: ***Voorhees, Walker, Foley & Smith***

General Contractor: ***Gens-Jarboe, Inc.***

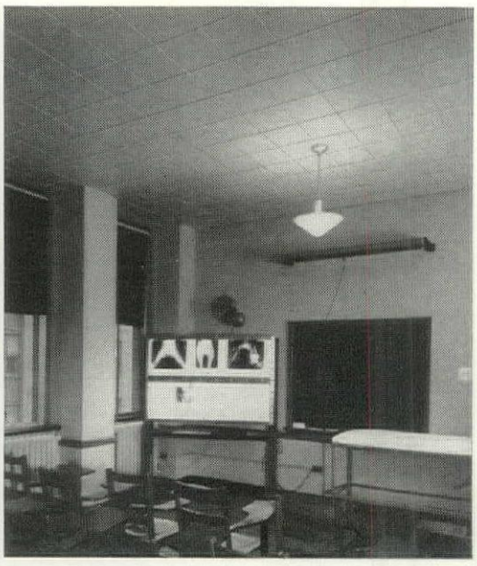
Acoustical Contractor: ***Wm. J. Scully Acoustics Corp.***



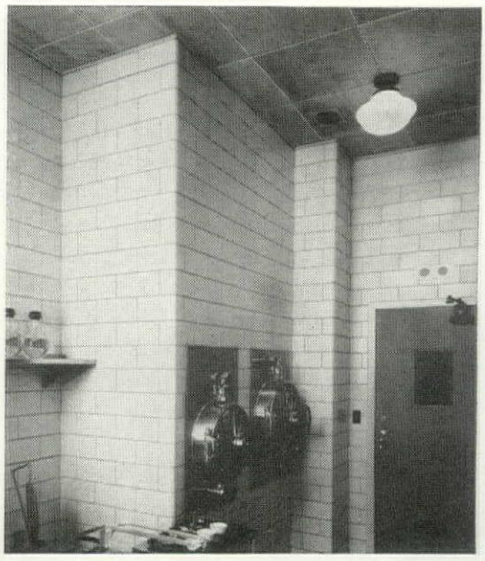
This audiometric testing room was especially designed to keep it free from noise transmission and vibration. It consists of a room within a room. The inside room is constructed on isolators, with air spaces between inner and outer walls. Here, where rugged conditions were essential, Perforated Asbestos Board with a glass wool sound-absorbing pad was chosen.



There's no noise problem now in Vanderbilt Clinic's admitting lobby. Although 1500 patients, visitors, and staff members pass through here daily, Arrestone ceilings maintain comfortable quiet . . . prevent build-up of disturbing noise levels.



Both classes and conferences are conducted more easily and pleasantly under sound-absorbing ceilings of Arrestone. This material soaks up as much as 85% of the noise that strikes it, promotes beneficial quiet for effective concentration.



The Perforated Asbestos Board ceiling in this busy nurses' work room keeps the noise level down. The high acoustical efficiency of this economical material is not impaired by the excessive moisture of the room's sterilizing equipment.

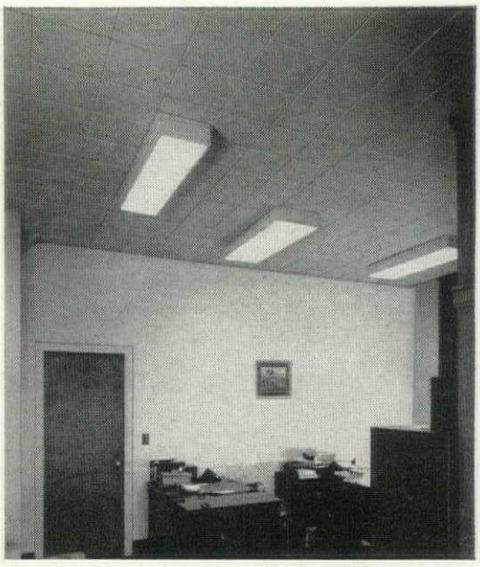
When The Presbyterian Hospital was sound conditioned, acoustical efficiency, though highly important, was not the only consideration in the choice of materials. The architects wanted ceilings that were good looking, fire-safe, and easy to maintain. Armstrong's Arrestone and Perforated Asbestos Board were the materials chosen.

Arrestone was used in offices, corridors, wards, and classrooms throughout Vanderbilt Clinic and New York Orthopaedic Hospital, two units of The Presbyterian Hospital. Arrestone is an attractive efficient metal-pan acoustical material. Completely incombustible, it meets the strictest fire-safety regulations. Arrestone has a white, baked-on enamel finish that's easily washed or repainted.

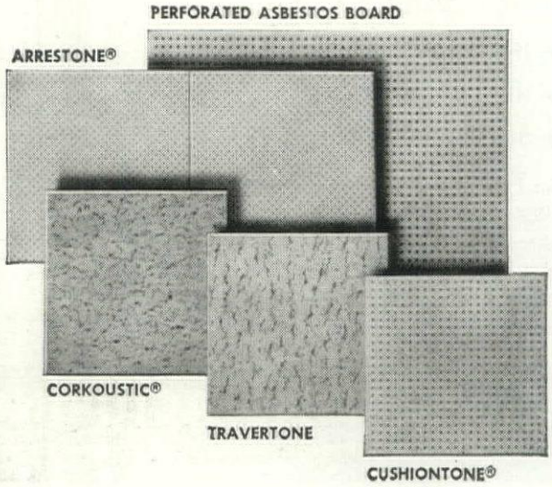
Arrestone is installed by mechanical suspension. When repairs on piping or wiring are necessary, individual units of Arrestone can be removed easily for access to the ceiling space above.

Perforated Asbestos Board was used in the audiology section of Vanderbilt Clinic. This area needed a hard-surfaced material that could be applied to walls as well as ceilings. Fire-safe, easy to clean, and moisture resistant, this material was also installed in pantries and utility rooms in Presbyterian and New York Orthopaedic Hospitals.

Armstrong's complete line of acoustical materials offers a wide range of special features to suit any sound-conditioning need. Call in your Armstrong Acoustical Contractor for free, expert advice. For the booklet, "How to Select an Acoustical Material," write Armstrong Cork Company, 4207 Rooney Street, Lancaster, Pennsylvania.



Offices, too, were sound conditioned to give office personnel in Vanderbilt Clinic the benefit of quiet. These Arrestone ceilings stay new looking with a minimum of maintenance . . . help provide pleasant, fire-safe working conditions.



ARMSTRONG'S ACOUSTICAL MATERIALS

WHAT CHANGES IN PUBLIC HOUSING?

(continued from p. 117)

procedures in construction, management, subsidy and financing. An unthinkable lot of rethinking—perhaps even to the point of renaming the public housing authority the homebuilding authority. How about that for another 1953 goal?

We could use some fresh thinking too in matters like design and costs and new approaches to them. Any architect who has designed public housing knows what a battle it is to put over even the slightest innovation in planning or construction, particularly if it involves some of management's pet statistical absurdities like the cost of central heat for row houses compared to the cost of individual heat. Or modular layout, which might save thousands of dollars in the field but which usually results in some rooms being somewhat larger than the prescribed formula, or in other statistical irrationalities. Or unorthodox structural systems that are not in the manual. Or financing self-help programs that run afoul of the prevailing wage fetish.

More architectural progress

This reluctance to experiment is natural, I suppose. It is easier to do things by the book. Never doing anything new makes review safe and easy; never taking a chance means less worry about congressional investigations. (True, it is always possible that an experiment or deviation from the tried and narrow rut might be a failure. Since the premise of all investigations is that anyone who fails is therefore dishonest, it is perhaps wise to keep the eyes closed and the fingers crossed.)

This failure to make any progress in the field of architecture was a matter of deep concern to many architects who believed that design could be improved and costs lowered. When Phil Klutznick was administrator, Howard Myers, the late publisher of ARCHITECTURAL FORUM, Bill Wurster, Albert Mayer and a few others put together the Architects Advisory Committee. It endeavored to improve design by working with local authorities and their architects, by careful analyses in the field of existing projects. It tried to suggest improvements in procedures, to simplify contractual relations, and to impress on both FPHA and the local authorities the value of competent architectural services. Then some years ago, interestingly enough right after a series of fee negotiations between PHA and the AIA were completed, there was suddenly no interest in the committee and no money for travel expenses. So some dozen or so of (I say with due modesty) the best housing architects in the country resigned. I submit that architects *do* know something about design, about specifications, about costs; and some of us even have ideas about social values and maintenance, and some about new methods of construction and the economics of building and why the semicolon boys make the bids come in high. I think it was very foolish of PHA to throw away thousands of dollars of free consulting services. Perhaps a minor goal for '53 is better relations with architects.

Lessons from private builders

As to costs, several things could be tried, if time and effort were given to rethinking the problems. One would be to look the fetish of 60-year fortress construction in the eye and recognize it for the nonsense it is. Another would be to bring bidding proce-

continued on p. 156

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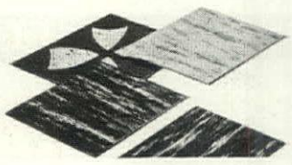

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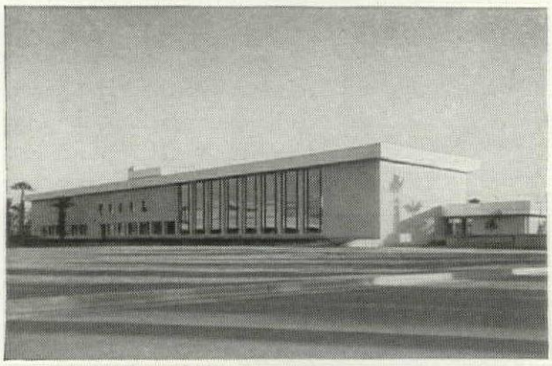

Public Library, Phoenix, Arizona
Architects: Lescher and Mahoney, Phoenix, Arizona
Contractor: T. G. K. Construction Company

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PUBLIC HOUSING *continued*

dures and contract documents down to the level of good private practice. Still another is to let the good operative builder into the picture. If the operative builder can build row houses for 62¢ a cu. ft. including site improvements as he does in Philadelphia; if Bill Levitt and others can produce detached single-family homes to sell for $9,999.92, including profit, it is simply silly not to avail oneself of their know-how.

Their houses are, in general, every bit as good, and will last just as long, as the general run of public housing. True, the land planning is usually not very good. Two of the very few sets of public housing standards I would hold onto are the land planning and density standards. The management experts will set up a cry about comparable maintenance costs, of course, but the fact is they have no comparable sets of costs to compare. There are virtually no figures at all on the cost of maintaining the average privately owned small house. Moreover, if we got away from projects into psychologically more normal types of housing, if more responsibility were thrown on the tenant, if more leeway were given him to create a personal home, much more and better tenant maintenance would result. In most cases (not all—I realize there are problem families) poor maintenance comes from plain economic inability to maintain. Some new thinking about the possibility of maintenance-subsidy funds is in order.

More latitude, fewer inspections

As to procedures, highly competent architects and builders have for years been pointing out that the PHA general conditions, its bidding practices, the rigidity and complication of its specifications, and above all the immense increase in overhead due to the necessity of filling out endless forms and reports in seven copies, the difficulty of negotiating the simplest change order, and many other involvements, are basic causes of high costs. Add to them the cost of PHA inspection, and local authority inspection and often architects' inspection, and the burden becomes fantastic.

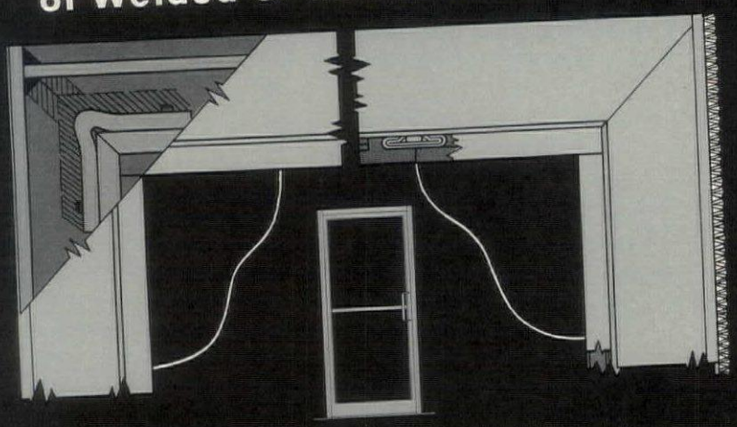
Most of these complications are again a result of the legalistic belief that all men are dishonest unless they are lawyers. It may be so, but I would like to see the reverse notion given a try. It might be worthwhile to say to the local authorities: "Here is the money for a certain number of dwellings. Build what you want, where you want, how you want. If you can't build within your budget, you and your architect will be responsible. When you are finished, there

continued on p. 160

Bulletin for Architects

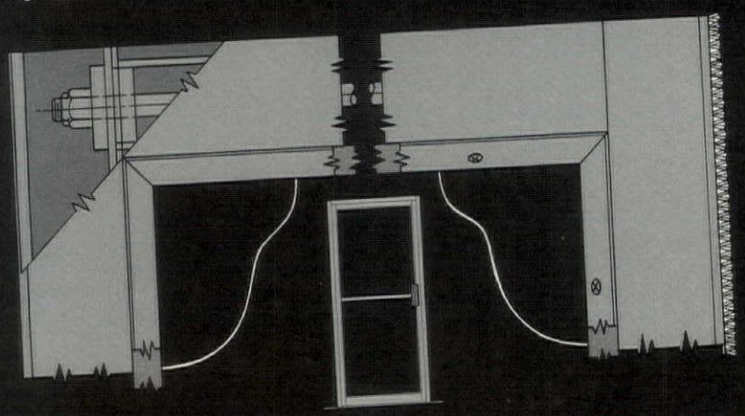
Re: The Kawneer Door Line

NOW Kawneer gives you your choice of Welded or Bolted construction



"W"-Series (Welded) Kawneer Type BX Narrow Stile Stock Entrance

Cutaway, above left: Extra-heavy aluminum extrusions are corner-reinforced with strength-adding clips. Entire corner is locked together by welding. Detail, above right, shows lead-faced adjusting block, locked-in glazing channel, durable weathering, and carefully mitered corners. Note that entire door surface is polished satin smooth, then the lustrous finish is protected by a special Alumiliting process. Kawneer "W"-Series (Welded) Door and Entrance units are available as Stock: Narrow Stile. Special (built to order): Narrow Stile, Full-Vision, and Wide Stile.



"B"-Series (Bolted) Kawneer Type BSF Narrow Stile Stock Entrance

Cutaway, above left: Special extrusion design interlocks rail and stile components, permitting bolts to hold with complete security. Detail above, right, shows new plastic glazing held in place with special glazing stops that interlock with rails and stiles and are secured by aluminum Phillips head screws. The butt corner joint is attractive, accurate and tight fitting. "B" Series (Bolted) Door surfaces are smooth, finished in a durable anodized protective finish. Available as Stock: Narrow Stile only.

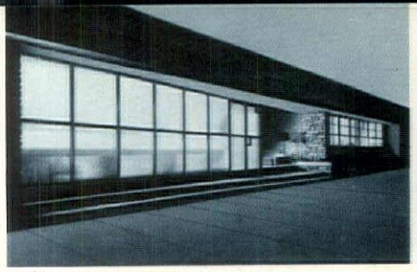
In keeping with Kawneer's industry leadership, we now offer you the only really complete door line. Kawneer has supplemented its criterion-of-excellence Welded Door line with a new, pace-setting Bolted Door. The Kawneer Welded ("W"-series) and Bolted ("B"-series) Doors combine to offer you wider-than-ever applications, styles, and price ranges when you specify to the requirements of your clients.

Recognized as the finest example of door craftsmanship, the satin-smooth Welded Door will continue to be Kawneer's contribution to the installation that requires the very best in entrance appointments. A striking blend of grace, beauty, and durability, Kawneer's Welded Door contributes immeasurably to your design and your client's satisfaction.

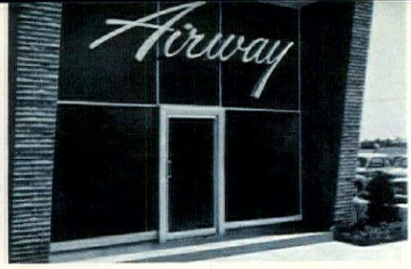
For those installations where the best in lower priced doors is required, the Kawneer Bolted Door is a truly outstanding product and value. Designed with the same style and durability considerations that typify all Kawneer products, the new Bolted Door is fabricated with the same Kawneer standards of craftsmanship that create the Welded Door. However, Kawneer engineering and production efficiency make it possible for us to offer the Bolted Doors at prices that are actually competitive with quality wooden doors.

Both Kawneer Welded and Bolted Doors are available in a wide range of easy-to-specify sizes and styles. Now when you specify from the most complete door line in the industry, in addition to specifying Kawneer craftsmanship and quality, you can meet whatever budgetary limitations the job may dictate.

For full information, architectural details, descriptive literature, and personal inspection of Welded and Bolted Door samples, contact your nearby Kawneer Installing Dealer. He is listed under "Store Fronts" in the classified pages of your telephone directory. Or write Kawneer, Niles, Michigan. Kawneer Field Representatives are located in principal cities and will be pleased to discuss your entrance requirements with you.



Architect: C. M. Buck.
Typical Kawneer factory application.



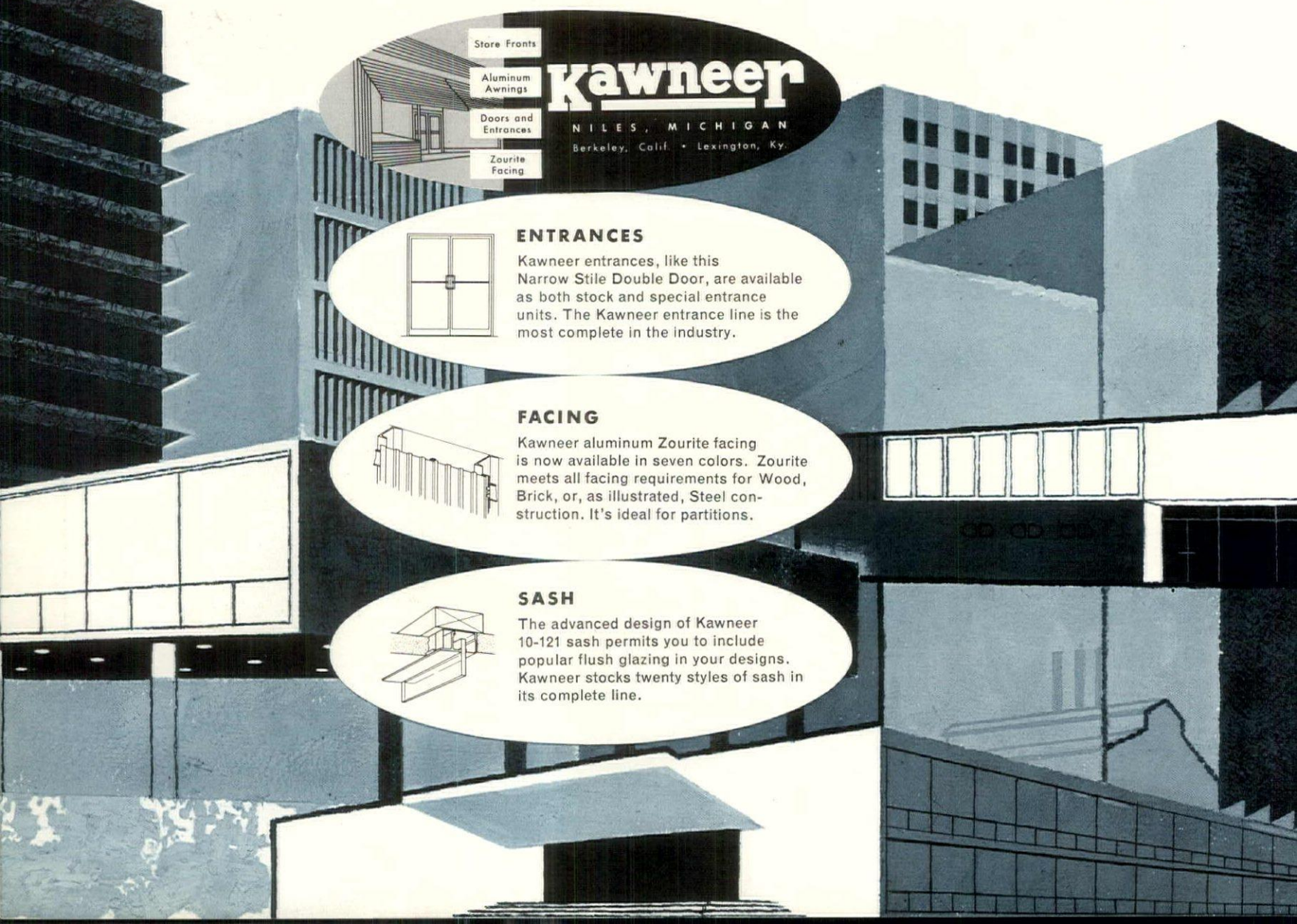
Architect: Olson & Urbain.
Kawneer modernized this building entrance.

