

UNIVERSITY OF HAWAII

SEP 28 1947

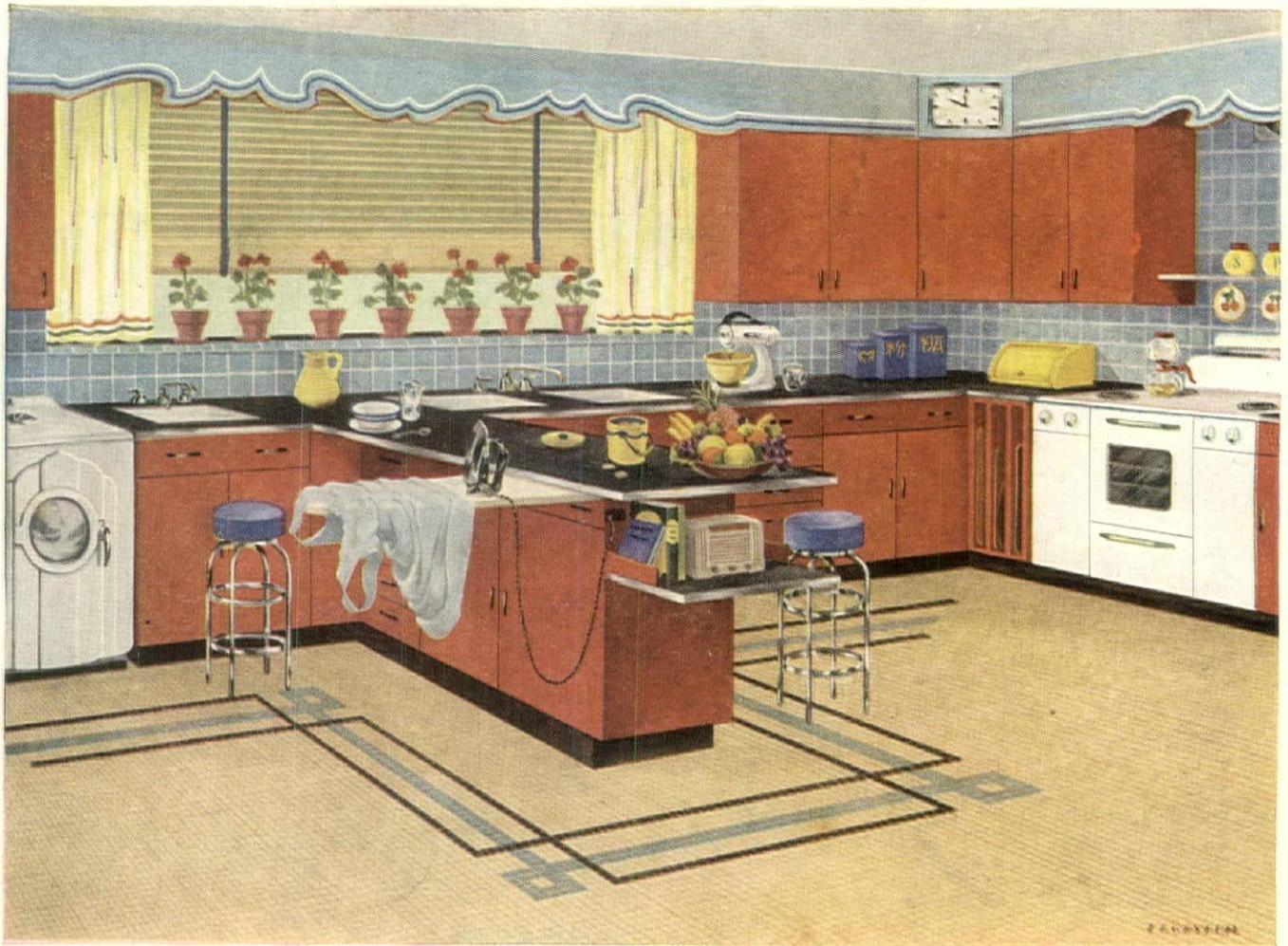
The Architectural

# FORUM

Magazine of Building

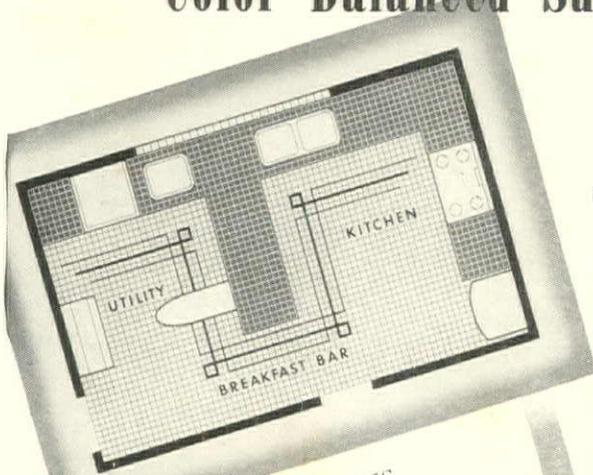


September 1947



## Color Balanced Suntime puts VALUE in the Home!

The downright fun of living and working in a room like this is one of the continuing values you can put into a home. Color Balanced Suntime walls, floors, and work surfaces wipe up sparkling clean and give buoyant lift to kitchen and laundry duties. Breakfast for two or midnight snacks for twelve are equally easy . . . equally gay. Easy livability and permanent beauty make Color Balanced Suntime a basic ingredient for happy homes.



### SPECIFICATIONS

FLOOR—1" x 1" Modular Ceramics.  
 Field—No. 24 Buff, No. 51  
 Sunstyled design—No. 24 Buff, No. 51  
 Turquoise Stipple, No. 48 Brown.  
 WALLS—4 1/4" x 4 1/4" Units, No. 849  
 Pompeian Blue.  
 CAMEL SINK AND CABINET TOP—  
 1" x 1" Modular Ceramics, No. 35 Black.  
 Sink Well Frame No. 948, Nosing No. 950.

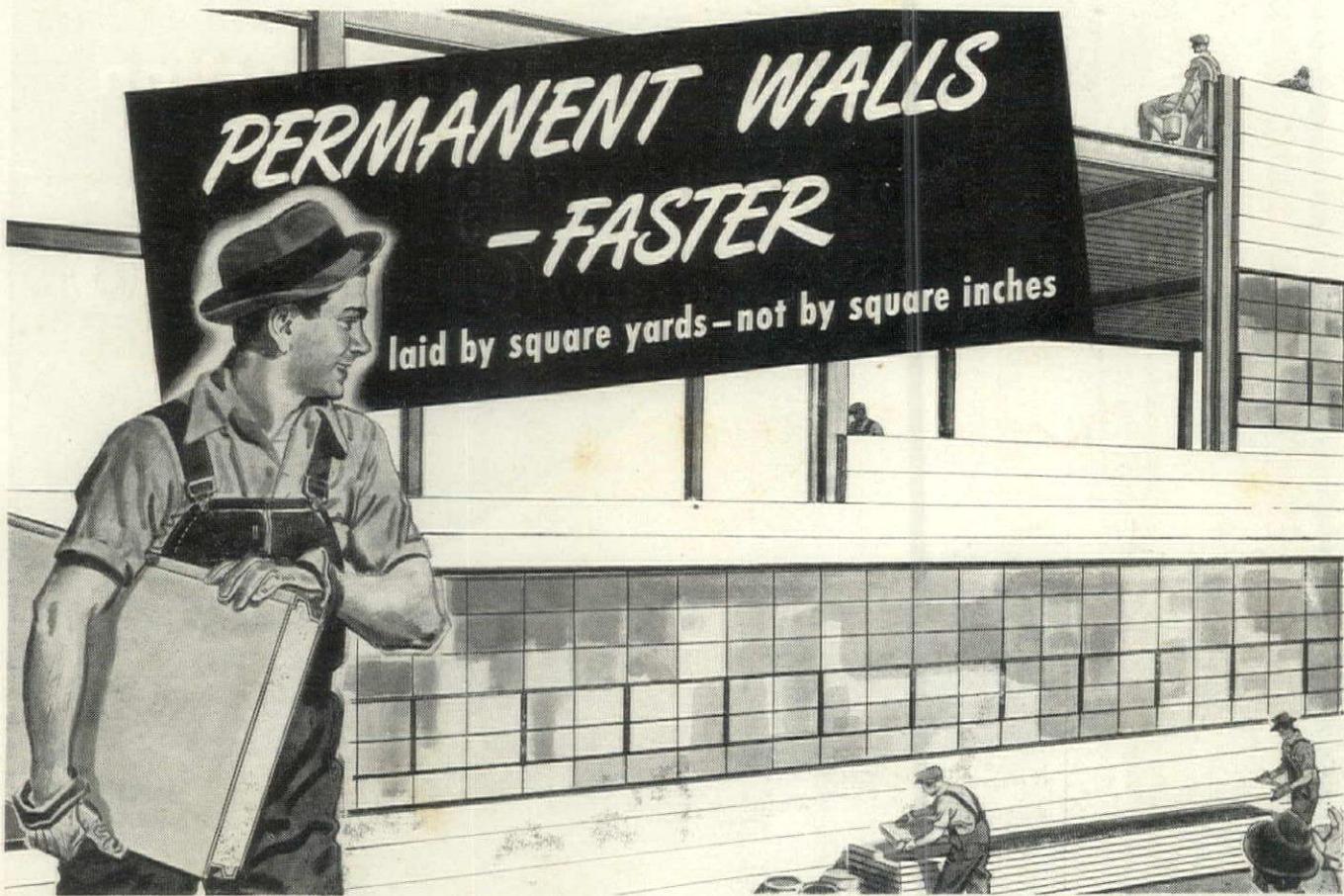
*Color Balanced*



# Suntime

*Bright with color. Right for life*

THE CAMBRIDGE TILE MFG. CO., CINCINNATI 15, OHIO



Compare this with piece-by-piece methods so commonly used.

Less handling . . . less time . . . lower cost. Clean, dry construction. And these noncombustible panels provide smooth surfaces on both sides, ready for paint or other finishing material of your choice.

This principle of time saving by construction with large metal sections can be applied to floors, walls, ceilings, and roofs. In fact—to every step from the structural steel to the finished job.

Fenestra Building Panels are suitable for many types of buildings. Their great strength makes them ideal for permanent, lightweight construction . . . their easy handling also suggests many uses for movable structures or partitions. Fenestra Panels come in a range of types, weights and sizes to meet almost any building need.

You'll find full information in Sweet's Architectural File (Section 3C-1). But why not let us help you apply their benefits to your own particular construction problem? Just call us or mail the coupon.

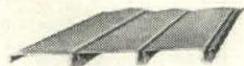
**TYPE C FOR WALLS.** Composed of two metal members pressed together, with felt at each side to prevent metal-to-metal contact. Filled with insulation at the factory. Standardized in 3" depth and 16" width, in 18 gage painted steel or 16 B&S gage aluminum.



**TYPE D FOR FLOORS.** Box beam formed by welding together two steel sections. Side laps interlock to form continuous flat surface. Cover plates available for open cells to provide two flat surfaces. Standardized in 16" width. Depths 1 1/2" to 9". Gages 18 to 12.



**HOLORIB ROOF DECK.** Copper-bearing steel sheets reinforced by three integral triangular ribs on 6" centers. Provides flat surface for mopped application of insulation and roofing. Sheets 18" wide, in lengths as required for purlin spacing. Gages 18 and 20 are standard.



*Fenestra*

**BUILDING PANELS FOR**

**ROOFS**

**WALLS**

**FLOORS**

DETROIT STEEL PRODUCTS COMPANY,  
Building Panels Division,  
Dept. AF-9, 2251 E. Grand Boulevard,  
Detroit 11, Michigan

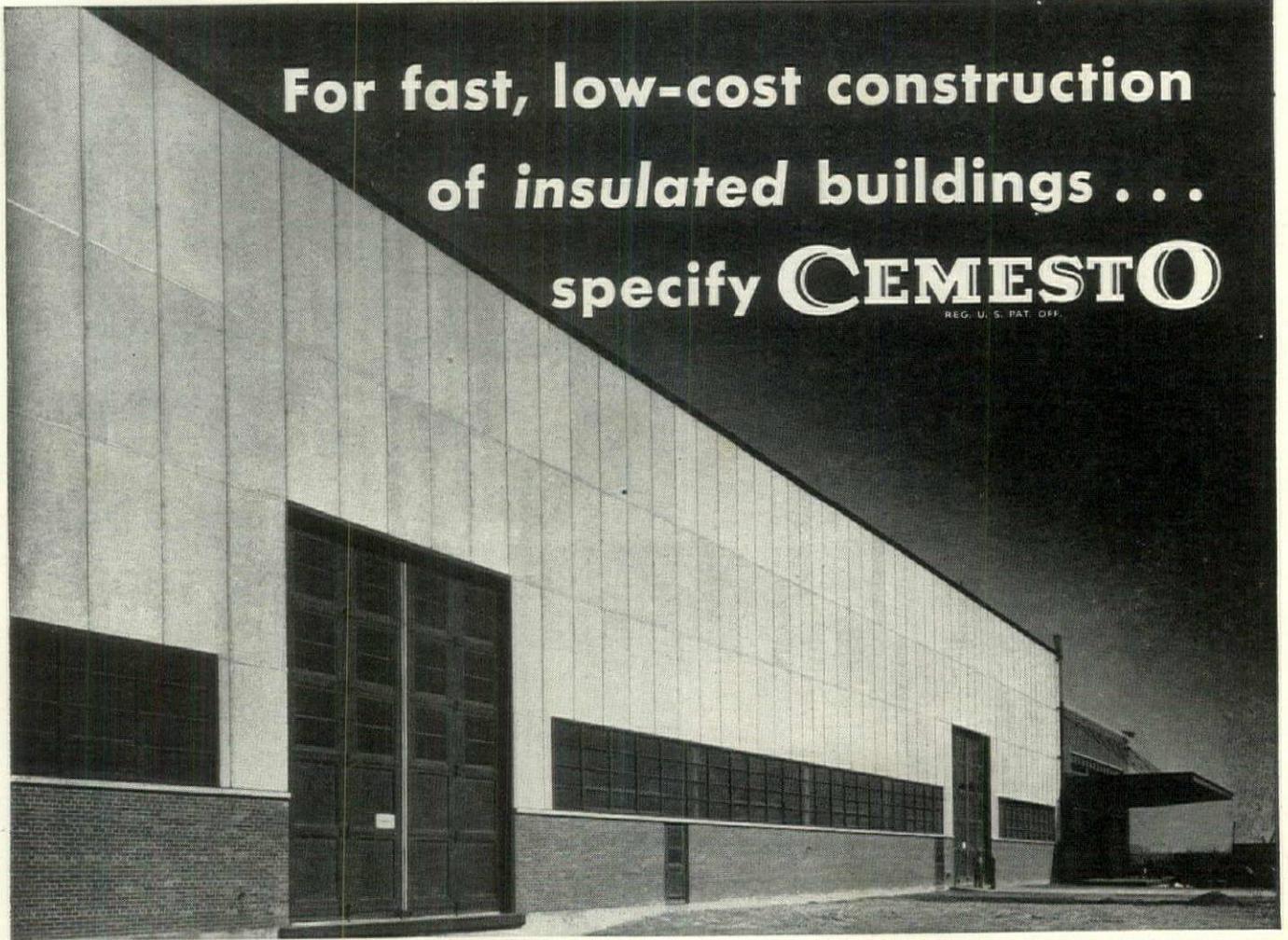
Please send me, without obligation, information on Fenestra Building Panels.

Name

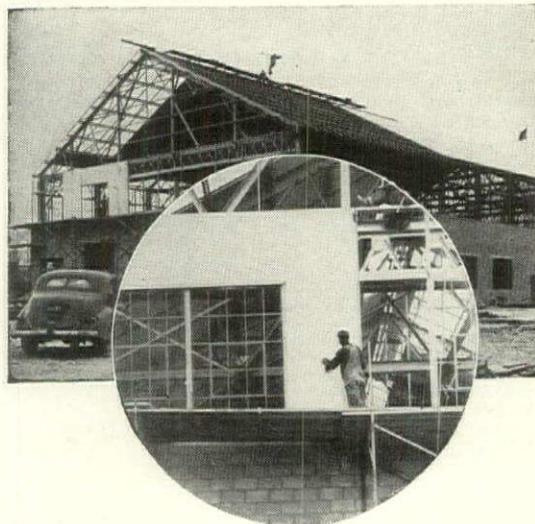
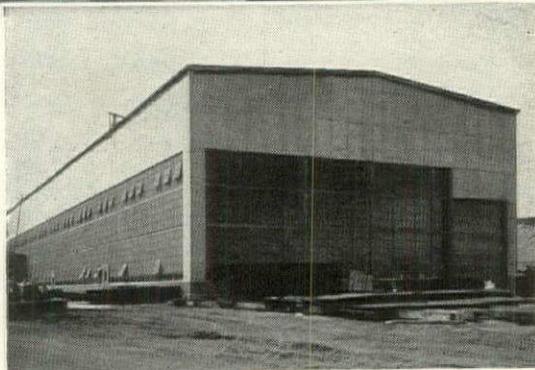
Company

Address

For fast, low-cost construction  
of insulated buildings . . .  
specify **CEMESTO**  
REG. U. S. PAT. OFF.



Albert Kahn Associated Architects and Engineers, Inc.



SHOWN HERE are only a few of the many commercial and industrial buildings built better and faster with Celotex Cemesto Board.

Cemesto is perfect for speedy, low-cost construction of insulated buildings. It offers thermal insulation, weather resistance inside and out, structural strength and siding . . . all at *one low cost*. In addition, Cemesto core is Ferox-treated to resist dry rot, fungus growth and termites.

Cemesto comes in standard size sheets in 1½", 1-9/16" and 2" thicknesses; can be easily cut to fit job conditions; can be attached by nailing to wood, by bolts or clips to steel.

Thus Cemesto is an ideal material for use in exterior walls, roof decks or interior partitions. It does not require painting, so maintenance costs are low.

Write the Architectural Sales Service Department for complete details illustrating several methods for applying Cemesto for roof decks, exterior walls or interior partitions.

If you wish to furnish plans to us, we will be glad to prepare shop erection drawings showing the exact size of Cemesto panels required, together with estimate on cost of material pre-cut to fit.

**THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS**

The Architectural **FORUM**  
MAGAZINE OF BUILDING

SEPTEMBER 1947



GIVE NOW  
TO YOUR  
COMMUNITY CHEST

Published by TIME Incorporated

EDITOR-IN-CHIEF.....Henry R. Luce  
PRESIDENT.....Roy E. Larsen  
EDITORIAL DIRECTOR.....John Shaw Billings

The Architectural FORUM

MANAGING EDITOR  
Henry Wright

ASSOCIATES: Eleanor Bittermann (Research), Louise Cooper, James M. Fitch, Jr., Joseph C. Hazen, Jr., Harry Mix, Mary Sanders, Richard Saunders (Washington), Chloethiel Woodard (South America), Lawrence J. Mester (Production).

ASSISTANTS: Doris Hoffer, Sighe Kennedy, Rosalind Klein, Mary Jane Lightbown, Jerome A. Moss, Amnon Rubinstein, Helen Benz Schiavo.

ART DIRECTOR: Paul Grotz.

CONSULTANTS: Miles L. Colean, George Nelson.

BUSINESS MANAGER: Vernon Hitchcock.

CIRCULATION MANAGER: George Seufert.

ADVERTISING DIRECTOR  
George P. Shurt

PUBLISHER  
HOWARD MYERS

The Architectural FORUM is published monthly by TIME Inc., 350 Fifth Ave., N. Y. 1, N. Y. Subscription may be sent to publisher's office or to 540 North Michigan Avenue, Chicago 11, Ill. Address all editorial correspondence to 350 Fifth Ave., N. Y. 1, N. Y. Yearly subscription payable in advance. To Firms and Government, their supervisory employes and design staffs, engaged in building design, construction, management, finance, materials manufacture or distribution: U.S.A., possessions and Canada, \$5.50; Pan American Union, \$6.50; Overseas Countries, \$10.00. To all others: U.S.A., possessions and Canada, \$8.50; Pan American Union, \$9.50; Overseas countries, \$10.00. When available, single issues, including Reference Numbers, \$1.00. All copies mailed flat. Copyright under International Copyright Convention. All rights reserved under the Pan American Copyright Convention. Entered as Second Class Matter July 17, 1944 at the Post Office at New York, N. Y., under the act of March 3, 1879. Copyright 1947 by TIME Inc.

TIME Inc., Time and Life Bldg., Rockefeller Center, New York 20, N. Y., also publishes TIME, LIFE and FORTUNE. Chairman, Maurice T. Moore; President, Roy E. Larsen; Vice President & Treasurer, Charles L. Stillman; Vice President & Secretary, D. W. Brumbaugh; Vice President & Sales Director, Howard Black; Vice Presidents, Allen Grover, C. D. Jackson, P. I. Prentice; Comptroller & Assistant Secretary, Arnold W. Carlson; Production Manager, N. L. Wallace; Circulation Director, J. DeW. Pratt. Producer, THE MARCH OF TIME, Richard de Rochemont.

VOLUME 87, NUMBER 3

NEWS	9
LETTERS	20
FORUM	56
ANNOUNCEMENTS	58
SEVEN POSTWAR HOUSES	77
IN THE NORTHWEST	78
Chiarelli & Kirk of Seattle design a house in Port Angeles, Washington, featuring a three spoked plan which opens the view on all sides.	
IN THE SOUTHEAST	85
Ralph S. Twitchell with Associate Paul M. Rudolph plans a small house in Sarasota, Florida, employing concrete block economically as structural and finishing material.	
IN THE NORTHEAST	90
Carl Koch does a solar house in Weston, Massachusetts, that is compact, economical, and relies on architectural restraint to conform to its locale.	
IN THE SOUTHWEST	96
O'Neil Ford & Gerald R. Rogers build a house in San Antonio, Texas, that offers maximum comfort despite hot dazzling summers and sharp winter cold.	
IN THE MIDDLE ATLANTIC REGION	102
Edward D. Stone produces a year round house in Huntington, Long Island, showing skillful use of available materials, practicable methods.	
IN THE MIDWEST	107
George Fred Keck & William Keck develop a house in Northfield, Illinois, with solar windows, water-cooled roof, cavity walls and cellular floors, to master a difficult climate.	
ON THE PACIFIC COAST	110
Gordon Drake completes a modular house in Los Angeles that capitalizes on the area's famous topography, climate and materials.	
PRODUCTS & PRACTICE	117
Laminated wood members replace steel in New York factory . . . Prefabricated bathrooms for Montreal hotel . . . New wood aggregate for concrete floors.	
REVIEWS	136
Vision in Motion . . . The Grass Roots of Art . . . The Practice of Design.	
BUILDING REPORTER	158
Warm air furnace . . . combination balancing valve and air vent for radiant heating systems . . . ventilator for kitchens.	
TECHNICAL LITERATURE	178
Private boat houses and docks . . . heat pumps . . . radiant heating . . . sewage disposal.	

Cover photo: (House by Carl Koch) Ezra Stoller



"Lovely Light and  
Subtle Shadow . . .

*Flexalum\* makes  
rooms twice  
as beautiful!"*

• Daylight is softened—gently diffused—through easily controlled Flexalum Venetian Blinds. Custom-fitted to windows, Flexalum Venetian Blinds close perfectly for absolute privacy. Made of a special formula aluminum, only one-third the weight of ordinary blinds, Flexalum will not lose its shape, sag or warp. Because the glowing satin-smooth plastic finish is "Duratized"—permanently sealed on—even washing cannot dim its luster. It will not peel, chip or crack. Watch for Flexalum Venetian Blinds in many exciting new decorator colors . . . perhaps your Flexalum supplier has them for you now.

HUNTER DOUGLAS CORPORATION, RIVERSIDE, CALIFORNIA; 150 BROADWAY, NEW YORK 7, NEW YORK

*Flexalum*  
\*REG. U.S. PAT. OFF.  
VENETIAN BLINDS



HUNTER DOUGLAS CORPORATION, DEPT. F  
150 BROADWAY, NEW YORK 7, N. Y.

Please send me "33 Ways to Beautify Your Home with Venetian Blinds." I enclose 10¢ to cover cost of mailing.

NAME \_\_\_\_\_

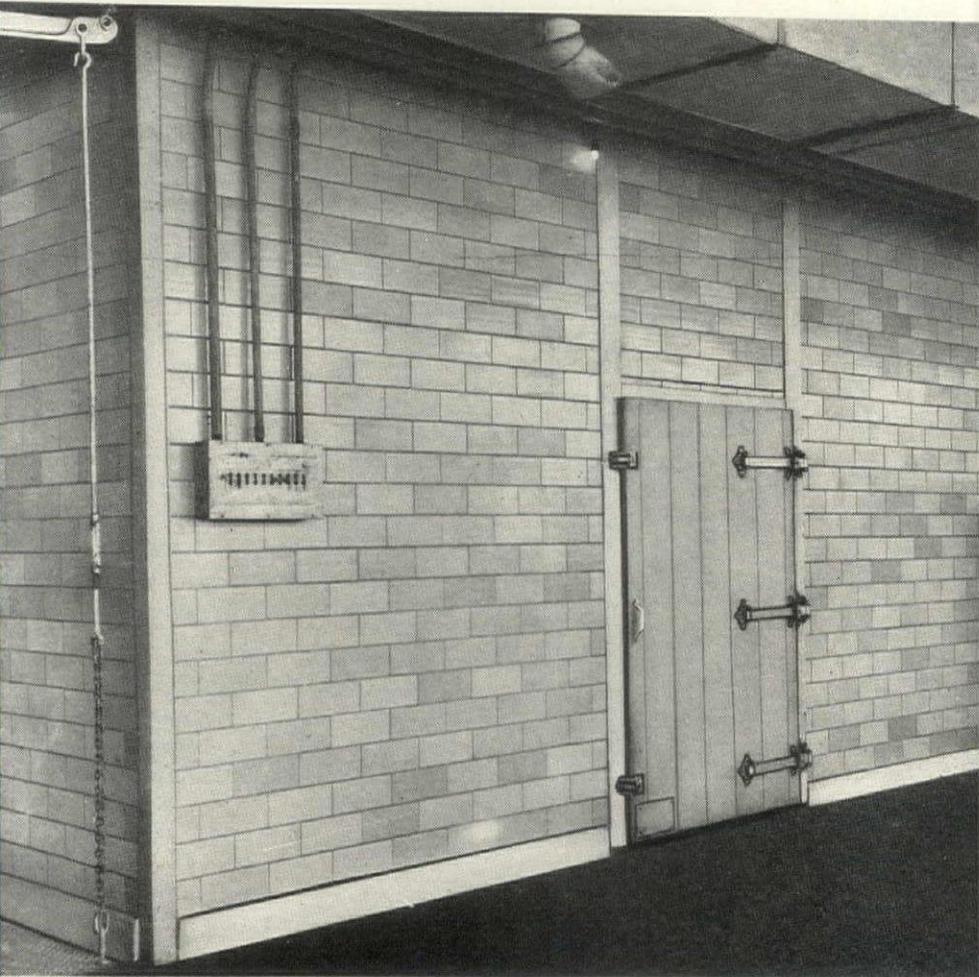
ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

Send for this Attractive Booklet →  
Sixteen pages of beautiful 4-color illustrations giving you an entirely new conception of how lovely windows can be.

Nationally Advertised in American Home,  
Better Homes and Gardens and Saturday Evening Post

# *Facing tile* meets every requirement for sanitary interiors in **PACKING PLANTS**



**I**T'S IMPORTANT to keep sanitation requirements in mind when you design or build a meat packing plant.

Interiors of Structural Clay Facing Tile help you comply with sanitary regulations. Facing Tile, made of dense, buff-burning fire clay, repels fungus and mildew. Bacteria, grease and butchery stains won't penetrate its smooth, non-porous surface. Hosing down or soap and water washing keeps plant walls clean.

Your client's building dollar goes farther when you specify Facing Tile, glazed or unglazed. This one material provides a strong, fire-safe supporting wall and a permanent wall finish. Facing Tile cuts maintenance and repair charges. It will not crack, scratch, mar or decay under rough treatment. Chemical action of blood, brine or animal body excretions doesn't affect it.

Production in modular sizes gives you even more reasons for specifying Facing Tile. These sizes mean more flexible design... less drafting and site supervision... less material waste... reduced construction time... greater plant utility... earlier plant occupancy.

**NEW MODULAR FACING TILE HANDBOOK.** Write the Institute Desk AF-9 for our new 90-page Modular Facing Tile Handbook showing methods of determining modular layout procedure. It's FREE to registered architects and engineers who write on their own letterheads; 50 cents to all others. Please feel free to call on Institute Members for advice or help. See Sweet's 1947 Architectural Catalog.

## INSTITUTE MEMBERS

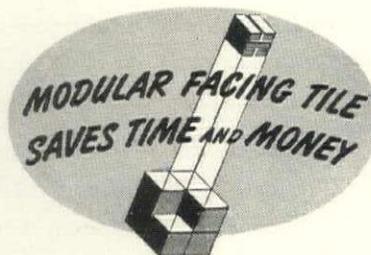
Belden Brick Company, Canton, Ohio

Continental Clay Products Co., Kittanning, Pennsylvania

Charleston Clay Products Co., Charleston 22, West Virginia

Hanley Company, New York 17, N. Y.