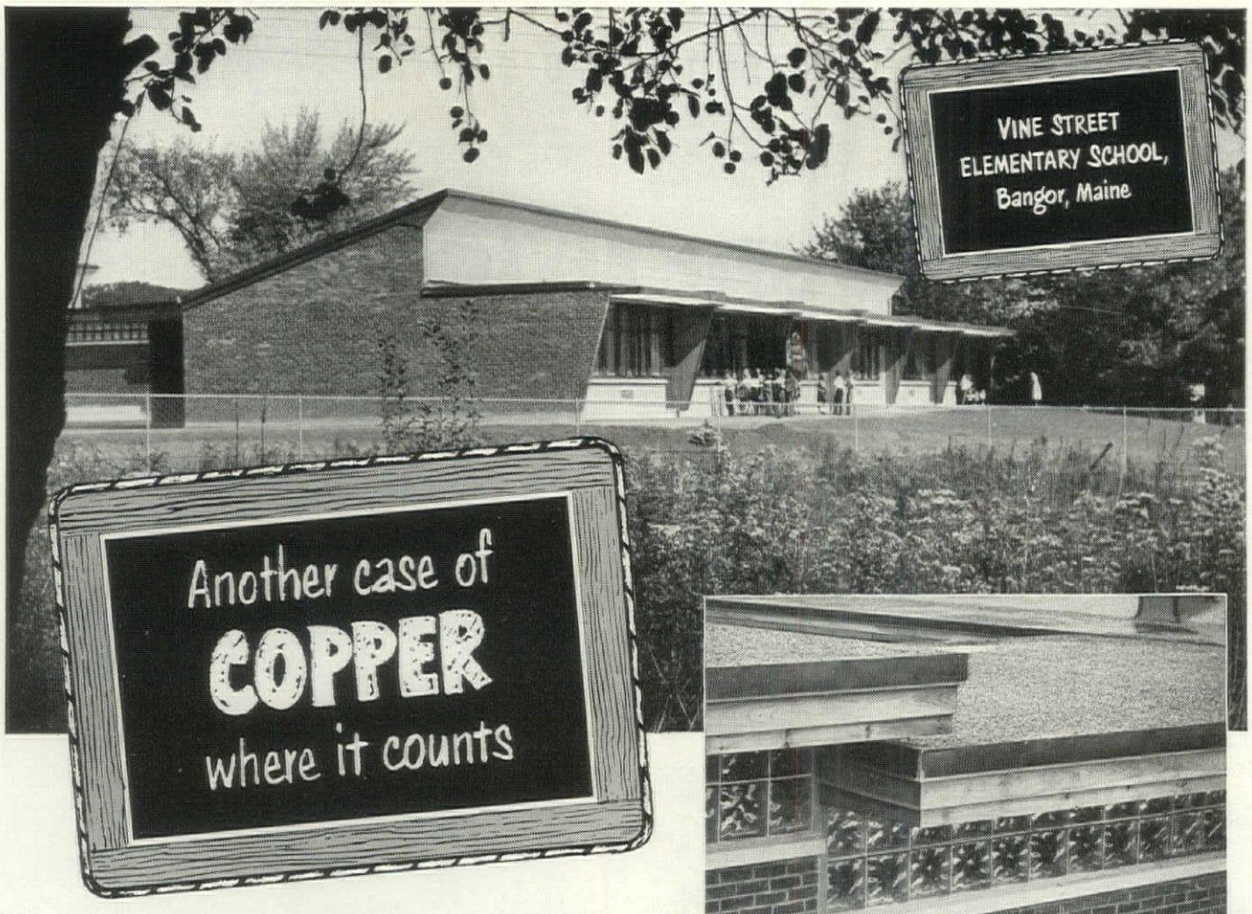
Kawneer helps architects design for office buildings and industrial plants

Designing for Office Buildings and Industrial Plants can mean big projects or little design jobs for you, the architect. But, large or small, Kawneer can help you handle those jobs more easily . . . more profitably.

Kawneer backs up its industry leading products with complete service. This means such helps for you as full size details, informative literature, factory-trained Installing Dealers, capable and qualified Kawneer Field Representatives, and products that are architect-designed for use by architects. Kawneer products blend perfectly with each other and with all materials used for contemporary construction. And the Kawneer product line is complete, letting you specify all materials from a single source. For example, Kawneer designs and manufactures architectural metals, doors and entrances, colorful Zourite aluminum facing, and aluminum sun control products . . . a complete line for either new construction or building modernization.

For complete information about Kawneer products and services, contact a nearby Kawneer Installing Dealer. He is listed under "Store Fronts" in the classified pages of your telephone directory. Or write Kawneer, Niles, Michigan.





The Vine Street Elementary School, designed by Eaton W. Tarbell & Associates was one of the five top winners in "The School Executive's" recent National Competition for Better School Design. It is an excellent example of the use of a limited amount of Copper where it counts most.

The Vine Street School, which has its own heating plant and covers about 10 times the area shown in the above photograph, used 5,270 lbs. of 16 oz. non-rusting Revere Copper for flashing and fascia gravel stops (see detailed photos at right). Said Mr. Tarbell, "Of all the materials available for the purpose, to my mind, copper was the one best for the job . . . both from a design as well as a utilitarian standpoint."

In addition to the Revere Sheet Copper the School used 2,500 ft. of Revere Copper Water Tube in sizes ranging from ½" to 3" for hot and cold water lines.

Architects like copper because this "ageless" metal has proved its enduring qualities through the centuries. It is non-rusting, lends itself to any kind of design treatment, builds prestige and protects reputations. Sheet metal contractors prefer it because it is readily worked and soldered; easy to handle.

Now, with restrictions on copper ended, there isn't any reason why your next job can't have the many benefits of Revere Copper. See the Revere Distributor nearest you about Revere Sheet, Strip or Roll Copper for flashing. Particularly ask him about the money-saving advantages of Revere Keystone Thru-Wall Flashing.* And, if you have technical problems, he will put you in touch with Revere's Technical Advisory Service.

*PATENTED

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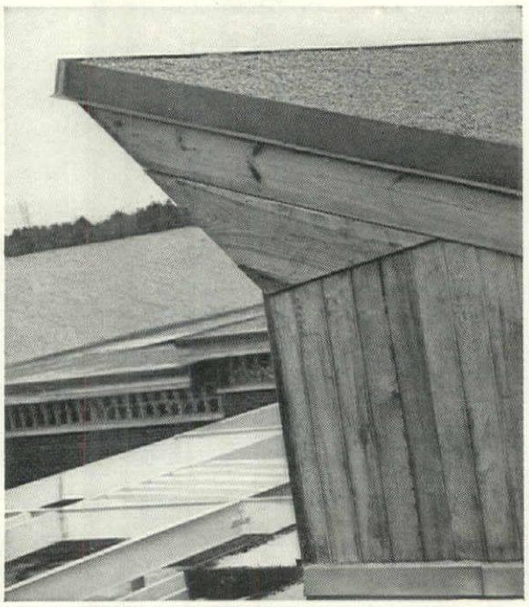
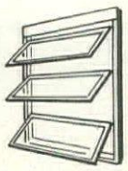
SEE REVERE'S "MEET THE PRESS" ON NBC TELEVISION EVERY SUNDAY

USING COPPER for fascia gravel stops made soldering a quick, certain operation. Note flange at base of strip for water run-off. Installation was made by the Bangor Roofing & Sheet Metal Company. Architects—Eaton W. Tarbell & Associates . . . both of Bangor, Maine.



THIS NON-RUSTING 16 oz. Revere Copper Flashing shown at base of picture (right) will be around for a good many years and require little if any maintenance while it seals the weather out of the Vine Street Elementary School. Another section of Revere Copper fascia gravel stop may be noted at top of picture.

THE TREND IS TO AWNING  WINDOWS

LUDMAN Auto-lok AUTOMATIC LOCKING PATENTED
WINDOWS
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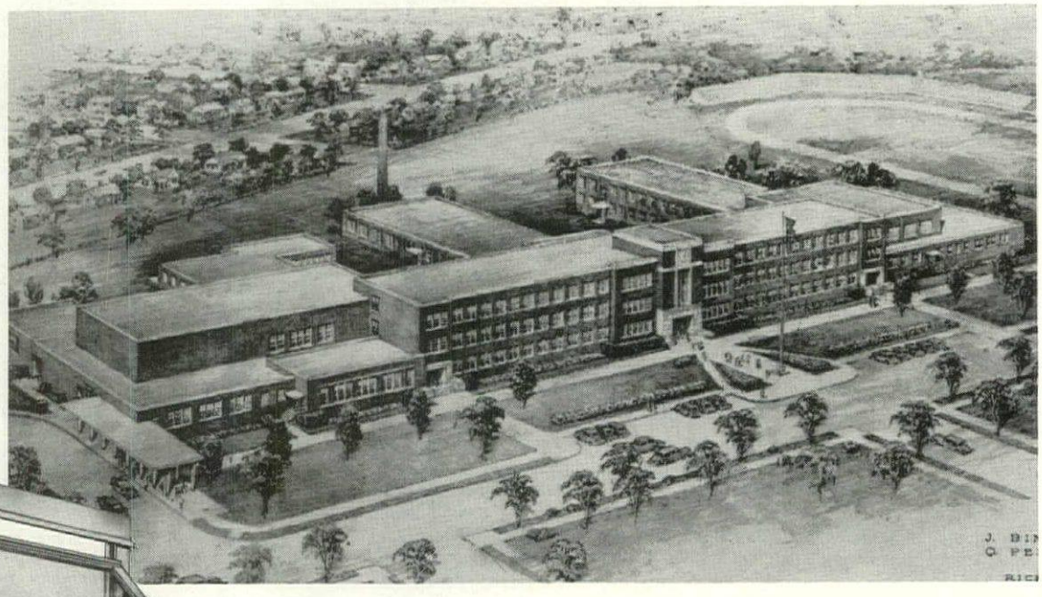
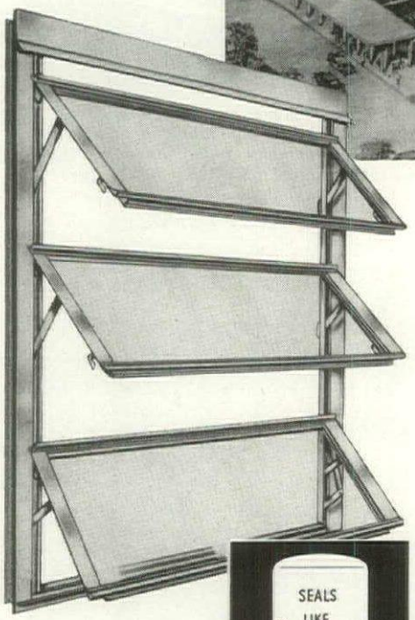
specified by more architects





Tightest closing window ever made

For schools in all 48 states, hospitals throughout the country, factories in every major industrial center, hotels, motels, office buildings, institutions, churches, convents, municipal buildings, airports, residences . . . everywhere, all over the world, architects are specifying more and more Ludman Auto-Lok Awning Windows!

Here's why! Ludman windows are engineered to pace modern building trends . . . give architects wider flexibility, maximum window utility!

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Ludman Engineering Planning Services are available to every architect for any job, large or small, upon request.

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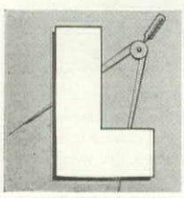
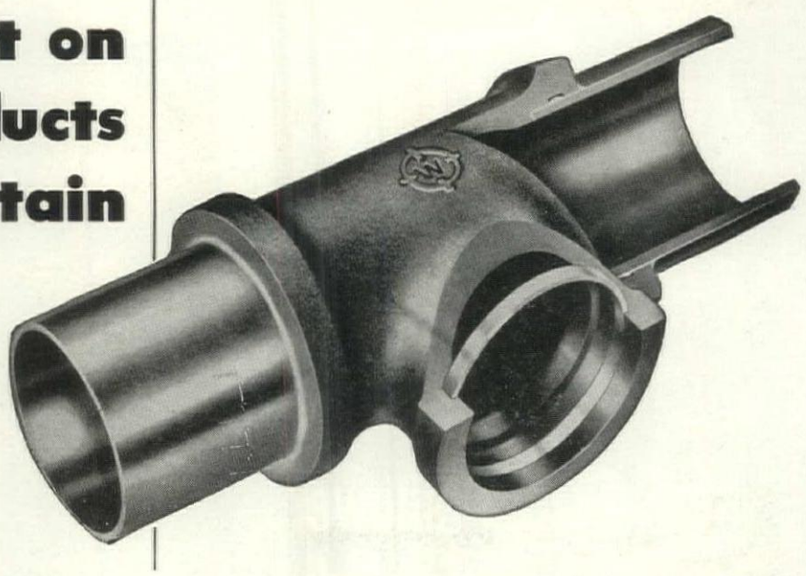


UDMAN LEADS THE WORLD IN WINDOW ENGINEERING

DON'T BE SATISFIED WITH HALF-WAY MEASURES...

insist on Walseal® products and be certain



– the FACTORY INSERTED Ring insures FULL PENETRATION of the Silver Alloy . . . a perfect joint

Today, contractors . . . builders . . . architects are using brazed connections, in ever increasing numbers on their brass and copper pipe runs. However, they must be certain that the correct brazing alloy is used; that the joint has penetration of alloy up the shoulder of the fitting.

That's why more and more are turning to Walseal joints made only with Walseal valves, fittings and flanges which assure the proper amount of alloy with no waste. They know that the finished joint not only will withstand hydrostatic pressure, but it will also withstand terrific impact and vibration – in fact, no correctly made Walseal joint has ever been known to creep or pull apart under any pressure, shock, vibration or temperature which the pipe itself can withstand.

Furthermore, it is a relatively simple operation to make a joint – no heavy scaffolding need be erected . . . just cut the pipe, flux, assemble, then braze, following the technique recommended by the Walworth Company. A silver brazing alloy – FACTORY INSERTED – in each port flows out when heated with the oxyacetylene torch, making a joint that is stronger than the pipe itself . . . a one-hand operation, with the mechanic out of the path of the deflected heat – at all times.

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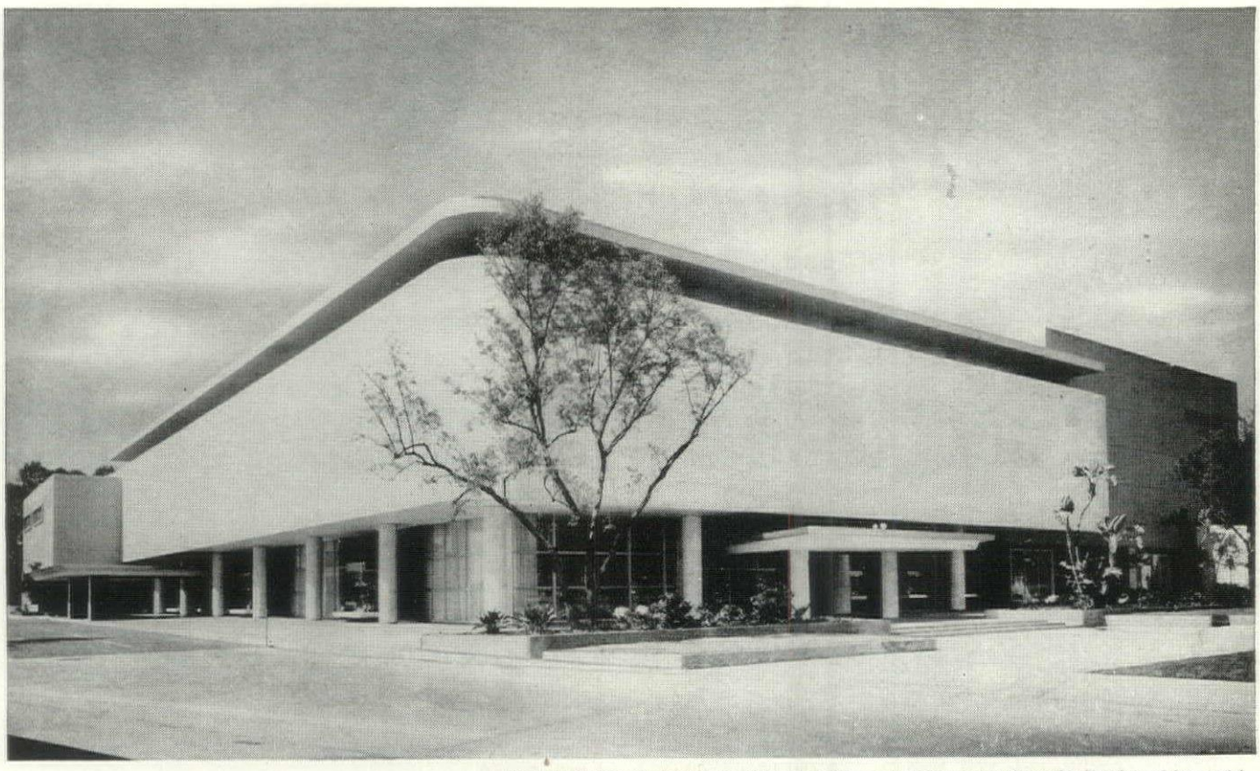
will be an audit, so don't try to get away with too much." And that would be all. Do away with all the reviews and reviews of reviews. Do away with all standards except two very simple ones: 1) minimum area per dwelling, and 2) maximum density per gross acre. PHA staff should be available for consultation; its great accumulation of technical knowledge should be accessible to local authorities and the architects. PHA has, incidentally, circulated extraordinarily excellent technical bulletins, and these should be published by the Government Printing Office and made available.

There would, of course, be some pretty bad things built, but also, I am sure, some very fine ones, just as there are in the public school system, which operates in just this way. The average, as with the schools, would remain mediocre but, even at the worst, adequate for the purpose. In other words, make the program honestly and truly a local program with local control. It might help get more than 35,000 units in 1954.

A new role for public housing

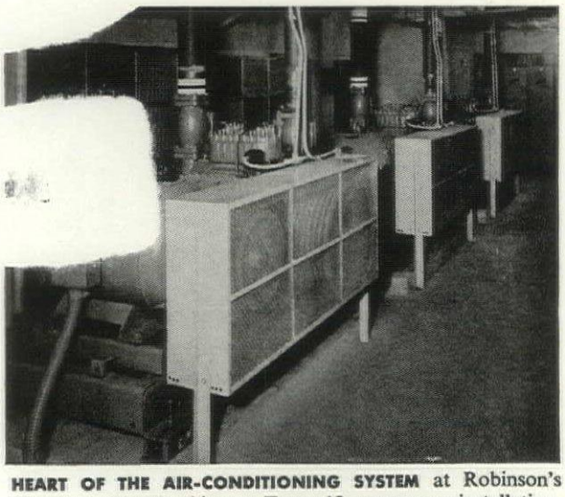
The public housing program has transcended the old slum clearance program and become part of a wider program of urban redevelopment. Urban redevelopment is vital to the continued success of our way of life. We have as part of our high standard of living a high and rising standard of leisure. This means that more and more people want a better leisure-time environment for themselves and for their children than the overcrowded central city affords. Public housing must join with city planning and the organized forces of private enterprise to redevelop our cities on a new and rational pattern. Slum clearance is a part of this, of course; but still more important is to prevent the growth or creation of slums. They are on the increase in most of our big cities, growing faster than they possibly can ever be cleared. Very little study has been given to this. The reasons are far from as simple as the ones usually given: "infiltration of undesirable elements" or "flight to the suburbs." Those are as much effects as they are causes.

Public housing can play a new and important role in holding the line against area deterioration if the notion of slum clearance and "project" is supplemented by the idea of salvage and the construction of small units, which are part and parcel of the area itself. In addition there must be building on vacant land, again not as "projects" but as part of the character of an area, and as part of the total development of the entire urban region.



MOVIE STARS SHOP IN COMFORT at the new Robinson's Beverly. Designed by architects Pereira and Luckman, this modern department store is air conditioned all year-'round by a Worthington system. Installation by Kilpatrick & Co., Alhambra, Calif.

Year-'round air conditioning in Beverly Hills' first department store



HEART OF THE AIR-CONDITIONING SYSTEM at Robinson's Beverly is this Worthington Freon-12 compressor installation. The system circulates 360,000 cfm of heated or cooled air.

Featuring two-level parking and an outdoor garden lounge, Beverly Hills' first department store, the new Robinson's Beverly, is completely air-conditioned every day of the year.

Fan and coil units throughout the store are used for both heating and cooling. Flow of steam or chilled water is controlled by change-over valves actuated by four thermostats on each floor.

Chilled water for the air-conditioning system is supplied by three Worthington 125-hp Freon-12 reciprocating compressor units. The Worthington system was chosen by architects Pereira and Luckman, who write about their selection of equipment: "All products and equipment were judged in terms of the contribution they make to a smoothly functioning facility for the distribution of merchandise. Ease and economy of maintenance were also major factors in the choice."

For over half a century, Worthington-engineered air conditioning installations have been serving business and industry. Today, the complete Worthington line is ready to meet any assignment, large or small. So when you think of air conditioning—think of Worthington. Get in touch with your nearest Worthington district office or write to Worthington Corporation, Air Conditioning and Refrigeration Division, Section A.3.55, Harrison, New Jersey.

A.3.55

WORTHINGTON

CLIMATE ENGINEERS TO INDUSTRY, BUSINESS AND THE HOME


"My architect was right..

PC Glass Blocks have given us superior daylighting everywhere in the building,"

says **V. V. Moulton,** *President, Auto-Owners Insurance Company, Lansing, Michigan.*

"My architect had three reasons for recommending PC Glass Blocks. He said they would give us superior daylighting, lower heating and cooling costs and low maintenance. After two years in this building, we know he was right on every point," Mr. Moulton said.

"These prismatic blocks gather the light and throw it well into the office spaces. Our heating and cooling costs are lower than we would ordinarily expect. And the glass block panels do not require any costly painting, re-puttying or cleaning."

Some of the most important buildings in America are being erected with large, light-giving panels of PC Functional Glass Blocks, because these blocks *do things to daylight*. They transform a blinding shaft of sunlight into useful, diffused illumination that is easy on the eyes. They also provide significant savings on heating, cooling and window maintenance costs.

There are hundreds of ways PC Glass Blocks can enhance the appearance and the comfort of a building. Plan now to make them a part of your next design. Get complete data on PC Glass Blocks by consulting Sweet's Architectural File, or by writing direct to us.

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Here's what you get with PC Glass Blocks

BETTER DAYLIGHTING–Functional patterns direct daylight to reflective ceiling, or distribute it uniformly throughout the room. More light, less glare.

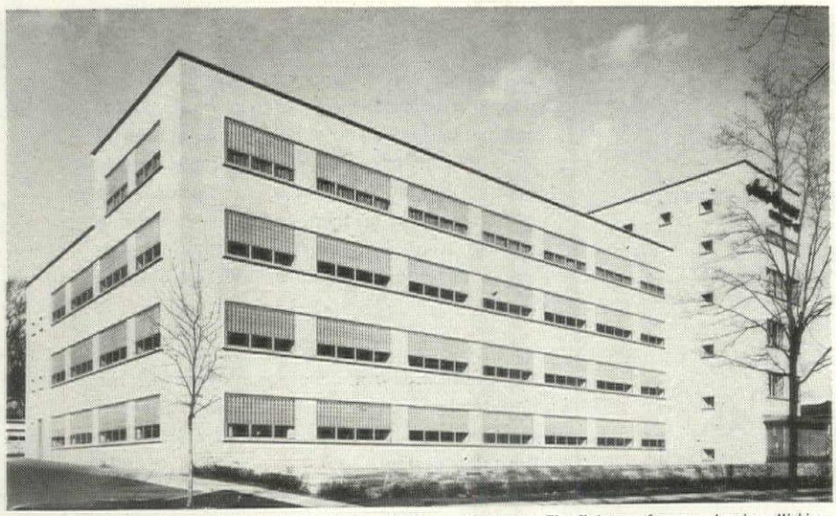
REDUCED HEATING & COOLING COSTS–Glass block panels have insulating efficiency of solid 8-inch masonry wall.

LOWER WINDOW MAINTENANCE COSTS–Glass block panels seldom have to be washed. Breakage is rare. There is nothing to paint.

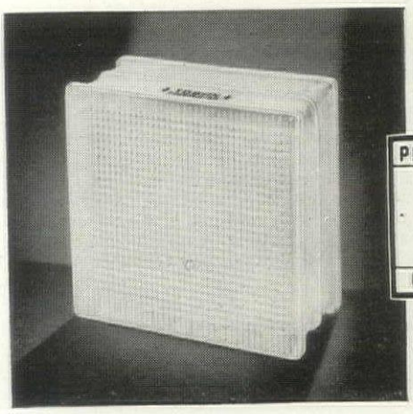
NO "EXTRA" EXPENSE–Unlike conventional windows, panels of PC Functional Glass Blocks seldom if ever need expensive shades, blinds or louvres.

NO DIRT INFILTRATION–A glass block panel is an integral part of your building wall. Tight mortar joints seal out moisture, dirt.

LESS OUTSIDE NOISE–PC Glass Blocks are hollow. The internal dead air spaces reduce sound transmission.



Architect: Lee Black and Kenneth Black, A.I.A., Lansing, Michigan · Contractor: The Christman Company, Lansing, Michigan



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FREIGHT ELEVATORS

How to plan them for better use

At the recent Material Handling Exposition in Philadelphia, engineers demonstrated numerous ways in which elevators can be made an integral part of the material handling system and outlined 16 ways to plan better use of freight elevators:

1. *Do not make elevators wait for loads.* And do not make expensive equipment such as fork-lift trucks wait for elevators. Loading space should be provided near the elevator so that loads can be accumulated. Power equipment should deliver material to a loading area and leave without waiting. Material can then be loaded on the elevators by less-expensive equipment such as manual or power-operated jack-lifts.

2. *Base elevator use on a complete survey of materials handling.* The objective is to minimize floor-to-floor, point-to-point handling time. The elevator operator is an integral part of the vertical phase of the entire materials-handling problem and must understand the function of the elevator in the over-all plan. In cases where an elevator pick-up schedule is adopted, the operator should understand the purpose of the system and be supervised sufficiently so that he adheres to the schedule.

3. *Install roller conveyors* permanently or temporarily on the elevator car floor. Loads can be pushed on or off with a minimum of time and effort. Place roller conveyors in loading and unloading areas so that loads can be accumulated on them and easily rolled into the elevator. Temporary accumulation storage near elevators reduces elevator waiting time.

4. *Tie in monorail conveyor systems* with the elevator by short sections of monorail attached to the car roof and connected by switch to the main system.

5. *Use trailers* that can be towed or pushed on the elevator by power truck.

6. *Build special wheeled dollies* to carry standard subassemblies to and from the elevator and throughout the plant.

7. *Make better use of palletized loads* for obtaining capacity loads on each trip.

8. *Use bins, shelf trucks and other containers on wheels,* rollers and castors to get capacity loads quickly and easily.

continued on page 168

The type it installed in Philadelphia's luxurious Rittenhouse Claridge and Savoy?

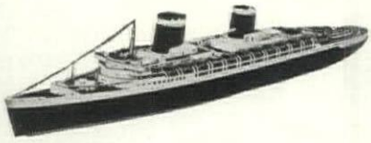
The advanced system recommended for the St. Francis Hospital in Lynnwood, Calif.?

The system chosen for guest comfort in Cincinnati's famed Netherland-Plaza Hotel?

Which York system of air conditioning should you buy?

The engineering feat accomplished for New York's Empire State Building?

The battery of Turbo Compressors installed in the great new *S.S. United States*?



The all-year-comfort system chosen for the beautiful Esso Building in New York City?

YOUR BUILDING CAN TELL YOU

That's because York has taken the compromise out of air conditioning.

You see, York Engineers work with a wide range of equipment. They do not have to compromise—and try to fit a rigid system to a building or fit the building to a system.

They can recommend with broad impartiality the installation that *precisely* suits the particular requirements of the building you are air conditioning. The result, of course, is better performance, longer life, at lower initial and operating cost.

There is a York Engineering Office near you. Give them a call. There is no obligation, naturally. Or write directly for details to York Corporation, York, Pa.

YORK AIR CONDITIONING AND REFRIGERATION
HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

York refrigeration air-conditioning

NEW!

An acoustical tile with the beauty of travertine, *plus* high sound-absorption value...

ACOUSTI-CELOTEX

TRADE MARK REGISTERED U. S. PAT. OFF.

CELOTONE

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FISSURED MINERAL TILE

For modern or traditional interiors, here is the most beautiful Sound Conditioning material of its type ever developed! New Acousti-Celotex CELOTONE combines the charm of travertine marble with excellent sound-absorption properties and incombustibility.

Deep, irregularly shaped and spaced fissures produce a pattern strikingly similar to travertine. Shadow patterns created by the fissures cause CELOTONE'S appearance to vary interestingly from different angles.

CELOTONE Fissured Mineral Tile has a surface of high light reflection value, superior washability. Can be washed repeatedly with no impairment of sound-absorption qualities. Has the paintability inherent to products of this type.

TO SEE SAMPLES OF CELOTONE, contact your distributor of Acousti-Celotex Sound Conditioning Products. If you don't know where to reach him, write to The Celotex Corporation, Dept. A-73, 120 S. La Salle St., Chicago 3, Ill. In Canada, Dominion Sound Equipments, Ltd., Montreal, Quebec.

ACOUSTI-CELOTEX

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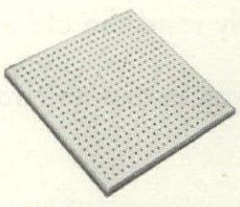
Sound Conditioning

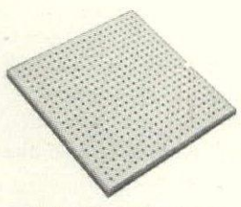
PRODUCTS FOR EVERY SOUND CONDITIONING PROBLEM

THE CELOTEX CORPORATION, 120 S. LaSalle Street, Chicago 3, Illinois



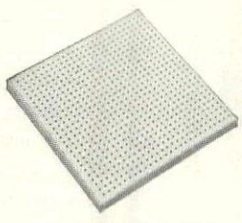
ACOUSTI-CELOTEX*
FLAME-RESISTANT SURFACED TILE

A cane fibre tile with a flame-resistant surface. This tile meets *Slow Burning* rating contained in Federal Specifications SS-A-118a. It may be washed with any commonly used solution, satisfactory for good quality oil-base paint finishes, without impairing its flame-resistant surface characteristics and without loss of sound-absorbing capacity. Repainting with Duo-Tex flame-retarding paint will maintain peak efficiency. Supplied in all sizes and thicknesses of regular cane tile.



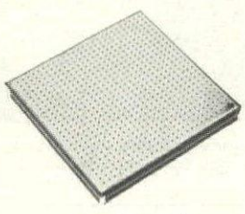
ACOUSTI-CELOTEX*
CANE FIBRE TILE

A lightweight, rigid unit, combining acoustical efficiency with a durable, smooth surface. Perforations (to within ⅛" of the back) assure repeated paintability, easy maintenance. Available in a variety of sound-absorbent ratings. Dry rot proofed by exclusive Ferox* process.



ACOUSTI-CELOTEX*
MINERAL TILE

Made of mineral fibre, felted with a binder to form a rigid tile with a universal rating of incombustibility. Perforated with small holes extending almost to the back, this tile provides high acoustical absorption plus unrestricted paintability by either brush or spray method.



ACOUSTEEL*

Combines a face of perforated steel with a rigid pad of sound-absorbing Rock Wool to provide excellent sound-absorption, together with attractive appearance, durability and incombustibility. The exposed surface of perforated steel is finished in baked-on enamel. Acousteel is paintable, washable, cleanable.

**Trademarks Reg. U. S. Pat. Off.*

FREIGHT ELEVATORS *continued*

9. *Install faster opening, bi-parting, power-operated doors.* Bi-parting doors open twice as fast as one-piece doors. Power operation will further cut time lost in loading and unloading. Doors can safely begin to open as the elevator approaches the landing so that the load can be handled as soon as the elevator stops.

10. *Provide doors at both ends of the elevator.* Avoid congestion and bottlenecks by providing a choice of loading areas. Save handling time by loading both ends simultaneously. Different building heights and different ent floor levels may cause transportation problems. An elevator with doors at each end can be installed between separate buildings to facilitate transfer from one to the other. Where buildings adjoin, an elevator installed in the taller one will serve all levels in both buildings.

11. *Coordinate elevators by telephones* in each car and at each landing connected to a central dispatcher, or by an automatic dispatching system.

12. *Equip elevators for self-leveling.* It takes a good operator to come within 3/8" of the floor on the first try. This is automatic in self-leveling cars. Loads can be handled more quickly and safely if the elevator is always level with the floor. Impact loads on the elevators are reduced, as is damage to the material being carried. The elimination of "jockeying" even saves some power.

13. *Install automatic controls* to speed service and reduce costs of running the elevator.

14. *Use push buttons on pendant fixtures* so that power-truck operators can call the elevator without dismounting.

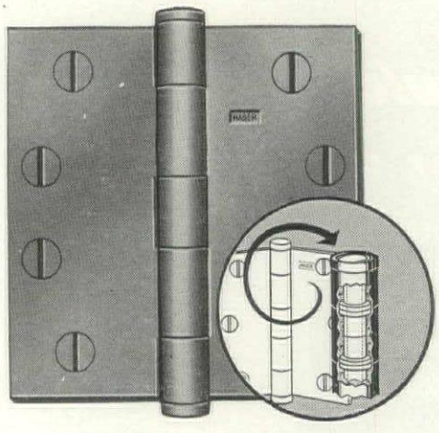
15. *Take advantage of gravity for down-flow.* Consider other types of conveyors such as spiral chutes installed at key points which will deliver material to the next production process by gravity and relieve some of the "down" traffic on the elevator.

16. *Consider other lifting methods.* Survey vertical transportation needs to determine whether light, frequent loads, which might cause an elevator bottleneck, can be carried by other means such as a dumbwaiter or a small, inexpensive, auxiliary elevator. Heavy personnel traffic, if a problem, may be carried on moving stairs or by self-service passenger elevators.

HERB BRAMMEIER, Jr.

"Her act is really clicking now that

EVERYTHING HINGES ON HAGER!"*



HAGER 1193 FBT
BRASS BUTTON TIP BUTT, STEEL BUSHED
Solid Brass Rust-Resisting Beauty
Hardened Steel-Bushed Knuckle Strength

BRASS BEAUTY *and* STEEL STRENGTH!

Hager combines the glistening elegance of luxurious solid brass with the timeless strength of steel (at the critical point of knuckle joint wear) to reinforce permanent beauty with *long life performance!*

Door weight swings on case-hardened, cadmium plated steel bushings, extending the *full length* of each knuckle. These hardened steel bushings—*steel-against-steel*—actually support door weight . . . leave brass knuckles free from erosive joint wear and friction. Beveled leaves insure close-fitting joints. Trim, square outer edges are firmly milled sharp and clean. Steel Pin with Brass Tip.

Specify Hager Solid Brass Steel-Bushed Butts for average frequency residence doors calling for finest service and enduring beauty.

FREE! *If you enjoyed laughing at Brammeier's mirth-making cartoon this month, send for Hager's new book containing 28 full-size popular "Everything Hinges on Hager" cartoons! It's FREE! Just address*

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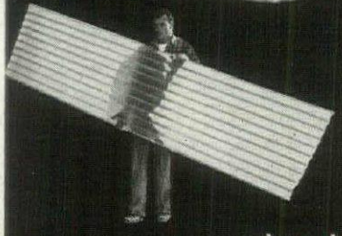
New decorative miracle...

Woven **Corrulux**



Two new *Corrulux* weaves in six decorator colors

● Combine the translucence of shatterproof Corrulux with the textured pattern of woven fabric and you have — *Woven* Corrulux, the most beautiful decorative panel ever designed! *Woven* Corrulux captures a new, translucent texture and uniformity never before obtained with any other building material. It's perfect for room dividers, bath enclosures, screens, ceilings, light panels, displays, signs and countless other uses.

Woven Corrulux comes in two weaves. *Bold weave* for accent on textures. *Fine weave* for lighting effects.

FREE COLOR IDEA FOLDER

Contains technical details, use suggestions, and color samples. Write for your free copy of the new Woven Corrulux Color Folder today!

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...introducing

GALAXY

a distinctive new design in

ACOUSTONE

America's most distinguished mineral acoustical tile

Galaxy is one in an exciting new series of architect-designed patterns in MOTIF'D *ACOUSTONE tile.

An original creation by architects Holabird and Root and Burgee, Galaxy is certain to stimulate the imagination, creating welcome new opportunities for unique ceiling beauty.

ACOUSTONE offers extraordinary sound absorption, is incombustible and highly light reflective.

And almost any design such as Galaxy can be produced in MOTIF'D ACOUSTONE, thanks to a patented process exclusive with U.S.G.—originators of the now widely imitated fissured acoustical tile.

*T.M.Reg.U.S.Pat.Off.

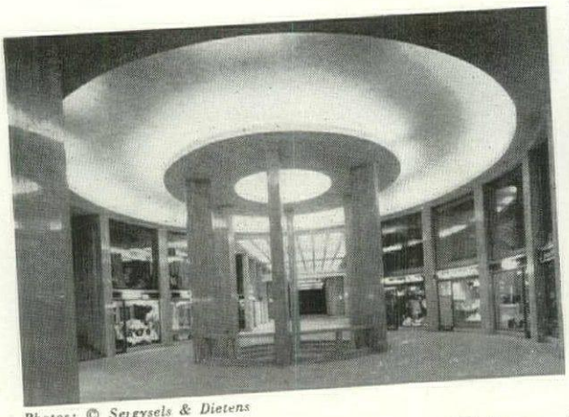
Sound control is a job for experts. For planning assistance, complete drafting room details, or information on other MOTIF'D ACOUSTONE tile patterns, contact your nearby ACOUSTONE contractor, or write United States Gypsum, Dept. 136, Chicago 6.

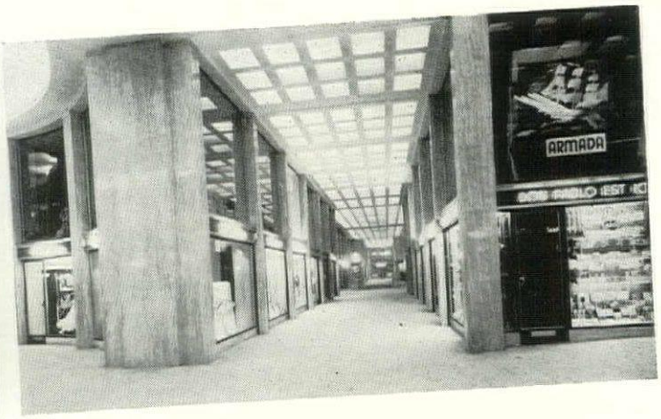
UNITED STATES GYPSUM

USG

Reg. U.S. Pat. Off.