Hydraulic Press Brick Co., Indianapolis, Indiana



Mapleton Clay Products Co., Canton, Ohio

## INSTITUTE MEMBERS

Metropolitan Paving Brick Co., Canton, Ohio

National Fireproofing Corp., Pittsburgh 12, Pennsylvania

Stark Brick Company, Canton, Ohio

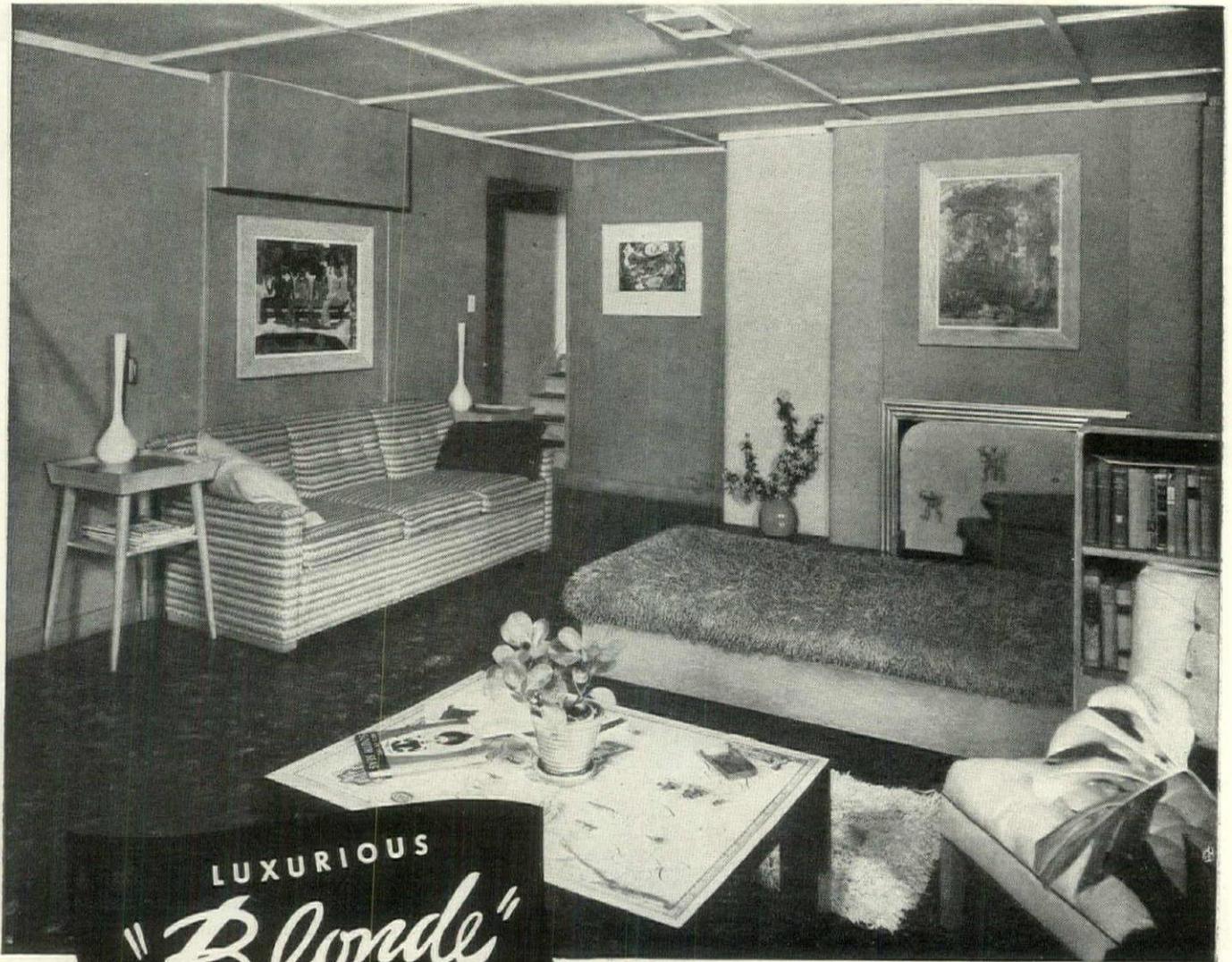
Stone Creek Brick Company, Stone Creek, Ohio

West Virginia Brick Company, Charleston, West Virginia

## FACING TILE INSTITUTE

1756 K STREET, N. W.

WASHINGTON 6, D. C.



LUXURIOUS  
**"Blonde"**  
 WOOD FINISHES

for lovely low-cost homes

The natural beauty of fine woodwork, paneling, trim and cabinetry—once found only in richest interiors—is possible today in the most modest home. For Pen-Chrome "Blonde" Wood Finishes enable you to achieve natural wood interiors of unusual warmth and beauty, at amazingly low cost.

Pen-Chrome is *immediately available*; no waiting, postponing, or expensive holdups due to shortage. Its wide range of tints gives you a chance for almost unlimited variation of decorative motifs. It is easy to apply; seals, waterproofs, and protects. Pen-Chrome retains its fresh marproof beauty after years of cleaning.

Pen-Chrome economy makes it suitable for low-cost homes; outstanding quality makes it *the* finish for finer residences, offices, truly Modern American interiors.

See your O'Brien dealer today, or write on your letterhead for new color card, free sample and details on luxurious Pen-Chrome "Blonde" wood finishes.

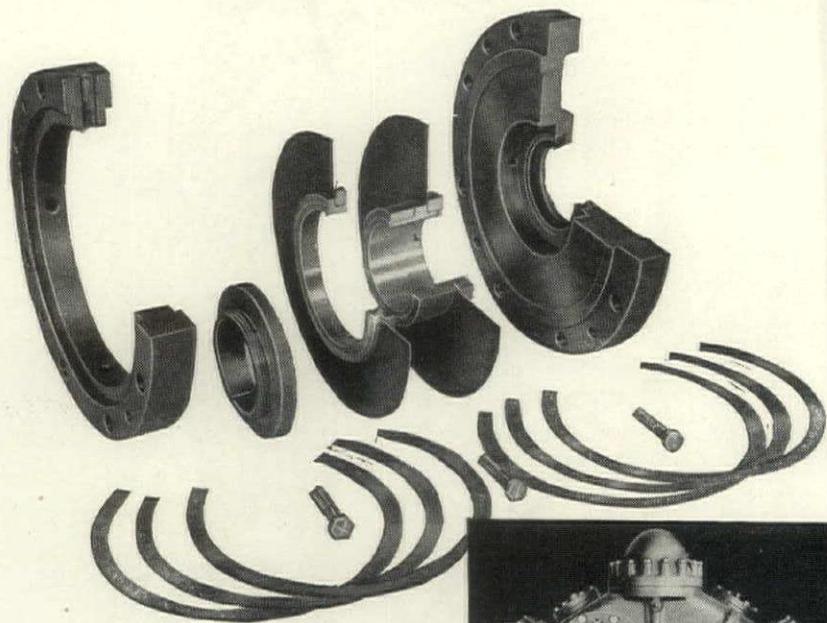


In 10 Modern Tints

- MAPLE
- SANDALWOOD
- BLEACHED MAHOGANY
- DRIFTWOOD
- PLATINUM
- BLONDE
- LIGHT OAK
- DARK OAK
- AMERICAN WALNUT
- MAHOGANY



THE O'BRIEN CORPORATION, 101 NORTH JOHNSON ST., SOUTH BEND 21, IND.



*Look for*

## BALANSEAL . . .

### another exclusive York feature in the V/W Compressor

The shaft of the famous V/W, "the compressor that never wears out" is effectively sealed without springs and without packing.

Through the use of the exclusive York "Balanseal", closure is secured with a minimum of friction and power loss by an arrangement of flexible, tempered steel discs that compensate for both internal crankcase pressure and external

atmospheric pressure. "Balanseals" operate under a continuous oil head and combine high efficiency with striking simplicity.

"Balanseals", plus vibration-free design, plus the use of cylinder liners that permit replacement of *all* parts subject to wear, make the York V/W the obvious choice of all compressors in their capacity range.

York Corporation, York, Pa.

For Competent,  
Authoritative  
Assistance...

**QUICK!**

CALL ON THE FACTORY-TRAINED  
EXPERIENCED YORK ENGINEER  
IN YOUR NEIGHBORHOOD

York-trained, seasoned specialists in refrigeration and air conditioning, located at district headquarters throughout the United States are assisting architects, consultants and contractors . . . in planning, purchasing, installing and maintenance.

In the Houston area, for example, District Manager Edwards and his staff of 10 sales engineers devote their full time to the problems of York customers in this region.



A. C. EDWARDS  
District Manager

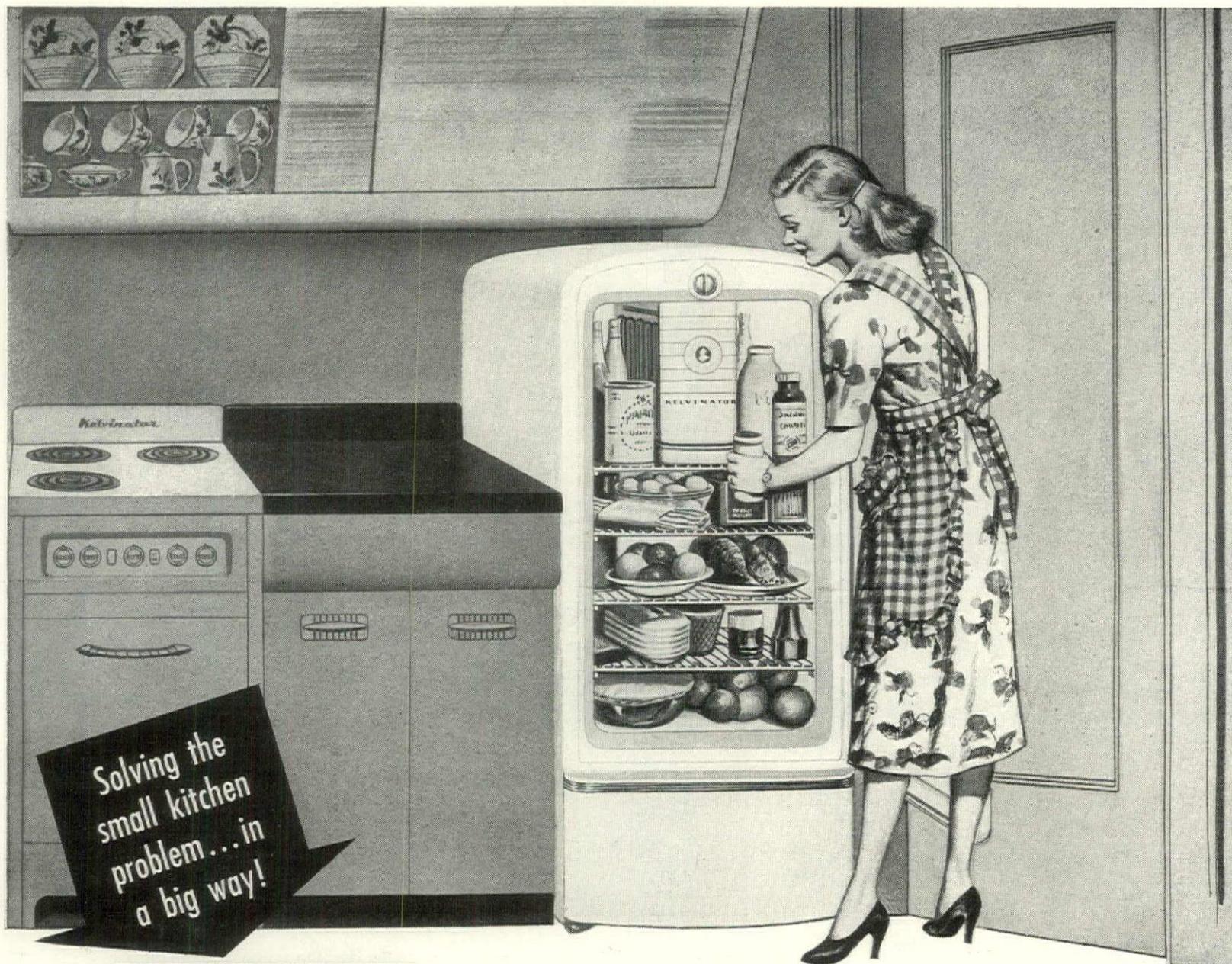
Assisted by:

H. W. Broadwell	W. R. McGinnis
Calvin Gore	C. H. McLeod
F. D. Graham	J. F. Moss
R. P. James	R. S. Sandifer
W. K. Laster	H. Z. Thomas

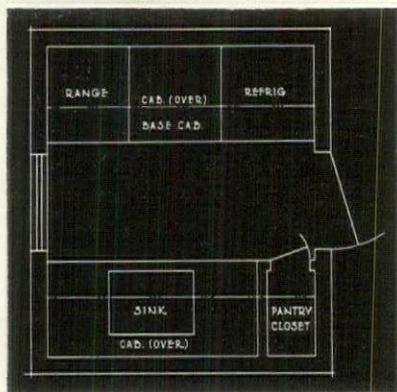
**YORK** *Refrigeration and Air Conditioning*



HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885



Solving the small kitchen problem... in a big way!



# Kelvinator's NEW "SPACE-SAVER"

Holds 50% more... uses no extra floor space!

Here's the most practical refrigerator ever designed for small kitchens—Kelvinator's new "SPACE-SAVER"! Ideal for small homes and apartments, it offers 50% more storage—full 6 cu. ft. compared to the previous 4 cu. ft. model. *Yet it takes up no more floor space!*

And just look at these really modern features! 5 full-width shelves with *greater space between shelves*... *extra room* for tall bottles and bulky foods... *High Speed*

*Freezer* for frozen foods... "*Seal Tight*" Door Latch, Kelvinator's latest exclusive... beautiful snowy-white *Permalux* finish... perfect trouble-free performance of *Polarsphere*—the matchless cold-maker!

To solve your small kitchen problems, or to replace inadequate units—*anywhere*—count on Kelvinator's "SPACE-SAVER"! Write today for further information... NASH-KELVINATOR, Detroit 32, Michigan.

## Kelvinator



DIVISION OF NASH-KELVINATOR CORPORATION, DETROIT  REFRIGERATORS • ELECTRIC RANGES • HOME FREEZERS • WATER HEATERS

# NEWS

## WASHINGTON

Both parties launch housing probes and prepare to blame each other p. 9

Government's anti-trust drive may include architects p. 10

## PRICES

Wholesale building materials index turns up again p. 10

Vets' hospital plans pared sharply as bids climb p. 10

## HOUSES

Building material producers tell how they will answer Congressional probe p. 12

## BUILDING MONEY

FHA eases up on rules for \$3,000 house p. 13

## DESIGN

Style shift ahead in consumer magazines? p. 11

Paris views international housing show p. 13

Producers Council presents engineered house p. 14

## JOBS

City will delay long-range planning around United Nations site p. 16

**BUILDING MONTH.** The biggest summer housing boom in the country's history was on. Nobody was sure just why and, more important, nobody was sure how long it would last. The boom could not be explained simply by the fact that supplies were now plentiful—although building material inventories double those of last year were mighty encouraging. It was more than the industry's complete freedom from controls—although a brisk market for the \$20,000-\$25,000 house was reported in many cities. It was certainly not to be attributed to a drop in house prices—for August brought the ominous news that the price of new houses, which had seemed to be stabilizing over recent months, is creeping up again. More than anything else, the boom seemed to be rising from one of those unpredictable shifts of market opinion. House buyers seemed to be deciding that building costs were simply not coming

down again and that, with top-grade materials now plentiful, there was no reason to wait any longer. The dimensions of the boom were impressive. Builders broke ground for 80,000 houses in July, more than have been started in any month in the last 22 years and 18,000 more than were started in July last year. Although the final figures were not yet in, the boom seemed to have mounted in August to as high as 85,000 starts. Measured against the usual seasonal sag of the late summer, the upturn was striking.

The boom was not showing up evenly over the U. S. A lot of it was in small cities and towns, who were building out of all proportion to the national pace. In the big cities, rental projects, started under liberalized FHA rules, were boosting the total of starts more than houses.

There were, to be sure, some worries about just how long the housebuilding boom could last. A few lugubrious Washington observers predicted a big drop by fall. And in non-residential building no comparable upturn was in sight. (In New York City, for example, builders figured non-residential activity was 50 per cent under last year).

But Building, like the rest of the U. S., knew that so long as its house customers maintain their present high income levels (the average industrial worker, according to BLS figures, is earning more than double what he did in 1935-39) there will be plenty of housebuilding. Building could only hope that its big customers would wake up to the plain fact that to wait for a sharp drop in building costs is to flirt with economic disaster. Many a Building man last month echoed the blunt statement of the Turner Construction Co.: nothing short of depression will bring building costs down very much.

That the industry was highly aware of the need for holding the cost line against any further rises was apparent in many promising directions. The Producers' Council backed up its emphasis on product improvement by presenting the Industry Engineered House, which makes a carefully studied system of modular construction available to the smallest house builder. While increased coal and steel prices were having their expected effect in upping building materials prices (especially brick and cement), Reynolds Metals announced 20 per cent price reductions on its aluminum building products, Westinghouse and Libby-Owens-Ford pledged no further price increases. New York City was hard at work

on a long-term wage stabilization agreement, and here and there a trades union was voluntarily turning down a wage increase in the interest of market stability. Like the rest of the U. S., Building was hanging from the kite of inflation. About the best it could hope to do now was to guide the kite, firmly and gradually, to a safe plateau where everybody could settle down for a while.

## WASHINGTON

### PRELIMINARY SKIRMISH

**Democrats and Republicans hope to blame each other for housing lack.**

As everybody has known for some time, the Great Housing Shortage will be exploited for everything it is worth in the forthcoming political campaign. Last month, Gael Sullivan, executive director of the Democratic National Committee and a one-time FHA state director in Illinois, laid down a preliminary barrage. To the Duckworth Democratic Club of Cincinnati, Sullivan offered some samples of how campaign oratory is likely to sound: "The Republican Congress can see rich landlords, but it can't see the poor tenant. It subjected the tenants to a gun-point 15 per cent increase . . . It gave big commercial builders the green light to hog building materials that had been earmarked for homes for veterans . . . Senate-boss Taft scuttled the chances of the Taft-Ellender-Wagner bill's being considered on the legislative calendar."

So far, at least, the "gun-point" rent increase was showing up more like a water pistol. During the first five weeks operation of the new rent program, leases calling for rent increases were filed for only 3.3 per cent of all units under rent control. Tenants seemed to be gambling on continued controls—either at a state or federal level. They probably had the odds. The Republicans were showing increasing reluctance to take the lid off rents in an election year; House Banking Committee Chairman Wolcott had said that rent control would probably have to be continued.

Both Parties were contesting for the title of slaying the giant of Housing Inflation—but so far neither had laid hands on a weapon more formidable than a pop-gun. The Republicans were spearheading the joint House and Senate Committee probe of housing shortage (snorted Representative Helen Gahagan Douglas: "The biggest laugh of the year!") and had already

treated the voters to some bitter intramural slugging. Senator Tobey (N. H.), who had given the W-E-T housing bill powerful support, had sought the



**CHAIRMAN GAMBLE** ly composing themselves around a conscientious middle-of-the-roader, Representative Gamble (N. Y.), the Republicans prepared to give the impression that they are single-handedly licking the Great Housing Shortage.

On its part, the Administration began beating the antitrust drums, promised a drive against price-fixing conspiracies in all phases of housebuilding. But Building men, unimpressed by the political gesturing of either party, were forced to conclude that, whatever else it might accomplish, the government's first suit would not be likely to reduce house prices much (see below).

## ELEPHANT'S FLEA

**Realtors first tapped for government's drive on housing inflation.**

Realtors' adroit Herbert U. Nelson was in New York, helping to persuade the American Legion that veterans need no public housing,\* when a Federal Grand Jury indicted the National Association of Real Estate Boards and the Washington Real Estate Board for criminal violation of antitrust laws and when the government simultaneously filed a civil antitrust suit against the same defendants.

NAREBmen paced their handsome Washington offices until Nelson, the big boss and the brain that has kept this lobby rolling like a bulldozer for the last 22 years, could get back from New York. The mimeograph machine waited, and none of the office girls went home. Then Nelson walked jauntily in, with the cocky half-smile and unshatterable assurance that has swayed dozens of Congressional committees and made realty tycoons feel it a privilege to dig into their pockets to keep NAREB afloat.

"We are outraged. . ." he dictated rapidly. "Real estate boards are old and well-known institutions in nearly every American community. . . The National Association has spoken out in what it believes to be the public interest in the matter of housing, at times in opposition to the Administration. Apparently the time has come when a citizen of this country cannot speak out without being served notice that he does so at the peril of criminal prosecution."

If, as Nelson hoped to convince the U. S., the antitrust suits were reprisals, the government had nevertheless been preparing them long before NAREB had played the

\* He and other industry representatives succeeded. The Legion convention decided not to endorse the W-E-T general housing bill.

leading role in scuttling the Veterans' Emergency Housing Program, sidetracking the W-E-T general housing bill, and shooting some big holes in rent control. Nearly two years ago FBI men had fingered through the files of the Washington Real Estate Board, and gone away with a fat bunch of letters, most of them signed by boss Nelson.

But the antitrust suits were bigger than even big NAREB. The tip-off was Attorney-General Tom Clark's instructions to the lawyers in charge of the antitrust drive in the housing field. The Department, he said, was investigating antitrust violations by "persons, firms, corporations, associations and their members, and others. . . engaged in the production, distribution, distribution or use of materials. . . used in the construction and housing industries, or in performing work or rendering professional service in any branch of the construction or housing or allied industries, and in connection with the sale, exchange, financing or management of real property and the improvements thereon."

This was broad enough to include architects, mortgage lenders, title companies—everybody in Building, in fact, except labor, exempted by Congress from antitrust prosecution (according to a Supreme Court ruling). Nobody where the Department of Justice would prosecute next, but few thought that NAREB would stand alone in the antitrust spotlight.

## NAREB: the public's view?

*St. Louis Post-Dispatch*



THE PRESIDENT POINTS A FINGER

To many, the charge that realtors have increased the cost of housing by conspiring to fix fees (realty brokers customarily charge about 5 per cent commission on transactions under \$50,000, 3 per cent on those above) seemed something like, as one columnist put it, "flicking a flea off the elephant of inflation." But the suit might be more important in undermining NAREB's influence in Congress and with such legislatively powerful groups as the American Legion. Because of the Great Housing Shortage, NAREB's prestige, as far as most newspaper readers were concerned, was already at an all-time low. What a number

of people thought about NAREB's ringed crusade for "every American's right to own his own home" seemed to be reflected by a rash of cartoons over recent months, the sharpest of which was Fitzpatrick's in the St. Louis Post-Dispatch.

## PRICES

### NEW PEAK

**Building feels effect of higher coal and steel prices, boxcar shortages.**

Building material prices, dropping for some months, last month turned up again. The mid-month BLS figures showed that the wholesale price index for building materials had reached a new postwar high—77 points higher on the chart than 1946 prices. Higher prices for coal and steel were speeding the rise.

Some thought the peak had not yet been reached. Lumber prices, which have jumped up and down at a dizzying rate over the last eight months, were climbing sharply again. Production was no longer lagging back of demand, but box car shortages were keeping lumber off the market, slowing lumber prices up.

BLS supplied another statistic back of climbing building costs: wages of union workers in the building trades rose 15 per cent in the year ending last July, the biggest jump in any 12-months since 1920.

### CUTBACK

**Vets' hospitals will sacrifice all extra space, General Bradley says.**

The Veterans Administration reluctantly ordered architects at work on veterans' hospitals to trim designs of all space not absolutely necessary for medical and surgical care. The reason: "runaway construction costs."

Construction bids have been running from 15 to 35 per cent over VA estimates. This means that doctors' quarters, theater recreation rooms, other extras must be sacrificed if VA is to get 75 top-standard hospitals for the \$772 million which Congress voted for the job.

The worst of it, VA's General Omar Bradley said, is that "we have no assurance that labor and material costs will not continue to rise." The General thinks that "contractors are adding a 15 to 30 per cent 'fear contingency cushion' to active construction bids."

Some government construction experts think that lack of wide competition is one reason for high construction costs on veterans' hospitals. Size of the projects and specialized construction required tend to restrict bidding to a small number of contractors, they say. Just how high costs have risen over the last two years is plain in the government's estimate that it now costs \$18,000 a bed to build a veterans' hospital—as against \$6,000 during the war.

# PARENTS' MODERN GETTING BUILT

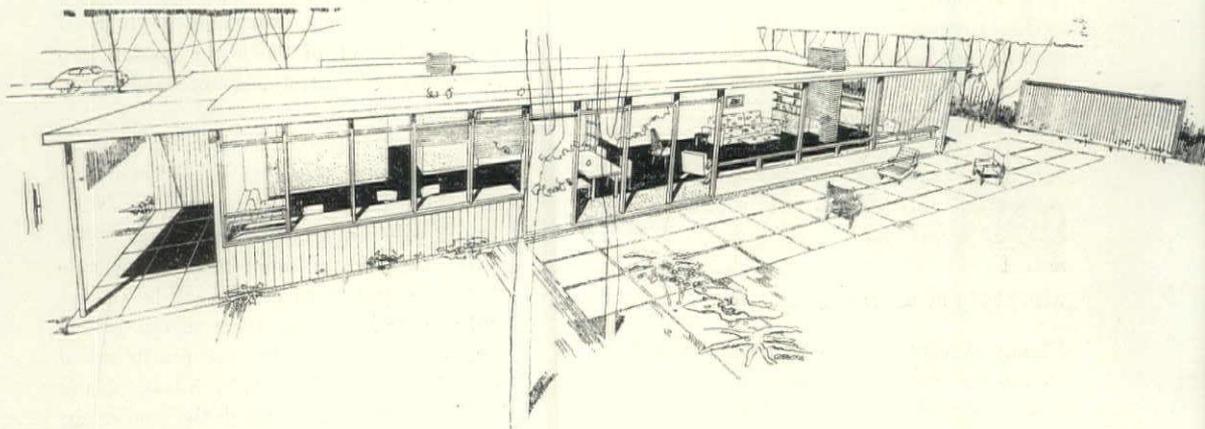
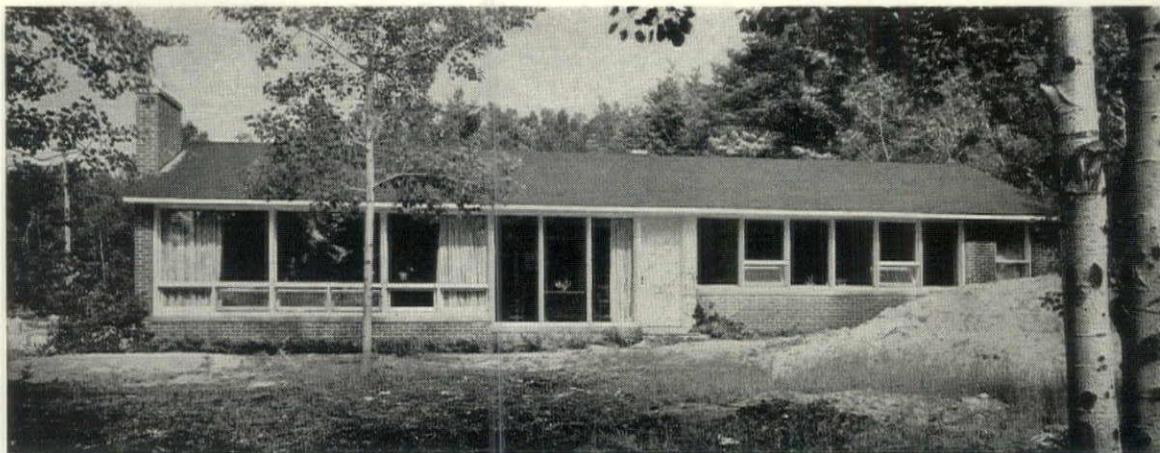
Building men alert to the sweeping influence of the heart-and-home magazines have recently detected a slight but alarming tremor in the hands that rock the cradle of customer taste. A few editorial whispers have said that "modern" was, after all, only another style"—already on the way out. Among the cautious middle-of-the-roaders, flower-trusted Cape Cod cottages have recently shown up with increasing frequency. And in the vanguard *Ladies' Home Journal* has been nostalgically visiting over the summer quaint old Nantucket and romantic Monterey.

In the midst of this slight wavering in the ranks of the faithful, Maxine Livingston of *Parents' Magazine* has maintained a rock-like consistency of attitude. This is mostly because Mrs. Livingston has never been concerned, and has never encouraged her readers to be concerned, with the "style" of the house. She started ten years ago to talk about living on the inside and, with increasing fluency, has continued to talk about it ever since.

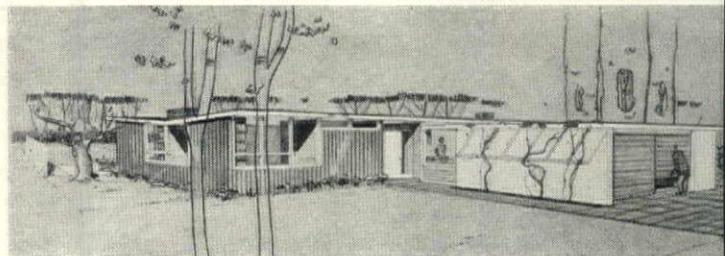
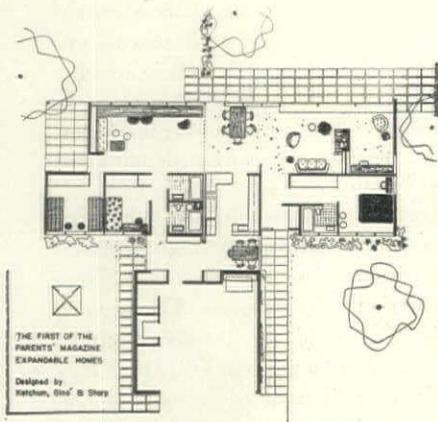
Last month Mrs. Livingston could point triumphantly to the impressive results of her consistent evangelism. A year ago *Parents'* presented the first of a series of "expandable homes," all designed by leading architects, and offered readers a set of blueprints and specifications for \$10. By last summer, the *Parents'* houses were under construction in 35 communities in all parts of the U. S. Thousands of plans have been sold, and orders are steadily mounting. The house plans, which provide for structural additions as family size and income increase, seem to have sold themselves to the building industry as easily as to the building market. In some cities, operative builders have bought plans and are building the houses in volume. In Yakima, Wash., the Federal Savings & Loan Association is building one as a model house. Mrs. Livingston attributes the rapidity with which *Parents'* houses have moved off the shelves and into construction to the highly realistic attitude of the majority of U. S. families. She thinks that "most families with children are more concerned with the protection or workability of a house than with style or tradition."

To the inevitable protests from those who say that *Parents'* is putting architecture on a mail-order basis, Mrs. Livingston says simply that her \$10 plans provide the kind of careful study not otherwise available to all-income families and, in some communities, not available at all.

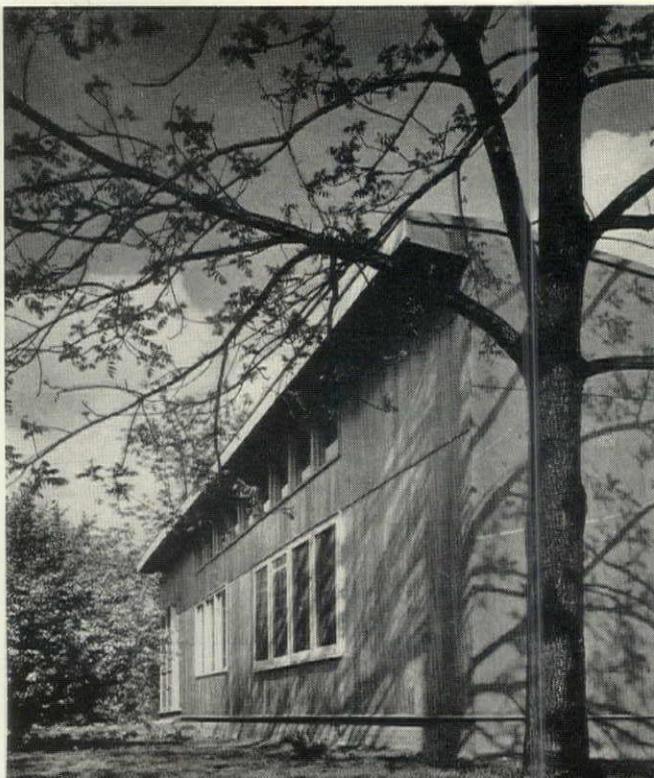
Mrs. Livingston has so far commissioned 10 expandable house plans from Ketchum, Kinsler & Sharp, L. Morgan Yost, George W. Smak, Victorine Homsey, Pietro Beltracchi, Perkins & Will, and intends to continue the series. Richard Bennett, Chicago, is *Parents'* architectural adviser.