UNITED STATES GYPSUM





Photos: © Sergysels & Dietens

Air-conditioned streets—A new US idea is "old hat" in Brussels

The big new idea in US shopping-center design is an air-conditioned "street" serving air conditioned stores (AF, Mar. '53).

In Brussels this idea has already crystalized in concrete and fine Italian marble: there, the new "Gallery Louise" is in effect a double-decked street with two levels of shops, all of which receive a fresh supply of conditioned air every 4 to 6 hours, depending on customer traffic.

Adjacent to Porte Louise at the intersection of Brussels' busiest shopping and business streets, the new shopping center is part of a huge building complex which includes a two-story garage, a 1,000-seat concert hall, a restaurant, several bars, 88 shops and a five-story apartment house.

Because it is built on a steeply sloping site, parts of the project, including some of the shops and the air-conditioned street or gallery, are underground.

Following are excerpts from the report of FORUM's Brussels' correspondent: "Already the most cosmopolitan fashion salons from Paris, banks, travel agencies have opened their main Brussels branches in this shopping center. Further galleries, still in the blueprint stage and planned to open up neighboring 'streets,' will contain chemists, drugstores, food stores and other shops catering both to visitors of the 'Gallery Louise' or to inhabitants of the vast apartment building overhead.

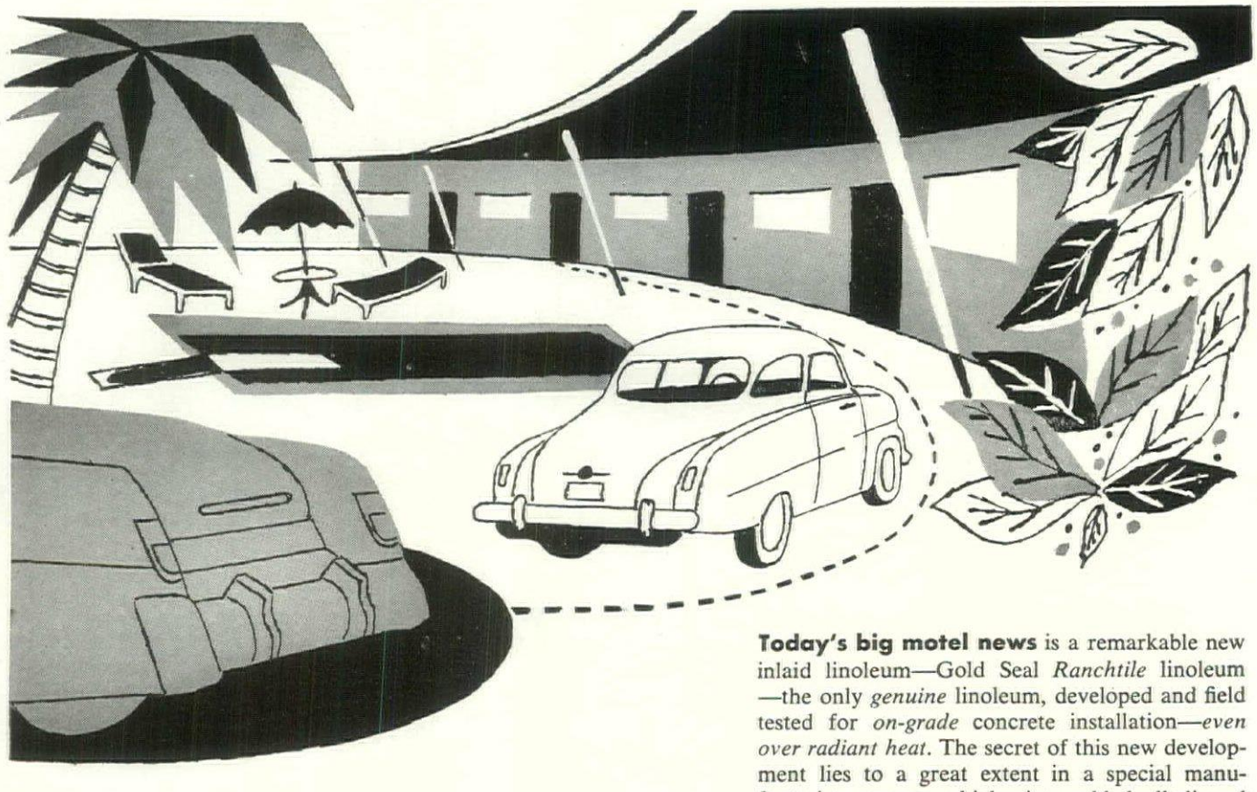
"Part of the concert hall, which is to be used for special film showings, top-class concerts and plays, can be cut off from the rest by a curtained partition and transformed into a long salon.

"The ground floor on a level with the street is decorated with Italian marble. Four Italian quarries worked for over a year to carry out the order for its supply.

"The whole complex was built in record time—not quite two years. Some 75,000 cu. meters of earth had to be displaced to develop the twin underground galleries. All in all the whole complex is 11 stories high, underground levels included.

"The apartment building is based on the same reinforced concrete and marble pillars which separate each individual shop and, one story higher, each garage stall from the other."

© EZRA STOLLER FOR CBS-TV



Here's a new and better floor for your motel

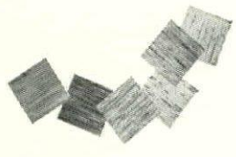
Today's big motel news is a remarkable new inlaid linoleum—Gold Seal *Ranchtile* linoleum—the only *genuine* linoleum, developed and field tested for *on-grade* concrete installation—*even over radiant heat*. The secret of this new development lies to a great extent in a special manufacturing process which gives added alkali and moisture resistance to both the wear layer and the backing of Ranchtile.

Unlike ordinary tiles that are hard and brittle when cold—that soften, dent, and deform when warm—this unusual inlaid linoleum gives constant *true resilience* and *quiet comfort*. It does not chip, break, or shatter. It will not deform. It has excellent resistance to denting. Instead of the hard, cold "factory" look associated with ordinary tiles, Ranchtile's bright, inviting colors make any place look warm, rich, and home-like.

Maintenance costs are exceptionally low: (1) Ranchtile has greater resistance to soil than other fine floors, (2) it has excellent resistance to abrasion, (3) it is unharmed by most of the solvents, greases and fats that ruin brittle tiles, and (4) no special maintenance equipment, materials or procedures are required to keep Ranchtile looking new for years of satisfactory service.

All the facts and figures about this remarkable floor covering are covered in "The Ranchtile Story." For your free copy, write Architects Service Department, Congoleum-Nairn Inc.

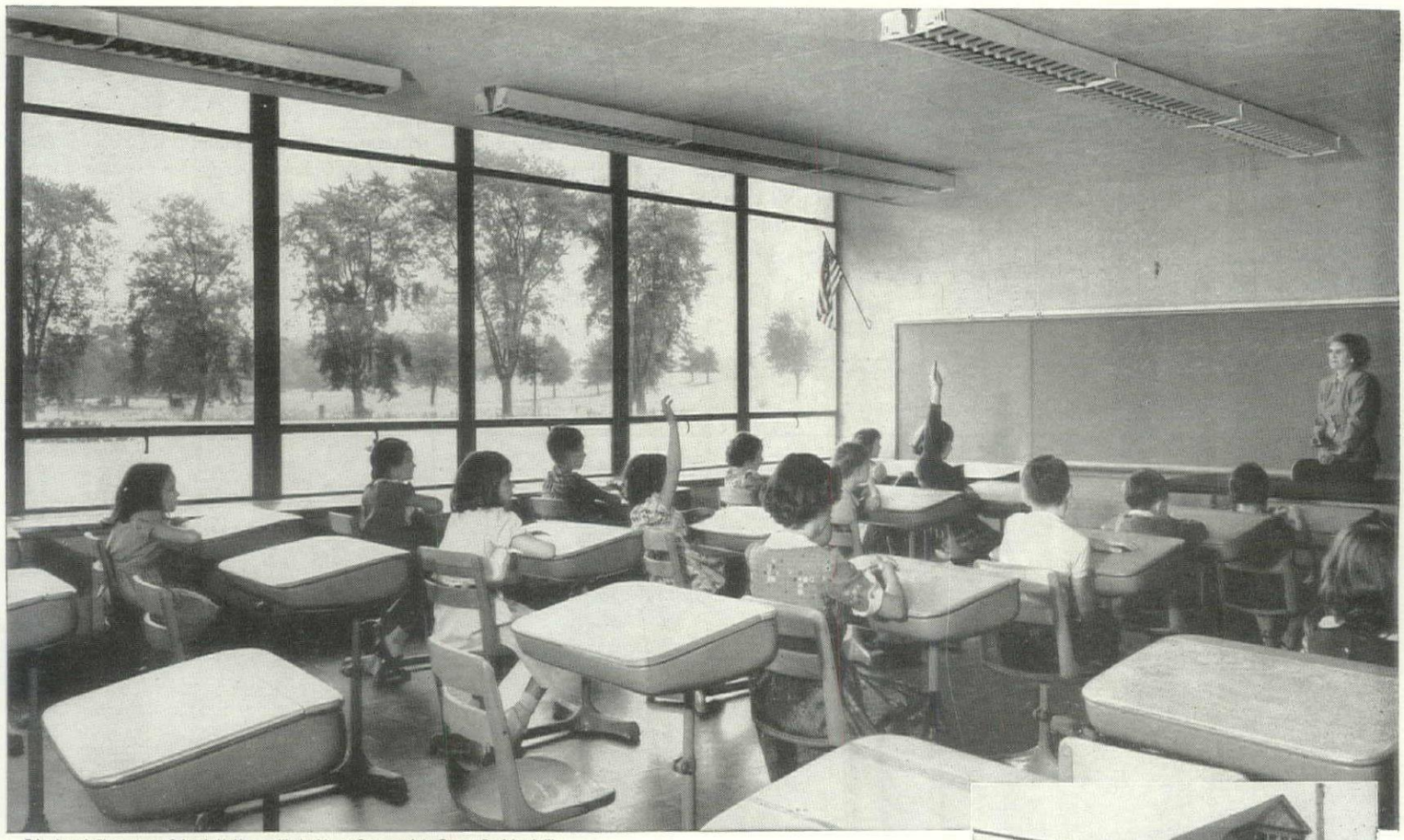
RANCHTILE
offers bright, clear, permanent colors in 6 textured patterns, 9" x 9" tile.



GOLD SEAL®

FLOORS and WALLS

CONGOLEUM-NAIRN INC., Kearny, N. J. ©1953



Edgebrook Elementary School, McHenry, Ill. Architect: Raymond A. Orput, Rockford, Ill.

COMPARE THIS with your 4th Grade schoolroom

Remember your fourth grade schoolroom, how dark it seemed inside, how cooped-up you felt, especially on a spring day when the world was in bloom and you could barely see out?

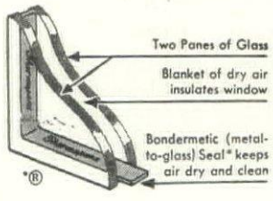
Compare that with the daylight flooded classroom above. See how the wonderful wall of clear glass extends the room into the world beyond. There's no cooped-up feeling here!

There are many other good reasons for Daylight Walls. Illumination costs are reduced. Clear, flat glass admits more natural light than glass in any other form. When properly used, it can eliminate shadows, which cause glaring contrasts and eye discomfort. Notice the evenness of the lighting in this photograph taken without the aid of artificial lights.

When you build with large sheets of clear glass you provide, too, a wall that is inexpensive to construct (no masonry, lath, plaster or paint). And it's easy to clean, permanently beautiful. In the box below, you'll find facts on *Thermopane** insulating glass that helps to reduce heating costs, adds to comfort and shuts out distracting noise.

If you design schools, you will enjoy reading the newest authoritative book on daylight illumination, *How to Get Nature-Quality Light for School Children.* Principles set forth are applicable for other buildings, too. For a free copy write Libbey·Owens·Ford Glass Co., 4273 Nicholas Bldg., Toledo 3, Ohio. *®

THERMOPANE QUICK FACTS



Thermopane insulating glass is widely and successfully used. *Thermopane* with ½" of dry air hermetically sealed between two panes has twice the insulating value of single glass. This minimizes chilliness, drafts and heat loss at windows in winter. *Thermopane* cuts air-conditioning costs by reducing the amount of heat entering during summer. It cuts out 44% more noise than single glass. Write for *Thermopane* literature. Libbey·Owens·Ford Glass Company, 4273 Nicholas Building, Toledo 3, Ohio.

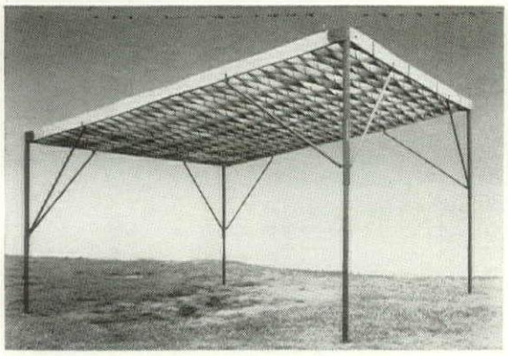
L·O·F GLASS · PLASKON · FIBER-GLASS

THERMOPANE • PLATE GLASS • WINDOW GLASS

DAYLIGHT WALLS

. . . THAT LET YOU SEE

OTHER L·O·F GLASS PRODUCTS: Vitrolite* · Tuf-flex* Tempered Plate Glass Tuf-flex Doors · Safety Glass · E-Z-Eye Safety Plate Glass · Fiber·Glass

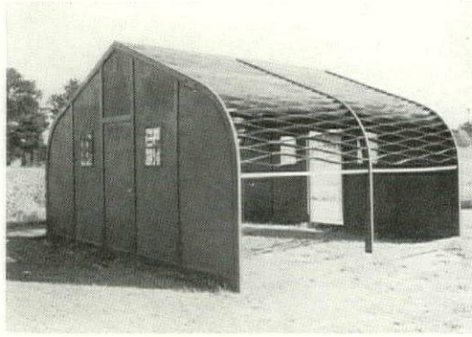


ing; for factories, with insulation board and built-up roofing materials. A slab roof could be made with *Gambella* serving as the core—much like the paper honeycomb in a flush panel door. In this type of construction, the diamond pockets of the lattice might be filled with inexpensive pouring-type insulation, and hardboard, plywood, or asbestos-cement sheeting applied top and bottom.

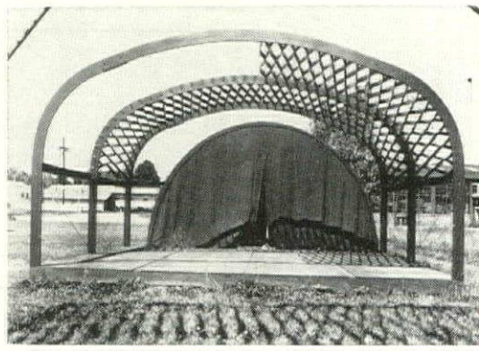
Where the underside is left exposed, the curved slats not only create a beautiful ceiling pattern but serve as sound traps. On renovating jobs, *Gambella* may be used as a suspended ceiling to veil piping and ducts while doubling as a graceful variation on the egg-crate-type light diffuser.

A *Gambella* close-up

Three plies of red oak comprise each *Gambella* slat. Just 3/16″ thick, the laminate is said to be more resistant to splitting under stress than a solid wood slat of greater thick-



ness. The graining of each ply runs in the same direction for flexibility on the horizontal plane of the assembled structure. The depth of the ply—3″—and the fasteners linking slat to slat combine to provide stiffness through the vertical plane. These interconnections also help transmit impact loads from one band to another. Each section is actually "prestressed" as it is expanded from its 1′ x 8′ telescoped size to the full 8′ x 8′, and secured with clips



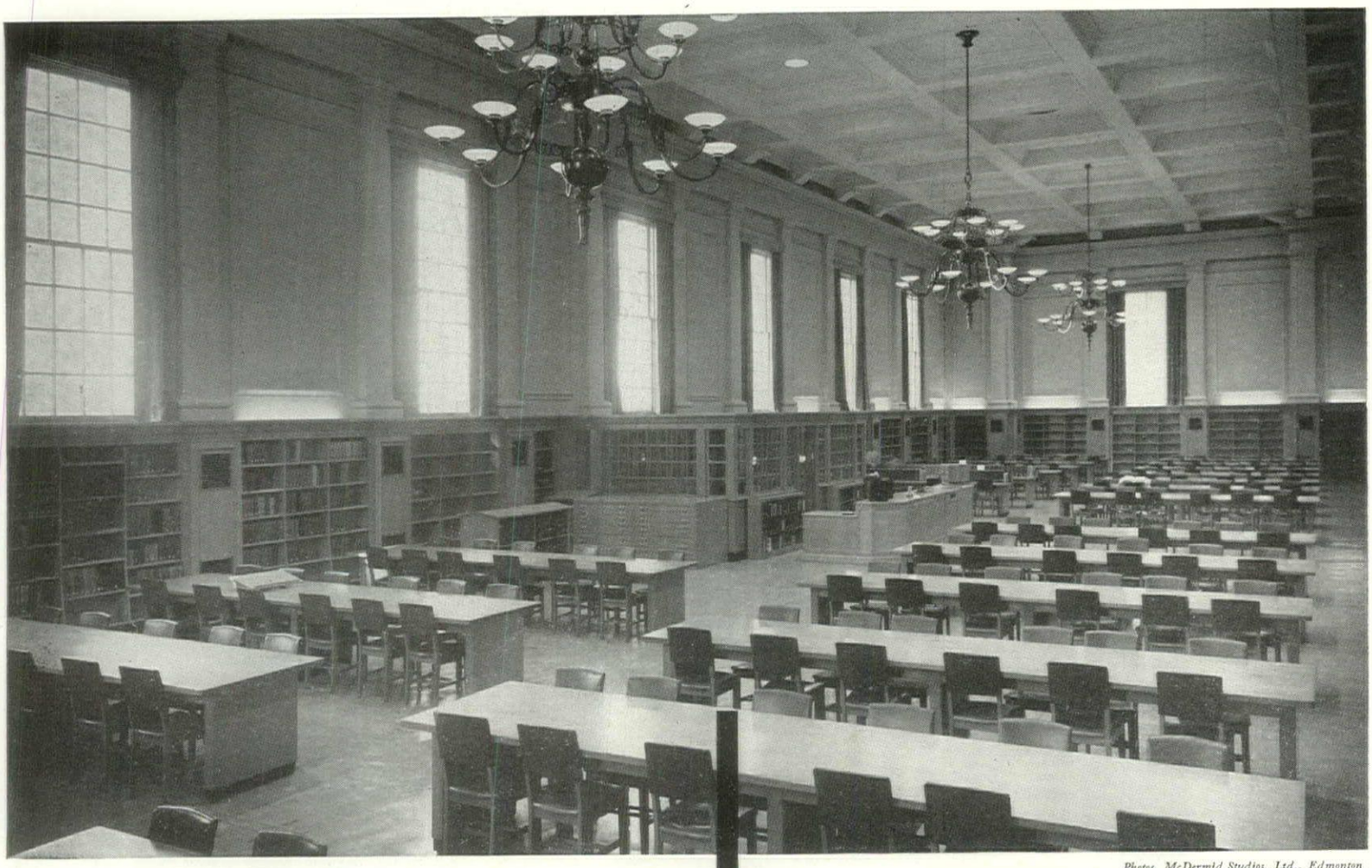
to framing members. Several types of take-apart and permanent fastening devices are available. Sections 16′ x 16′ and larger may be obtained on special order.

Manufacturer: Gamble Bros., 4601 Almond Ave., Louisville 9, Ky.

CONTEMPORARY CLASSROOM FURNITURE provides comfort for students and cushion for budget

Taking its first shot at school furniture, famed billiards-equipment firm Brunswick-Balke-Collender has made a triple carom. The style-coordinated tables and chairs are versatile in use, easy to store and attractively priced. Chicago Industrial Designer Dave Chapman used modern furniture techniques and materials to create this comprehensive line that

continued on p. 180



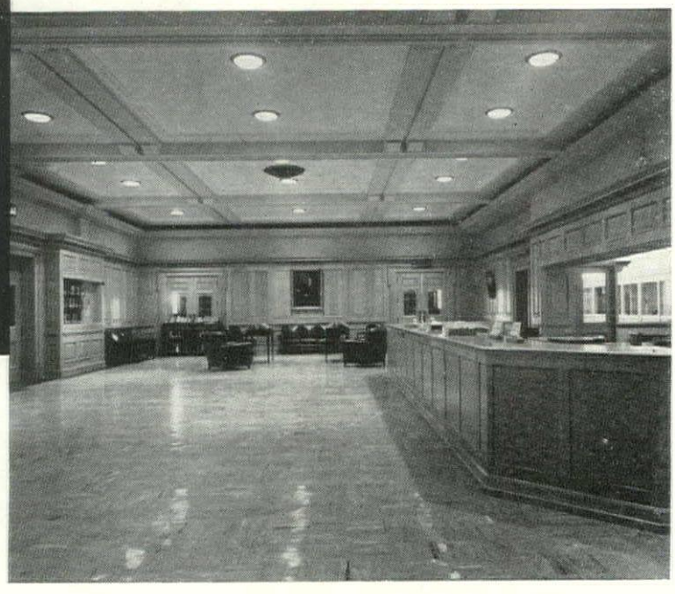
Photos, McDermid Studios, Ltd., Edmonton

RUTHERFORD LIBRARY, UNIVERSITY OF ALBERTA, EDMONTON. RULE, WYNN & RULE, Architects, Edmonton ★ POOLE CONSTRUCTION CO., LTD., Edmonton ★ KEELER PAINTING AND DECORATING CO., Edmonton

Magna Cum Laude

Highest honors went to Pratt & Lambert when it came to specifying paints, varnishes and stains for the beautiful, new Rutherford Library at the University of Alberta. P&L products were used exclusively.

And this is just one of countless projects throughout the United States and Canada where architects have relied on Pratt & Lambert, not only because of P&L's quality reputation, but equally because of the service which all P&L Architectural representatives stand ready to render. You are invited to call upon them any time for assistance in color planning and specification writing for any project.



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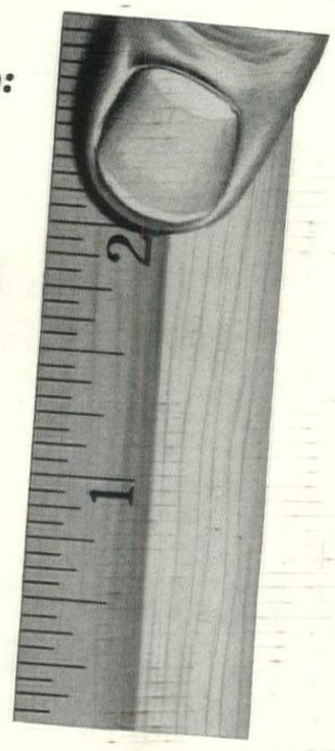
not How Thick?



but How Thermal?*

*Thermally efficient

Obtaining roof insulation results begins with "What is the thermal value of the insulation?" To answer this safely and consistently, specify Fiberglas† Roof Insulation. By all standards of comparison, Fiberglas Roof Insulation gives you dependable, proved-in-use performance that is far superior to most materials. It is made from one of the most efficient insulators known, fibers of glass.

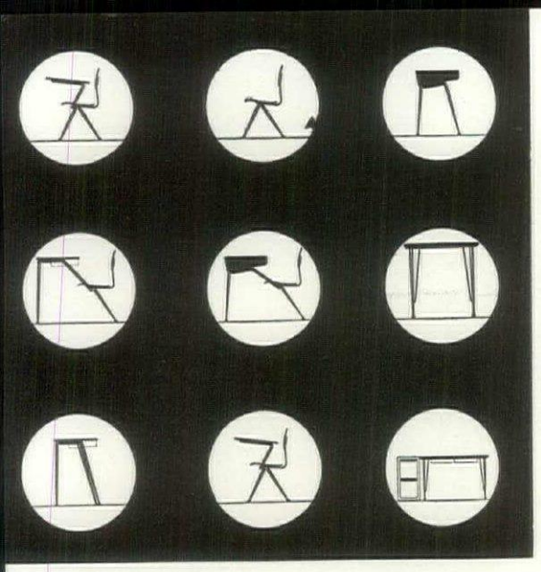
You get all these other advantages, too, when you specify Fiberglas Roof Insulation. Ease and speed of handling to cut labor costs. Light weight to reduce structural steel. And fibers of glass will not rot. In all, highest quality performance at comparative low cost.

For proof of Fiberglas Roof Insulation superiority, send for latest technical brochure about many outstanding jobs, "Fiberglas Roof Insulation Preferred", and Design Data Sheet RW6.A2. No obligation. Write: OWENS-CORNING FIBERGLAS CORPORATION, Dept. 67-G, Toledo 1, Ohio.

†Fiberglas is the trade-mark (Reg. U. S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with fibers of glass.

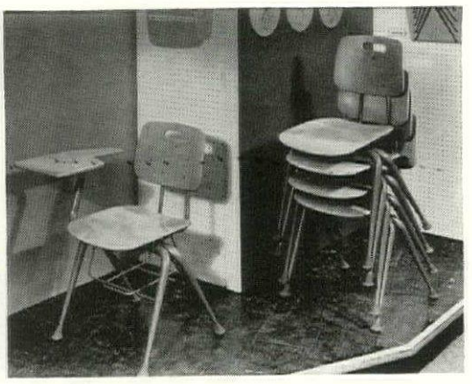
Specify OWENS-CORNING FIBERGLAS Roof Insulation

first for thermal value



NEW PRODUCTS *continued*

behaves as well as it looks. On the chairs, shaped plywood seats and back supports assure good, comfortable posture. The tubular metal chassis, independent structurally from the chair seat, flexes with the student without strain on the seat. Stackable up to the ceiling, these lightweight but sturdy chairs come in a wide range of sizes to fit students from kindergarten through graduate school. The basic chair sells for $6.95 to $8.75. (Discounts on quantity orders.) It can be converted from

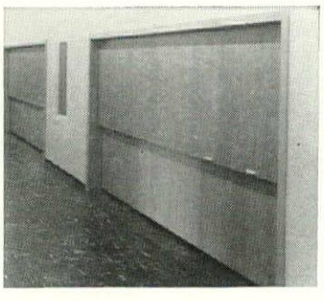


lounge chair to desk unit by attaching a simple tablet arm or book-box writing top. A dust-defying wire book rack is optional equipment. The tables, also constructed on resilient frames of lightweight metal, can be grouped for different classroom activities, and when necessary, can be nested out of the way. Prices run from $27.50 for the shortest 2′ x 4′ with ⅝″ plywood top to $42.95 for the tallest 3′ x 6′. Plastic-surfaced tops are available at slight additional charge. A teachers' planning desk 30″ wide x 4′ long with knee panel and two flat drawers is $54.95. In addition to pitched-top desks, several lift-lid models with flat work surfaces are included in the line.

Manufacturer: Brunswick - Balke - Collender Co., 623 South Wabash, Chicago, Ill.

SCHOOL WARDROBE DOORS open upward to save precious floor space

When the recess rush charges a coatroom outfitted with Barcol's *Wardrobedoor*, it will meet no opposition from swinging panels. The two-part door unit opens vertically to create a completely accessible classroom wardrobe 2′ deep—as much as 18″ shallower than a conventional closet. Made of birch or oak plywood over a solid core, the overhead unit is mounted on the door frame on 2″ x 8″ casing.



It takes 3′-6″ head room and 9″ side room. Counterbalanced, it operates smoothly and quietly on nylon rollers; all chains and operating mechanism are concealed, and there is

continued on p. 184

. . . the finest structures rest on

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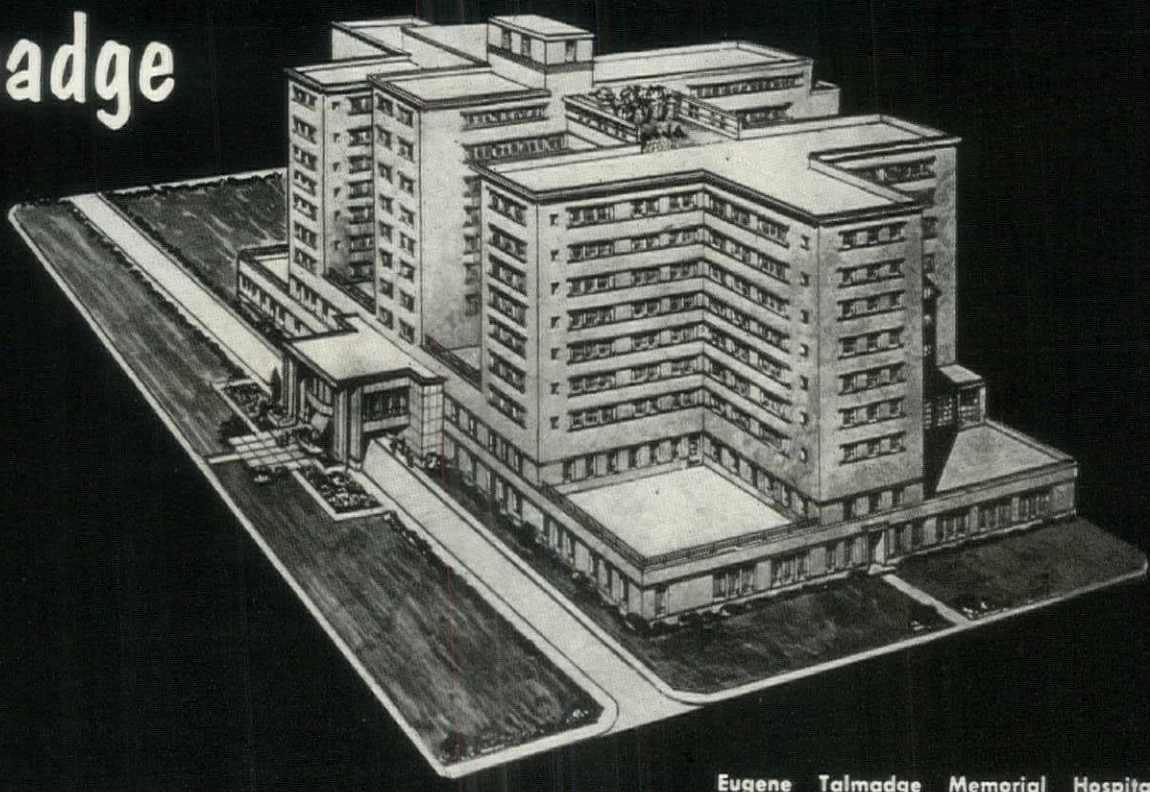
Ingalls will fabricate the steel for Georgia's new Eugene Talmadge Memorial Hospital.



Eugene Talmadge Memorial Hospital
Augusta, Georgia. Gregson & Ellis, Architects, George A. Fuller Company, General Contractor

Let us quote on your steel fabricating and erecting jobs.

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Sales Offices: New York, Chicago, Pittsburgh and Houston
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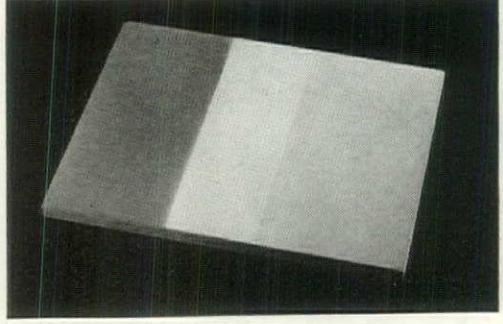
no dirt-inviting track on the floor. A 10′ x 6′ *Wardrobedoor* accommodating 40 students sells for $480 F.O.B. Oxford, Ill.; a 12′ x 6′ unit for 48 students is $540. Either model can be equipped with electrical controls at additional cost. *Wardrobedoors* will do double classroom duty if outfitted with chalk board and rail or cork bulletin board. Either can be attached to the top door panel at the factory.

Manufacturer: Barber-Colman Co., Rockford 1, Ill.



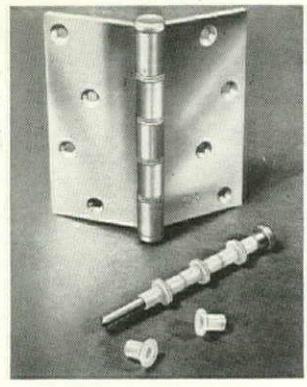
PLASTIC-FACED PLYWOOD fabricated for one-coat paint finish

G-P-X Green is a medium-density plywood produced with an especially smooth surface for easy painting and maintenance. Overlay sheets of 80% cellulose fibers and 20% phenolic resin are applied to each side of the board with a hot press during manufacture. More abrasion and moisture resistant than regular Douglas fir plywood, *G-P-X Green* is suitable for exterior as well as interior walls, displays, sliding doors, furniture, and store fixtures. Even where used for outdoor signs exposed to rough weather, the fiber face will not delaminate. *G-P-X* is made in 3′ x 8′ and 4′ x 8′ board in thicknesses from 5/16″ to 1⅝″. Prices range from 35¢ to 50¢ a sq. ft. The single coat of paint necessary for finish is said to last longer than the conventional two since the plastic surface which serves as a primer is impervious to hairline checking and resists grain raising.

Manufacturer: Georgia Pacific Plywood Co., Augusta, Ga.

SQUEAKPROOF HINGE never needs oiling

Nylon bearings in the Getty hinge assure its easy and silent operation. Requiring no lubrication, the new door hardware makes good sense for use in public buildings where maintenance means money. The hinge itself is made of extruded bronze with a stainless steel pin so that the entire piece of hardware is corrosion-resistant. It comes in lengths of 3½ to 6″. Because the nylon bushing is half the thickness of the conventional ball bearing it



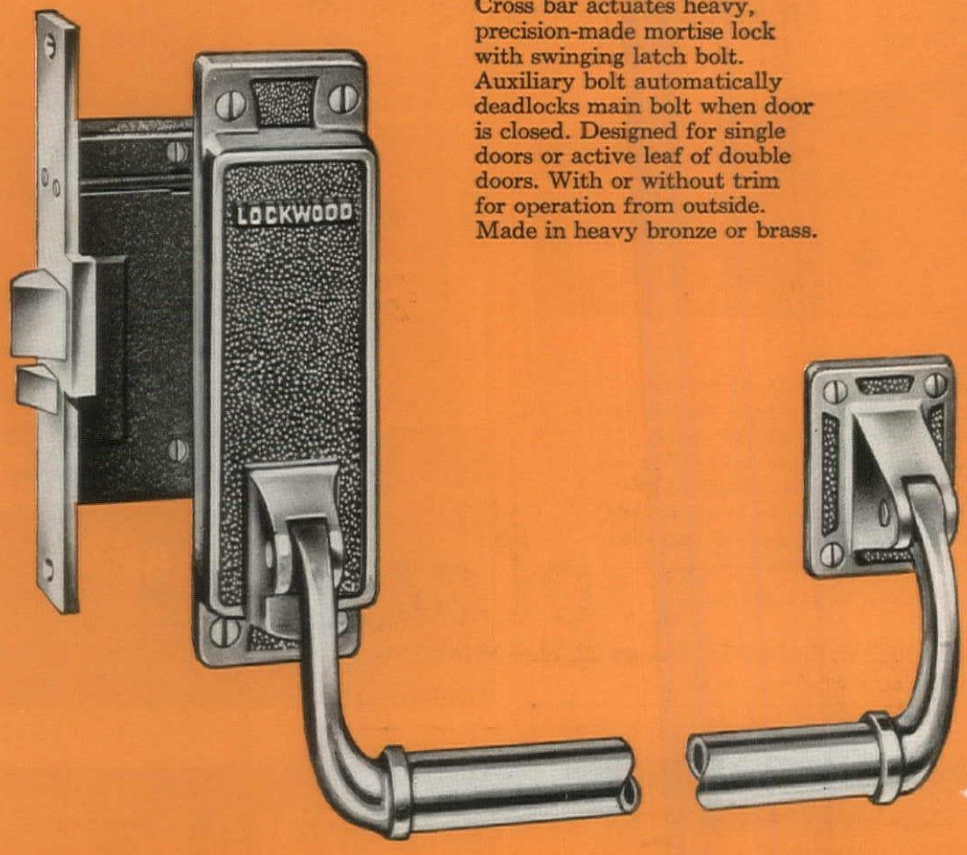
replaces, more solid metal remains on the barrel, thus creating a stronger unit. A pair of 4½″ x 4½″ hinges retails for $17.10.

Manufacturer: H. S. Getty & Co., Inc., 3348 N. 10th St., Philadelphia, Pa.

LIQUID LATEX COMPOUNDS add bounce and wearability to concrete

In the fall of 1950 Atlanta Engineer O. I. Freeman commissioned Georgia Tech engineers to try to find a trowel-applied floor surfacing that would set quickly and take factory abuse gracefully. They found it and more. After two years and hundreds of unsuitable compounds went down the drain, they devel-

continued on p. 188



MORTISE EXIT DEVICE
Cross bar actuates heavy, precision-made mortise lock with swinging latch bolt. Auxiliary bolt automatically deadlocks main bolt when door is closed. Designed for single doors or active leaf of double doors. With or without trim for operation from outside. Made in heavy bronze or brass.

Safe exit assured by LOCKWOOD

Trouble-free installations in outstanding public buildings across the nation have won Lockwood an unequalled reputation for quality and dependability in exit devices.

Vertical, mortise and rim type devices . . . and a complete line of accessory equipment... assure satisfactory installation under all conditions. Each item is carefully engineered to give long service and the ultimate in smooth-working performance.

Lockwood exit devices are typical examples of Lockwood's leadership in the development and manufacture of all types of builder's hardware.

Lockwood

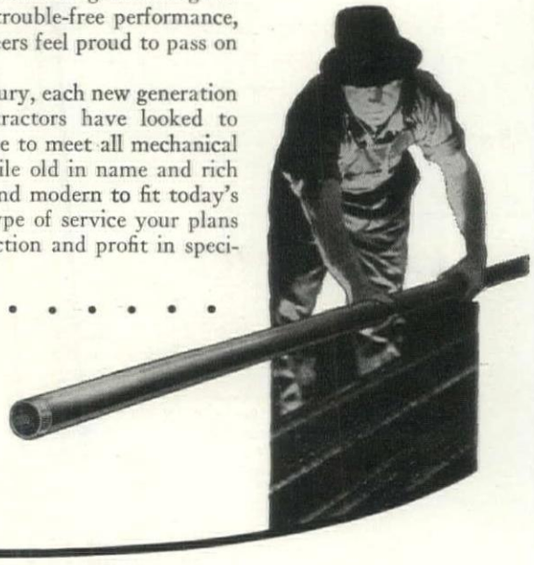
LOCKWOOD HARDWARE MANUFACTURING COMPANY
Fitchburg, Massachusetts

When it comes to the pipe in your plans—

WHETHER you are planning for a conventional hot water or steam heating system, for fire control and plumbing lines, or for a modern radiant heating application or a snow melting installation, remember that NATIONAL, the world's most widely used pipe, has all the necessary qualities for complete adaptability in all these services. As a busy architect and engineer this means to you—no worries, no doubts, no uncertainties—just a simple specification of the one word "NATIONAL" relieves you of any and all further checks or investigations. It's as easy and as simple as that.