**FIRST EXPANDABLE HOUSE** was designed for *Parents' Magazine* by Ketchum, Kinsler & Sharp. Photograph above shows how it was built in Traverse City, Mich. with a pitched roof and from a reversed plan. Photo below shows how it was built in Canada with an inverted roof and clerestory. While the architects suggested redwood siding, *Parents'* presentation emphasized use of local materials. Michigan house was finished in brick veneer; Canadian house was built of plywood.



Richard Garrison Photos



**CANADIAN HOUSE** was adapted by Designer Russell Kilbourn to site fronting on south. Placing living rooms on north, he closed up some of the fenestration.



## BUILDING MATERIAL PRODUCERS ANSWER TO CONGRESSIONAL INQUIRY: Industry competition is the only sure way to product improvement, lower prices, and a large and continuing housing market.

Reini Photo



**WHITLOCK: no better or quicker way.**

*Facing a Congressional investigation of all phases of housebuilding (see page 10) and enormous public dissatisfaction with the performance of the building industry as a whole, building material producers have a well-defined point of view about what course of action will be most effective in solving the U. S. housing problem. In an exclusive interview with the FORUM, Douglas Whitlock, chairman of the Building Products Institute and a past president of the Producers' Council, tells what stand the producers will take when the Congressmen start asking questions.*

**What is the correct appraisal of the housing job the building industry should properly be called upon to do, measured in terms of effective demand rather than general housing need?**

Our information on the condition of housing is not sufficiently conclusive to tell us how much of the existing supply still has, or could be made to have, additional useful life, and our information on the composition of households gives very little clue as to how much of the so-called "doubling-up" represents hardship. Until our information is more complete, our ideas on standards of minimum housing in closer agreement, and our determination to demolish the worst of the supply embodied in effective local regulation, it will be difficult for anyone to appraise accurately the job before the industry.

Since the needs, standards and resources of communities vary widely, this task should be a matter of local concern. Utilizing basic data provided by the Census, communities should follow such examples as those of Cleveland and Denver of keeping themselves informed on all aspects of their housing situation and of providing both business and local government with a

sound basis for action.

In spite of the absence of accurate information, industry knows that its job is a challenging one. One thing that makes the job so challenging is that the prospect of demand resulting from the net increase in families (after the present spurt in the marriage rate is over) will be relatively small—about 450,000 a year, according to Census estimates. If the industry is to keep going and expanding, it must aim more and more at a replacement market. It must sell people out of their old houses into something more attractive, more convenient, more economic.

This can be done in the housing industry on the same principle as it has been done in other industries—of providing what people will buy and providing it in better quality and lower price year by year so that more and more people will be willing and able to buy. Operating on this principle, industry sees ahead the possibility of a large market of indefinite duration, and it is convinced that through the continuous process of improving the product and lowering its price, it can bring about the steady discarding of the worst of the housing supply and the raising of the standard of housing for all families. It sees no evidence that there is any better or quicker way of accomplishing these objectives.

**Is the price factor preventing the industry from meeting the market demand for low-cost housing?**

It seems safe to assume that prevailing costs and prices are preventing the industry from building as many low-cost homes as the market might absorb. The demand undoubtedly would be greater if prices were 10 or 15 or 20 per cent lower than they are. However, it must be recognized that the increase in the cost of housing is not out of line with the rise in the general price level.

**Is there reasonable assurance that there will be enough materials and equipment available to permit the industry to do an adequate job?**

There is general agreement that manufacturers will be able to produce all of the materials that the industry will be able to utilize during the next 10 years, although spotty shortages of a few items may continue for a few more months, largely because of freight car shortages. Inventories are fast being rebuilt to normal levels.

**What are the functions that should be exercised by the federal government in the broad field of housing and construction?**

The federal government can aid private industry greatly by providing more accurate statistics on building needs and economic trends. It also can cooperate with industry in needed technical research. It

can help further by continuing to insure loans on a sound financial basis; by continuing to coordinate the efforts of industry and labor in the field of apprenticeship training; and by stimulating local communities to modernize their building codes.

Otherwise, the federal government should confine its activities in the field of housing to its public works program. Attempts to program housing will only confuse the picture and discourage private enterprise from making an all-out effort. The government will help furnish accurate facts so that industry can measure the market for new building with greater accuracy. The industry will build more than could be built under any form of government program.

The factory-built housing fiasco is a glaring example of what happens when government tries to direct the housing industry. Prefabricated or factory-built housing undoubtedly has a good future, but it faces manifold problems which only time and private initiative will solve. Government dreamers who program for 700,000 such houses in two years upset the whole materials supply situation, waste millions of dollars of taxpayers' money, and threw the prefabricated industry into confusion.

No one questions the fact that the housing industry is working hard on the problem, as is evidenced by the Industry Engineered Housing program. Cost reduction is the one sure way to expanded markets. But the government has nothing to offer in the way of a solution, except financial devices which only tend to underwrite high costs. Costs will come down as productivity returns to normal and as competitive forces come into full and unrestrained play throughout the industry.

**Should the federal government coordinate its own construction programs with the general building picture so as to retards construction when private building is active?**

There unquestionably is a need for scheduling public works programs in accordance with the trend in private building. Deferrable public works should be fully planned in advance but should be held back until the volume of private building begins to slacken. In this way, employment in the building industry can be better stabilized and fluctuations in construction volume can be leveled-off.

**Does the present administrative set-up of the government in respect to housing and building functions offer the best possible arrangement? If not how could it be improved?**

Under the reorganization plan recently approved by Congress, there will be

manent agency to attempt to program housing and determine federal housing policies. This planning or programming agency is superfluous and should be abolished. It can accomplish little more than getting the operation of the competitive market.

National Housing Council to coordinate the agencies concerned with housing. The FHA and FHLB can function far more effectively as independent agencies. The government's public housing functions should be placed in the Federal Works Agency which is charged with the supervision of Federal non-military public works activities.

**Is there any way in which slums can be cleared and adequate housing provided for low-income families without large federal subsidies?**

Slum clearance and provision of housing for low-income families can be most effectively handled by state and local governments without federal aid or interference. The Indianapolis Plan appears to be one model pattern for a community to follow. Other communities are working on plans of their own. The federal government already has far too broad a hold on the local governments and individual people in the country. Slum clearance and housing for needy families are local problems. They should be solved with local funds by the people who are familiar with local conditions.

**BUILDING MONEY**

**SET-UP FOR LOW PRICE**  
**FHA hopes to start more money flowing for \$3,000-and-under-house.**

Among some of the unpleasant facts about housing, the Federal Housing Administration has finally decided to make things easier for families who have only \$3,000 to spend for a house. Last month FHA eased its construction standards for minimum houses built under the Title I insurance program.

To reduce the risk of brickbats from housing reformers, FHA said that houses with out-plumbing may now qualify for Title I insurance—if they are built in neighborhoods where this is customary. The agency's reluctant but realistic view is that the new standards for \$3,000-and-under houses will at least move thousands of rural and small town families out of shacks and into weather-tight new construction.

Under the revised Title I plan, FHA will require only that a house meet standards characteristic in the neighborhood in which it is built. Except for this general rule, there are a few structural requirements that will be used. Chief of these is that the house must have at least 360 sq. ft. of space. Even this requirement has been waived for Good's Wingfoot mobile house, which FHA says is all right for young families just getting out. FHA will inspect no houses, leaving this up to lenders.

**PARIS HOUSING SHOW**

**New City Plans are Better than Houses Shown by Eleven Nations.**

While many homeless Frenchmen were aghast at the thousands of francs and man-hours expended to mount the current International Urbanism and Housing Exhibit in Paris, the great show spread out along the banks of the Seine at least focused the eyes of all Europe on the need for technical improvements in housing and made it possible to compare the work so far done by nine European countries, Iceland and the Union of South Africa. In the great glass-domed hall of the Grand Palais, decorated with the flags of eleven countries, visitors saw exciting plans for the reconstruction of French towns and cities, all reflecting the new emphasis on "urbanism"—a term the French use to mean consideration of the community as a whole. Outside, model houses sent by the various countries were less inspiring. They did, however, show considerable ingenuity in the use of substitute materials and in improved methods of working old materials where they are still available.



Baden house now has sheet aluminum insulation



Swiss prefab is assembled from large sections



French Embassy, Information Division



**CIRCULAR HOUSE** (above) has solar water heating system. One-room prefab (center) is made of fire-proofed straw. Interior shows how apartments being built at Boulogne-sur-Mer will look.



**FRENCH** call house at left the "Jeep", say it is expandable. House (lower left) is built of fibrocement planks. France's new stone-cutting machinery produced \$4,200 house below.



# ENGINEERED HOUSES promise small builders lower costs via modular design and standardization.

Pat procedure today for reducing house building costs is simply to reduce the size of the house. Not so simple, but infinitely more promising, is the procedure advocated jointly by the Producers' Council and the National Retail Lumber Dealers Assn. after a two-year study of the economies of modular coordination. Launching what they call the "Industry Engineered House Program," these organizations of building material manufacturers and distributors last month unveiled a group of house plans which cut waste time, motion and materials to the bone. If the barrage of promotion prompts widespread acceptance of the program by housebuilders, the plan will mean further economies through the mass manufacture of standardized house parts and the simplification of manufacturers' stocks and dealers' inventories.

Intended not as a series of model houses but as a demonstration of the principles of modular coordination for the express benefit of the small builder, the Industry Engineered houses were designed by Architects Chapman & Evans and A. Gordon Lorimer with the dimensions of stock building materials as their principal guide. Since 4 inches has long been the building industry's basic dimension, the modular design of these houses is based on a three-dimensional 4 in. grid to which the entire house structure and each of its parts is coordinated. As indicated by the grid on these pages, floor plans are based on a 4 ft. module which, of course, is a multiple of 4 in. and a stock dimension of most sheet materials.

Dimensioning and framing of the houses illustrate the effect that standard material sizes have on their design. Selected by the program sponsors for intensive promotion, the four-room bungalow (below) from which most of the other houses are adapted,

is comprised of two sections of identical size. Their inside dimensions of 16 x 24 ft. permit the use of standard 8 x 8 x 16 in. foundation block in half bond without cutting and 16 ft. 2 x 10 in. joists without cutting or intermediate girders and footings. However, since the usual practice of using a single header in conjunction with 16 ft. joists throws the exterior walls 4 in. out of balance as far as the interior application of standard board materials is concerned, the sill detail of the Engineered House (opposite page) includes extra headers or blocking to space the nominal inside faces of exterior walls 16 ft. apart. The same result may be obtained with single headers by cutting 16 ft. 4 $\frac{3}{8}$  in. joists from 18 ft. lengths. (The scraps may be recut to 14 $\frac{3}{8}$  in. and placed between joists to serve simultaneously as solid bridging, as accurate joist spacers and as nailers to facilitate the application of ceiling panels.)

In houses with wood floor construction, exterior wall and partition studs are uniformly standardized at 7 ft. 8 $\frac{3}{8}$  in. (Where a 4 in. concrete slab floor is used, an 8 ft. stud is required for exterior walls.) The 16 ft. span suggests lightweight trussed rafters (2 x 6 in. rafters with 2 x 4 in. ceiling ties supported by a central drop hanger) spaced 2 ft. on centers, in which case the entire floor and ceiling of the house may be finished before partitions are installed. Partitions may be assembled on the floor and tilted into position without damaging the ceiling, for their height is  $\frac{3}{8}$  in. less than the distance between finished floor and ceiling. (The partition is jacked up and secured in place by the insertion of  $\frac{3}{8}$  in. wedges—possibly shingles—under the sole plate.)

If the program sponsors can convince builders of the on-site dollar-and-cents advantages of standardization and modular

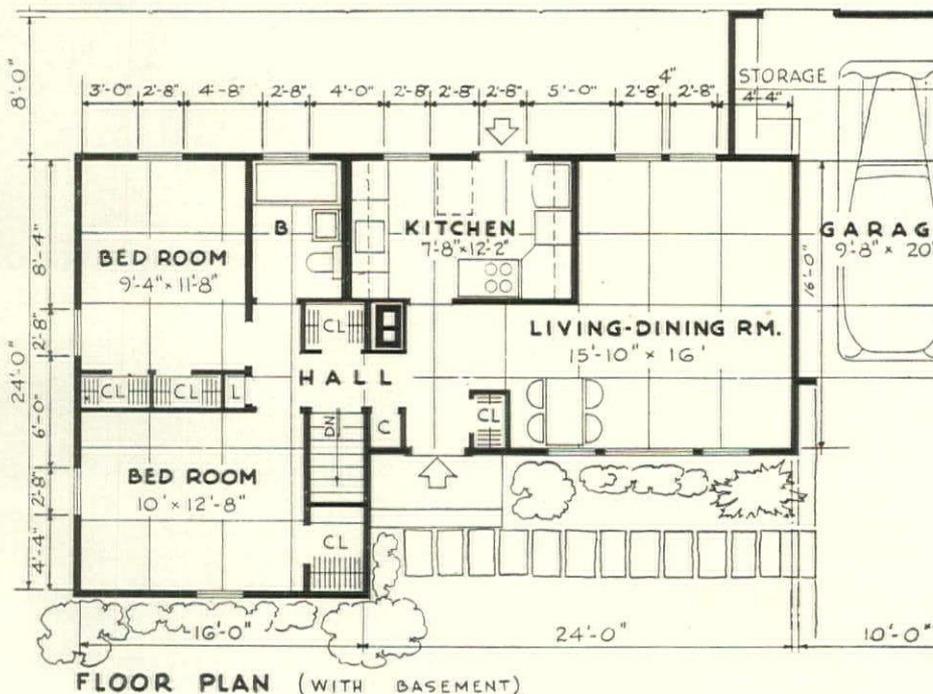
framing, they promise further savings in packaging, precutting and preassembly at the local dealer level. For instance, if demand warrants it, the lumber industry will concentrate on the production of 16 x 2 x 10's, and dealers will bundle 7 x 8 $\frac{5}{8}$  in. 2 x 4's like lath and will preassemble partition sections in jigs. Moreover, it is hoped that with increased standardization of dimensions and room arrangements, other manufacturers will tailor low-cost materials and equipment specifically to fit into the Industry Engineered Houses.

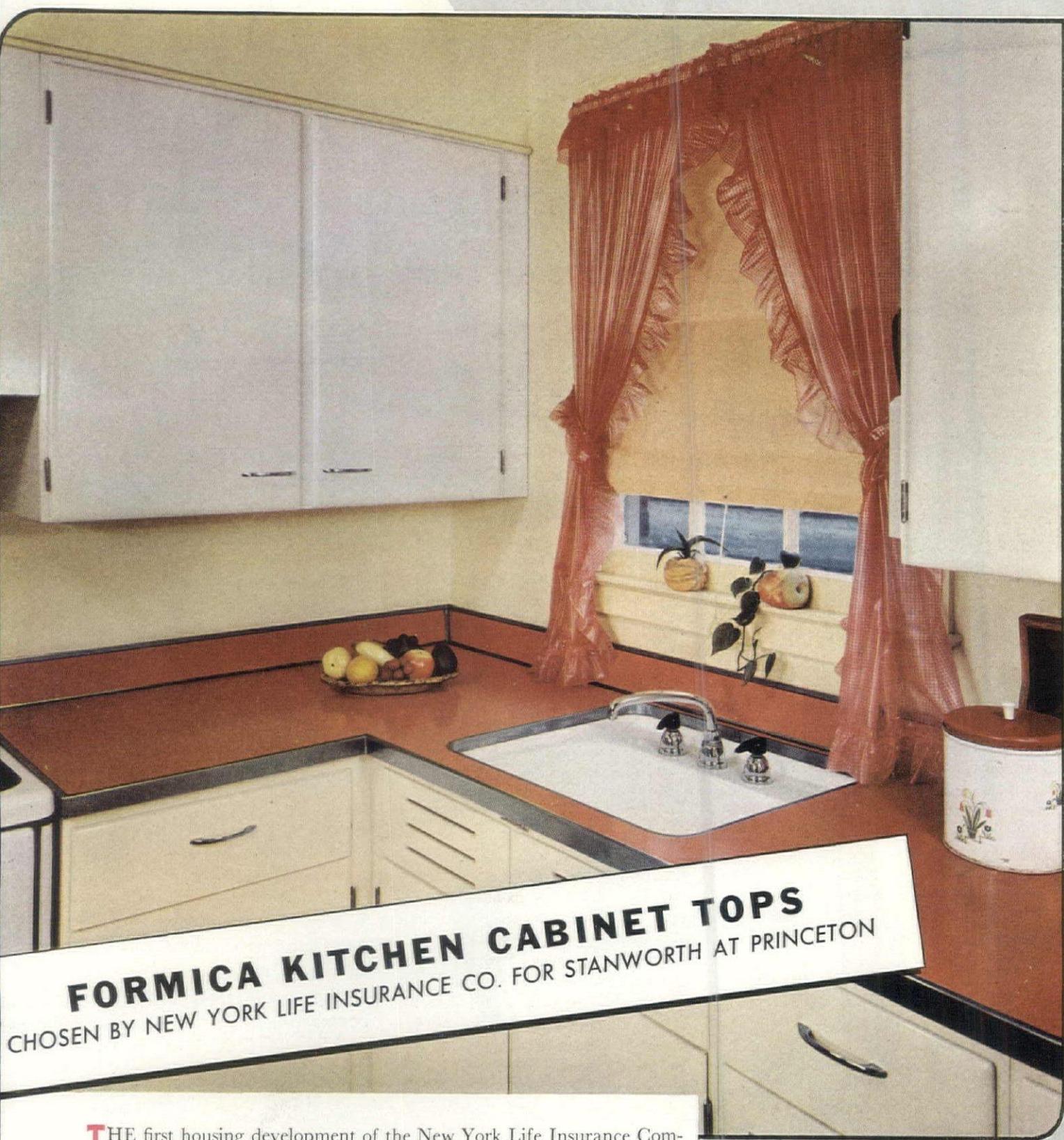
While the program sponsors intend the houses to be merely demonstrators, they realize that their designs will probably be cribbed by builders everywhere. Their planning has been carefully studied even beyond the aspects of modular coordination. The basic bungalow is neither the smallest nor the cheapest house that can be built. Its shape is more expensive but more attractive and livable than the tight rectangle usually associated with minimum house design. Its room sizes exceed the FHA minima by 162 sq. ft. or about 42 per cent. Placed with its front door facing the street, the house's 50 ft. width, including attached garage, demands a 60 ft. lot to meet the property requirements of most communities. (A basement garage would reduce the lot requirement to 50 ft., and, if the house were also tucked end to the street, the lot width could be reduced to 40 ft.) Having a gross area of 807 sq. ft. (a net of 768 sq. ft.) without a garage, the basementless version of this house is comparable in size to those being sold by big operative builders for about \$6,000 excluding land. It remains to be seen whether this big builder figure can be met or bettered by the small builder with the aid of modular coordination and the program.

(Continued on page 16)



**BASIC PLAN** concentrates service and hall space at center, frees living room from traffic. The house is comprised of two 16 x 24 ft. wings, containing a total gross area of 807 sq. ft., a net area of 768 sq. ft. In basementless version, stairs would make room for large storage closet, and closet near chimney would accommodate furnace.





**FORMICA KITCHEN CABINET TOPS**  
 CHOSEN BY NEW YORK LIFE INSURANCE CO. FOR STANWORTH AT PRINCETON

**T**HE first housing development of the New York Life Insurance Company, Stanworth at Princeton, New Jersey, is nearing completion, and many of the garden-type apartments have already been rented and occupied. In this carefully planned and competently engineered project it is significant that Formica kitchen cabinet tops were used.

Formica gives kitchen cabinet tops a new high in decorative value. The most popular finishes are plain black, pearlescent and line patterns. These latter are available in attractive pastel tints. They may be chosen to harmonize with the decorative scheme of the kitchen as a whole.

Formica does not chip, crack, or break, and is not injured by alcohol, fruit acids, or the alkalis that are ordinarily used in the home.

*So far Formica tops have been installed in 153 units of Stanworth at Princeton, specified by Architect Holden McLaughlin, with the approval of Chief Architect Gurney of the New York Life Insurance Company. The tops were furnished by the Kitchen Sales Company of New York. The General Contractor was William L. Crowe, New York.*

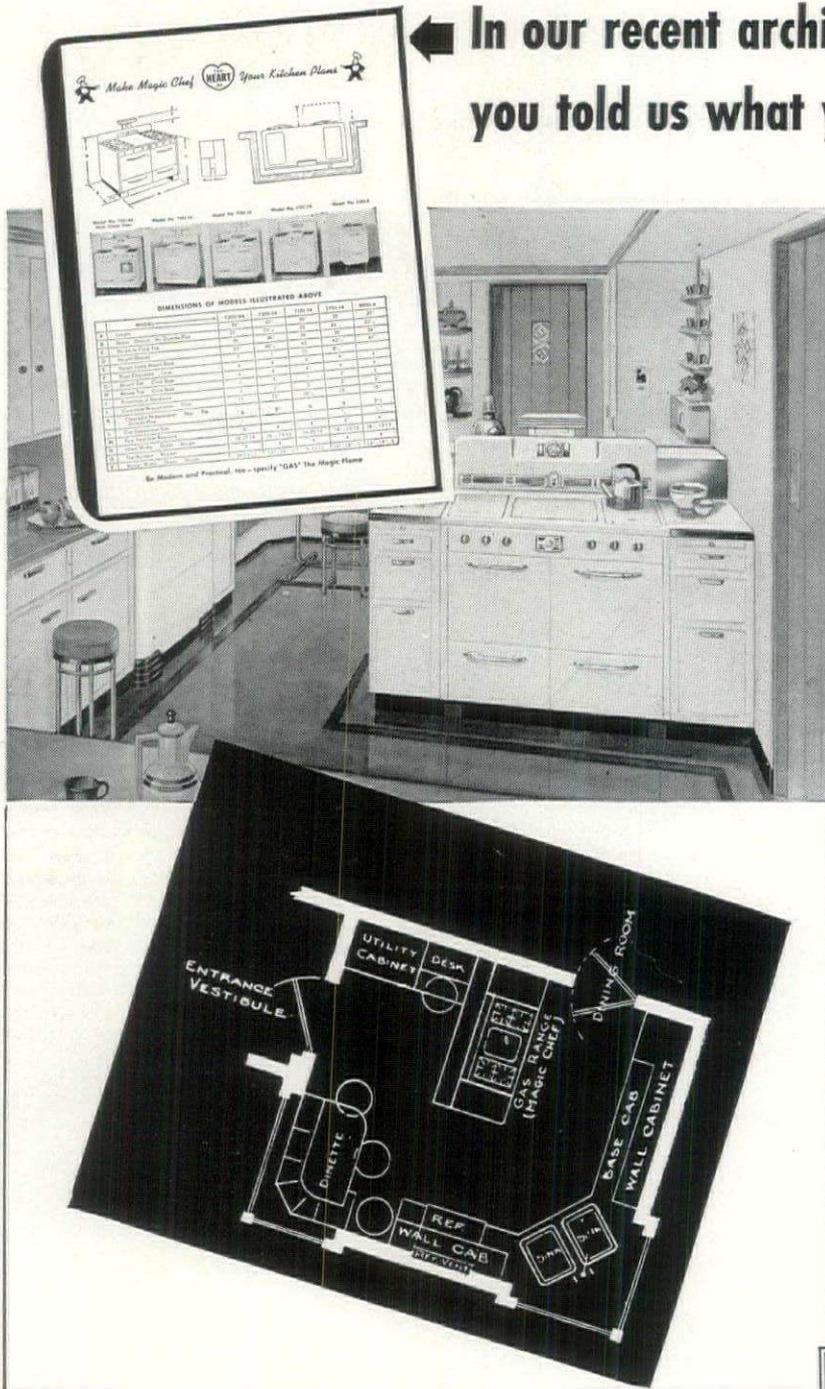


PRINTED IN U.S.A.

Send for

# Magic Chef's KITCHEN PLANNING DATA

← In our recent architect and builders survey you told us what you wanted—Here it is!



## OUR KITCHEN PLANNING DATA CONSISTS OF:

- 1 Magic Chef Specification Page. Gives detailed measurements on 5 different models of Magic Chef Gas Ranges.
- 2 Kitchen Supplement showing 12 different kitchen designs offering a wide variety of arrangements and utility features to choose from.
- 3 Floor Plan Insert—shows the detailed floor plan of each of the 12 kitchens mentioned in item No. 2 plus detailed plans for other sections of the kitchen.
- 4 Kitchen Broadside shows 10 New Freedom Gas Kitchens in full color which affords excellent opportunity to study the full effects of contrasting colors in the kitchen.

*Your clients can cook with gas wherever they live. Perfect results with "Pyrofax" or other LP (bottled or tank) gases.*



**MORE WOMEN COOK ON Magic Chef THAN ON ANY OTHER RANGE**

LOOK FOR THE FAMOUS RED WHEEL

THE MARK OF DEPENDABILITY



**AMERICAN STOVE COMPANY**  
Advertising Dept., 4301 Perkins Ave., Cleve. 3, O.

*Please send me items Checked*

1. Domestic Kitchen Planning Kit
2. Information on Heavy Duty equipment for hotel restaurants

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# NOW!

## HIGH-PERFORMANCE ADHESIVE USED IN INTERIOR-TYPE DOUGLAS FIR PLYWOOD!

As Outlined In New  
U.S. Commercial Standard CS 45-47

THOSE to whom Douglas fir plywood has long been a preferred construction material now find even greater advantages in this "modern miracle wood." For today, under the new U. S. Commercial Standard adopted by the industry, every panel of Interior-type plywood is manufactured with high-performance adhesive. This is the highly moisture-resistant (but not waterproof) adhesive long used in Plyform grade Douglas fir plywood—adhesive which withstands an average of at least 10 cycles of wetting and drying. Higher specifications for inner plies on all grades of Interior-type plywood have also been adopted. Together, these improvements mean greater usefulness, greater serviceability—and higher performance standards than ever before.

### IMPROVED INTERIOR-TYPE DOUGLAS FIR PLYWOOD NOW MANUFACTURED IN THESE APPEARANCE GRADES



**PLYANEL**  
Sound 1 Side

A general-purpose Interior-type panel for applications where only one surface is to be exposed. Plypanel Sound 1 Side (So1S) replaces two former grades—both Plywall and the old So1S grade.

PLYANEL D.E.R.A. - 5025

**PLYANEL**  
Sound 2 Sides

For applications where both surfaces are exposed (cabinets, cabinet doors, booth partitions, etc.)



**PLYSCORD**

An unsanded panel manufactured specifically for wall and roof sheathing and subflooring.



**PLYFORM**

Manufactured with the time-tested and proved premium adhesive which has now been adopted for all Interior-type Douglas fir plywood. PLYFORM is a structurally stronger panel, made especially for multiple re-use concrete forms.

★ For Permanent  
Exposure to Weather  
or Water, Specify  
**EXTERIOR-TYPE  
DOUGLAS FIR  
PLYWOOD**

**EXT. - D. F. P. A.**

Exterior-type Douglas fir plywood—identified by the "grade trade-mark" shown above—is made especially for permanent exposure to weather, water, and abnormal moisture conditions. This is the type to specify for the exterior of buildings, for outdoor signs, for marine construction, for railroad car siding—and for other applications requiring waterproof performance. Exterior-type—available in several appearance grades—is manufactured with completely waterproof phenolic resin adhesive and with higher performance inner plies as specified in the new U.S. Commercial Standard CS 45-47.



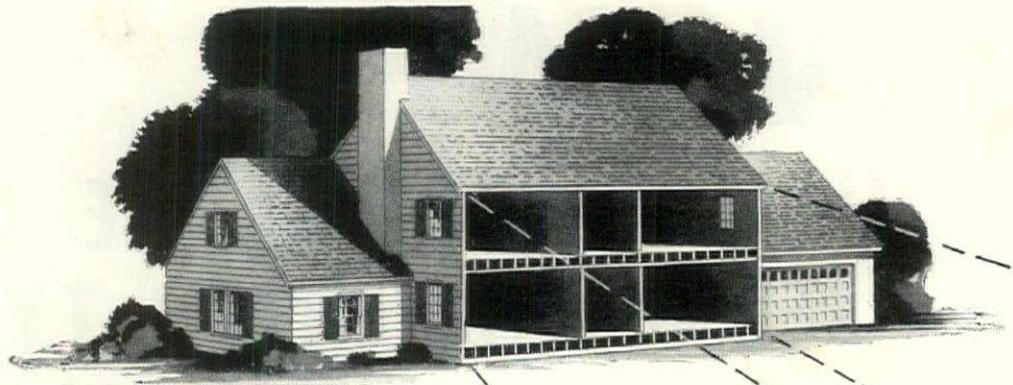
WRITE FOR YOUR  
COMPLETE COPY  
OF THIS NEW  
COMMERCIAL  
STANDARD

Booklets giving complete data on the new U. S. Commercial Standard (CS 45-47) for the types and grades of Douglas fir plywood are available. Single copies will be mailed without charge to any point in the United States. Address your request to: DOUGLAS FIR PLYWOOD ASSOCIATION, Tacoma 2, Washington.

**Douglas Fir  
PLYWOOD**

LARGE, LIGHT, STRONG

*Real  
Wood*  
**Panels**



**HERE'S WHERE  
DOUBLE DUTY  
INSULITE GIVES**

**Double**

Pull any house apart . . . take a long look at those outside walls.

That's the thin dividing line between comfort and hardship.

That's where *double* service is appreciated!

Double-duty INSULITE performs just such a *double* service in house construction:

(1st) *It Builds*

(2nd) *It Insulates*

Two services for the price of one! Your customer gets more for his money, and appreciates your interest in his welfare. More satisfied customers means more business for *you*.

Insulite *insulates* as it builds. One material — double service — two jobs in one operation.