Why? Well,"old timers" will tell you that confidence in NATIONAL to fill the bill is born of years of experience and observation, upon thousands and thousands of installations in America's finest and costliest structures. But most important of all, it is based on the comforting knowledge of NATIONAL'S uniform, dependable, trouble-free performance, the kind that architects and engineers feel proud to pass on to their clients.

For over three quarters of a century, each new generation of architects, engineers and contractors have looked to NATIONAL with complete confidence to meet all mechanical requirements. They know that while old in name and rich in service records, it is ever new and modern to fit today's requirements. And so, whatever type of service your plans call for, you will find both satisfaction and profit in specifying NATIONAL "all the way."



Here's why *NATIONAL* Pipe gives the most service per dollar cost:

1 *It's Uniform Throughout*—National Pipe is uniform in metallic structure, ductility, strength, corrosion resistance, surface finish and diameter.

2 *Threads and Cuts Easily*—Absence of slag inclusions, laminations and blisters assures smooth, strong threads . . . clean cuts.

3 *Coils and Bends Well*—National Pipe has that extra strength and ductility so necessary to meet the demands of close and exacting fabrication.

4 *Makes Sound Joints*—Uniformity and accuracy in manufacturing have made unequaled pipe jointing records for National Pipe . . . whether welded or threaded.

5 *It's Scale-Free*—National Scale-Free Pipe avoids damage to valve seats and clogging of small orifices.

6 *It's Spellerized*—Special rolls work the bloom surface to eliminate irregularities and produce a dense, uniform surface.

7 *Constantly Improved*—For over 60 years, National Steel Pipe has constantly been improved to meet the most difficult requirements.

8 *It's Tested and Inspected*—Each and every stage of production is carefully checked by the finest instruments . . . thoroughly tested by the most experienced men.

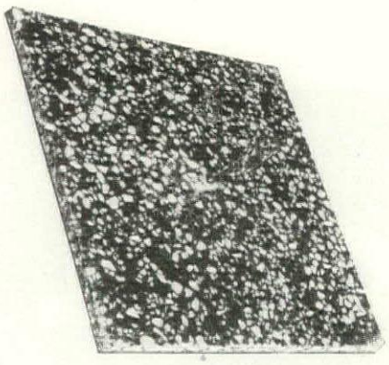
9 *Controlled from Start to Finish*—From the raw material to the finished product, one organization has rigid control over the manufacturing steps that produce National Steel Pipe.

10 *Nationwide Acceptance*—A cross section of industrial or building applications will show a predominant use of National Pipe . . . largest selling pipe in the world.

NATIONAL TUBE DIVISION, UNITED STATES STEEL CORPORATION, PITTSBURGH, PA.
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO, PACIFIC COAST DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U·S·S NATIONAL Steel PIPE

UNITED STATES STEEL



oped and successfully tested two synthetic rubber compounds that, when substituted for water in sundry cementious mixes, produced toughness, elasticity and adherance to other materials. Used in mortar, concrete and plaster to provide moisture needed for hydration, they at the same time dispersed a film of resilient latex solids throughout the mix. One of the compounds, *Surco Yellow Label*, provides exceptionally good water resistance; the other, *Surco Red Label*, produces a very tough

film with good wearing characteristics. The *Yellow Label* type was tested in roofing materials, stucco, plaster, waterproofing compounds, and as flashing and calking. The *Red Label* was used to patch hard-bitten industrial floors and to make a precast terazzo-type material. The latter was applied to an asbestos-cement panel and sanded and polished, a type of artificial stone that could be installed inexpensively—about 70¢ per sq. ft. —for use on store fronts, window sills, and as a substitute for costly conventional terazzo. Other potential applications for the *Red Label* type are in walks, drives, precast concrete products, pipe covering and masonry for tile setting.

Basically off-white, the composition can be colored by incorporating various aggregates in the mix. In home construction *Surco* looks like a good bet for the slab house, where for 35¢ per sq. ft.—about the same cost as finishing the concrete and putting on asphalt tile—it can be troweled on for an attractive, resilient, dress floor.

As a vote of confidence Georgia Tech specified concrete made with *Surco* to coat its sprawling Grant Field Stadium.

A complete report of the Institute's tests on *Surco*, titled "A Resilient Flooring and Surfacing Composition," can be obtained from G. I. T. The manufacturer will provide a chart listing proportions, type of binder, and aggregates and thickness recommended for various kinds of industrial and residential applications.

Manufacturer: Surco, 110 Pear St., Atlanta, Ga.

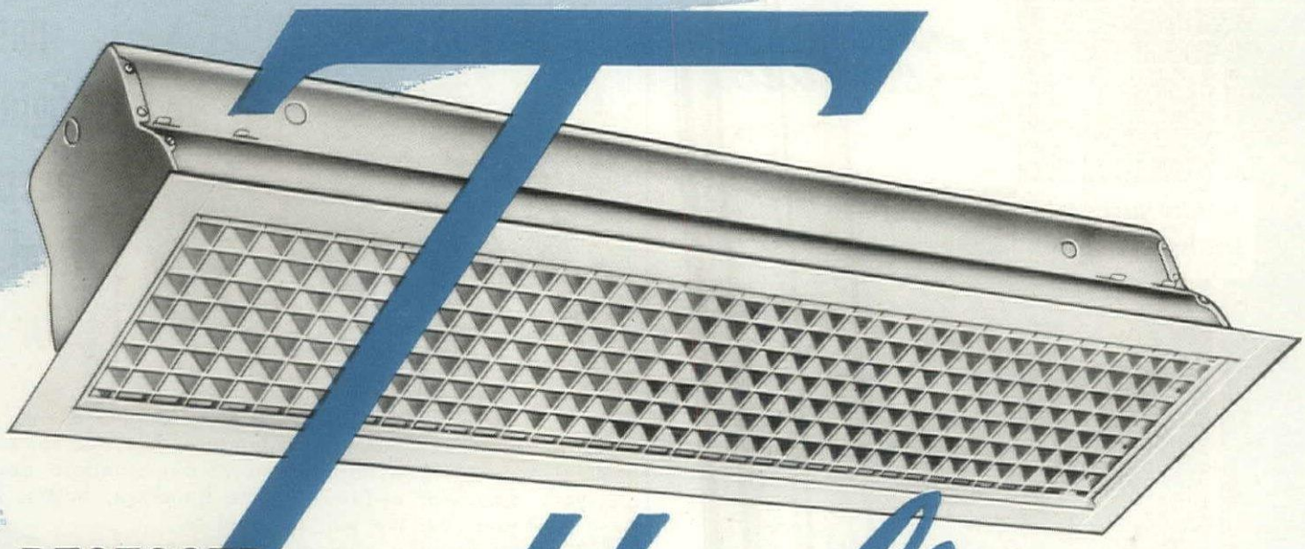
Research Report: Engineering Experiment Station, Georgia Institute of Technology, Atlanta, Ga.

LOW-COST LUMINOUS CEILING carries U.L. approval for installation below sprinklers

If and when a fire should start beneath an *Acusti-Luminus* ceiling, the thin, corrugated, plastic diffuser sheets will uncurl and drop away in plenty of time to let the sprinkler system above go to work. Masking the sprinkler heads and other service lines and ducts during workaday operation of a store or industrial plant, the ceiling shows only a sleek

continued on p. 192

the Benjamin Leader Line presents Versatility "Plus"



RECESSED *Trofferlites*

for Interiors of Distinction

FEATURES LIKE THESE MEAN VERSATILITY "PLUS":

TROFFERLITE ACCESSORIES

DIRECLITE
adjustable, incandescent spotlight.

CORNER FILL-IN
joins sides of rectangular arrangements.

COMPLETE RANGE OF SIZES

12" Regular
12" Shallow
24" Shallow
24" Regular

BAFFLE LOUVER
for locations requiring extra-high light levels.

GLASS ENCLOSED
means less maintenance, better lamp operation.

6 MOUNTING STYLES
—general purpose, T-bar, Simplex ceiling, plastic frame, wood furring and channel furring (illustrated).

MOLDED PLASTIC LOUVERS
No warpage . . . no discoloration.

5 LAMPING ARRANGEMENTS

12"—1 lamp
12"—2 lamps
12"—3 lamps
24"—4 lamps
24"—6 lamps

Versatility *plus* efficiency and distinctive appearance . . . that's *Trofferlite*. Offices, stores and commercial establishments of all kinds take on a new look of distinction with these trim, slender units which appear to be a part of the ceiling. There is no limit to the variety of designs, arrangements and architectural effects you can achieve with these recessed Troffers. They are available in a wide range of styles and sizes, in individual units or continuous rows, as shown at left.

For Interiors of Distinction, specify Versatility "*Plus*" . . . specify recessed *Trofferlites*. Complete catalog data sheets sent on request.

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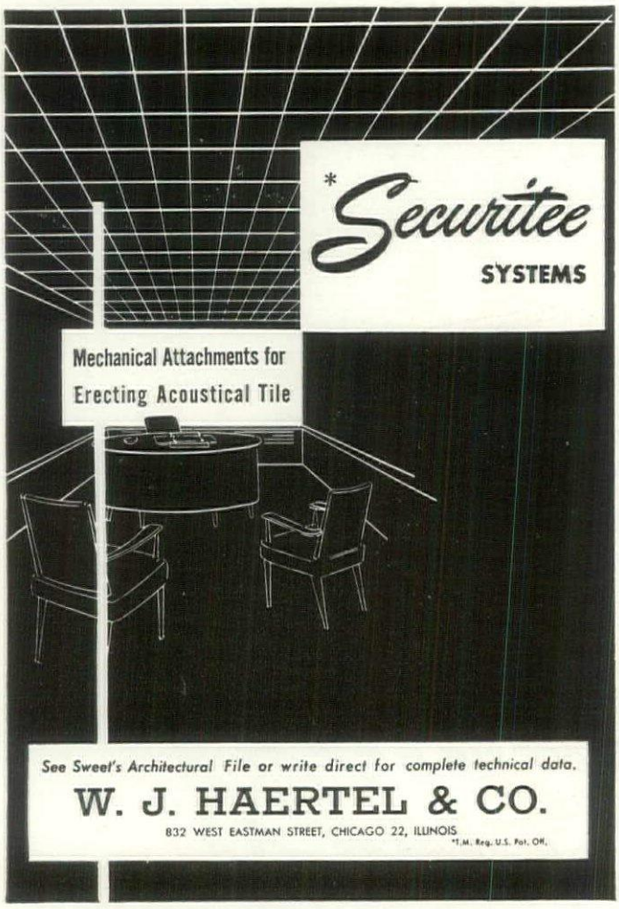
Exclusive licensee of the Leader Line in Canada: Robertson Irwin Limited, Hamilton, Ontario

Leader Line

Sold Exclusively through Electrical Distributors

Benjamin Electric Mfg. Co., Leader Division, Dept. YY, Des Plaines, Illinois, also makers of famous Benjamin lighting equipment and sound signals for Industry, Institutions and Commerce.

SP-273



See Sweet's Architectural File or write direct for complete technical data.

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"Everything for the Smoker"

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Large capacity wall receptacle saves floor space. Flip blades and all refuse disappears. 6" x 2" opening. Model 1227-B.

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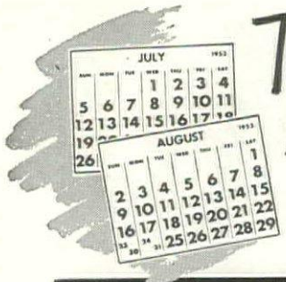
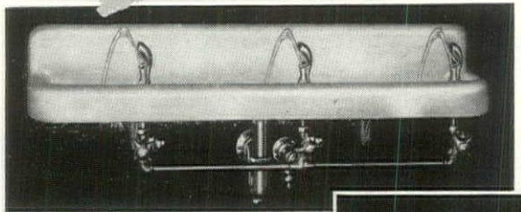


Time for replacement and repairs



In current remodeling and repair programs, Halsey Taylor Drinking Fountains play a prominent part, because they help promote the high health standards set by leading educational authorities and the architects who aid in such plans.

Halsey Taylor battery fountains, wall and pedestal types and new Lo-Level Cafeteria Coolers provide a wide range of choice in fountain specification. Write.

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THE HALSEY W. TAYLOR CO., WARREN, OHIO

Halsey Taylor

DRINKING FOUNTAINS

the Safe Specification

for Glazing

EVERY TYPE OF WINDOW

Specifying *Tremglaze* means a better job...a safer job...an economical job. *Tremglaze* requires no painting—comes in harmonizing colors, bonds tightly to metal, wood and glass. Over 20 years of experience makes Tremglaze the safe specification.

Paint First...Then Glaze
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MASTIC GLAZING COMPOUND

Recent Tremglaze Jobs:
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Parklabrea Housing Projects, Los Angeles

TREMCO

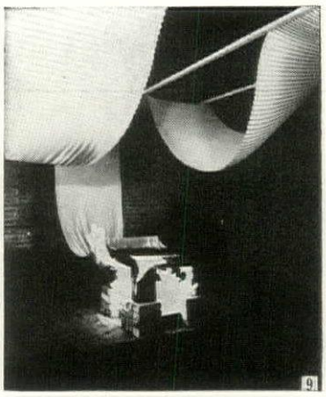
THE TREMCO MANUFACTURING COMPANY, Cleveland, Ohio

THE TREMCO MANUFACTURING COMPANY (Canada) LTD., Toronto, Ontario

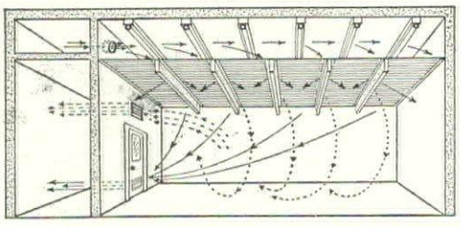
NEW PRODUCTS *continued*

vista overhead. Its vertical baffles are made of perforated steel finished in baked white enamel and packed with sound-absorbing material. T-tracks supporting the fins also hold up the translucent sheeting. The baffles not only provide efficient acoustical correction, but also break up the sky effect of the wall-to-wall diffusers. (Over-all lighting intensity can be regulated by the number of fluorescents above.)

Experimental installations have shown that ductless air conditioning can be worked into this ceiling system. The space above the diffusers serves as a distribution plenum and the air is discharged at low velocity evenly and imperceptibly through the tiny 1/8" bumps left by the corrugations along the flanges (see diagram above for air pattern). Fully installed, an *Acusti-Luminus* ceiling runs about $2 a sq. ft. Where noise is no problem, it may be hung without baffles for around $1.55 to $1.75. When necessary the plastic diffusers may be taken down and washed with a mild detergent solution.



Seconds before the sprinklers above the ceiling will react to a fire, the plastic diffuser panels will soften and drop to make way for the spray.

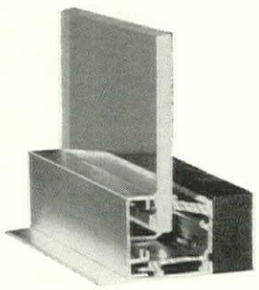


For a charge of 3¢ per sq. ft., Luminous Ceilings, Inc. will come, roll up the plastic, machine-wash it, rewax it and put it back in place.

Manufacturer: Luminous Ceilings, Inc., 2508 W. North Ave., Chicago 47, Ill.

SLENDER SASH designed for modern stores

This slim square-face window sash is especially suited to contemporary commercial buildings. Made of aluminum and treated to resist corrosion, the new sash is available in several types: an extruded all-metal sash *No. 316* costs $2 per lin. ft.; the semi-extruded model *No. 216*, with a resilient gutter, is $1.75;

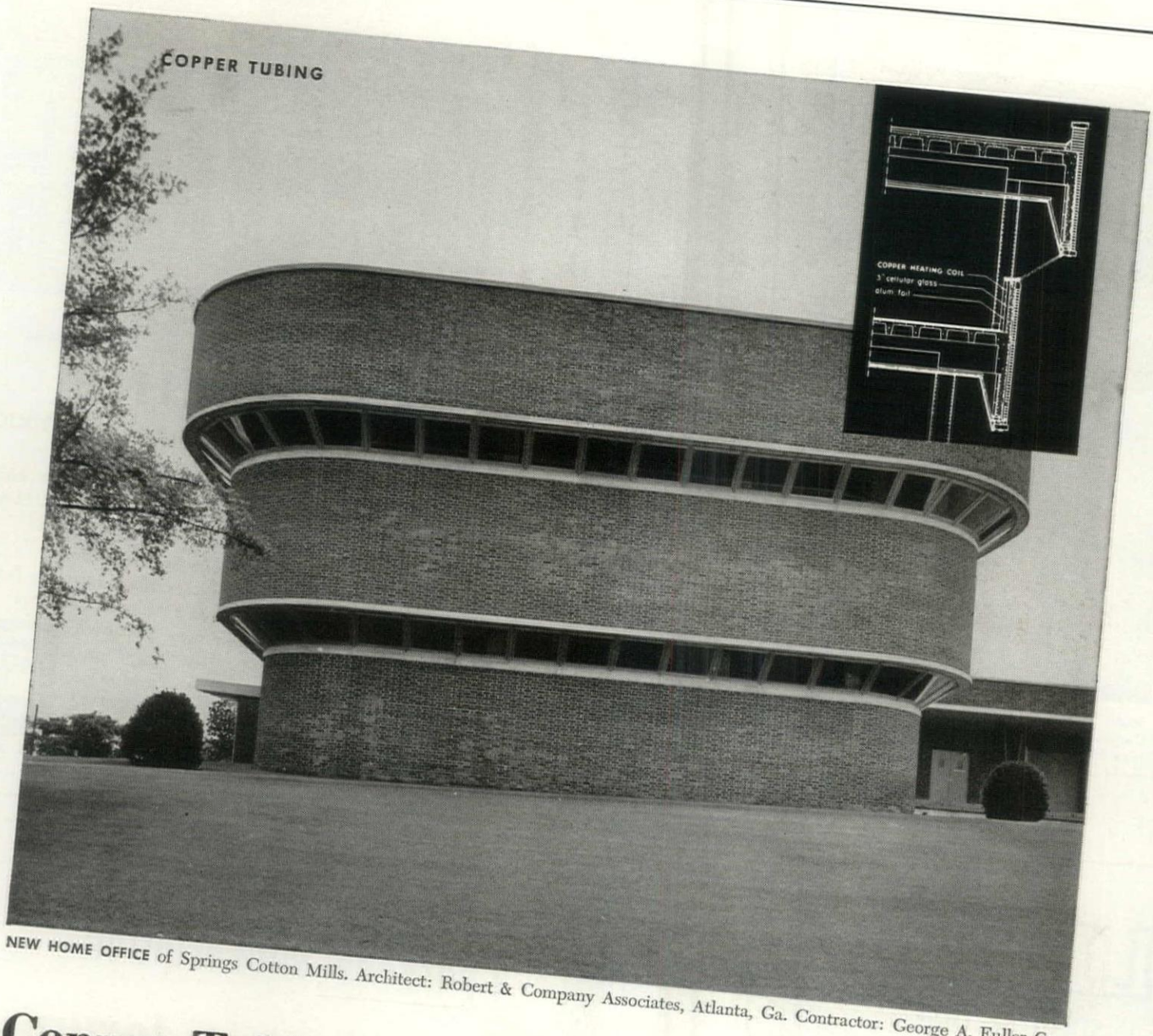


and *No. 204*, designed for direct screw molding, sells for $1.05. The sash fits Desco's wide variety of sills, heads and trims.

Manufacturer: Desco Metal Co., 2309 Gratiot Ave., Detroit 7, Mich.

Technical Publications p. 196

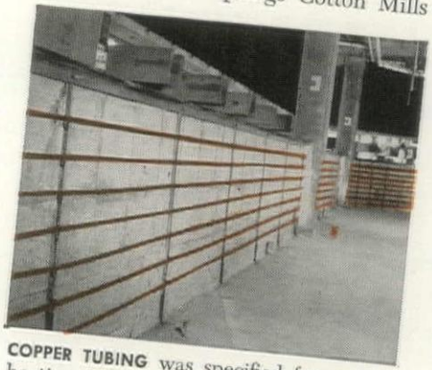
COPPER TUBING



NEW HOME OFFICE of Springs Cotton Mills. Architect: Robert & Company Associates, Atlanta, Ga. Contractor: George A. Fuller Co.