*Strength?* It provides greater bracing strength than wood sheathing horizontally applied.

*Insulating Value?* It provides greater insulation than ordinary sheathing.

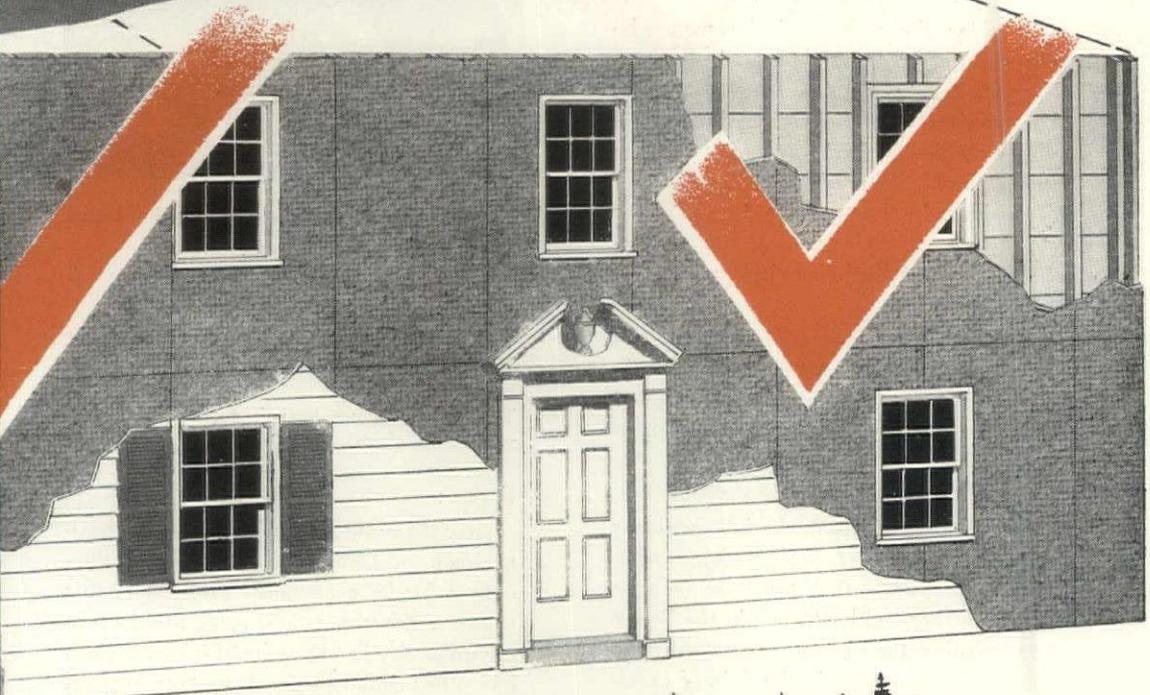
Specify double-duty INSULITE and give your customers double for their money.



**INSULATES AS IT BUILDS**

When you Build or Remodel . . . .

• • **FOR THE MONEY!**



double-duty  
**INSULITE**  
*The GENUINE*

Refer to Sweet's File,  
Architectural Section 10 a/9

**INSULATES**

"Insulite" is a registered  
trade mark, U.S. Pat. Off.

DS AS IT

INSULITE DIVISION  
PAPER  
MINNEAPOLIS 2. MINNESOTA



MINNESOTA & ONTARIO  
COMPANY

Architect-designed interiors on the carpet . . . Arbiter of the Arts . . . Round the world on a T-square . . . Five Dollar Plans . . . More on Censorship of Design . . . Letter from France.

## GOLD FROSTING

Forum:

So many times in recent years friends of mine, after having leafed through a copy of the FORUM, have commented on the utter coldness of home interiors. That meant another would-be devotee of contemporary design was lost forever.

After an architect does a perfectly wonderful design and planning a job on a building, the interior furnishings belie all that the building itself implies. Whatever the reason for this apparent slip-up, certainly the interiors do no justice to the building. It is so rare to see intelligent interiors, period or contemporary, in the pictures of recently built homes, that I wonder if architects consider the finished result.

I put in a plea to architects to seek the services of an accomplished decorator who can do an intelligent job in a business-like manner from the planning stage.

FRED B. SHRALLOW

New York, N. Y.

FORUM's architectural readership might be inclined to point an equally critical finger at certain lush decorator-designed interiors.—Ed.

## ALL HAIL THE BEAUX ARTS

Forum:

I enjoyed your spicy article on The Arbiter of the Arts. It is apparent that the writer knows his subject pretty thoroughly, and that he could have filled many more columns had space permitted.

For this reason, it is all the more disappointing to realize that he has not done full justice, either to Dean Meeks or to the Beaux Arts tradition which the Dean so ably represents in this country.

The author chooses to perpetuate an old error, sired by jealousy out of ignorance in the days when the B-A boys were copping all the good jobs—a foolish error, which confused the tradition of the *Ecole* with the style of *pere Laloux*.

Dean Meeks is portrayed as a sort of reluctant dragon; he is credited with enough shrewdness to foresee which way the wind will blow, and to change his course accordingly; but the inference is that he does so unwillingly.

I believe this is an unfair inference from the facts as set forth in the article.

That magnificent maverick, Frank Wright, to the contrary notwithstanding, Dean Meeks is correct in stating that organic architecture was taught in Paris. Of course, it wasn't "organic" under Mr.

Wright's definition. I think Mr. Wright would be the first to admit that truly "organic" architecture existed nowhere in the world before his advent; and would sadly agree that it is unlikely to be seen ever again after he has passed on to his reward.

The tradition of the Beaux Arts is not static, but dynamic; and many of the changes inaugurated at Yale have been paralleled and often preceded by changes in the Paris *ateliers*. Anyone who observed the *Ecole* during the twenties, when the student body was engaged in the "education du jury," or who has followed its *projets* since that time, knows that the Paris School gave up the *cartouche* and bi-axial symmetry long before we did. What it has never given up is a great teaching tradition, based on the *projet* system . . .

Consider the names of the men who helped build up the Yale school; Faulton, Morgan, Hood, Holabird, Howe, Harrison, Abramowitz, Stowe, Bennett. All these, and others, studied in Paris, and most of them were *diplomé*. What of Aalto, Saarinen, Le Corbusier? In the twenties, Le Corbusier was hailed as their guiding star by the students of the *Ecole* (though not yet by the faculty) . . .

Your article is sufficiently interesting, and contains enough good-natured malice, without such ungenerous phrases as "he bowed gracefully—to the inevitable"—"without relinquishing his Beaux Arts ideal"—"he could no more resist the tide of change"—.

Why not give Dean Meeks full credit for his accomplishments? Why not admit what seems so obvious—that precisely because he *was* so thoroughly steeped in the Beaux Arts tradition, the Dean was one step ahead of his contemporaries in the field of architectural education?

JOHN CROMELIN, Architect

Chicago, Ill.

Shaken but unchanged FORUM still feels that Dean Meeks was given full credit.—Ed.

Forum:

I read with interest your article on Everett Meeks but see that you certainly skipped the period when he left Carrère & Hastings until the time he took over the Yale Deanship. If you will look up the facts you will find that he was associated with Cornell University. I think it only fair that you make this correction.

ROBERT L. PROSO

New York, N. Y.

FORUM is well aware that Everett Meeks acted as visiting critic at Cornell University, omitted this fact with perhaps one hundred others to meet stringent space requirements. If Reader Pioso rechecks his facts he will discover that Meeks was still with Carrère & Hastings when commuting to Cornell.—Ed.

## GLOBAL GRAB-BAG

Forum:

The problems of providing comfortable facilities in a land where the temperature goes above 110 degrees regularly in daylight hours, and humidity near saturation in the dark ones, and where there are blinding sandstorms and blinding fogs are all very interesting. It is possible, particularly if



one keeps a weather eye on what the Arabs have been doing for many centuries.

I hope you are experiencing milder climate at Fifth and 34th Street.

CHAUNCEY RILEY, Architect  
Bahrain Islands, Persian Gulf

The only thing we haven't got is sandstorms.—Ed.

Forum:

Now the building professionals and businessmen in China are facing some difficulties for its economical problem in this country. After war the housing problems in the great city in China are also very serious like other countries do. I am very hopeful to get some idea in the FORUM which may afford stimulating factors to my job.

Both of our countries are situated at different foundations, and so it is that we may have separate interest and demand. I hope the FORUM may give me good reference in architectural engineering world. I am waiting for the recent volume of the FORUM with kindness. If I can catch any good idea to contribute to the FORUM later on, I will write and let you know.

S'hai, China

TANG SHU KWANG

Forum:

No architectural journal has found its way to any of us Austrian architects for

(Continued on page 22)

# LARGEST OFFICE BUILDING *In New England*

## HAS **Q** -FLOORS

Back this up by the fact that the largest office building in Canada, the largest in the South and the largest all-metal commercial group in the world also have Q-Floors.

This is why:

Q-Floors save an enormous amount of draft-

ing room changes. The steel cells of Q-Floor are crossed over by headers carrying wires for telephone, power and every type of electrical service. An electrician can drill a hole in any six-inch area of the exposed floor and—a matter of minutes—establish an outlet, without trenches, fuss or muss.

This means that outlets and partitions need not be located until the building is occupied. Floor layouts are permanently flexible.

On the construction side, Q-Floor enables you to quote pre-known costs. Q-Floor is steel and reduces to a minimum the variable elements of construction in the field. It comes to the job pre-cut and two men can lay 32 sq. ft. in 30 seconds. This speed reduces building time 20 to 30%. It is dry, clean, noncombustible, free from forms and shoring. Construction time as well as cost is more nearly predictable.

Many of the prevalent griefs of construction are eased with Q-Floor and all the grief of predetermining electrical outlets is eliminated. You can see Q-Floor fittings at any General Electric construction materials distributor's. For literature please write:

### H. H. ROBERTSON COMPANY

2403 Farmers  
Bank Building,  
Pittsburgh 22,  
Pennsylvania

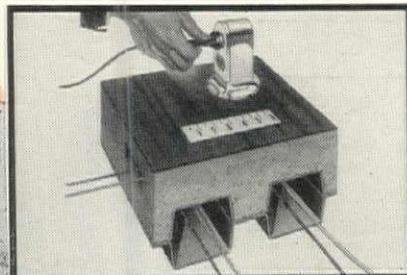


Offices in 50  
Principal Cities  
World-Wide  
Building Service

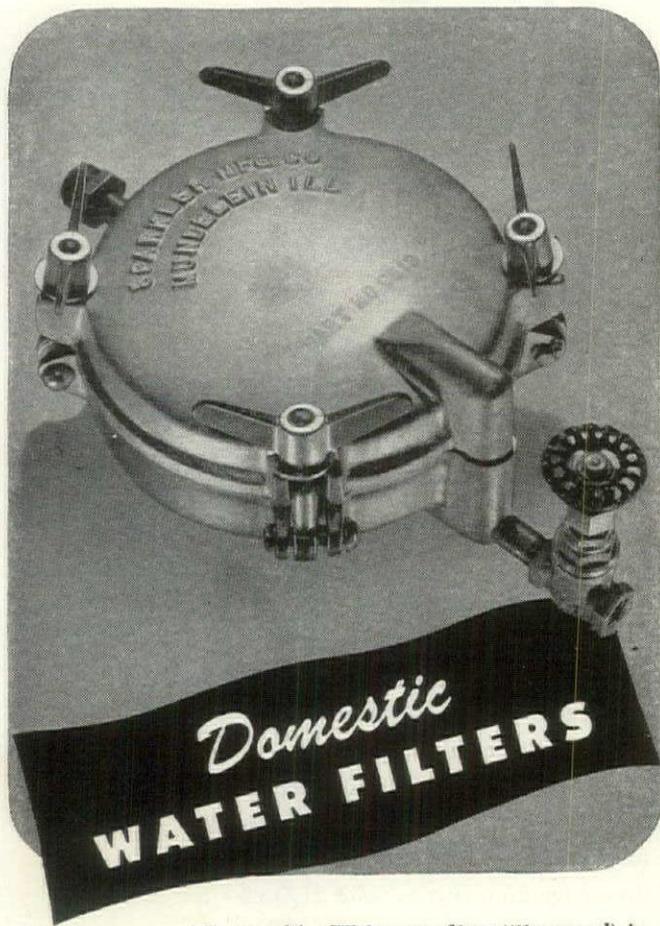


John Hancock Mutual Life Ins. Co.  
Boston, Mass.

Cram & Ferguson—Architects-Engineers  
Turner Construction Co.—Contractor



THIS IS 1 SQ. FT. OF Q-FLOOR



The Sparkler W-8 water filter (illustrated) is new in the plumbing field for home use, but is a time tested proven product used successfully for years in industry for filtering and purifying water. Sparklers are built of cast bronze with a rugged strength that insures continuous efficient operation; are water tight under pressures in excess of 75 lbs.

Sparkler filters completely remove all chlorine and other off-tastes and odors, all sediment, color, pipe rust, algae, etc., and deliver clear, sparkling pure water for drinking and cooking.

Sparkler filters are easily installed by tapping the cold water line at the kitchen or utility sink and deliver pure water through an auxiliary faucet. With this in-line installation only the water used for drinking and cooking is filtered, insuring a longer period between renewals of the filter element. Sparkler filter pads are easily renewed by loosening several wing nuts and replacing with a new inexpensive pad; for average family a filter pad will last from four to six weeks.



Simple construction; easy to change filter pad.

Model	Filter Area in Sq. in.	Capacity GPH	Height	Diam.	Shpg. Wt.
W-8	100	60	6"	9"	20 lbs.
SPA	7	20	3"	4"	3 1/2 lbs.

Construction: Solid Bronze; SPA is chromium-plated. Filter Media: Low cost preformed pads.

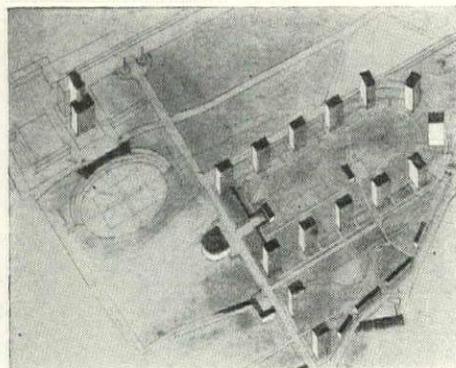
Larger size filters with capacities up to 10,000 gal. per hr. are available for institutions, hospitals, or commercial requirements.

Write for special file bulletin on home water filtration. Gives complete information.

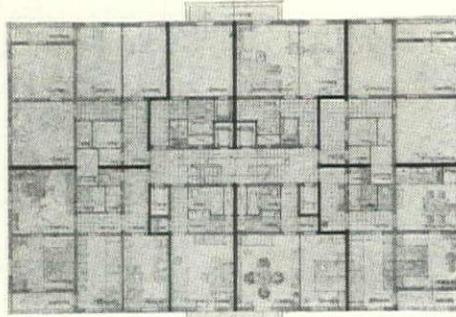
**SPARKLER MANUFACTURING CO.**  
MUNDELEIN, ILLINOIS

air these past years, you know. I should be very much obliged to you, therefore, if you would kindly let me have such journals or sheets, no matter of what contents or what date they may be. I could forward them to some of my Tyrolese colleagues as well . . .

Enclosed are some designs . . . meant for restoration of destroyed quarters of a big city (Montage - System - Prefabricated)—1,200 or thirteen storied houses with about 1,000 flats. The scheme of tall houses is



Air view and typical floor plan



treated here collectively, for once. Instead of choosing the effect of the single building we tried to emphasize the complex of houses and parks together.

W. A. SCHWAIGHOFER

Innsbruck, Austria

Forum:

Your May issue has been received and once more I have ascertained the interest that your beautiful magazine offers to all of us and you are certainly to be congratulated on the production of such an outstanding periodical.

I have admired certain realizations of modern architecture in America in which air and light are so widely lavished. Many American architects excel in the adaptation of this technique to man's environment in a harmonious relation of indoors and outdoors and they must be congratulated.

But, on the other hand, I am astonished that the use of very small windows still is so frequent in small houses (see Levitt & Sons' designs, for instance).

Is not this a strange thing? Why do not these traditionalist constructors enlarge the windows of their houses for answering modern necessity?

This fact already struck me when I visited the exhibition "Techniques Americaines" in Paris two years ago. Some models of prefabricated houses had very small windows indeed.

Once more, why?

G. VITTE

Paris, France

According to Builder William Levitt, two factors influence his window sizes: 1) Owners of small homes have small budgets and cannot afford the higher fuel bills which result from large glazed areas. 2) His customers prefer placing furniture against the wall to looking out of it. FORUM wistfully agrees with Read Vittet, cites the reduced fuel bills which come with solar heating, the added convenience of built-in furniture.—Ed.

LITERARY FORUM

Forum:

I should like to see a far better journalistic and literary quality in the FORUM comparable with the *Architectural Review* of this country. Both magazines could learn a lot from one another even though their policies may differ. Less money spent on lavish display, and more on opinion and architectural trend reviews, would add much to the prestige of your magazine.

N. SANDERSON

(Student)

London, England

But then the *Architectural Review* would be unnecessary.—Ed.

STRICKEN SICILIANS

Forum:

We take the liberty to express our criticisms regarding the building of the seat of the U.N.O., and we respectfully beg you make them known.

We have given attention to the development of the events through your interesting magazine and feel a moral obligation to protest in the name of art and justice.

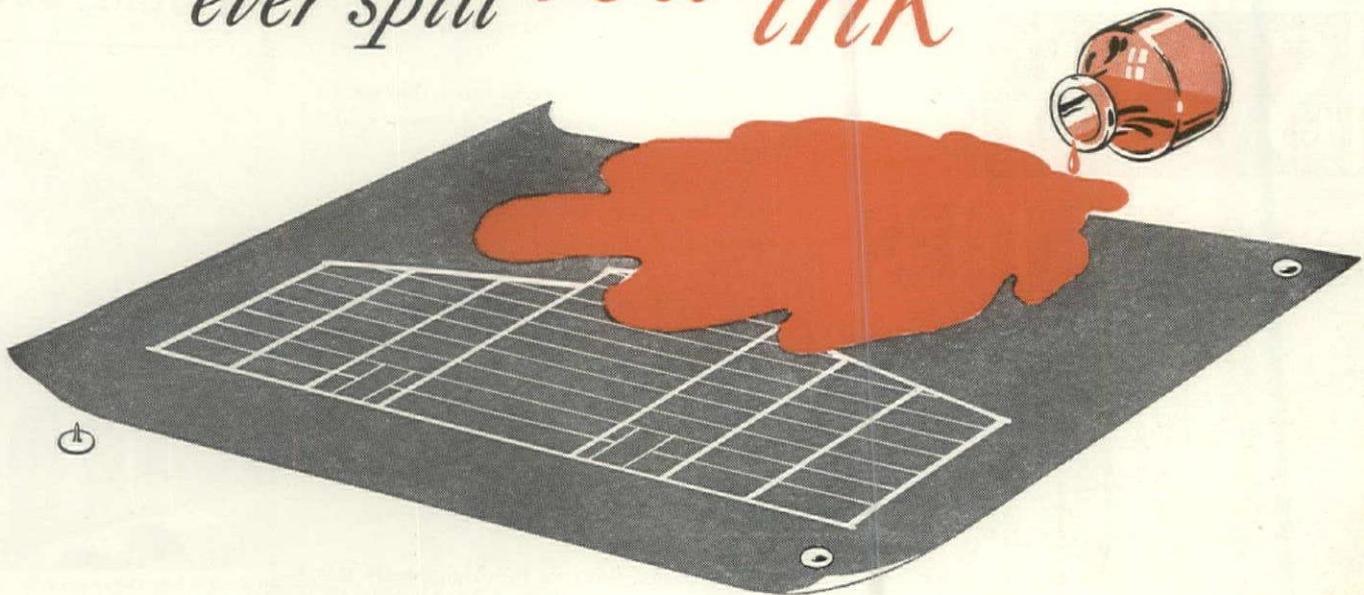
In your issue of March 1946 (page 10) rightly criticising the building of the League of Nations in Geneva, you have tried to give a warning to public opinion to avoid a repetition of the once-incurred mistake. Unfortunately, errors are today multiplying themselves, we believe, for several reasons:

1) The chosen zone . . . damages the whole project; the excessive narrowing of the lack of . . . ground between 1st Avenue 42nd and 48th Streets and the river do not allow the necessary development.

2) There should have been an international competition proclaimed in order

(Continued on page 24)

ever spill *red ink*



on your *building blueprints?*

*t*hat frequently happens . . . though blots may not show up for months, or even years. Then they are revealed in increased maintenance costs, or damage to valuable equipment.

These costs can be prevented at the blueprint stage. Many companies do it by specifying **Careystone Corrugated Asbestos-Cement Roofing and Siding** for construction of factories, foundries, warehouses and other industrial buildings. **HERE'S WHY:**



**Careystone speeds construction**

—It comes in large easy-to-handle sheets that can be applied 35-

square-feet at a time. That cuts labor and time expenditure to the bone . . . gives you another bonus on the low cost of the material.



**Careystone cuts maintenance**

—It's made of Asbestos and Portland Cement. Maintenance is built-in; no painting or other protective treatment required.



**Careystone is fireproof**

—It won't rot, rust or corrode. Salt air or ordinary industrial fumes don't affect

it . . . it's ideal where atmospheric conditions are unusually severe.

**Write for your free copy**



. . . of the Careystone Corrugated catalog . . . contains technical data on the product and its application. Describes the complete estimating and engineering service available from Carey. For a free copy write Dept. AF-9

**Carey**

**THE PHILIP CAREY MANUFACTURING CO., CINCINNATI 15, OHIO**

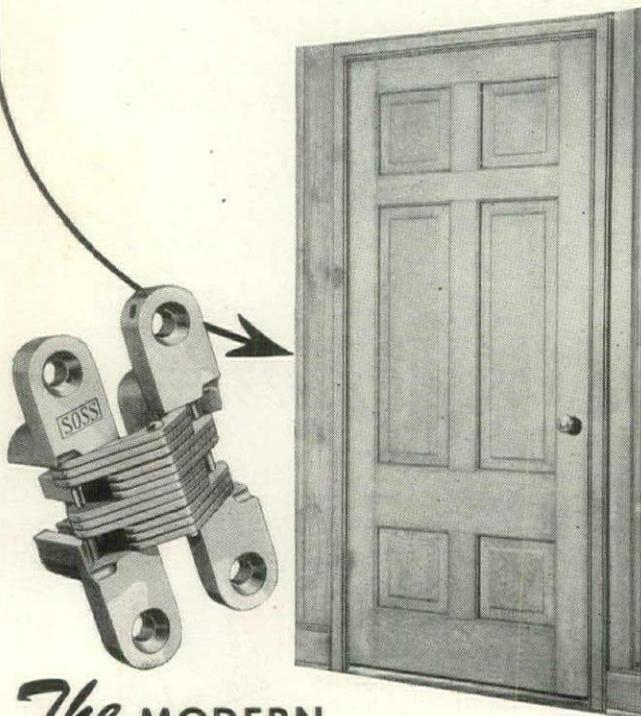
In Canada: The Philip Carey Co., Ltd.  
1557 MacKay St., Montreal 1, P. Q.

Industrial Insulation • Rock Wool Insulation  
Careyduct • Asbestos Wallboard & Sheathing  
Asphalt Shingles & Roofings • Built-up Roofing  
Roof Coatings & Cements • Pipeline Felt  
Asphalt Tile Flooring • Waterproofing Materials  
Expansion Joint • Asbestos Shingles & Siding  
Corrugated Asbestos Roofing and Siding  
Miami-Carey Bathroom Cabinets & Accessories

The Hallmark  
OF TOMORROW'S HOME

**SOSS**

INVISIBLE HINGES



The MODERN . . .  
DIFFERENT "out of sight" HINGE

"This house has personality! There is something different and distinctive about it!" Many times people make just such remarks when looking at a home equipped with SOSS INVISIBLE HINGES—for these hinges when installed are completely concealed.

It is obvious why SOSS hinges impart a distinguished personality to any home. For one thing they permit the use of flush surfaces for doors, panels and cupboards which are a feature of modern streamlined design. Furthermore they eliminate surfaces marred by unsightly protruding butts. Your clients will commend you for suggesting these modern hinges.

Write for SOSS "Blue-Print Catalog" giving full details of the many applications of this modern hinge. Free on request.

**SOSS MANUFACTURING COMPANY**

21767 HOOVER ROAD • DETROIT 13, MICHIGAN



permit architects, engineers and artists of the whole world to contribute to such an important theme of building.

3) Puerile is the justification—if it can be so called—that the competition had not been proclaimed for want of time, wishing the U. S. A. to inaugurate the seat of U.N.O. within 1948 . . .

4) The question brought forth, that such a seat must necessarily be a complex of functional architecture, is inconsistent, since a different structure could be better adapted in a larger space.

In the FORUM article (Nov. '46), a group of architects, authors of the project, nobly interpreting the value of the function of the seat of the U.N.O., affirmed rightly that such a realization ought not to have been a monopoly of local interests.

In the building of the seat of the U.N.O., such as it appears today, only economic factors and individual opinions are taken into account.

We, having faith in the high ideals to which American people conform, had begun long since to prepare a plan for the competition which ought to have been proclaimed.

We have been strongly stricken and bitterly deceived by the resolution taken, about which we still hope they may alter their minds.

For a group of architects,  
engineers and artists,

MARIO URBANI

Director of the Institute of Arts  
*Palermo (Sicily)*

#### CREDIT CORRECTION

Forum:

Your last February number publishes the scheme of the Avenida 9 de Julio in Buenos Aires, an elevated eight-lane highway with parking garage and shops underneath . . . .

We see an error has been committed in attributing this work to the Buenos Aires City Plan Commission. This project is the personal work of Jorge P. Cazenave, Luis E. Bianchetti, Jorge J. de Mattos, architects. As this error attempts against our interests, we shall appreciate your publishing this note.

CAZENAVE, BIANCHETTI Y DE MATTOS  
*Buenos Aires, Argentina*

The FORUM's apologies to contributors Cazenave, Bianchetti and De Mattos.—Ed.

#### LEGAL RACKET

Forum:

My high regard for your publication has been severely shaken, to say the least, since reading the article entitled "Five Dollar

(Continued on page 28)

## 20-Year Record of Heating Comfort



Hecht Brothers Department Store, Baltimore, Md. Heated by Webster Steam Heating System since 1927.

This is the 20th year of Webster Steam Heating service to Hecht Brothers Department Store in Baltimore, Md., where management has long recognized that heating comfort is an important factor in successful department store operation.

In 1927, when the present home of Hecht Brothers Department Store was built, a Webster Vacuum Steam Heating System was specified by Abbott, Merkt & Co., Inc., New York, Architects and Engineers. Riggs, Distler & Co., Inc., Baltimore, were the heating contractors.

In 1941, Hecht Brothers decided to discontinue their coal-burning boiler plant and purchase street steam from the Consolidated Gas Electric Light & Power Co. On the recommendation of the Gas and Electric Company, they decided to convert the installation to a Webster Motorized System, then as now recognized for comfort at low cost.

Sam Hecht, President of Hecht Brothers, and William P. Calhoun, Store Manager, look upon the Webster Heating System as an investment in customer satisfaction.

If you are interested in heating comfort at low cost backed by the experience of long-service Webster Representatives, write us.

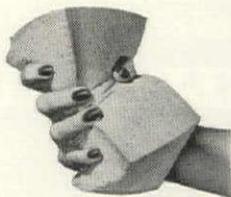
WARREN WEBSTER & CO., Camden, N. J.  
Representatives in principal U. S. Cities : Est. 1880  
In Canada: Darling Brothers, Limited, Montreal

**Webster**  
HEATING SYSTEMS

# UNITED STATES RUBBER COMPANY

SERVING THROUGH SCIENCE

We've even taken its  
temperature in  
**SOUTH  
AFRICA!**



**K**OYLON Foam keeps *cool*—even on the hottest days! No wonder, for Koylon is porous. It “breathes” fresh air with every contact and release of pressure. What a comfort this is when it’s “too hot to move”! It’s a welcome feature wherever people sit or sleep.

Koylon is sagproof, clean, odorless and verminproof. 12 years of testing on major railroads prove that Koylon takes constant hard wear. Providing Koylon comfort is easy and economical as well as permanent. In every way, *it pays to specify Koylon Foam.*

WHEREVER COMFORT COUNTS, PUT



*How easy to upholster with Koylon! Cuts to shape with a knife or a pair of shears!*

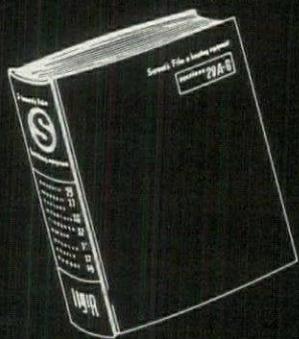
*No stuffings! And Koylon stays trim and smooth . . . never sags or mats!*

*Mattresses, chairs, sofas—Koylon provides all with comfort that sells itself!*



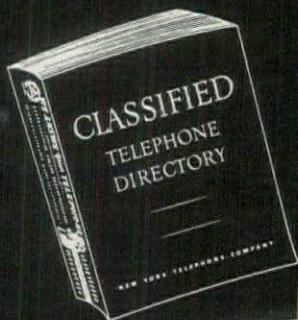
U. S. Koylon Foam Division, Mishawaka, Indiana

# To help you plan General Electric Heating Installations —



## FOR SPECIFICATIONS

You'll get full information on  
**GENERAL ELECTRIC GAS AND OIL  
HEATING** in Sweet's, Section 29A-6



## FOR PRICES

Ask your General Electric Dealer.  
He's listed under "Heating Equipment"  
in your Classified Telephone  
Directory.

### IMPORTANT To Architects:

Production is picking up. We hope it won't be long before you can give your clients the added quality of General Electric Heating. And, remember, General Electric equipment is priced competitively in the better grade heating field.

Automatic Home Heating

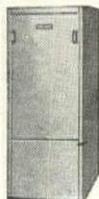
**GENERAL  ELECTRIC**

General Electric Company, Air Conditioning Department, Section 7139, Bloomfield, New Jersey

### OIL-FIRED



G-E Boiler for steam  
or hot water heat



G-E Warm Air Con-  
ditioner



G-E Conversion  
Oil Burner

### GAS-FIRED



G-E Boiler for steam  
or hot water heat



G-E Warm Air  
Conditioner

*a modern building  
is truly modern...*



when pipe joints are SILBRAZ\*



Silbraz joints are leakproof, vibration-proof, and corrosion-resistant. They make the ideal connection for all piping systems where "B" copper tubing or brass pipe is used.

Threadless, Silbraz joints are permanent . . . will not creep or pull apart . . . save trouble and cost by eliminating leaks . . . literally join with the pipe to form a "one-piece pipe line." No properly made Silbraz joint has ever been known to fail under any condition which the pipe itself can withstand. If you are looking for maintenance-free pipe lines — for either new construction or remodeling — specify Silbraz joints.

**Walseal\* Valves and Fittings for Making Silbraz Joints**

Walworth Company manufactures a complete line of Walseal Valves, Fittings, and Flanges for making Silbraz

joints — the modern method of joining brass or copper piping. For further information, see your nearest Walworth distributor, or write for Circular 84I.

*\*Patented — Reg. U. S. Pat. Off.*

**WALWORTH  
valves and fittings**

60 EAST 42nd STREET, NEW YORK 17, N. Y.

Make it a "one-piece pipe line" with Walseal



DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD



\*  
**All the benefits of storm windows**  
**All the benefits of screens**  
**All the benefits of weatherstripping**  
*in one permanently installed unit*

with nothing to change... nothing to store...  
 year 'round, rainproof, draft-free, filtered-  
 screen ventilation... patented Thermolok\*  
 frame insures permanent, weatherproof fit.

Thousands upon thousands of prospective home, commercial and industrial building prospects know all about the many year 'round advantages of RUSCO ALL METAL, SELF-STORING COMBINATION SCREEN AND STORM SASH. Your recommendation will receive enthusiastic approval.

Specifications will be found in Sweets File or complete descriptive literature and specifications sent upon request.

**THE F. C. RUSSELL COMPANY**

6400AF HERMAN AVENUE • CLEVELAND 2, OHIO

©TFCRC  
 \*T. M. REG. APP. FOR



Also manufacturers of Rusco All Metal Venetian Awnings, Thermoseal Combination Windows, Cinco Sto-a-way Windows.

Plans," in the May issue. It is, to me, a bad thought to convey to the public that "architects skim off only the cream of the design market and do not even try to serve the family of average means."

My office, as well as many others in New Jersey, does low cost house jobs on a full fee basis with complete satisfaction to both the client and myself.

This article merely increases the original sales resistance or keeps the prospective client away entirely. If contact is once made with a proposed client, it is rare that we are not able to prove the value of a local architect and also that the complete service rendered under the accepted A.I.A. fee schedule does not pay for itself at least twice over.

It would seem, in sponsoring this article, that you prefer the good will of a possible advertiser rather than that of the profession which you serve.

The statement: "Some states require that registered architects prepare all house plans—but a small fee will usually get a local registrant's signature on the firm's plans"—that is against the law in New Jersey and any architect signing plans prepared outside of his own office would have his license revoked, regardless of the size of the fee. This is, I believe, true in forty-five other states.

The above is not only misleading but tends to place the services of an architect in the category of a legal racket from the point of view of the layman.

This certainly was the reaction voiced in the case of the Kresge store in Newark, in selling *Better Homes And Gardens* plans across the counter at five dollars.

M. MUNN PATTISON, Architect  
 Rahway, N. J.

To a similar letter from C. Godfrey Poggi published in the July issue, FORUM explained its position, has not yet shifted its stand: "FORUM reported facts, has never sponsored mail order plans. But let's drop the fiction that architects have served the small home buyer. In any normal decade, individual architecturally designed houses are found only in the upper brackets. In any year the percentage of houses constructed with architectural service is miniscule. Newly elected President Douglas Orr of the American Institute of Architects has recently announced a study to explore means of bringing architect and small house builder together."—Ed.

**BLOOD, SWEAT AND LOVE**

Forum:

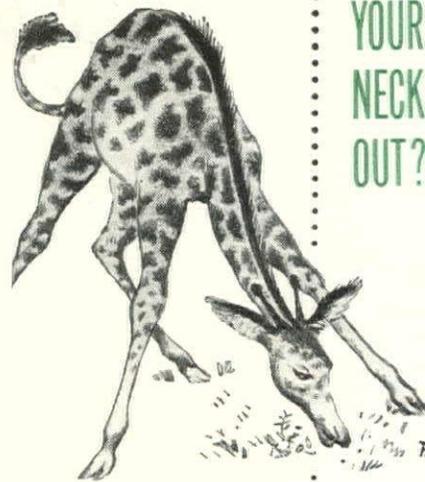
After all of our blood, sweat and tears in following through on the Lustron house (FORUM June '47) we find no Hedrich-Blessing credit line.

It's a grand story and I don't know why but we still love you.

KENNETH A. HEDRICH  
 Hedrich-Blessing

Chicago, Ill.

(Continued on page 32)



WHY  
 STIC  
 YOUR  
 NECK  
 OUT?

You can't ignore the demand for

*Electric Water Heaters*

Surveys\* show that women want Electric Water Heaters because of the following advantages: (1) SAFE (fumeless, flameless); (2) CLEAN (smokeless, sootless); (3) ADAPTABLE (short hot water lines; no flue or vent); (4) TROUBLE-FREE (as electric light); (5) ECONOMICAL (plenty of hot water all the time at low cost).

Be sure the homes you build offer all these advantages—install modern Electric Water Heaters.

\*A NEMA survey revealed that there were three times as many women preferring Electric Water Heaters as owning them.

Electric Water Heater Section

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION  
 155 E. 44th Street, New York 17, N. Y.

- B & F • CLARK • ELECTROMATIC • FOWLER
- FRIGIDAIRE • GENERAL ELECTRIC • HOTPOINT
- HOTSTREAM • JUD WHITEHEAD • KELVINATOR
- MONARCH • NORGE • PEMCO • REX • RHEEM
- SEIDELHUBER • SELECTRIC • SMITHWAY
- THERMO-GRAY • THERMO-WATT • UNIVERSAL
- WESTINGHOUSE

IN A HOUSE WIRED FOR AN ELECTRIC RANGE IT'S

**EASY TO INSTALL**

AN

*Electric*

**WATER HEATER!**



IF THESE WERE YOUR  
CUSTOMERS

If giraffes were your customers your worries would be over, because they have no vocal cords. But home buyers *do* have, and they're likely to raise their voices loudly unless the houses you build today are modern and will stay modern for years to come. One way to be sure is to *wire your houses for modern Electric Ranges!*

Survey after survey proves that's what Mr. & Mrs. America want—homes that are up to date—homes with Electric Ranges!

An Electric Range requires only: 3-wire service entrance no smaller than two #6 and one #8 wires from the point of termination of the power supply company's wires to the distribution panel; a 60-amp. switch with overload protection and a three-wire circuit from the distribution panel to a range outlet in the kitchen. Make this your minimum wiring specification.



Electric Range Section  
NATIONAL ELECTRICAL  
MANUFACTURERS ASSOCIATION  
155 E. 44th Street, New York 17, N.Y.

A-B STOVES  
ADMIRAL  
CROSLLEY  
ESTATE HEATROLA  
FRIGIDAIRE  
GENERAL ELECTRIC  
GIBSON  
HOTPOINT  
KELVINATOR  
LEDO  
MONARCH  
NORGE  
QUALITY  
UNIVERSAL  
WESTINGHOUSE



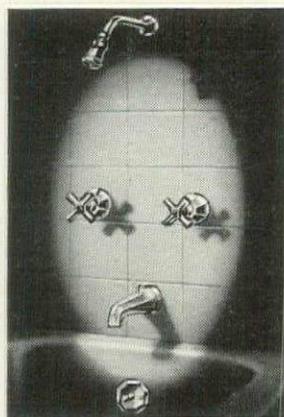
TO KEEP THEM MODERN . . .

wire your houses  
FOR ELECTRIC RANGES

**only**  
**BRIGGS** *Beautyware*  
**offers a**  
**SAFETY BOTTOM BATH TUB**

For you—the future can be profit-making. Start now to capitalize on these exclusive safety and comfort features—patented safety bottom • maximum area of level bottom • wide rim seat • low sides • safety hand grip • stainproof porcelain enamel. This is another example of how Briggs engineers really work for Beautyware dealers—by giving Mr. and Mrs. Public more for less. Briggs Beautyware *is* the finest in plumbing ware.

**THE REPUBLIC "TRUART" SHOWER  
 and BATH FITTING**



Specify K3432

*with Automatic Diverter  
 Valve in Spout*

Republic—the yardstick of quality for brass goods since 1903—is the same top quality as Briggs Beautyware. The "Truart" (illustrated at left) with diverter valve and spout connection—is smart in design, with brilliant heavy chrome finish. Fine fittings for a fine bath. Another reason why Briggs Beautyware is so easy to sell—so satisfactory to your clientele.



DESIGNED AND ILLUSTRATED BY BRIGGS DESIGN RESEARCH DEPT.

Made exclusively for your protection  
 ... The Briggs safety-bottom bathtub.

**BATH-ON-A-BUDGET . . .**

Today, it's a rare bath that costs less than it looks! But it can be done (and beautifully, too) with a dash of originality . . . plus Briggs Beautyware! For these famous porcelain-enamelled steel fixtures are *unique*. Streamlined to fit smartly into the smallest space. Easy to clean as only Briggs' stainproof fixtures could be. Yet with all its "custom-made" features, a Briggs Beautyware bathroom can be had on the most ready-made budget! Start yours, *now*—by sending for this free booklet, Briggs Manufacturing Co., 3007-I Miller Avenue, Detroit 11, Mich.

**BRIGGS** *Beautyware*



Briggs Beautyware is telling its exclusive safety-bottom bath tub story to over 5,000,000 readers each month. Featured is the most recent of a dramatic series of four-color advertisements appearing every month in Better Homes & Gardens and American Home.

**BRIGGS** MANUFACTURING  
 COMPANY

3023 MILLER AVE., DETROIT 11, MICH.

SUBSIDIARIES:

REPUBLIC BRASS CO., CLEVELAND, OHIO  
 JOHN DOUGLAS CO., CINCINNATI, OHIO

Is time saving on the site  
your key to lower costs?

**THEN LOOK INTO THIS!**

*You can:*

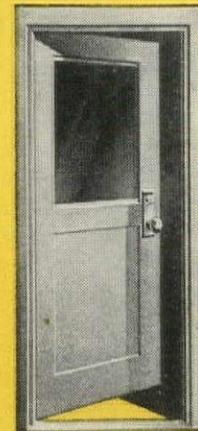
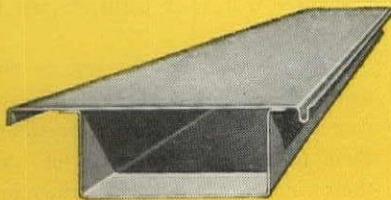
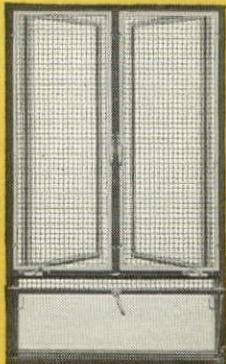
- Get construction under cover faster.
- Get floors, walls and ceilings erected quickly, so interior work can progress.
- Get windows in sooner for weather protection.
- Get doors on quickly to complete the enclosure . . . with

Fenestra Windows, Doors and Building Panels are factory-fabricated to save time on the site. They're standardized units—you know they'll fit predetermined openings and spans. You save time otherwise spent on sizing and cutting.

Standardization means lower first cost, too. And these products are all up to the quality you'd naturally expect from America's oldest and largest steel window manufacturer. Each item shown here is merely representative of a full line of types and sizes that are co-ordinated with modular dimensions currently used in modern construction. For product information, see Sweet's Architectural File (Sections 16a-9 and 3c-1). Better yet, call us. Detroit Steel Products Company, Dept. AF-9, 2251 East Grand Blvd., Detroit 11, Michigan.

# *Fenestra*

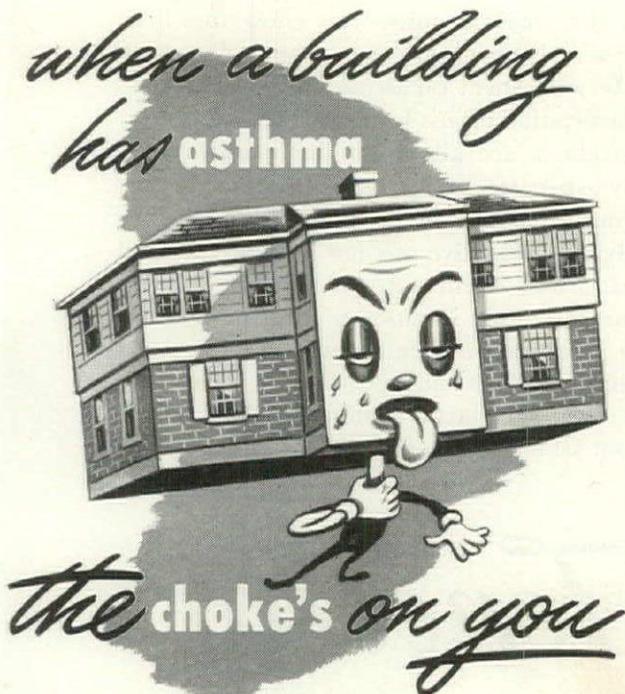
## **BUILDING PRODUCTS**



**WINDOWS**—standardization in modular sizes of most kinds of Fenestra Windows enables you to use them with greater economy—with savings both in first costs and in installation. From the smallest house to the largest office building, school, hospital or factory, there's a Fenestra Window that's right—in size, appearance and operation.

**PANELS**—these prefabricated panels fit together in jig time, to form lightweight, fire-resistant floors, walls, ceilings and roofs. Extremely versatile—permitting a wide variety of uses. Some types include raceways for electrical, plumbing, heating and ventilating facilities. Ready for application of the surface material of your choice.

**DOORS**—these standardized doors are real timesavers. They come complete with pre-fitted or attached hardware; some with pre-fitted frame—that cuts fitting time. All are standardized in size for maximum economy in first cost, as well as in installation time, labor and materials. Designed for easy operation. Swing, slide and overhead types available.



It's an alert architect's responsibility (and opportunity!) to work modern ventilation into building blueprints. That's the best way to eliminate a building's gasping for air... to cure any tendency toward stuffiness... kitchen vapors and odors... bathroom fog and steam... soapy vapors in laundry rooms... heavy, stale smoke in recreation rooms.

It's a good way to give clients an extra measure of architectural service, too. That's why more and more architects are specifying



## VENTILATING FANS

A **VICTRON** Ventilating fan can be installed at *any* time—in *any* room... moves 700 cubic

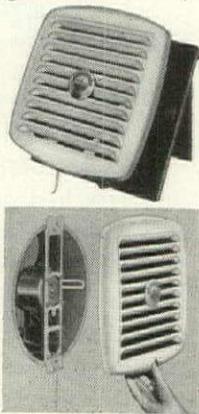
feet of free air a minute—gives instant freshness to rooms with special ventilating problems—eliminates the need of opening windows on cold-catching days. The **VICTRON** Ventilating Fan is whisper-quiet... guests can't hear it. There's no radio interference from the induction-type **VICTRON** motor. Positive weather-sealing shutter prevents chilling blasts from back-drafts. You can specify **VICTRON** Ventilating Fans with confidence—backed by 20 years of Victron precision engineering.

**Attractively Designed**... and quietly efficient. Model V 1106: cleanly streamlined for smart appearance; fan and outside shutter operate automatically by pulling beaded chain.

**Grille snaps on and off** without tools or tugging—is quickly removed for easy cleaning.

**Write for illustrated specifications for all models, or refer to Sweet's Architectural 1947 File 298**

14



**VICTOR**  
PRODUCTS  
2950 Robertson Ave.



**ELECTRIC**  
INCORPORATED  
Cincinnati 9, Ohio

### MORE ON CENSORSHIP

The Publisher's Letter of last May scoring a possible Board of Experts to pass on Fifth Avenue's building design, has produced a flood of varying opinions featured over the past months. In this issue, pros and cons are still at it.

Forum:

... I don't believe in Architects Boards of Aesthetics (partly because I don't like architects these days for working against public housing), but I should think they could make a few rules calculated to insure a degree of honesty or integrity. I can mention two of my particular hatreds that may be characteristic only of Chicago—blank brick walls twenty stories high, with tall Gothic windows outlined in colored brick; knobs, cupolas, gazebos, or something ornate, concealing the smokestack.

Probably the answer is that one can't regulate honesty any more than beauty.

ELIZABETH WOOD, Executive Secretary  
Chicago Housing Authority  
Chicago, Ill.

Forum:

The editorial and the comment on architectural censorship reminded me most unpleasantly that, although I am not entirely unrespected in my home community, I am effectively prevented from building any commercial building here by a law which limits such structures to Elizabethan English.

L. MORGAN YOST, Architect  
Kenilworth, Ill.

Forum:

I agree with your point of view without reservation.

It is possible, as you say, to collect a group of discriminating experts in any large community, and it is even possible to get them to agree on a matter of taste, but their collective judgment, although indicative of what might be termed "the best" today, is after all only today's pattern. What of the next generation—will they look back on our best and think it good?

It is quite possible they will abhor it, just as we do some of the work that was done no more than forty—or even twenty-five years ago. Yet that very work, had it been judged by an expert jury of the time, might have received its blessing and praise. On the other hand, we know of several buildings that we have come to admire, yet they were condemned by the experts in those days as being too radical, if not downright ugly.

Therein, it seems to me, lies the great argument against any kind of art commission that sets itself up as a judge of "good

(Continued on page 36)

Endorsed  
By The Public



## For Public Building Washrooms

The reputation of any public building depends upon the people who enter doors. Therefore, when the public selects Bradley Duo-Washfountains—the most modern and sanitary wash fixtures available, it is an endorsement worthy of consideration.

Thousands of men and women are familiar with Bradley Washfountains through shop, plant, factory and school installations. These people have learned to appreciate the superior advantages of Bradleys: the automatic foot-control which keeps hands safe from contagious faucet and wash basin contacts—the self-flushing bowl that prevents contaminating dirt collection—and the clean spray of running water.

Management, too, prefers Bradleys because of valuable economies in water consumption, maintenance and installation costs. One DUO serves two persons simultaneously, replaces two ordinary single-person wash basins and the easily-cleaned DUO sprayer head takes the place of four faucets.

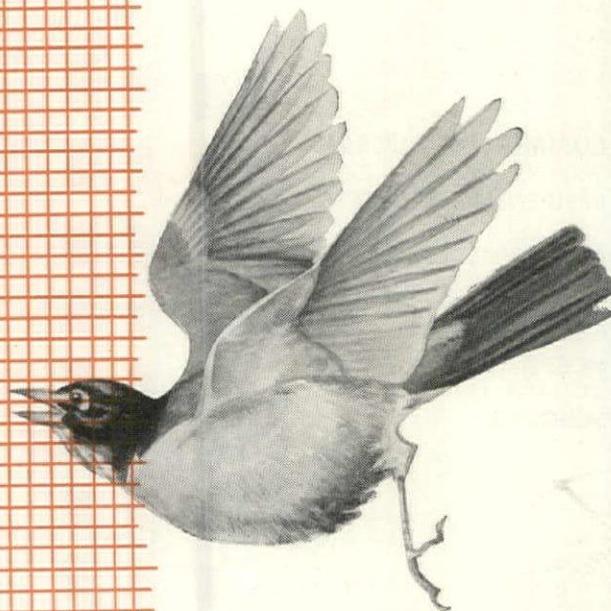
DUO-Washfountains are furnished in glistering white sanitary enamel or iron. Nationally distributed through plumbing wholesalers. BRADLEY WASHFOUNTAIN CO., 2235 VERNON Michigan Street, Milwaukee 1, Wis.

**BRADLEY**  
Duo Washfountains

## Specify the screening that's feather-light

### Get these 8 Advantages

- Permanent — can't rust
- No upkeep—never needs painting
- Cannot "bleed," stain exterior
- Easier installation — handles like cloth, cuts with scissors
- Safer installation — no jagged edges or sharp splinters
- Greater impact strength
- One-fifth the weight of metal
- Tinted — to blend with any color scheme



**Firestone**

*Velon*\*

**TINTED SCREENING**

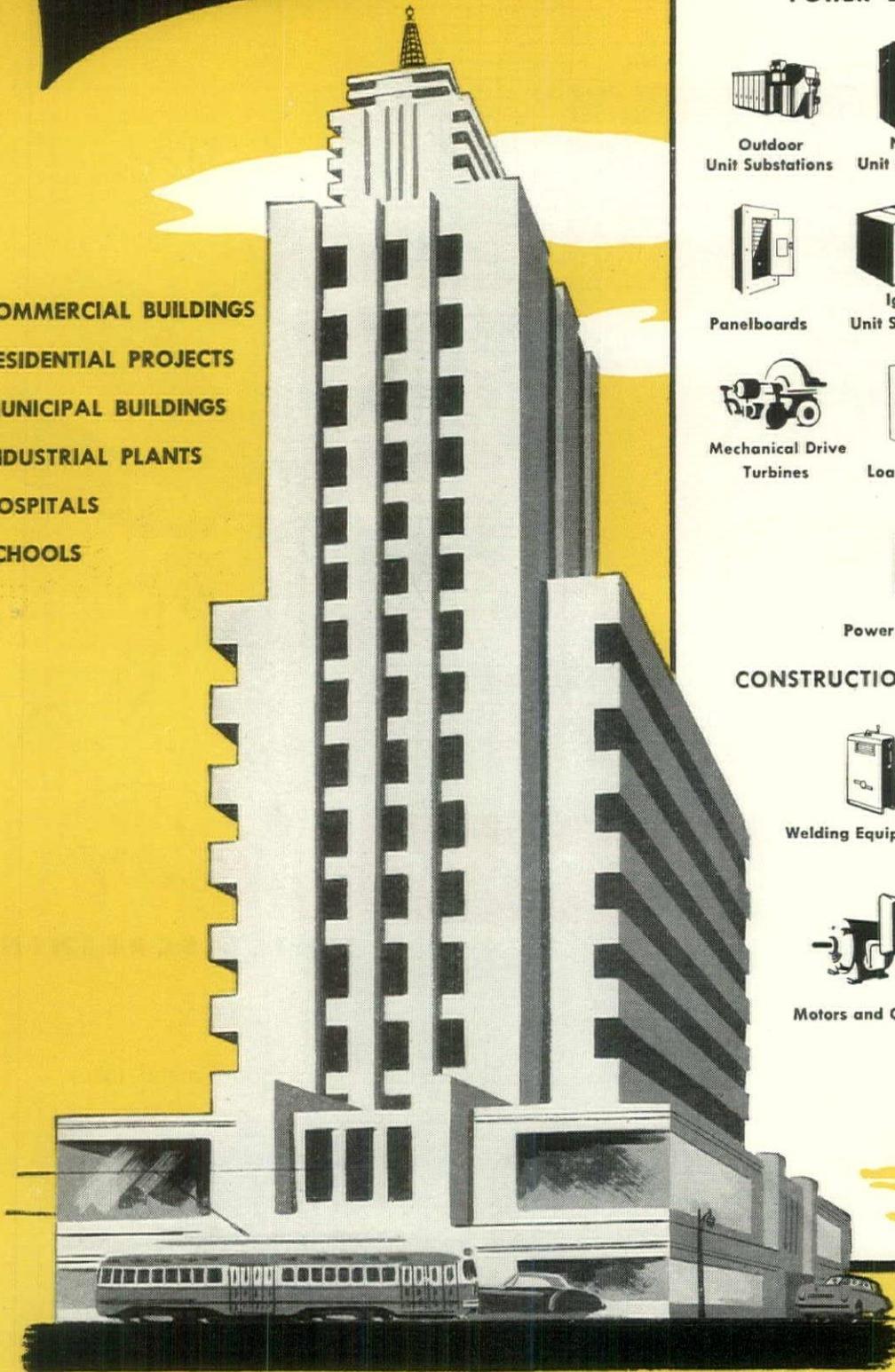
*Velon* will amaze you. It's one-fifth the weight of metal, takes a big load off installation and removal of screens. *Velon* is easier to set into frames, easier to tote around, easier to store. You can even leave *Velon* screens up all year round if you like — they're impervious to weather, salt air, any climate conditions. Yet *Velon* costs no more than good metal screening! Available in standard widths and gauges. Write Firestone, Akron for free full color booklet on *Velon*.



*from One Source*

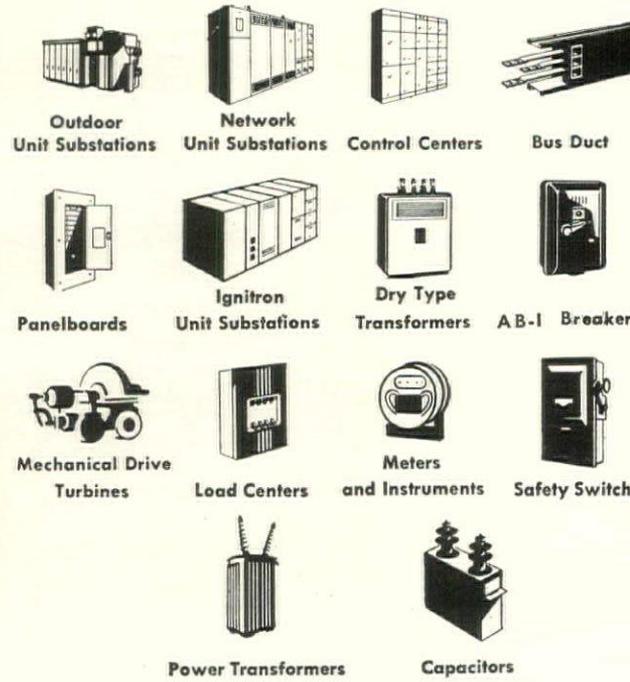
... everything

COMMERCIAL BUILDINGS  
RESIDENTIAL PROJECTS  
MUNICIPAL BUILDINGS  
INDUSTRIAL PLANTS  
HOSPITALS  
SCHOOLS

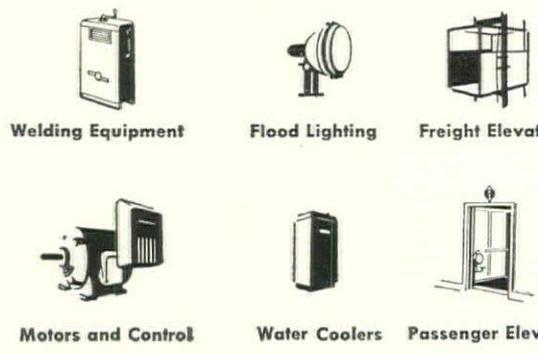


*In Commercial Buildings .*

POWER DISTRIBUTION EQUIPMENT



CONSTRUCTION AND BUILDING EQUIPMENT



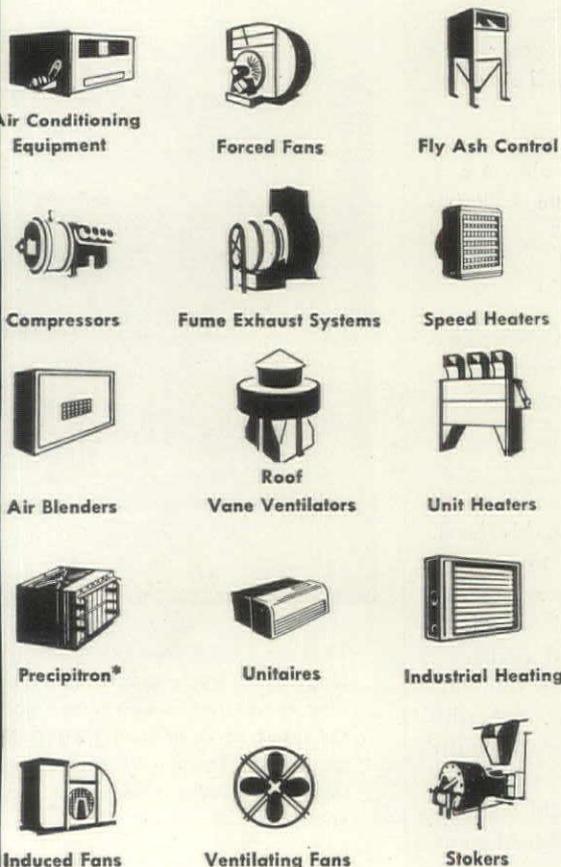
FOR *Everything Electrical* LOOK

needed to produce • distribute  
control and utilize ...

*Electric Energy*

Westinghouse can Supply

HEATING AND VENTILATING EQUIPMENT



Air Conditioning Equipment    Forced Fans    Fly Ash Control  
Compressors    Fume Exhaust Systems    Speed Heaters  
Air Blenders    Roof Vane Ventilators    Unit Heaters  
Precipitron\*    Unitaires    Industrial Heating  
Induced Fans    Ventilating Fans    Stokers

LIGHTING EQUIPMENT



Office Lighting Equipment    Vapor-tight and Dust-tight Luminares    High Bay Luminares  
Industrial Lighting Equipment    Silvered Bowl Diffusers    Lamps

g. U.S. Trademark

Electrical equipment requirements for different types of projects vary widely, of course. But whether it's a commercial building, industrial plant, residential or municipal projects ... you can place undivided responsibility for everything electrical with Westinghouse and its distributor organization.

The advantages of this unit responsibility are obvious:

- 1. Specialized Engineering** ... to assist in selecting and applying equipment for maximum efficiency.
- 2. Simplified Ordering** ... by providing a focal point of contact for all buying and specification data.
- 3. Speedier Installation** ... by centralizing responsibility for delivery and installation.
- 4. Better, More Reliable Service** ... through the coordinated design and construction of Westinghouse equipment, plus broad experience in applying it for all types of industries. Westinghouse also offers unmatched electrical maintenance service, through its nationwide chain of Renewal Parts Warehouses and Manufacturing and Repair Shops.

No other electrical organization in the world can match the breadth of these facilities and products for the construction industry. Your near-by Westinghouse office or Westinghouse Distributor is headquarters for this service. Westinghouse Electric Corporation, P. O. Box 868A, Pittsburgh 30, Penna.

J-94763

PRACTICAL, EASY-TO-USE BUYING INFORMATION



**Architect's and Engineer's Data Book—B-2161-D**  
This 362-page book contains data on all Westinghouse products for the building industry. Its format is adapted to the needs of the architect and engineer.



**Sweet's Architectural Catalog**  
In this "bible" of the building industry, Westinghouse is represented in the Architects' File, Engineers' File, Builders' File, Mechanical Industries' File, Process Industry File and Product Designers' File.



**Simplified Buying Data**  
Westinghouse Buying Data has been designed to meet buyers' preferences ... provides all needed information in the most usable form.