Copper Tubing . . . in walls that "hang in air"

The ability of architectural designers to solve unusual construction problems is proved again in this new home office building of the Springs Cotton Mills located in Ft. Mill, S. C. The angled windows desired by the owner require that the walls be supported by cantilever construction, thus creating the illusion of being suspended in mid-air.



COPPER TUBING was specified for radiant heating panels that are installed in walls.

These walls contain the radiant panels that provide winter comfort for office workers. From both a cost and design basis, copper tubing fits this type of heating system perfectly. It is easily installed because it comes in long lengths, requires fewer fittings and bends easily to follow wall curvatures. Connections, where necessary, are made quickly and securely even in the hard-to-get-at spots by using solder-type fittings.

Architects will always find that copper tube for radiant heating panels offers their clients the "final touch" to modern design . . . that copper means lower installation costs, longer service life and lower upkeep. Publication C-9, "What Most People Want to Know About Radiant Panel Heating" will answer any questions your clients have on panel heating. For free copies, write to *The American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.*

5313A

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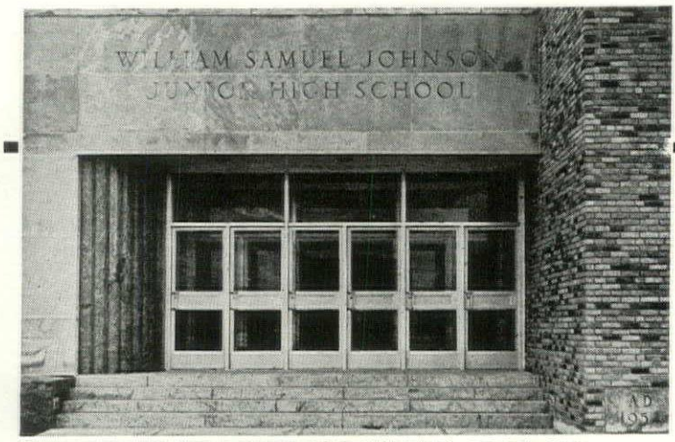
copper tubes and fittings for industrial piping, water, heating, soil, waste and vent lines • sheet copper • through-wall flashing.

South Bend, Ind.: The Morris Inn is a new hotel on the Notre Dame Campus. Old grads being pretty much the same all over, furniture tops in the 92 rooms are beautiful and rugged Formica. Among its many other virtues, Formica is alcohol proof.

Holabird & Root & Burgee, Architects
Formica Furniture, Romweber Co. via B. Altman



William Samuel Johnson Junior High School, Stratford, Conn.
Andrew J. Patrick, Architect.
EXTRUD-A-LINE Center Panel school doors used on this installation.

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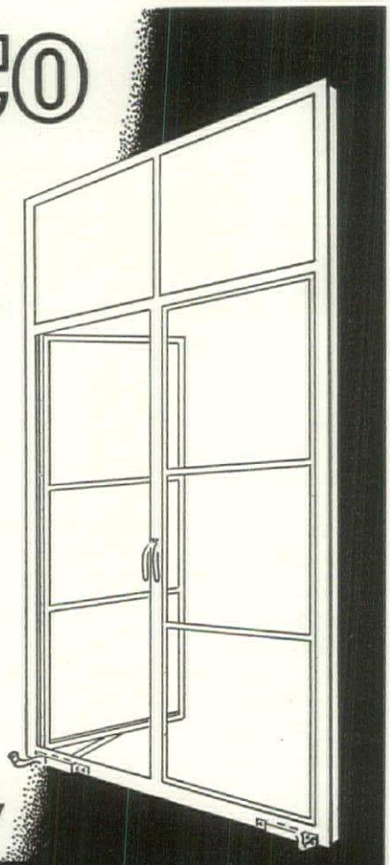

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It takes the best to make the best. That's why THOMASON Flush Doors are produced from the finest quality of foreign and domestic woods. By ship . . . by rail . . . from Africa, the Philippine Islands, Panama, Honduras, Canada and from America's own Northern and Appalachian forests, come the rare and rugged woods that go into the production of THOMASON Flush Doors.

THERE ARE THOMASON HOLLOW AND SOLID CORE FLUSH DOORS FOR

Residences, Apartments, Office Buildings, Hotels, Schools, Hospitals, Institutions and Public Buildings.

AVAILABLE IN THESE FACE VENEERS

Philippine Mahogany, Genuine Honduras Mahogany, Walnut, Oak, Birch, Knotty Pine, Gum, or in any face veneer desired.

IMPORTANT

THOMASON plastic-faced flush doors are now available in all domestic and foreign wood grain plastics, as well as in decorative plastics.

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PLYWOOD CORPORATION
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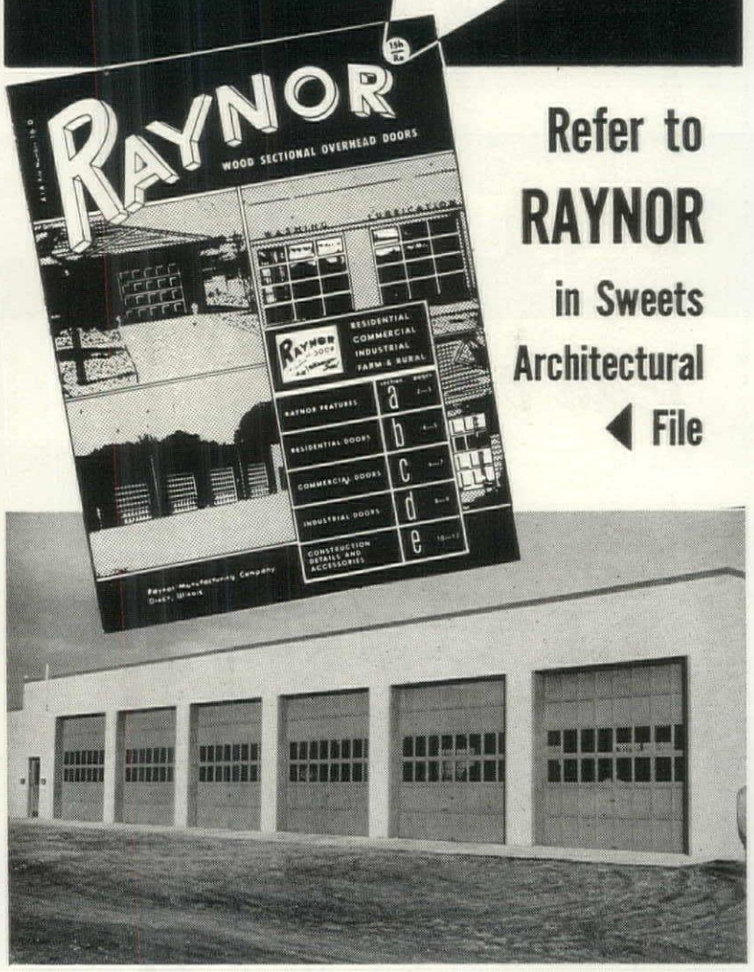


Refer to RAYNOR in Sweets Architectural File

Raynor Mfg. Co. builds a wood sectional overhead door to fit every residential, commercial and industrial door opening.

All of these top quality doors and their many exclusive features such as Graduated Seal, Three-Way Stress Construction, Carved Raised Panels and many others, are clearly and factually presented in the conveniently indexed Raynor catalog in Sweets Architectural File.

If you have not already done so, we invite you to inspect the Raynor Sweets Architectural File catalog and become completely familiar with this reliable and dependable source of wood sectional overhead doors.

See your telephone directory for the name of the Raynor representative nearest you or write direct.

Raynor Manufacturing Company, Dixon, Illinois

Builders of a complete line of wood sectional overhead doors.

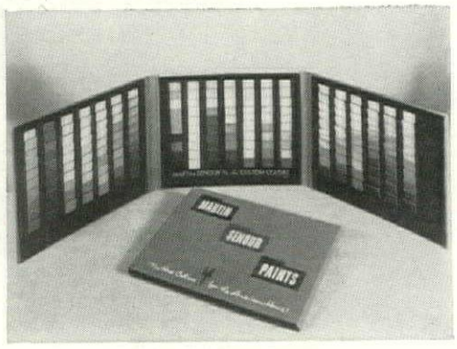
TECHNICAL PUBLICATIONS

MASONRY CONSTRUCTION. Specifications Recommended to Secure Dry Brick Walls. Louisville Cement Co., Dept. HM, Louisville, Ky. 18 pp. 8½" x 11"

Winner of an honorable mention in the 1953 Building Products Literature Competition (sponsored by the AIA and Producers' Council), this well-illustrated guidebook capsules 20 years of research in the proper use of brick and mortar. It explains in readable text the necessary precautions that must be taken to prevent water from passing through brick walls.

PAINTS. Martin-Senour Color Portfolio. Martin-Senour Paint Co., 2520 S. Quarry St., Chicago, Ill. 3 pp. 10½" x 14". $5

A decorating aid designed for briefcase totability, this handsome portfolio holds five sample color tabs of each of 200 *Nu-Hue*



paint tones developed by the manufacturer for interior use. It is sturdily bound and the samples are replaced by Martin-Senour without charge. The portfolio is available to interior designers, architects and contractors.

OFFICE EQUIPMENT. Filing Cabinets, Office Chairs, Steel Desks, Blueprint Cabinets, Shelving Units, Storage Units, Pronto Files. Cole Steel Equipment Co., Inc., 285 Madison Ave., New York, N. Y. 43 pp. 8½" x 11"

ROLLING DOORS. Saving Ways in Doorways, Bulletin No. 75. Kinnear Manufacturing Co., 820-870 Fields Ave., Columbus 16, Ohio. 31 pp. 8½" x 11"

SHEET METAL. Sheet and Plate Fabrication, Parts and Assemblies. The Kirk & Blum Manufacturing Co., 2838 Spring Grv., Cincinnati 9, Ohio. 37 pp. 8½" x 11"

EXCAVATING EQUIPMENT. Power Cranes and Shovels, Use and Application. Power Crane & Shovel Assn., 74 Trinity Pl., New York 6, N. Y. 32 pp. 8½" x 11"

HEATING. Kritzer Baseboard Heating. Kritzer Radiant Coils, Inc., 2901 Lawrence Ave., Chicago 25, Ill. 15 pp. 8½" x 11"

RESTAURANT EQUIPMENT. Faster Food and Dish Handling with Lamson Trayveyors, Bulletin 749. Lamson Corp., Syracuse 1, N. Y. 20 pp. 8½" x 11"

CEILING SYSTEMS. Acusti-Luminus Ceilings. Luminous Ceilings Inc., 2500 W. North Ave., Chicago 47, Ill. 8 pp. 8½" x 11"

TOILET COMPARTMENTS. Sanymetal Toilet Compartments, Shower Stalls, Hospital Cubicles, Catalogue 90. The Sanymetal Products Co., Inc., 1701 Urbana Rd., Cleveland 12, Ohio. 19 pp. 8½" x 11"

CEILING SYSTEMS. Sanymetal Suspended Ceiling Systems, Catalogue SNU-5. The Sanymetal Products Co., Inc., 1701 Urbana Rd., Cleveland 12, Ohio. 11 pp. 8½" x 11"

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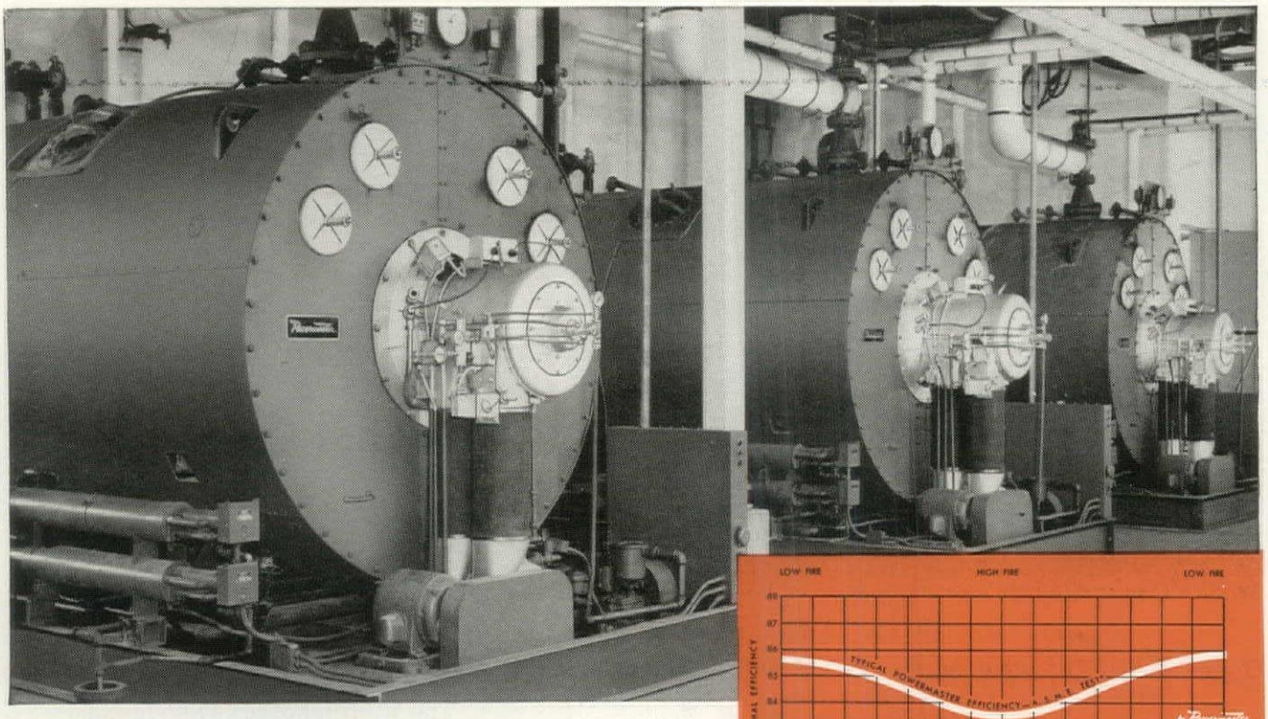
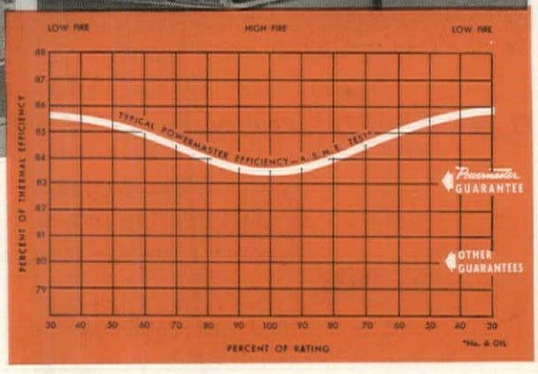


This battery of 350 HP *Powermaster* boilers handles the steam requirements at the Bayshore, L. I., plant of the Fairchild Engine and Airplane Corporation. A.S.M.E. tests at the plant surpassed *Powermaster's* 83% efficiency guarantee.



83% minimum efficiency with No. 6 Oil guaranteed only by Powermaster®

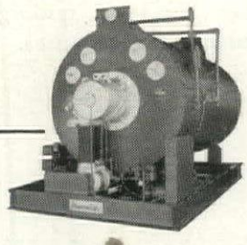
The "pay-off" on a boiler is its operating efficiency!

Take a look at this typical efficiency curve of *Powermaster* . . . then compare A.S.M.E. tests with those of any other boiler! At less than full load (which is normal in field operation) notice that *Powermaster* efficiency actually *increases.*

There's a reason for such efficiency. The *Powermaster* is the development of 68 years' experience in boiler manufacture. Continuing research and progressive engineering have consistently been reflected in *Powermaster* design.

Point-by-point, *Powermaster* welcomes comparison. Before deciding on a new boiler for your plant, be sure to get the facts on the new *Powermaster* with *Voriflow* combustion. Just drop us a line and we'll be glad to send you complete information.

Powermaster®
PACKAGED AUTOMATIC BOILERS
In sizes to 500 HP; pressures to 250 psi.



ORR & SEMBOWER, INC. • *Established 1885* • 845 MORGANTOWN ROAD, READING, PENNA.

Good lighting

becomes dramatic display

This entire office building in California makes a dramatic display out of construction features primarily planned for purely functional reasons. The lighting system is an outstanding example. Ten continuous miles of Westinghouse plastic luminaires are truly an ideal lighting system for daytime work . . . and become a strong merchandising device by night.

The number one requirement was quality illumination for detail office work. This called for semi-indirect lighting. A secondary consideration was to maintain the same high level of balanced design that existed throughout the building structure.

By taking advantage of the 10′ ceilings, it was possible to suspend fixtures 2′ and install a glareless system of continuous semi-indirect lighting. After 3 years of service, this system still maintains a desk-top lighting level of over 40 foot-candles.

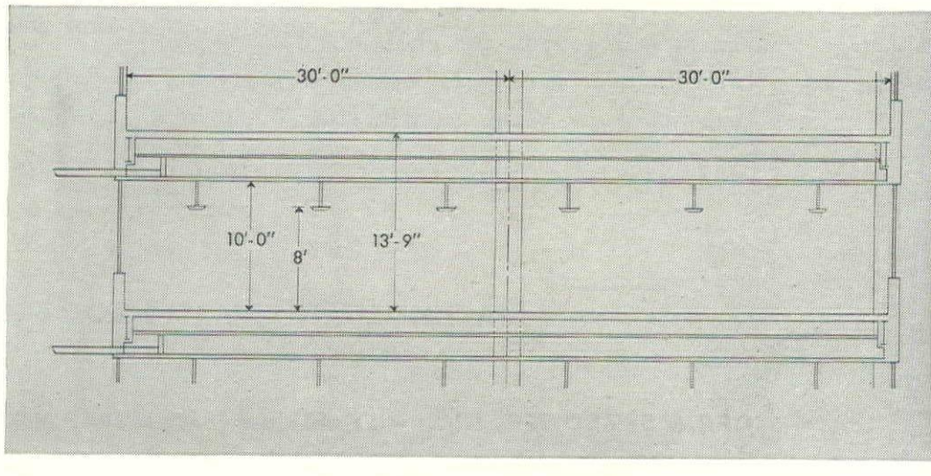
The Westinghouse CD-80 luminaire provides this lighting system. Its styling was right because the dominant horizontal lines of the building exterior are repeated and emphasized by the lighting system on the inside.

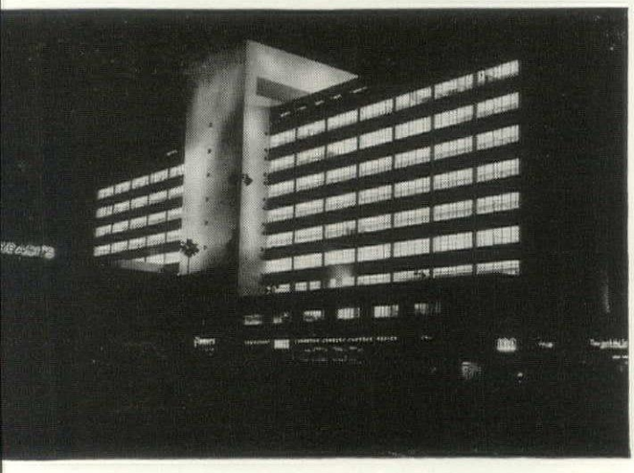
Lighting systems can be attractive as well as functional. That's why we maintain a complete and varied line of lighting systems and fixtures to meet the variety of modern lighting problems. Consult us on your next lighting installation. Westinghouse Electric Corporation, Edgewater Park, Cleveland, Ohio. J-04331

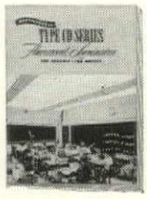
YOU CAN BE SURE...IF IT'S

Westinghouse

Luminaires, spaced 10′ apart, are suspended 2′ below the ceiling and are never turned off during working hours. Outside rows of lights are kept burning until midnight for advertising purposes.