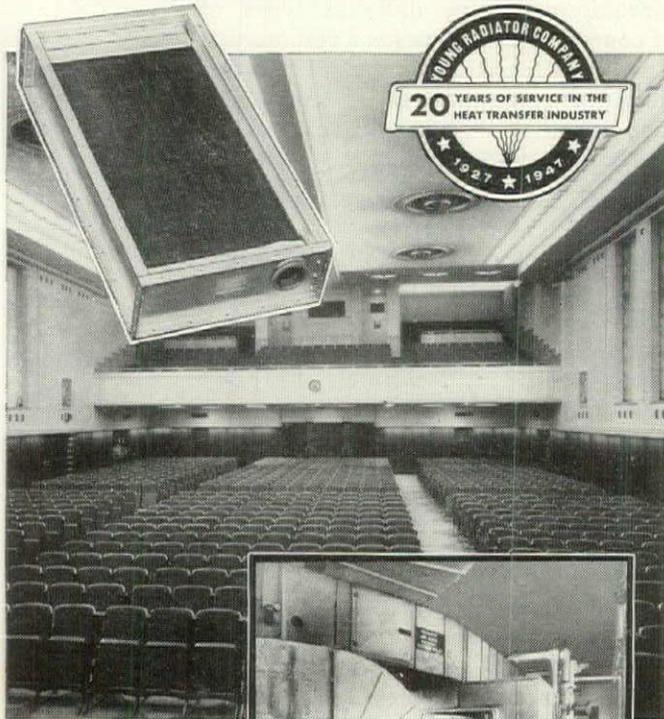


**Lighting Equipment Catalog**  
Contains complete product data and specifications on all types of lighting equipment for commercial, industrial and residential use.

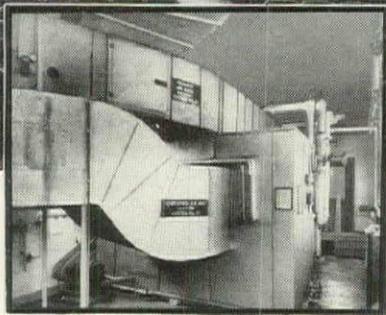
Westinghouse  
OFFICES IN 25 CITIES . . . OFFICES EVERYWHERE



# FOR DEPENDABLE AIR CONDITIONING Use **YOUNG** Heating and Cooling Coils



Young Coils are used in the air conditioning systems of the Wisconsin Electric Power Co. in the Public Service Building, Milwaukee, Wisconsin for offices and the main auditorium.



Stuffy, indoor rooms now become comfortable and healthful with controlled, fresh-air conditioning by Young coils and air conditioning units. Since every job has a different set of requirements, the way to the best possible end result . . . to have the added assurance of unfailing efficiency and customer satisfaction . . . is to call on Young Engineers to recommend the proper equipment for the specific job. There are Young cooling coils and air conditioning units for every conceivable size of installation . . . from the smallest home to the largest public building. Young Products have earned a reputation for long, trouble-free service . . . because Young has specialized in the design and manufacture of Heat Transfer Equipment for two decades! On your next heating and cooling job, do as architects and contractors everywhere are doing . . . call on Young's staff of trained engineers without obligation.

## YOUNG HEAT TRANSFER PRODUCTS



**YOUNG RADIATOR CO.**  
Dept. 157-J Racine, Wis., U. S. A.  
Sales & Eng. Offices in all Principal Cities

### AUTOMOTIVE AND INDUSTRIAL PRODUCTS

Gas, gasoline, Diesel engine cooling, radiators • Jacket water coolers • Heat exchangers • Intercoolers • Condensers • Evaporating coolers • Oil coolers • Gas coolers • Atmospheric and condensing units • Supercharger inter-coolers • Aircraft heat transfer equipment

### HEATING, COOLING AND AIR CONDITIONING PRODUCTS

Convectors • Unit Heaters • Heating coils • Cooling coils • Evaporators • Air conditioning units •

taste." We can judge by today's standards and have opinions on the work of the past, but no one can prophecy the future or the philosophy underlying future standards. It is reasonable to regulate building heights, use zones, safety measures and such for the public welfare, but we should never regulate design.

All this was forcefully propounded relative to another kind of censorship—that of the press—by John Milton in his "Areopagitica" published over three hundred years ago. The argument has never been bettered, and we would do well to abide by it.

OTTO TEEGEN, Director  
Department of Architecture  
Beaux Arts Institute of Design  
New York, N. Y.

#### Forum:

Cheers and jeers are the only design controls a living architecture can survive. . . .

HARWELL HAMILTON HARRIS, Architect  
Los Angeles, Calif.

#### Forum:

Eliel Saarinen comments in his book, *The City*, that we have laws to prohibit people from strewing the streets with garbage, why not laws to prohibit men from filling the street with "mental garbage." That comment seems to justify the Fine Arts Commission in principle, but with modern man no more ready for it morally and ethically than he is for a euthanasia commission, I believe we should continue our present freedom of the individual in design.

The Fine Arts Commission in Washington has not elevated design but has merely assured banality and mediocrity. What assurance have we that the Fifth Avenue Association would choose a commission any more talented or astute.

HENRY L. KAMPHOEFNER  
University of Oklahoma

Norman, Okla.

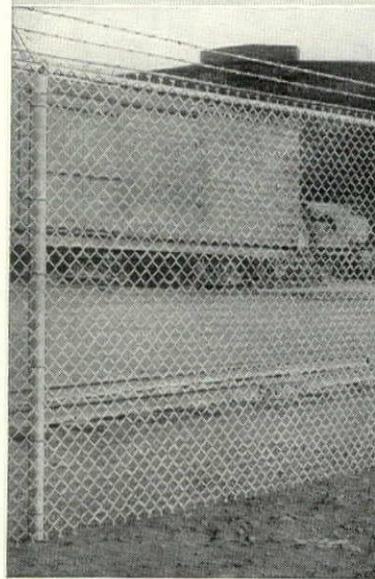
#### Forum:

. . . Some years ago the Champs-Elysees Association in Paris commissioned me to turn out a drawing for the press of the most abominable facade possible—it had to be so bad that everyone—even dumb animals—would be nauseated. It was the hardest job I've ever been confronted with. I turned out sketch after sketch and someone was bound to find something attractive about every one of them.

The point of it all was to enlist popular support for just such a control board as you write about (which they claimed ex-

(Continued on page 40)

## How to SOLVE YOUR CLIENTS' FENCE PROBLEMS



There are a lot of points to be checked in specifying fence—and Anchor Chain Link Fence's four exclusive features hold the answer to all of them. Here's what an Anchor Fence will insure you clients' maximum protection for long years of service:

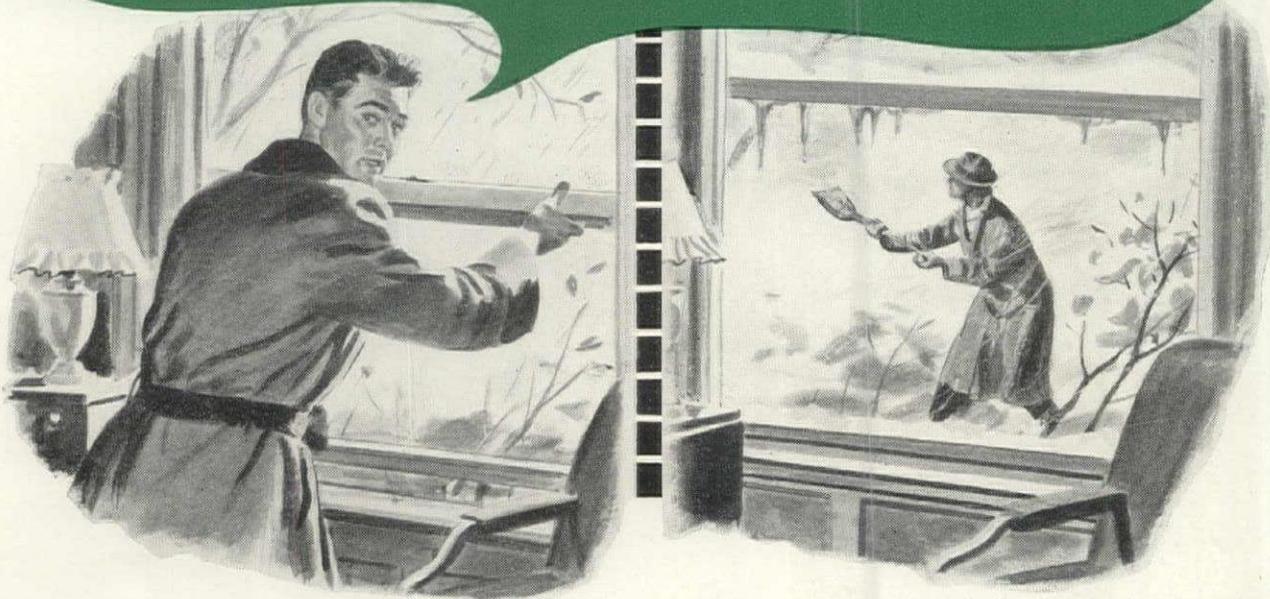
1. *Deep-Driven Anchors* hold the fence permanently erect and in line, in any soil or weather, yet permit easy relocation where necessary.
2. *Square Frame Gates* are amazingly free from warping and sagging.
3. *U-Bar Line Posts* are self-draining, rust-free and rigid.
4. *Square Terminal Posts* improve strength, durability and appearance.

SEND FOR YOUR FREE COPY OF OUR BOOK, "Anchor Protective Fences," for your A.I.A. File 14-K. It's both a catalog and specification manual. Shows many types and uses of Anchor Chain Link Fence . . . pictures installations for many prominent companies and institutions . . . contains structural diagrams and specification tables. Just ask for Book No. 110. Address: ANCHOR POST FENCE DIV., Anchor Post Products, Inc., 6633 Eastern Ave., Baltimore 24, Maryland

**Anchor Fence**  
Nation-wide Sales and Erecting Service

*What do you mean...*

**Two Furnaces in One?**



*Yessir... that feature of Superfex "round-the-clock" heating gets instant interest from any home owner. It's a simple point to drive home, too. And it's just one of many user-urging points in this greatest selling story in the heating industry.*

**The answer is... Superfex is two furnaces in one because it provides...**

- A.** Peak (high fire) capacity for the coldest weather demand.
- B.** Automatic cut-back to comfortable and economical low fire operation along with corresponding low blower speed for that "in between" mild weather.

Superfex provides all-over comfort *in any weather*. All-over comfort meaning uniform temperature, floor to ceiling, in all rooms. It means warm floors, no cold leg zone. That's "Homogen-Air" heating, and the Homogen-Air idea is exclusive with Superfex

**Plus . . .**

- A profit-protected exclusive franchise.\*
- Sound national advertising support.
- Effective Dealer Help materials.
- Quality and performance leadership insured by the finest development laboratory in the heating industry.
- Backing by the big name company with 60 years of history and a sure future.

. . . gives you a selling punch the other fellow does not have.

Other hot points are . . . healthful "live atmosphere" action, no stuffy dead-air rooms; banishing of "layer-cake" heat separation notable with stop-and-go types of heating; summer fanning and filtering facilities; heavy, dependable long-life construction throughout; a "Bonderized" finish, resistant to scratching and chipping; choice of gas or oil fired models and a size for every home heating need; a companion line of "Thermaflow" non-blower models (also with three-stage continuous fire); special units for popular basementless type homes.

*\* Yes, there are a few (and we do mean few) such franchises still open in good territories.*

*Qualifications for a Superfex dealer: Determination, Dependability, and a bit of DO. If you have them, and want to build a permanent profitable business, contact the home office without delay.*

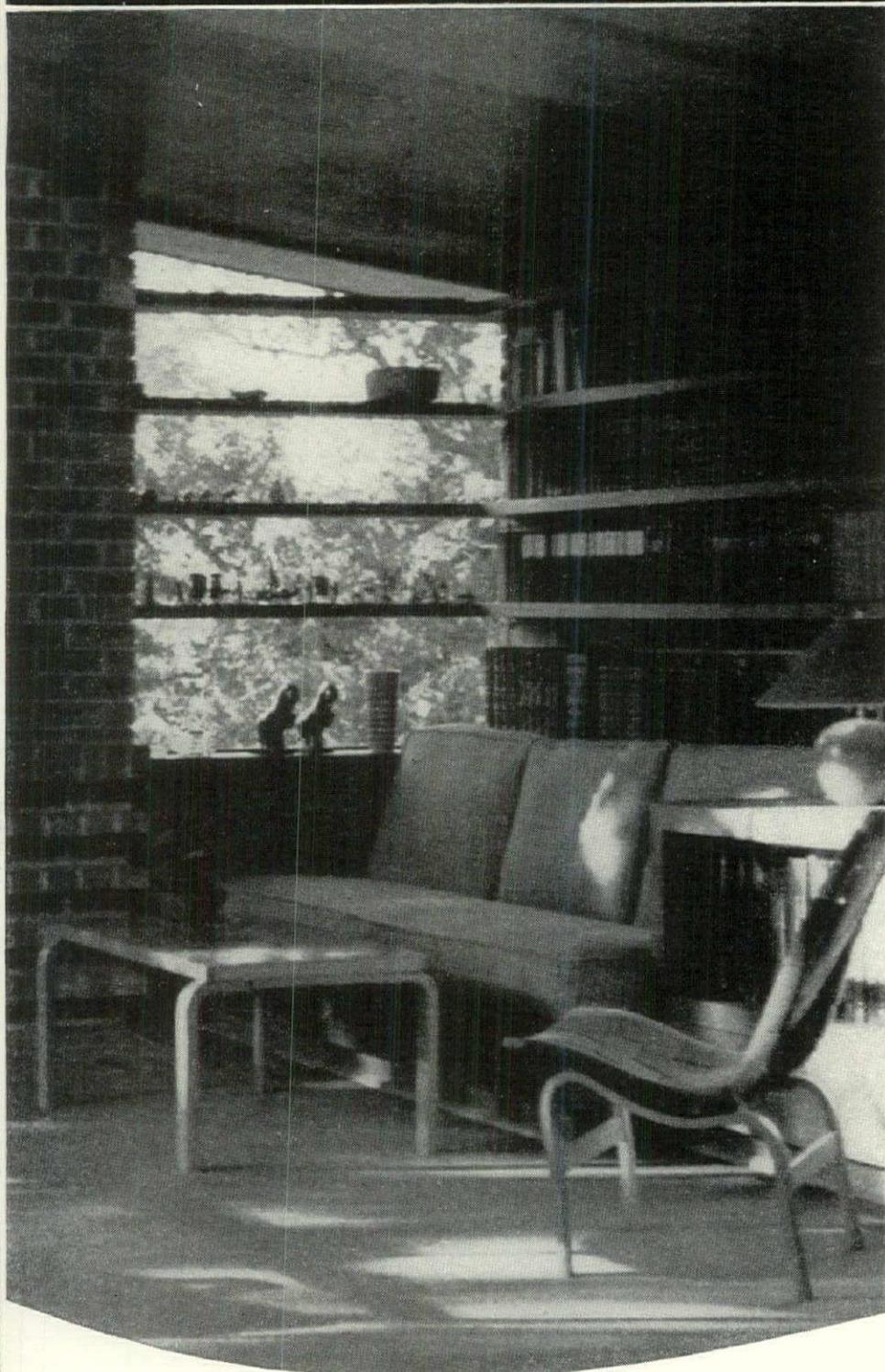
**Superfex FURNACES**  
GAS OR OIL

PERFECTION STOVE COMPANY

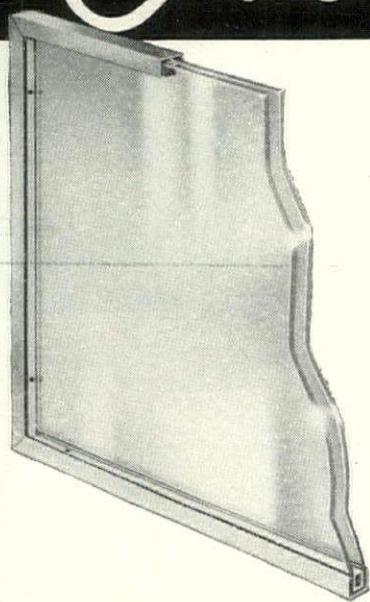
7920-A Platt Avenue . . . . . Cleveland 4, Ohio



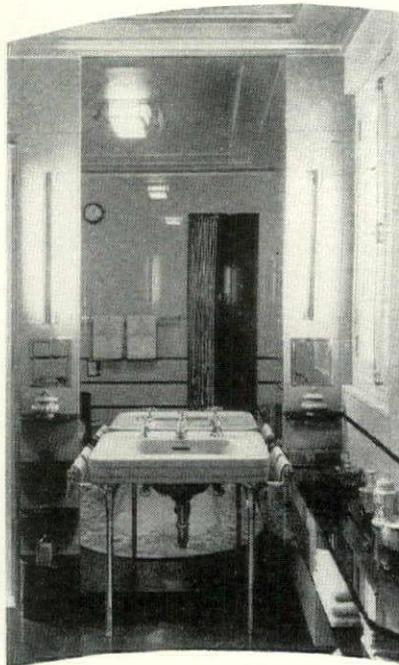
# Suggestions for using *Glass*



The complete line of "Pittsburgh" glasses includes a quality glazing material for every conceivable need. Pittsburgh Polished Plate Glass has been famous for almost 70 years for its clarity, polished beauty, and absolute transparency. Pennvernon Window Glass is eminently satisfactory to meet all sheet glass requirements. And where *insulated* transparent windows are desired, Twindow, the window with built-in insulation, is unexcelled. Architects: W. A. Ganster & A. Hennighausen.



**Twindow**—"Pittsburgh's" new window with built-in insulation—when made with 2 panes of glass has nearly twice the insulating efficiency of ordinary windows. It has greater insulating efficiency when made with additional panes. It cuts heating and air conditioning costs . . . facilitates proper temperature maintenance.



Many attractive and practical bathrooms and kitchens have been designed with wall wainscots of Carrara Structural Glass. The reflective polished glass is impervious to moisture and chemicals and is very easy to clean. The bath above has Carrara shelves and a large built-in mirror, as well as Carrara wainscots. Carrara is available in 10 smart colors. Architects: Walter T. Karcher & Livingston Smith.

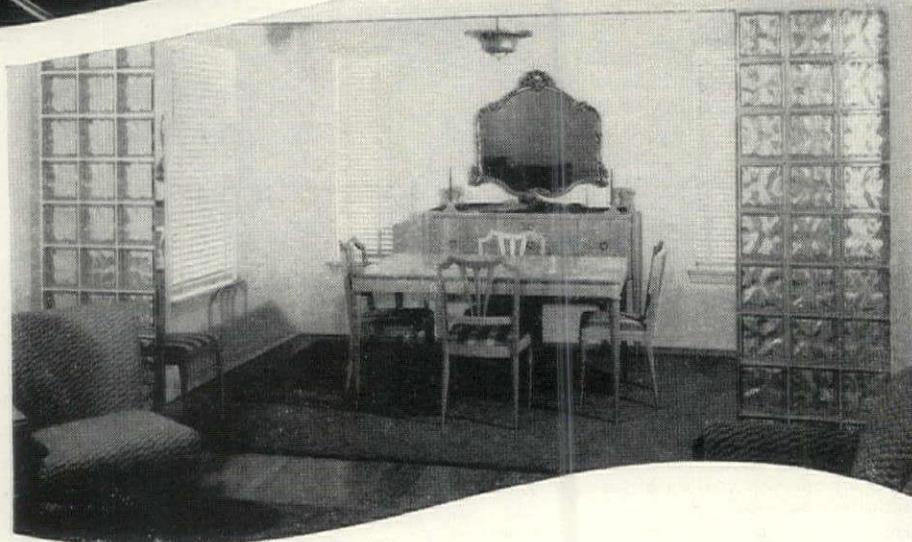
PITTSBURGH PLATE GLASS COMPANY

# n residential buildings



gh Mirrors can be used in countless ways to  
e the attractiveness of any interior. A large,  
ral mirror over the dining room buffet, as  
here, is one of the most popular applications.  
attractive and practical uses of mirrors: over  
ntel; on bedroom and dressing room doors;  
back walls of the tub recess in the bathroom,  
rom blue, flesh-tinted or green Plate Glass,  
el Plate Glass and with silver, gold or gun-  
packing.

s Blocks offer numerous interesting possibili-  
residences of both traditional and modern  
cture—above work surfaces in kitchens . . .  
front entrances . . . in stairwell walls, and for  
rtitions as shown here. These blocks trans-  
light generously yet provide privacy. They  
ooms brighter, smarter, more cheerful. Their  
ng properties cut heating costs.



ere you will find much to interest you in our illustrated booklet of ideas con-  
he use of Pittsburgh Glass in building design. Send the coupon for your free copy.

Design it better with

# Pittsburgh Glass



"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH PLATE GLASS COMPANY

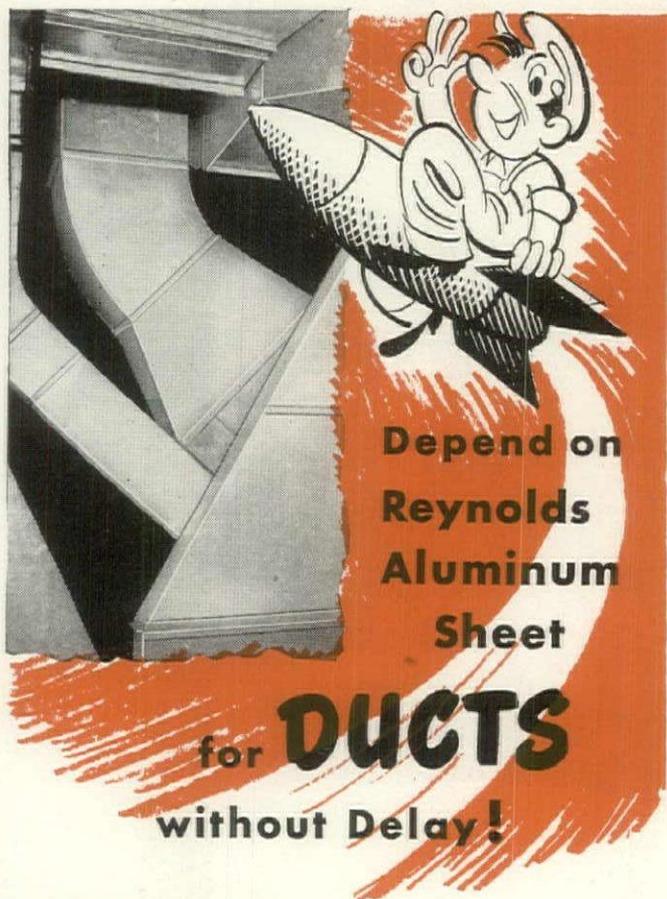
Pittsburgh Plate Glass Company  
2293-7 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, your free  
booklet entitled "Ideas for the Use of Pitts-  
burgh Glass in Building Design."

Name.....

Address.....

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



**Depend on  
Reynolds  
Aluminum  
Sheet  
for DUCTS  
without Delay!**

● Reynolds Aluminum Sheet is available for immediate delivery; easier fabrication and lighter weight make installations faster . . . yet the final cost is no higher than that of conventional materials.

Immediate delivery . . . faster fabrication . . . these time-saving advantages are only two of many reasons you'll want to use Reynolds Aluminum Sheet for heating and ventilating ducts. But the clock doesn't dictate all the requirements for a good duct installation. Final cost, appearance, and performance are equally important . . . and Reynolds Aluminum Sheet wins on these counts too:

For example:

**In cost . . .** Comparison of the final cost of aluminum and conventional materials will show the savings when aluminum ducts are installed. Every pound of aluminum gives you 3½ times more working surface. Light weight and good workability mean lower fabrication and erection costs. No paint is required.

**In appearance . . .** Ducts of Reynolds Aluminum Sheet remain neat and bright. Even without a protective coating of paint, they will never rust. Joints are uniformly smooth.

**In performance . . .** Because aluminum does not corrode, the inner surfaces of these ducts remain smooth and offer less resistance to air travel. Operation is quieter because aluminum absorbs expansion and contraction noises, does not conduct sound readily.

Take advantage of profitable duct business now . . . and be assured of thoroughly satisfactory, long-lasting installations, too. Contact your local jobber or nearest Reynolds sales office now. Reynolds Metals Company, Aluminum Division, 2528 South Third Street, Louisville 1, Kentucky.

IF YOU SEE RUST  
YOU KNOW IT'S  
NOT ALUMINUM



Lifetime

**REYNOLDS  
ALUMINUM**

isted in New York to "protect" Fifth Avenue). In Paris, only the "monuments historiques" are protected. . . .

EDWARD R. TAUCH, JR., Architect  
New York, N. Y.

Forum:

. . . I was recently in a court which decided a case for alleged breach of zoning laws, and heard the county attorney, who was also the enforcing officer, state to the judge his own opinion that a man is sovereign in his own property rights and that therefore he should do whatever he wants with his own property, including creating a nuisance to his neighbors and the community. Last week, I happened to be in Knoxville and traveled on the main thoroughfare leading to the Smokies which, when I saw it last two years ago, was a beautiful avenue and today, after a little postwar building, has been transformed into a very obnoxious place.

The solution is perhaps an impossibility. The only ray of hope is education, the selection of intelligent and unbiased Boards, and most of all the selection of good planners and architects. I know this is Utopia and for the time being I am willing to take my chance and set myself against any rules and regulations. . . .

MARIO BIANCULLI, Architect  
Chattanooga, Tenn.

#### LETTER FROM FRANCE

Forum:

Some of the best architects and town planners in France have been at work since 1940 preparing plans for the rebuilding of the city of Rouen. The ancient capital of Normandy lost many architectural treasures during the battle of France. It suffered severely from explosions and fires caused by the bombs from American and British planes.

The fighting between the French and Germans in the summer of 1940 led to destruction, mainly by fire, of scores of houses and offices which jostled each other between the Cathedral and the River Seine. Though we must lament the loss of these quaint survivals of the Middle Ages, in the long run the clearance will mean healthier conditions of life for local residents—for some of the most wretched slums to be found in France have been destroyed. In addition there are wonderful new vistas of the beautiful Cathedral, which now can be seen to full advantage.

When I was in Rouen recently, I found a good deal of division between two schools of thought. The idealists would like these acres of land, on which today piles of

(Continued on page 44)



#### Cold Storage Plants Offer Hot Tip On Wood Construction

**WOLMANIZED LUMBER\*** adds long life to the other advantages of wood construction; that's the verdict of cold storage and ice plant operators after observing its fine performance for the past nineteen years. They've used hundreds of thousands of feet of Wolmanized Lumber for cold room floors, framing and linings.

**WOOD CONSTRUCTION** puts cold storage within reach of many fruit and vegetable growers, by cutting the initial cost of these plants. Wolmanized Lumber assures low upkeep costs, because this wood is able to withstand the high humidities encountered. Its insulating properties give added operating economies.

**WOLMANIZED LUMBER** is ordinary lumber which has been made resistant to decay and termite attack by vacuum-pressure impregnation with Wolman Salts\* preservative. It adds little to the first cost of a structure—is light, strong, resilient. It goes up quickly and easily and is clean, odorless and paintable.

**HAVE YOU A PROBLEM** which might be solved with Wolmanized Lumber? We'll gladly send you additional data on its use. Write American Lumber & Treating Company, 1647 McCormick Building, Chicago, Illinois.

\*Registered Trade Mark

*Wolmanized*  
**LUMBER**



# Points of Distinction

OF THE MODEL M

## PENBERTHY AUTOMATIC ELECTRIC SUMP PUMP

**1** MOTOR— $\frac{1}{4}$  hp capacitor type special vertical motor designed expressly for sump pump operation has maximum resistance to moisture and corrosion, and is practically free from radio interference.

**2** OVERLOAD PROTECTION—Built into motor, protects motor in case of improper voltages, overloading or trouble of any kind.

**3** MERCURY SWITCH is sensitive, dependable and particularly adapted to float operation. It has no mechanical contacts to wear or spark.

**4** IMPELLER has high efficiency and operates successfully against a head of 22 ft.

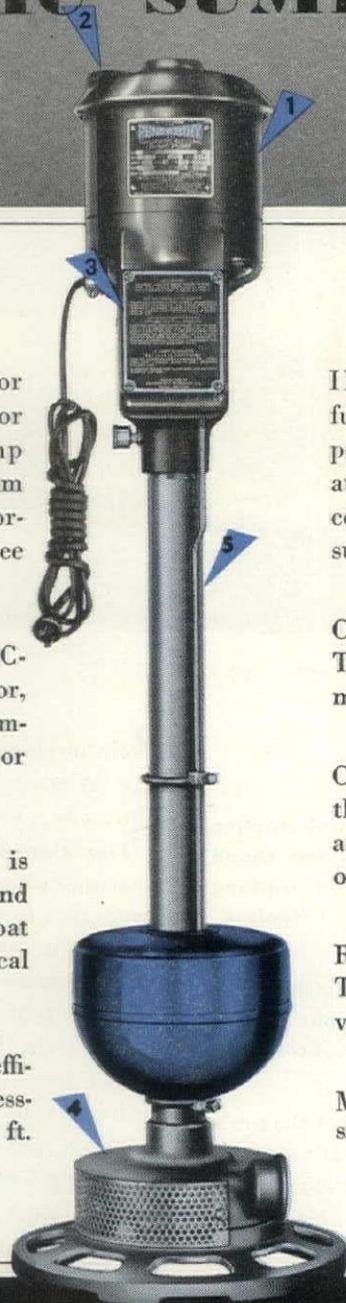
IMPELLER SHAFT is **5** fully enclosed and held in perfect alignment by bearings at both ends. Flexible spring coupling relieves motor shaft of sudden starting shocks.

COPPER AND BRONZE **6** THROUGHOUT; it is immune to corrosion.

COMPACT DESIGN—**7** there are no protruding arms or levers to bend and get out of order.

RUGGED CONSTRUCTION **8** assures long life and very satisfactory operation.

Made in FIVE SIZES for **9** sump depths, from 2 to 8 ft.



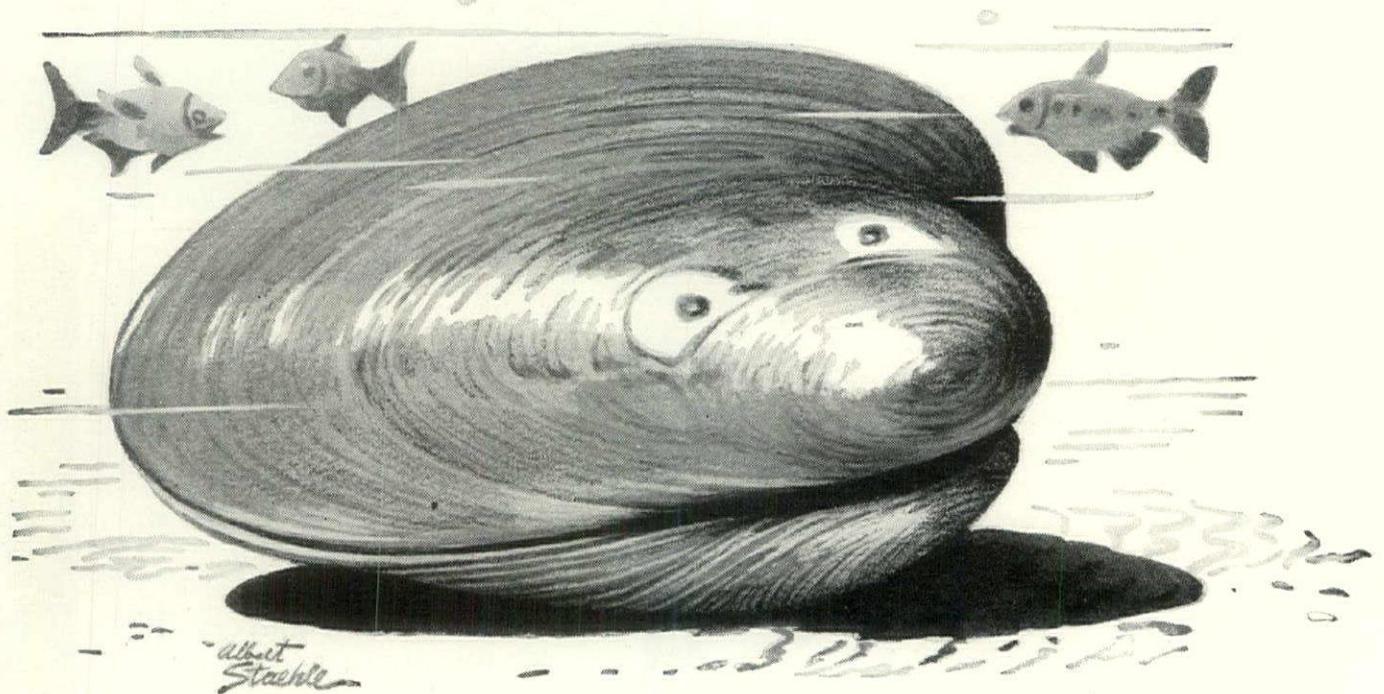
PENBERTHY INJECTOR COMPANY  
DETROIT 2, MICHIGAN

Established in 1886



Canadian Plant, Windsor, Ont.

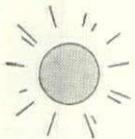
# What keeps the weather clement for a clam can keep your clients happy, too!



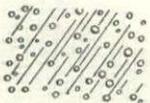
Over 90 years of successful roofing experience has demonstrated the sound value of the gravel or slag wearing surface of a Barrett Specification Roof:



1. It holds in place the heavy-poured (not mopped) top coat of coal-tar pitch—providing a doubly thick waterproof covering.



2. It provides protection against the sun's actinic rays which otherwise dry out the valuable oils in roofing bitumens.



3. It protects the roof against mechanical damage, hail and wind, wear and tear.



4. It interposes a surface of fireproof rock between the building and flying embers—makes a roof that carries Fire Underwriters' Class A Rating.

Rain or shine, the Clam doesn't care. He's happy all the day. Whenever trouble looms he pulls his roof up over him... he's safe inside his *armored wearing surface*.

The Barrett Specification\* Roof, with its armored wearing surface of gravel or slag, provides comparable protection for building structures. It's so tough and long-wearing it can be bonded against repairs and maintenance expense for as long as 20 years.

Built up of alternate layers of coal-tar pitch and felt, topped by a thick *pouring* of pitch to *anchor* the gravel or slag wearing surface, it is the toughest, longest-lasting built-up roof made. It is waterproof, fire-safe, sun-resistant, and *armored* against mechanical damage.

As a service to your clients, recommend Barrett Specification Roofs on the buildings you design. The Atomic Bomb Plant at Oak Ridge, Tenn., the Empire State and R.C.A. buildings in New York, and many other famous American buildings—all Barrett-roofed—confirm the soundness of your recommendation.



## THE BARRETT DIVISION

Allied Chemical & Dye Corporation  
40 Rector Street, New York 6, N. Y.

2800 So. Sacramento Avenue Chicago 23, Ill. Birmingham Alabama

In Canada: The Barrett Company, Ltd.,  
5551 St. Hubert Street, Montreal, Que.

\*Reg. U. S. Pat. Off.

# Get **BETTER WORKMANSHIP** with **BRIXMENT!**

No. 4 OF A SERIES—

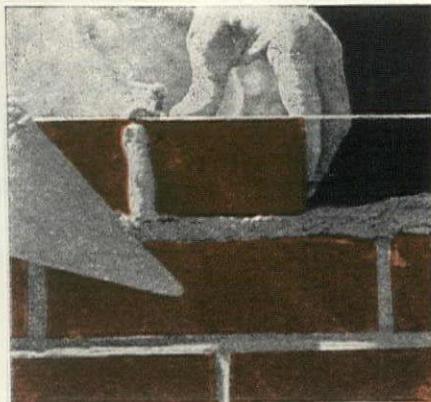
## THE RIGHT WAY AND THE WRONG WAY—IN HEADER COURSES



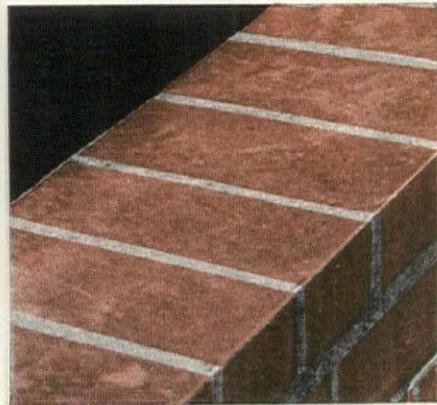
Mortar should be spread over the entire side of the header brick before it is placed on the wall.



*To secure full header joints, mortar should be spread over the entire side of the header brick before it is placed in the wall.*



The brick should be shoved into place so mortar oozes out at the top of the joint.



This completely fills the joint.

## **BRIXMENT**

is so workable, so plastic, that when the bricklayer pushes the brick into place, he does not have to *force* it home. The excess mortar "flows" readily into every part of the joint, thus providing good, full joints without requiring extra work or effort on the part of the bricklayer.

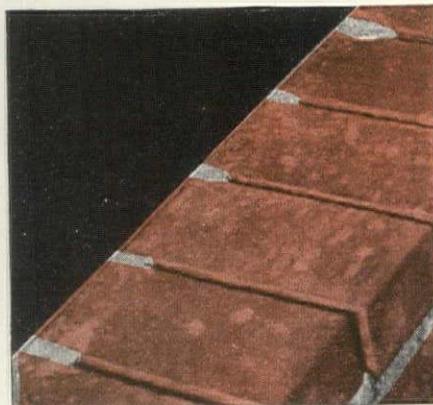
Aside from its greater plasticity, Brixment mortar has higher water-retaining capacity and bonding quality, greater resistance to freezing and thawing, and freedom from efflorescence. Because of this combination of advantages, Brixment is the leading masonry cement on the market.



When a dab of mortar is spotted on one corner of the brick,



*A dab of mortar spotted on one corner (or both corners) of the brick cannot possibly fill the cross joint. Slushing will not fill the voids.*



there is very little mortar in the cross joint.



Slushing will not fill the voids.

**LOUISVILLE CEMENT CO.**  
*Incorporated*  
**LOUISVILLE, KY.**

## LETTERS

# HALL-MACK

THE SMARTEST IN BATHROOM ACCESSORIES

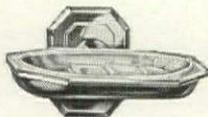
TOILET PAPER HOLDER No. 370  
Chrome Roller



TUMBLER AND TOOTHBRUSH HOLDER No. 330



SOAP HOLDER No. 322—With Unbreakable Crystal Tray



ROBE HOOK No. 381—2½" Long



SQUARE TOWEL BAR No. 394—¾" Square Bar. Lengths: 18", 24", 30", 36"



CONCEALED LAVATORY UNIT  
U.S. Patent No. 2,039,065



No. 338—OPEN  
Soap Dish, Tumbler and  
Toothbrush Holder  
exposed for use.



No. 338—TURNING  
Turned at the touch  
of a finger.

No. 338—CLOSED  
Toothbrushes, Soap  
and Tumbler hidden  
from sight.

ARISTOCROME accessories are made of solid brass, nickel plated and then heavily chromium plated to add distinction to the finest bathroom.

**HALL-MACK COMPANY**

(FORMERLY HALLENSCHEID & McDONALD)

1344 WEST WASHINGTON BLVD., LOS ANGELES 7, CALIF.

bombed stones have been neatly stacked, left as open space, laid out with public gardens leading to embankments along the River Seine. The opponents of this scheme point out first that the cost to the city, which already has had to bear such heavy finan-

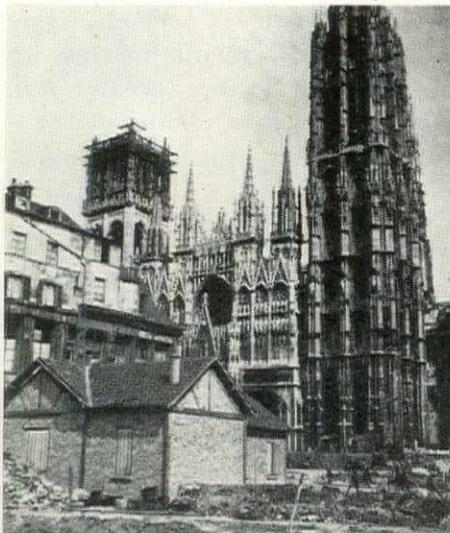


Back view of bombed houses which boasted picturesque Elizabethan exteriors, but were often hovels of squalor within.

cial losses in the war, would be overwhelming. Second, 8 per cent of the business premises of Rouen were in the central area and there is urgent need for more office accommodation.

M. Greber, the architect and town planner, has prepared plans for the reconstruction of this area. Rebuilding will be per-

*Ministere De L'Information*



View of Rouen Cathedral showing temporary dwellings and shops which will be demolished when permanent buildings can be erected.

mitted only to limited heights, so that the views of the Cathedral will not be blocked. The famous Arts Theater, which was completely demolished, will be rebuilt on another site, further away from the Cathedral, so that the height of such a building may not obscure the view. The original theater,

(Continued on page 48)

# No Waiting

WHE  
YOU  
US

## LITH-I-BAR

### FIRE SAFE LIGHT WEIGHT CONCRETE JOISTS



IMMEDIATELY AVAILABLE

For All Types of Fire-Safe Building. For small homes, apartments, schools, hospitals, or any type of commercial or industrial buildings, the Lith-I-Bar system provides greater speed, simplicity, minimum work, therefore economy. Lith-I-Bar machine made joist utilizes the Lith-I-Bar method of electrically welded reinforcing. Wide range of sizes and lengths up to 36 feet.

Wire, write or call today for location of your nearest licensed manufacturer.

GET THIS FREE

## LITH-I-BAR

BOX 870F HOLLAND, MI

# DECORATIVE MICARTA

# Winner...

## BY 10 IMPORTANT POINTS

What puts Decorative Micarta\* out in front?  
It's the only surfacing material that gives  
you *all* 10 of these important advantages.



**WON'T SCRATCH OR MAR** under ordinary service conditions. Finished surface is hard and durable.

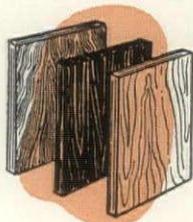
**WILL NOT SPOT OR STAIN** from spilled food, grease, alcohol, etc. Highly resistant to heat, moisture, mild acids and alkalis.



**STRONG, DENSE MATERIAL** . . . guaranteed not to warp, chip or crack under ordinary service conditions.



**COLOR-FAST, PERMANENT FINISH.** Unusually clear, lustrous colors and patterns won't fade or darken.

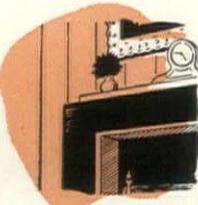


**GENUINE WOOD VENEERS AVAILABLE.** Truwood Micarta combines the beauty of such woods as primavera, mahogany and walnut with all the practical features of Decorative Micarta.

**EXCLUSIVE "BEAUTY MASK"** of tough Kraft paper protects the surface during shipping, machining and installation. Strips off easily when ready for use.



**QUICKLY, EASILY CLEANED** because of its permanently smooth surface.



**OPTIONAL FINISHES.** Brilliant *high-gloss* or lustrous *satin*.



**AVAILABLE IN "CIGARETTE-PROOF" GRADE** at slight extra cost. Even when cigarettes burn out on it, "cigarette-proof" Decorative Micarta remains unmarred.

**LARGE 4 FT. BY 8 FT. SHEETS** of Decorative Micarta are available for covering large surfaces quickly, and with a minimum of joints. Smaller sizes also available for table tops and similar applications.



Just about adds up to perfection, doesn't it? Get *all* these advantages when you buy a surfacing material. Specify Decorative Micarta . . . and be sure.

Use it for table-tops, counters, bar-tops, built-in booths, walls . . . anywhere at all when you want beauty,

convenience and durability combined in one *practical* material.

Get complete information on Decorative Micarta. A variety of desirable colors and patterns is available now. Write:

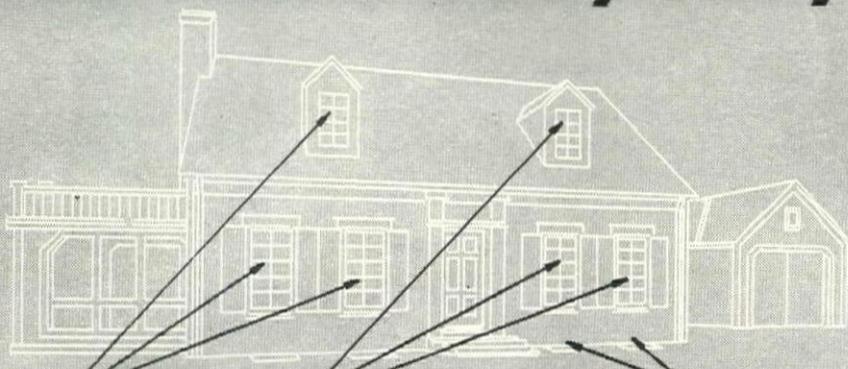
**UNITED STATES PLYWOOD CORPORATION**  
55 West 44th Street, New York 18, N.Y.

Weldwood** Hardwood Plywood	Flexmerl
Douglas Fir Weldwood	Weldwood Glue** and other Adhesives
Mengel Flush Doors	Weldrex** (patented striated plywood)
Douglas Fir Doors	Decorative Micarta*
Overhead Garage Doors	Flexwood**
Molded Plywood	Flexglass**
Armorply** (metal-faced plywood)	Firzite
Tekwood** (paper-faced plywood)	

\*Manufactured by Westinghouse Electric Corporation. Reg. U. S. Pat. Off.  
\*\*Reg. U. S. Pat. Off. United States Plywood Corporation

# Here's

## How to save money 3 ways



### WINDOWS

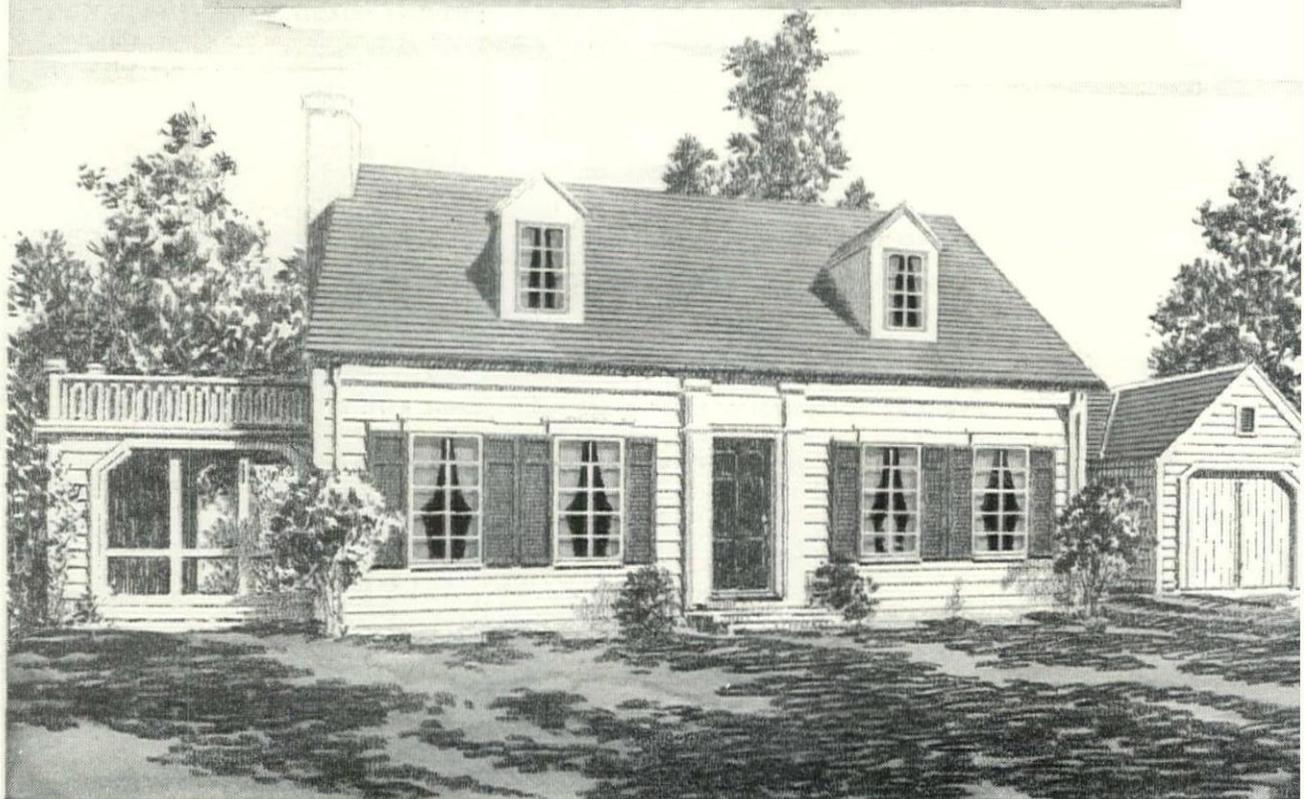
No repair costs  
Rot proof

### SCREENS

Cost less than  
old style screens

### BASEMENT WINDOWS

No repair costs  
Termite proof



*In construction products* **CECO ENGINEERING**

# Way to Reduce ome Building Costs!

Have you ever asked yourself "How can home building costs be reduced?" Now, that's a practical question—and here at Ceco we have an answer. Certain Ceco products *will reduce* home building costs. Take steel windows for example: They cost less installed, because there are no hidden costs to overlook, such as hardware, prime coat, accessories, additional labor costs. Then, too, steel windows last, and last, and last. There is no need for repair—they cannot rot . . . they are bonderized and painted for protection against rust. And that goes for steel basement windows, too. Another way to save is provided by Ceco metal frame screens. Installed, they actually cost less than old-style screens, are factory finished—need no on-the-job painting, trimming or fitting. So, to reduce home building costs, recommend Ceco metal casements, basement windows, and metal frame screens.

## WHY SPECIFY CECO?

Ceco does more than design and manufacture fine construction products. Besides their wealth of technical engineering skill there is available construction knowledge gained by 35 years of experience on the job. In 23 offices strategically located from coast to coast, Ceco stands ready to help you reduce home building costs. Call on Ceco today!

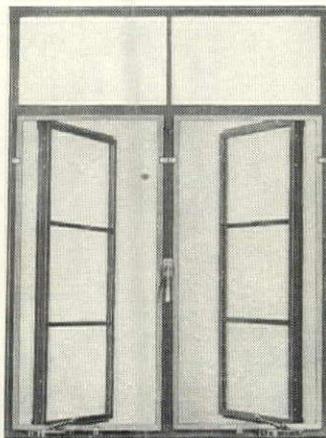
## CECO STEEL PRODUCTS CORPORATION

GENERAL OFFICES: 5701 West 26th Street, Chicago 50, Illinois

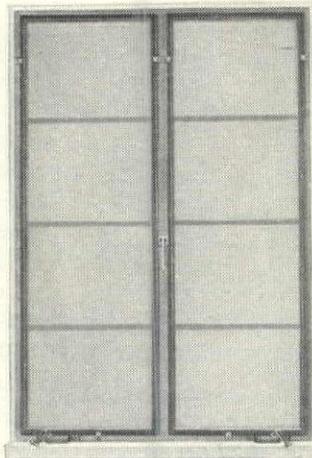
Offices, warehouses and fabricating plants in principal cities

**CECO  
STEEL**

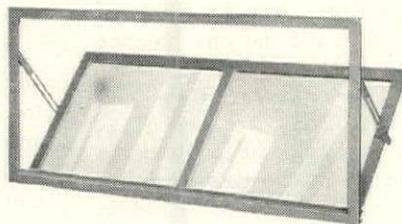
*makes the big difference*



Ceco steel casements are precision engineered, provide tighter weatherseal. They give 30% more light and allow controlled ventilation up to 100%. Easily washed outside from the inside . . . no risky ladders.



Note the trim appearance of Ceco metal frame screens. They come in standard types and styles for every purpose. They are custom built from steel, bronze, or aluminum and are wired with rust-proof screen cloth.



Ceco's economy basement windows are easy to install and easy to open and close. They are designed to provide partial or full ventilation in the basement. Newly designed combination storm window and screen also available.

### Partial list of other Ceco Products

Combination All-Aluminum Storm-Panel-and-Screen for Wood Windows • Meyer Steelforms • Reinforcing Steel • Steel Joists • Roof Deck • Metal Lath and Accessories • Highway Products • Corrugated Roofing

**EASY...  
does it.**

**EASY TO OPERATE**

**EASY TO INSTALL**

**FINGER-TIP CONTROL**

**Better Homes and Gardens**

**American Home**

**HOMES**

**Farm Journal**

**GRAND RAPIDS**

**Invisible**

**SASH BALANCE**

**EASY TO SELL**

**THE PRACTICAL SPIRAL SASH BALANCE**

**Easy to operate . . .** the touch of a finger is enough to raise or lower the ordinary sash.

**Easy to install . . .** just drive two fasteners and a screw, that's all!

**Easy to specify . . .** because a few standard sizes fit 95% of your jobs. And it's the one balance that's ideal for repairing or modernizing and for narrow trim and corner windows.

**Easy to sell . . .** supported by national advertising to 134,445,000 home-minded magazine readers. Tests in the laboratory and in thousands of homes assure smooth lifetime operation in all climates.

**Get Complete Installation Data**

See how Grand Rapids Invisibles save time and materials. Write TODAY for fully-illustrated specifications and installation instructions.

**SEE OUR CATALOG IN SWEET'S**

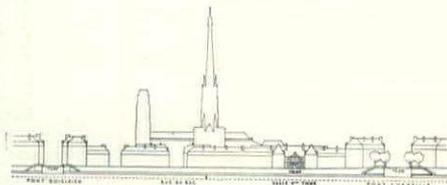
## GRAND RAPIDS HARDWARE COMPANY

558 11th Street, N. W. • GRAND RAPIDS 2, MICHIGAN  
Quality Leaders in Sash Hardware for 50 Years

### GRAND RAPIDS SASH PULLEYS

◀ No. 103 face plate, cone bearing type and Nos. 175, 109, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements. ▶

where Taglioni danced in the romantic era, was reconstructed in 1882 according to the plans of the architect, Sauvegeot. M. Greber proposes that the theater site will be used for a lower building that will not compete in mass with the Cathedral. He also plans new streets to give a better view of the historic building known as *Le Bureau de Finance*, designed by Leroux in the sixteenth century and, fortunately, still intact.



**Silhouette sketch** of proposed rebuilding of cathedral area. New construction is kept low to emphasize height of cathedral spire, allow view from any direction.

The famous old clock on the bridge across the *Rue de Gros Horloge* is also untouched and the new plans provide for various views from there, and the opening out of some of the charming little squares and Renaissance buildings which in the past have been hidden.

It must be remembered, however, that Rouen is a city famous not only for Gothic churches, fifteenth century houses and art collections, but is also one of the busiest ports in France. It is one of the centers of French cotton manufacture and the chief town, with over 121,000 inhabitants, of the Department of the Seine Inferieur. Its replanning is therefore being thought out with a view to its industrial future.

Every visitor to Rouen must have been impressed by the contrast between the architectural treasures on the Right Bank of the River Seine and the ugly confusion of many of the industrial buildings on the Left Bank. All along the river side, the bombing of the port has led to widespread destruction. This is providing an excellent opportunity for replanning. There will be better zoning of industrial and commercial buildings and residential flats, and the provision of more playgrounds and open spaces. When these plans are carried out, the Seine at Rouen will become, as at Paris, the axis of a balanced city.

. . . In short, out of the bombed ruins of a martyred city, the museum of such historic architecture as has survived the bombs is being preserved, a busy port is being rebuilt on a long-term plan and the regional capital of Normandy restored and enhanced in administrative convenience, beauty of layout and modern design.

B. S. TOWNROE, Hon. A.R.I.B.A.  
Camberley, Surrey, England

(Publisher's Letter on page 52)

# A SAFE FOOTING



*Alberene Stone Treads and Landings, Wood Wilson High School, Washington, D. C., N. W. W. yeth, Architect.*

## ALBERENE STONE TREAD

For more than 40 years Alberene Stone has been the choice for treads, platforms and floors subject to severe daily use in schools, hospitals and public buildings. Its natural high-toothed surface is safe, wet or dry. The selected, extremely hard Tennessee Stock meets every requirement for durability, upkeep and appearance.

The regular grade Alberene Stone is equally popular for toilet and shower compartments. Tongue-and-groove interlocking construction produces liquid-tight joints. Its light blue-gray color is harmonious and the stone is close-grained and practically non-absorbent and non-staining. For complete data and samples please address Alberene Stone Corporation of Virginia, 419-4th Avenue, New York 16, N. Y. Quarries and Mills at Schuyler, Virginia. Sales Offices in principal cities.

## ALBERENE STONE

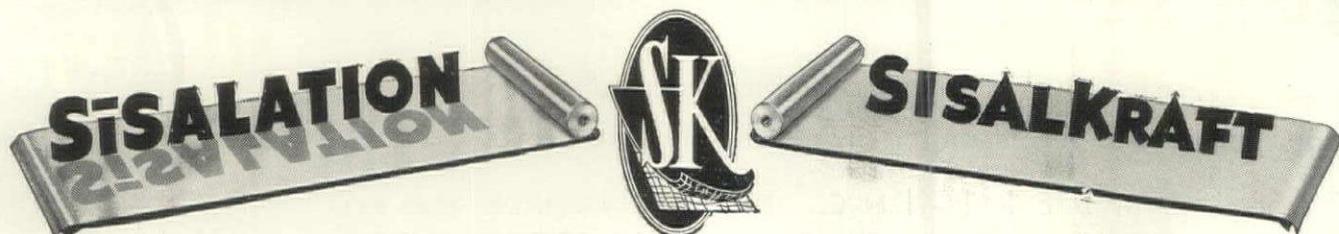
THE NATURAL STONE  
OF DIVERSIFIED UTILITY

This Improved Construction Assures a Permanent  
**DRY WALL**  
 at Minimum Material and Labor Cost!

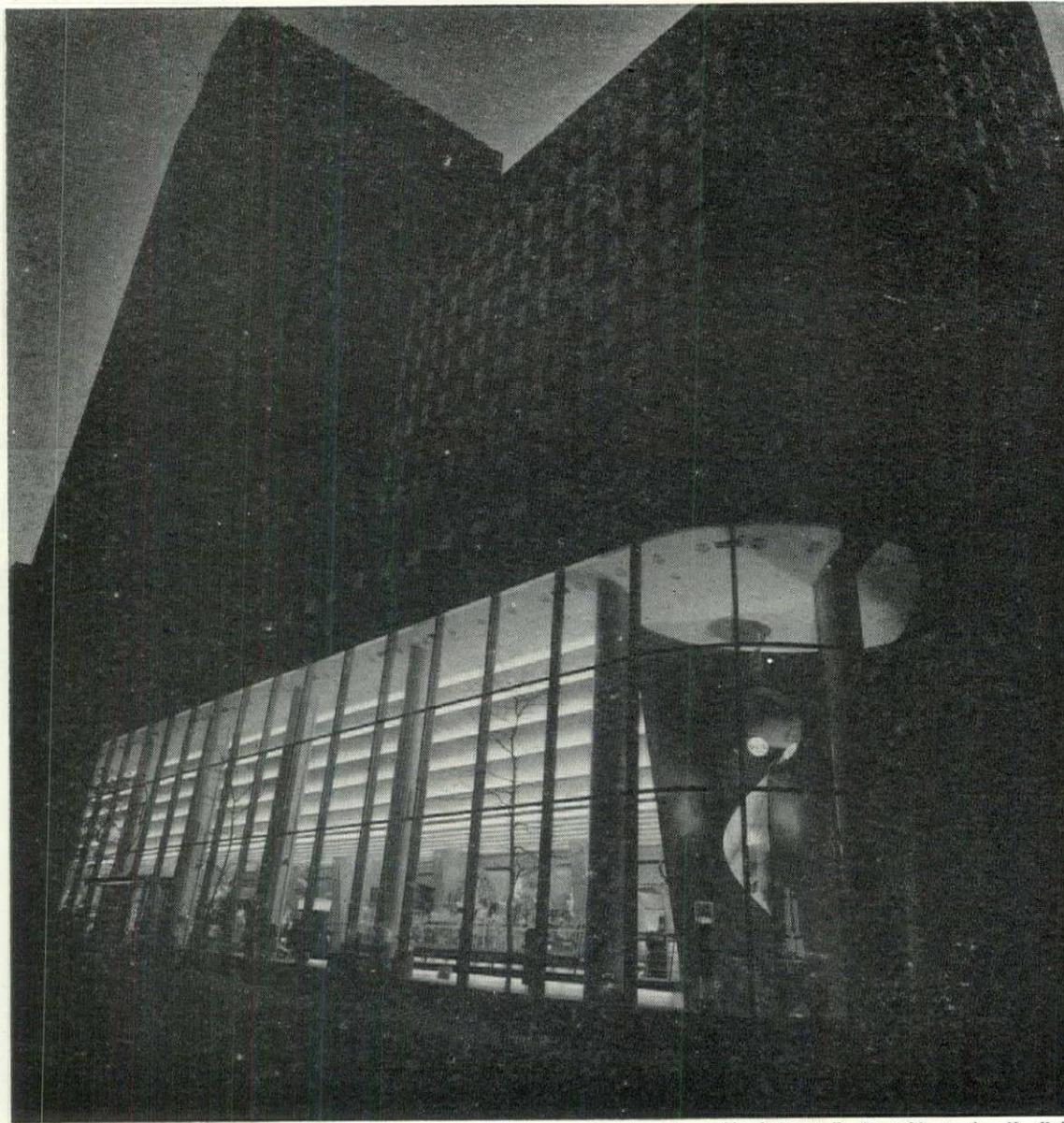


*See for Yourself:* New wall construction, utilizing the prime features of Sisalkraft and Sisalation, now enables you to stop the passage of harmful moisture into walls easily and economically. This simple method provides a permanent *dry wall* in homes PLUS all the advantages of adequate insulation at no extra cost! Write today for further information about these two products.