Get this Free Booklet, B-4075, Type CD Fluorescent Luminaires for complete details.

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Company.....

Street.....

City.....State.....

LIGHTING. Standard RLM Specifications for Industrial Lighting Units. Reflector and Lighting Equipment Manufacturers, RLM Standards Institute, Inc., 326 W. Madison St., Chicago 6, Ill. 46 pp. 8½" x 11"

PUBLIC HEALTH FACILITY CONSTRUCTION. Controlled Materials Plan and Health Facilities, July 1, 1951-June 30, 1952. Division of Civilian Health Requirements, Public Health Service, Washington 25, D. C. 100 pp. 8½" x 11"

WIRING. Indoor-Outdoor Current Transformers, GEA-5874. General Electric, Schenectady 5, N. Y. 12 pp. 8½" x 11"

HEATING. The Kewanee-Iron Fireman Boiler-Burner Unit, Form No. 2314. Kewanee-Ross Corp., Division of American Radiator & Standard Sanitary Corp., Kewanee, Ill. 12 pp. 8½" x 11"

UNIT HEATERS. Overhead Panelray Catalogue, Day and Night Div., Affiliated Gas Equipment, Inc., 800 Royal Oaks, Monrovia, Calif. 30 pp. 8¾" x 11¼"

PROTECTIVE COATINGS. Rust-Oleum Stops Rust. Catalogue No. 251 Rust-Oleum Corp., Evanston, Ill. 16 pp. 8½" x 11"

VERTICAL TRANSPORTATION. Dumbwaiter and Elevator Catalogue. Sedgwick Machine Works, 150 W. 15th St., New York 11, N. Y. 8 pp. 8½" x 11"

CONSTRUCTION EQUIPMENT. Sheppard Diesel Industrial Tractors. Sheppard Diesels, Hanover, Pa. 4 pp. 8½" x 11"

CONCRETE. Sika Plastiment Concrete Densifier. Sika Chemical Corp., 35 Gregory Ave., Passaic, N. J. 8 pp. 8½" x 11"

PROTECTIVE COATINGS. Skybryte Maintenance Paint. Paint It Right with Skybryte. Skybryte Co., 3125 Perkins Ave., Cleveland 14, Ohio. 6 pp. 8½" x 11"

WATER REPELLENTS. Hydrocide S-X Colorless. L. Sonneborn Sons, Inc., Building Products Div., 404 Fourth Ave., New York 16, N. Y. 6 pp. 8½" x 11"

MAINTENANCE. Over the Rough Spots—Stonhard throughout Your Building. Stonhard Co., 600 Stonhard Bldg., 1306 Spring Garden St., Philadelphia 23, Pa. 48 pp. 5½" x 8½"

HARDWARE. Sturdee Parts Manual and Specifications of Overhead Door Hardware for Use by Architects and Engineers. Sturdee Steel Products Co., 6820 Brynhurst Ave., Los Angeles 43, Calif. 20 pp. 8½" x 11"

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LIGHTING. Luminous Ceilings by Rem-Lite, Inc. Rem-Lite, Inc., 876-8 Broadway, New York 3, N. Y. 8 pp. 8½" x 11"

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OFFICE EQUIPMENT. New Tempo in Figure Production with the Printing Calculator, Booklet No. AC 639 Rev. 1. Remington Rand, Inc., 315 Fourth Ave., New York 10, N. Y. 8 pp. 8½" x 11"

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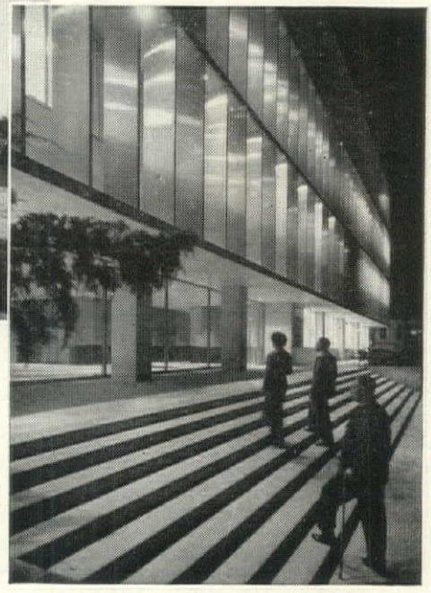


PAN-AMERICAN LIFE INSURANCE CO.
Office Building, New Orleans

SKIDMORE, OWINGS & MERRILL
CLAUDE E. HOOTON
architects

CARY B. GAMBLE ASSOCIATES
mechanical engineers

E. M. BABST CO.
plumbing contractor

CRANE COMPANY
plumbing wholesaler

GEORGE J. GLOVER CO., INC.
general contractor

NEW ORLEANS TRADITION GOES MODERN

• The exterior of this award-winning office building presents a modern version of the New Orleans' traditional galleries and balconies. On all four limestone walls are horizontal canopies and vertical aluminum fins which create comfort and beauty by day and a striking light pattern by night. Above the ground floor there are no interior columns to obstruct the air-conditioned office areas, all of which are connected by a motor-driven conveyor that deposits mail and record trays at stations to which they are directed. On the upper floor of the low rear wing is a landscaped patio surrounded by a private dining room, employees' lounge and a huge room which, by means of accordion partitions, can provide cafeteria space, recreation room or large auditorium. Skilled architectural planning and product selections based on proved performance assures the owners of lasting satisfaction. In this fine building all Flush Valves bear the name SLOAN—more evidence of preference that explains why . . .

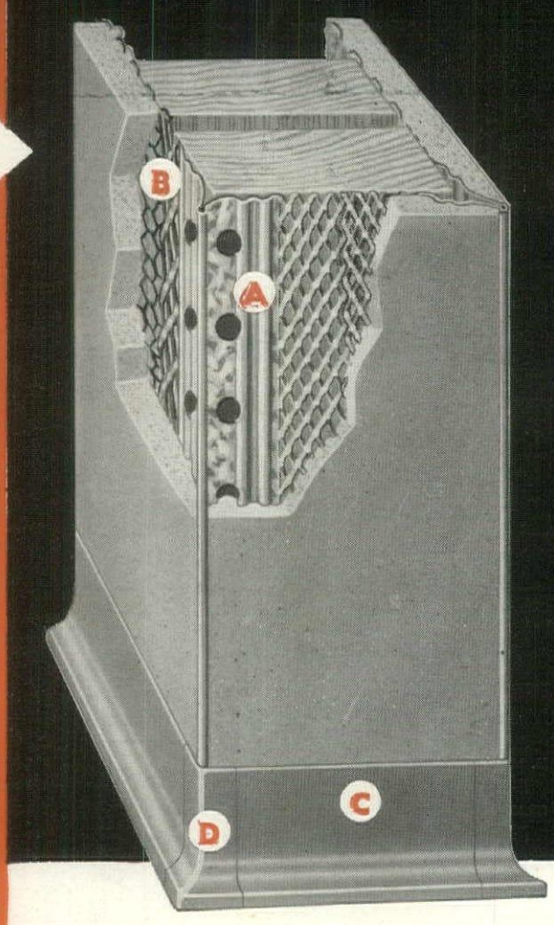
Corner Beauty and Protection at its best!

A. Milcor Super-Ex Corner Bead. Provides strong, straight nose held true by two semi-solid flanges.

B. Milcor Metal Lath. Always specify — *Metal Lath for Strength — Plaster for Beauty.*

C. Milcor Clip-On Metal Base No. 677-S. Base snaps over clips fastened to wood grounds—no exposed screw heads in base.

D. Cast friction-fit fitting, available for either inside or outside corner of base.



MILCOR*

SUPER-EX CORNER BEAD

Gives you greater depth of plaster adjacent to the bead — regardless of the plaster grounds!

Super-Ex Corner Bead, with its exclusive design, offers three big advantages to plasterer and owner:

Improved design permits a greater depth of plaster adjacent to the bead area — this means less danger of chipping, longer lasting plaster beauty.

Wings of Super-Ex are formed at an angle of 60 to 70° for a spring fit on a 90° corner — adjusting readily to any specified plaster grounds, whether ¾", ⅝" or ½".

Exclusive Super-Ex design combines the rigidity of a solid wing with the added plaster reinforcement of expanded metal. Straight, true-edge plaster corners are protected against cracking and chipping.

Milcor Super-Ex goes on fast — reduces erection costs. It requires little or no aligning. It can be wired, stapled, or nailed — no clips are necessary.

To be sure of longer plaster life and lasting plaster beauty, standardize on Milcor Super-Ex Corner Bead. Write today for complete information.

M-118

*Reg. U. S. Pat. Off.

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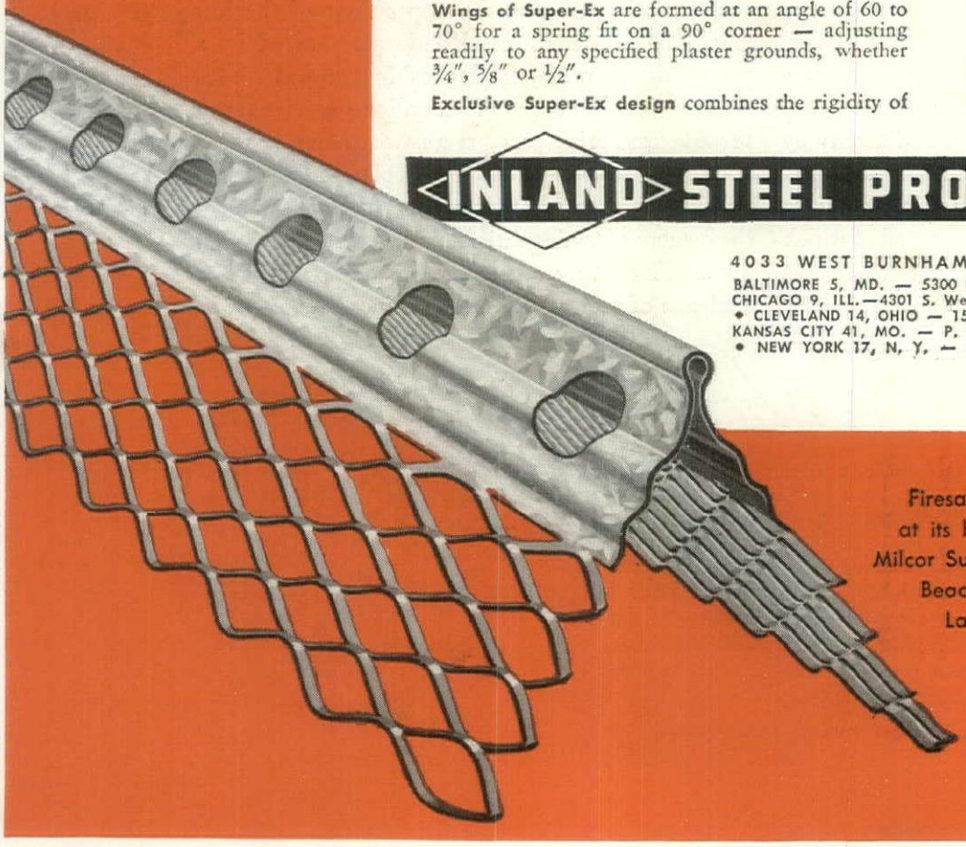
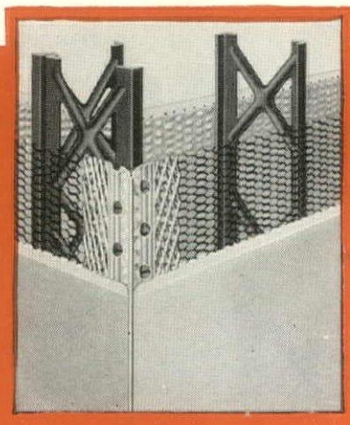
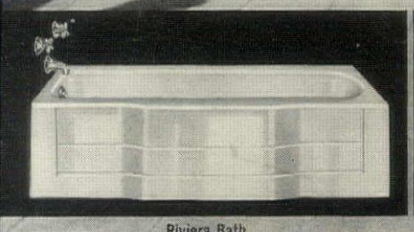


Firesafe construction at its best: improved Milcor Super-Ex Corner Bead, Milcor Metal Lath, and Milcor Steel Stud.



The *Virgin isle* ...one of the world's most luxurious hotels ...equipped exclusively with ELJER Plumbing Fixtures



Riviera Bath
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Sylenta Closet
Combination E-5120

Martha Washington
Lavatory E-3045

Caribbean Studios

Managing Director: Henry L. Kimelman
Architect: Harold Sterner, Long Beach, N. Y.
Associate Designer and Interior Decorator: Jac Lessman, New York City
General Contractor: Virgin Islands Construction Co., Inc., St. Thomas, V. I.
Plumbing Consultant: Herman Witchell, New York City

One of the world's most luxurious hotels, the Virgin Isle Hotel on the beautiful Island of St. Thomas in the Caribbean, was designed and built to provide the ultimate in comfort and luxury.

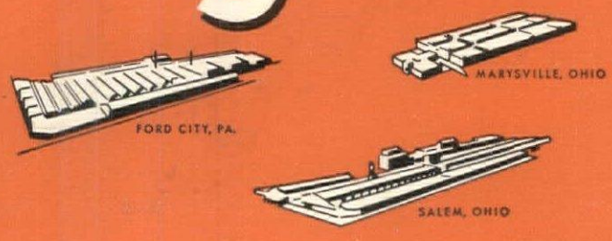
It is extremely significant that Eljer's Fine Plumbing Fixtures and Brass Trim were used exclusively in this 123-room hotel for both private baths and service facilities.

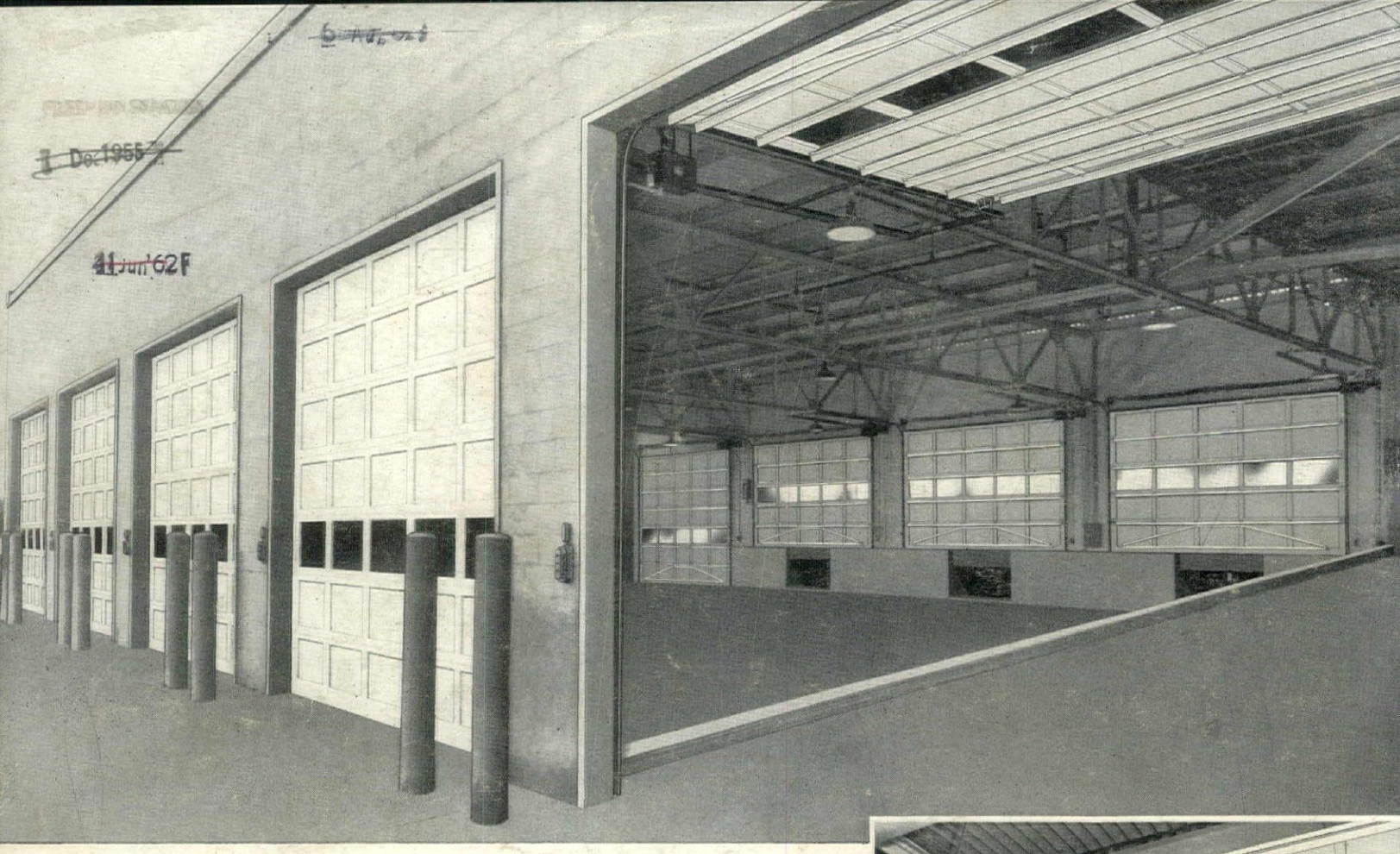
Similarly, *you* will find that Eljer's *complete* line of plumbing fixtures and brass goods will satisfy your most discriminating specifications . . . for every type of building, anywhere in the world. So, for beauty, convenience features, long life . . . for outstanding quality . . . specify Eljer.

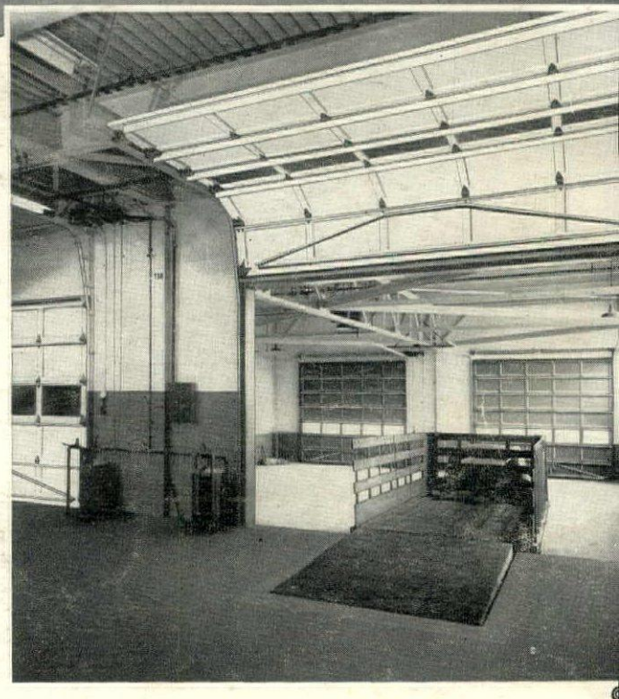
For more information on Eljer Fixtures, see Sweet's Architectural File, Sweet's Light Construction File, or write Eljer Co., Ford City, Pennsylvania.

Quality
THROUGH AND THROUGH

ELJER







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The "OVERHEAD DOOR"

Speeds Production

Electric operators soon pay for themselves in time and labor saved. Push button, pull switch or key switch controls expedite traffic and step up production. Electrically operated doors move at a *controlled* speed, saving wear and tear. Operators furnished for The "OVERHEAD DOOR" have rugged, gear-head motors; they give reliable service for many years.

OVERHEAD DOOR CORPORATION, Hartford City, Ind.

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Nashua, N.H.	Lewistown, Pa.	Dallas, Tex.	Glendale, Cal.

Look for this trade mark in the yellow pages of your telephone directory. It stands for more than 32 years of quality and leadership!

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