**The SISALKRAFT Co., Dept. AF, 205 W. Wacker Drive, Chicago, Ill.**



**PRATT &  
LAMBERT  
PAINT AND  
VARNISH**



*Photo by Ezra Stoller, Pictorial Services, Inc., New York*

**E**XTENDING for over 190 feet along 49th Street, opposite the RCA Building, is the plate glass front of RCA Exhibition Hall, shown above. Here are exhibited the products, facilities and services of the Radio Corporation of America, combining a display of technical achievements with entertainment, to appeal to both the communications industry and the public.

This 30-foot-high glass front serves as a huge show window, filled with novel and scientific detail. The entrance was designed to present an unobstructed view of the interior. Floor layout was planned to accommodate the tremendous flow of traffic expected. The many fascinating but loosely-allied departments of the Hall are subtly held together by a lighting scheme too vast to be disturbed by individual exhibits.

Included in the Pratt & Lambert Paint and Varnish products used in the decoration of the Hall were Lyt-all Flowing Flat, Solidex, and "61" Enamel. The decoration required colors that were rich, harmonious and restrained, to conform to the high quality of products displayed.

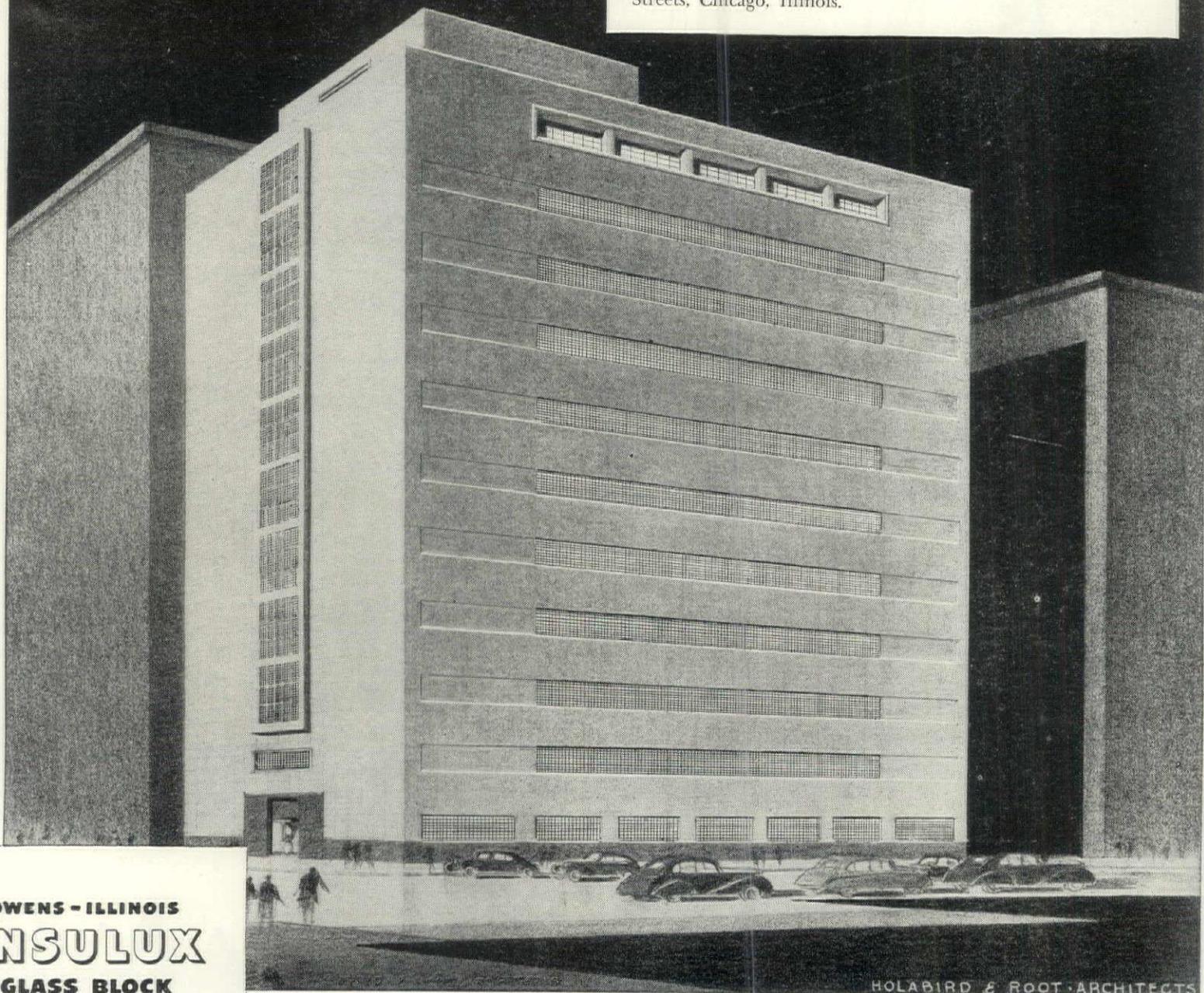
The Pratt & Lambert Architectural Service Department whole-heartedly assists architects in securing appropriate decoration for any type of structure.

PRATT & LAMBERT - INC., Paint & Varnish Makers  
NEW YORK • BUFFALO • CHICAGO • FORT ERIE, ONTARIO

RCA EXHIBITION HALL,  
ROCKEFELLER CENTER, N. Y.  
CARSON & LUNDIN, Architects, New York  
POLLAK & GRIEVE, Engineers, New York  
W. L. STENSGAARD & ASSOCIATES, Inc.  
Displays, New York City  
TOM LEE, Designer, New York City  
WM. F. O'KEEFE DECORATING CO., N. Y.



**Designed** by Architects Holabird and Root, this 11-story unit of Illinois Bell Telephone Co.'s long distance switching center (already the world's largest) will house intricate, costly equipment. Insulux will provide daylight, the insulation necessary for economical air conditioning, and help block out dust and dirt in this structure planned to be built at Clark and Congress Streets, Chicago, Illinois.



**OWENS - ILLINOIS**  
**INSULUX**  
**GLASS BLOCK**

HOLABIRD & ROOT ARCHITECTS

## Glass block daylights unique building

**W**ITH an ease approaching magic, myriad calls from all parts of the world will pass through this unit of Illinois Bell Telephone Co.'s long distance switching center.

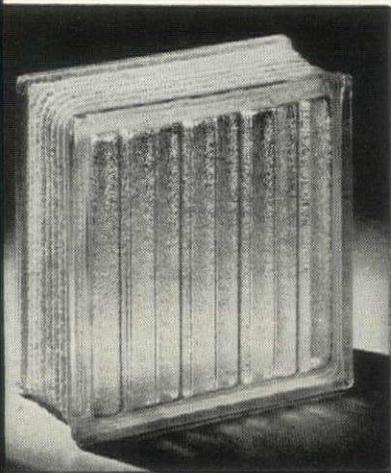
The building and its equipment—representing ten million dollars—have been carefully designed for smooth operation and economical maintenance. One note-worthy bit of planning by Architects Holabird and Root was the selection of Insulux Glass Block.

Insulux panels will not only bring in light, but provide good insulation. The

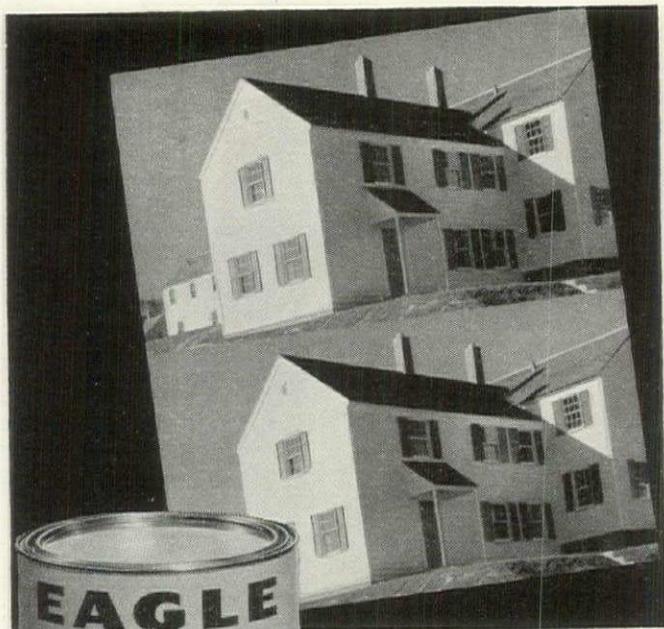
result is lower cost air conditioning and heating operations.

Maintenance, too, is less costly with Insulux. The panels are not subject to rust, rot or corrosion. Infrequent washing keeps them sparkling. No painting is required.

Frequently Insulux Glass Block can make important contributions to efficiency while protecting processes and equipment in industrial and commercial buildings. For complete information write Insulux Products Division, Owens-Illinois Glass Company, Dept. D-20, Toledo 1, Ohio.



*Insulux Glass Block is a functional building material, designed to do many things other materials cannot do. Investigate!*



**does  
double  
duty**

1. Being pure white lead, Eagle RTU has traditional beauty and durability.
  2. It's factory-mixed for new efficiency, goes to jobs in original containers.
1. Eagle RTU's fine brushing and hiding qualities make for easy application.
  2. Its smoothly gleaming coat gives lasting distinction to your buildings.
1. Eagle RTU is favored by builders for its time-and-labor-saving convenience.
  2. It's preferred by homeowners for its whiter white that stays white longer.
1. Eagle RTU is pure white lead paint in a modern form.
  2. It is backed by Eagle-Picher's 104-year-old reputation.

**EAGLE PURE  
WHITE LEAD**  
*Paint*



**THE EAGLE-PICHER COMPANY**  
CINCINNATI (1), OHIO  
Member of the Lead Industries Association

## A LETTER FROM THE PUBLISHER

Dear Reader:

Because of the universal interest in the building situation in Germany, we present this report by a recently returned member of the FORUM's staff, Peter Blake.—H.M.

96.7 per cent of the City of Kassel on the northernmost tip of the U. S. Zone of Germany, was destroyed in 1943 in a couple of half-hour, 1,500 bomber raids. The City of Nuremberg, some distance to the south, was similarly blasted during those same months. Frankfurt on the Main, Headquarters City for the European Command (EUCOM), U. S. Army, is in pretty good shape: 40 per cent of it is still standing. Heidelberg is almost undamaged—one of the very few German cities in that condition. Its population, needless to say, has just about tripled with the influx of people from less fortunate cities.

Margaret Bourke-White



Nuremberg: Six shovels

This is the grim story behind much optimistic talk about the job of rebuilding Germany. Since this job may partly fall to the U. S., American contractors had better realize that, where they may go, there will be little food, little shelter, and less production.

\* \* \*

Food, shelter, and production,—the vicious circle that hampers all German rebuilding. Construction workers are scarce. Since we control their wages at prewar levels and black market food prices are, of course, uncontrolled, carpenters and bricklayers prefer to do "black market" repairs for "black market" wages. Moreover, German workers don't live where they are needed most. They have taken off to live with their relatives in undamaged villages and well-stocked farmyards. To get a carpenter into Kassel, you must first give him a room to live in; to build that room, you must first get him into Kassel.

Supposing, however, that you have got German carpenter "A" where you want him—where are his hammer, nails, level, saws and, finally, his lumber? The answer is simply that they are not there. Because German workman "B,"

who makes hammers, nails and saws, has also taken off to live with his uncle who is a farmer—since "B's" house in Kassel was destroyed and there are no carpenters to rebuild it. And this is where we came in.

\* \* \*

When the *Buergermeister* of Nuremberg was told last year to start cleaning up his city in earnest, he asked the Military Government (M.G.) for a few shovels. He had only six. When General Eisenhower remarked during a visit to Frankfurt that he was disappointed at the slowness of the rubble clearance program, the *Buergermeister* there indicated in so many words that the General might see some progress if he came back in 50 years. A champagne manufacturer in Frankfurt, who succeeded in building a new house, first had to swap dozens of kegs of green "champagne" for black market lumber. . . .

\* \* \*

Not all the outlook is bad. A prefabricated steel house, manufactured in the British Zone, and some wooden prefabs made in the U. S. Zone, may soon be available to Germans under our new "reconstruct Germany" policy. Heretofore, these pre-fabs were made for export only, to pay for food imports, which M.G. considers an even greater need than shelter. To the Germans, U. S. Army Engineers have shown that, given modern equipment, a contractor can clear the rubble almost overnight. Still, many Germans feel that the current "peace" may produce some more rubble even before the existing wreckage is

Peter Blake



Frankfurt: A couple of bulldozers

taken care of, a feeling which has contributed to much lethargy on the part of potential German rebuilders.

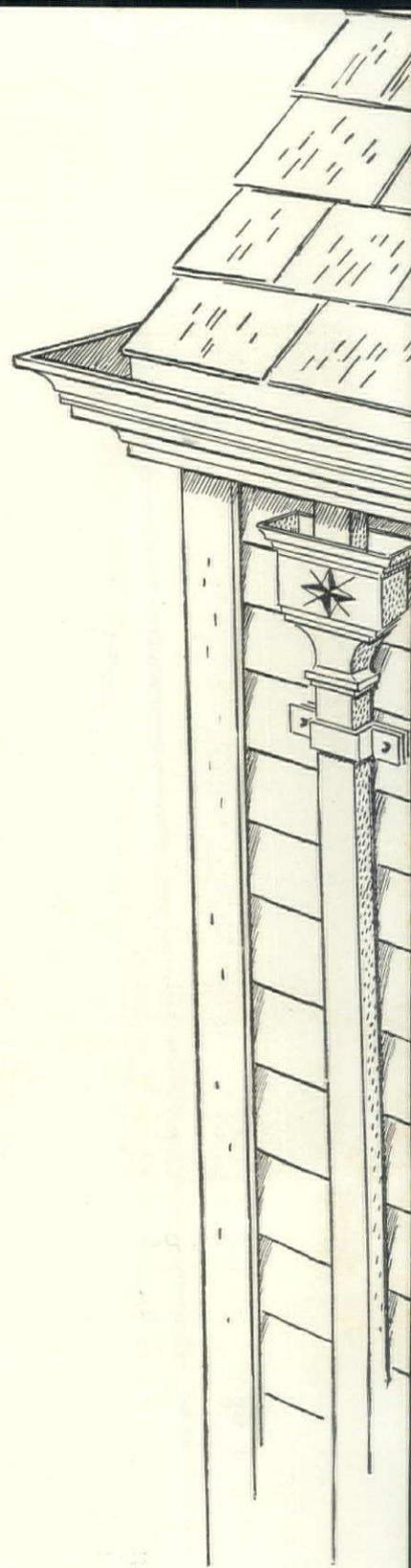
So if you find yourself doing any German rebuilding in the near future, be sure to bring your own equipment. And bring along a good book for those weeks while you wait for "construction permits" and "Treasury licenses" that give you the right to pay a German carpenter without illegally trading with the enemy. . . .

P.B.

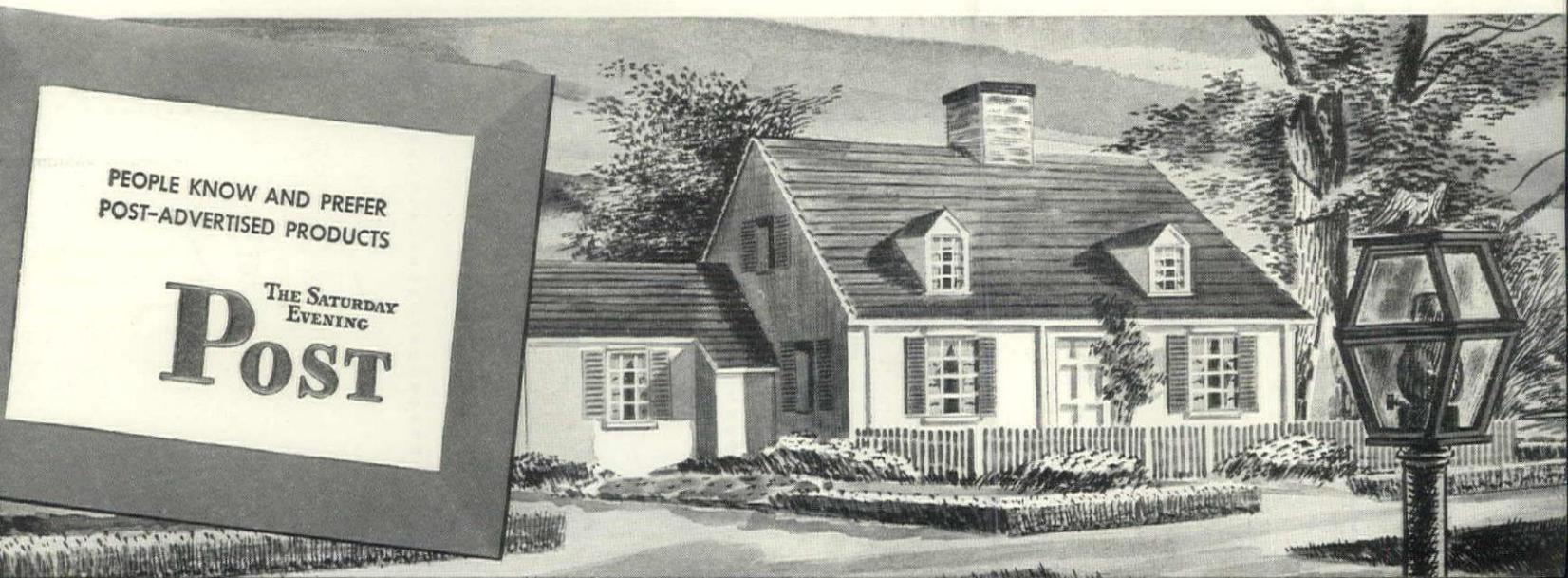
Will the  
roof last?



Of course!  
You've read  
what they say  
in their ads  
in the Post!



QUALITY IS THE QUESTION—"IT'S POST-ADVERTISED" IS THE ANSWER!



\*

\*



**SPEAKMAN ANYSTREAM  
SHOWER HEADS**

When a job calls for showers . . . specify Speakman Anystream Shower Heads . . . the shower head chosen by leading hotels, clubs, institutions and by home owners all over the country. Anystream saves up to 58% on hot water consumption . . . cuts water and fuel bills. And, since Anystream is self-cleaning . . . the usual cause of shower maintenance is completely eliminated. Write for full information.

*"Established in 1869"*  
**SPEAKMAN**  
SHOWERS AND FIXTURES

SPEAKMAN COMPANY, WILMINGTON 99, DELAWARE

<p>A turn of the lever gives <i>Needle Spray for Stimulation.</i></p>	<p>or <i>Regulay Spray</i> for Relaxation.</p>	<p>or <i>Flood Spray</i> for No-Splash Rinse.</p>	<p><i>Never This!</i> The Anystream is self-cleaning.</p>

**Perkins & Will design a factory . . .**



**Mesker Steel Windows**

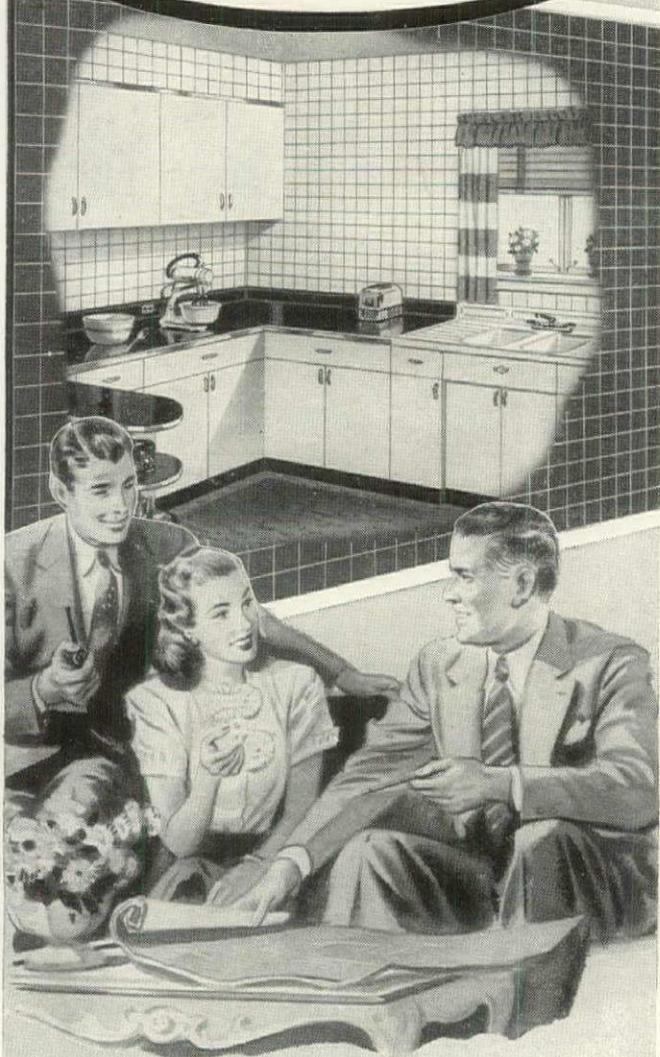
**“Modern manufacturing plants owe much of their attractive appearance to intelligent handling of metal windows. As elements of industrial design, their possibilities are unlimited.”**

Philip Will, Jr.  
of  
Perkins & Will  
Architects  
Chicago, Ill.



For your copy of the Mesker Book of Industrial Windows,  
write to Mesker Brothers, 4336 Geraldine Ave., St. Louis 15, Mo.

The Demand is for  
**PRESTILE**



**E**ACH month, through Better Homes & Gardens, American Home and other magazines, more and more homemakers are learning about the advantages of using Prestile . . . the quality tileboard with its plastic beauty baked in. While we are striving to meet overwhelming demand, Prestile continues to advertise as an aid to dealers, contractors and architects.

PRESTILE MANUFACTURING COMPANY  
2860 LINCOLN AVE., CHICAGO 13, ILL.

**PRESTILE**

*"It's Plastic Beauty is Baked In"*

## FORUM

Behind the scenes with FORUM contributors

**JAMES J. CHIARELLI** graduated from the University of Washington in 1934, just three years before Partner **PAUL KIRK**. Before formation of the partnership, Chiarelli worked for various architectural offices in Seattle and was field architect for a large housing project in Vancouver, Washington. Kirk was associated with Stuart and Durham on Federal Housing work, including community and school layouts. Design philosophy of the partnership: "To complement in architectural form how we live and think today" (p. 78).

**RALPH S. TWITCHELL'S** designs dot the eastern landscape from New England to Florida (p. 85). He studied at Rollins, McGill and Columbia for eight years, followed up with two years in Europe and practical experience with Cross & Cross, Carrere & Hastings and Raymond Hood. He was a test pilot in World War I, a retired Colonel after No. II. After winning the Rorimer Prize and graduating from Auburn in 1940, Associate **PAUL M. RUDOLPH** entered Twitchell's office, won a scholarship to Harvard. Rudolph's three years in the Navy preceded their association in 1946.

Dynamic, German-born, Swedish-influenced **CARL KOCH** studied under Walter Gropius at Harvard, received the Bacon Traveling Fellowship in 1938-39, established his own practice near Boston in 1939. In 1941 he became senior research technician for NHA, then did a turn in the Navy during the war. His diverse talents have produced numerous modern houses (p. 90), including the Snake Hill group near Belmont, Mass. where he now lives, large housing projects, museums, office buildings, exhibitions, laboratories, and even a Finnish bath.

A Texan born and bred, whimsical **O'NEIL FORD** studied architecture via a correspondence course while working as a carpenter and house painter after three years at North Texas State College. He spent six years in the office of David R. Williams, then did several years of government housing work. His 2000-hour flying stint as a flight instructor during the war led to use of a plane by himself, Partner **JERRY ROGERS** and the personnel of their bucolic office near San Antonio in supervising projects (p. 96) abuilding throughout their roomy state. Rogers, an alumnus of Texas A.&M., Ford's office, and the Army Engineers, became a partner in the firm in 1941.

The work of genial **EDWARD D. STONE** needs no introduction to FORUM readers. Born in Arkansas, he attended the University of that state, Harvard and M.I.T. He started practice in 1923, has designed countless modern residences (p. 102) and buildings, including World's Fair structures, homes for various publishing houses, government housing projects and, with an associate, the Museum of Modern Art. After two years as a Major in the Army Air Corps, he resumed private practice in New York in 1944.

**GEORGE FRED KECK**, pioneer in radiant and solar heating, has confined his designing talents largely to single-family homes (p. 107). A staunch modernist, he was educated at the Universities of Wisconsin and Illinois, returned to the latter as professor of architecture in 1923 after a year overseas in World War I and employment by William Pruyn and D. H. Burnham. He was associated with Schmidt, Garden & Ernesen in Chicago, opened his own office there in 1926, is now in partnership with his brother, **WILLIAM KECK**. One of his best-known designs is his prefabricated solar house for Green's Ready-Built Homes.

The gloomy future predicted by conservatives for personable, 30-year-old **GORDON DRAKE** after construction of his first house in 1937 has turned into a bright progression of modern houses, the latest of which is the Presley residence (p. 110). After attending the Universities of California and Hawaii, he worked as a draftsman for Harwell Hamilton Harris, spent five years with Marine engineer troops in the South Pacific. He established his own office in April 1946, promptly won a national award, now has a thriving practice in Southern California.

ATTRACTIVE • ECONOMICAL • LOW UPKEEP

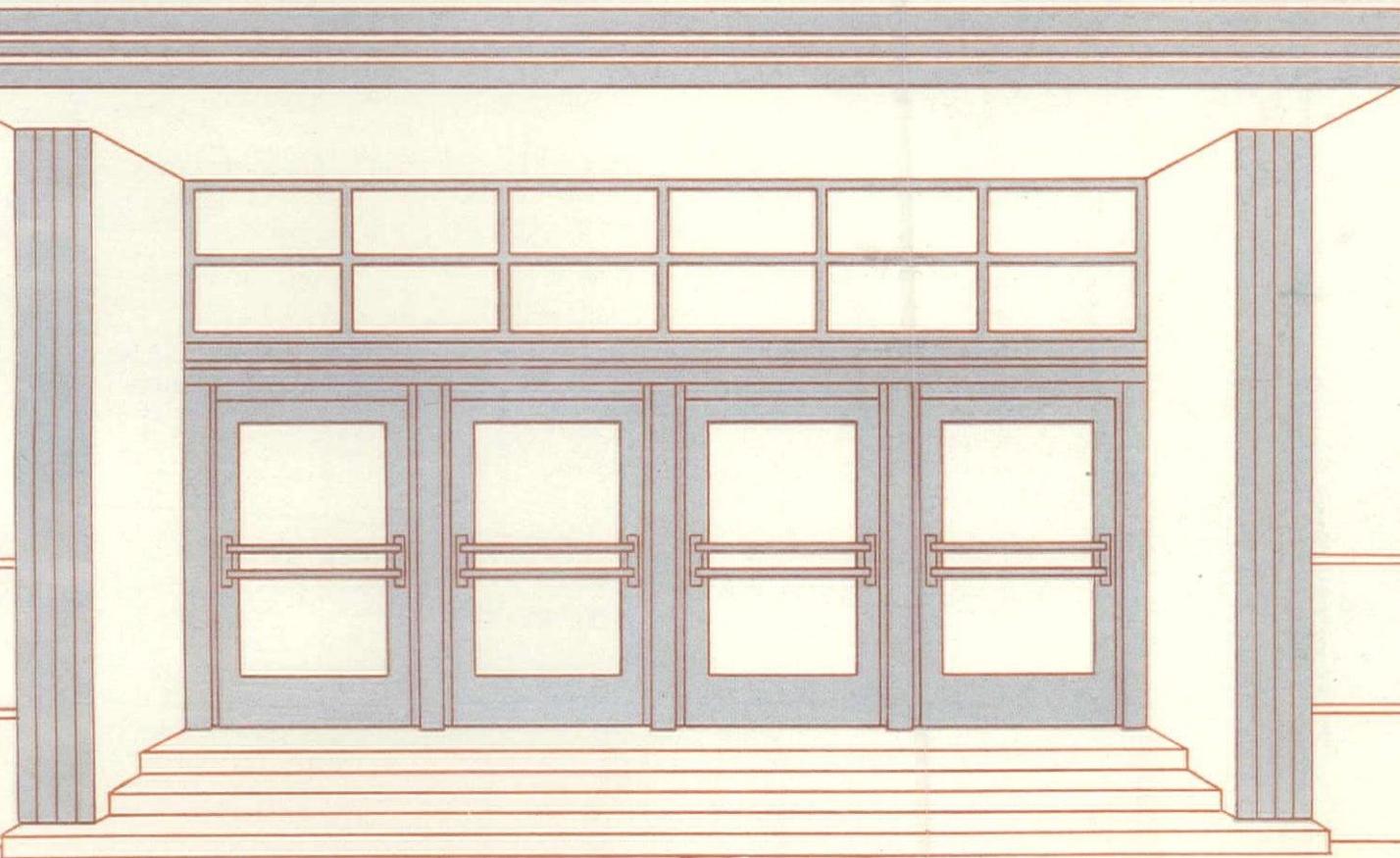
# ALCOA

## Architectural Extruded Shapes

When design problems call for distinctive appearance and low upkeep, turn to Alcoa Architectural Extruded Shapes. Here you may find the answer, and at reasonable cost.

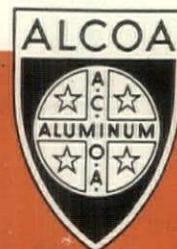
Alcoa Extrusions, produced in standard or special designs, can eliminate the need to build up sections from formed plate and sheet and rolled shapes such as angles, channels and tees. First cost is reasonable. Assembly time and labor costs are reduced. Rustproof, corrosion-resistant, Alcoa Aluminum, available in a variety of finishes, provides distinctive appearance.

Alcoa's years of experience in the design and production of extruded shapes is available to all architects. For information, write for a copy of the Alcoa Architectural Extruded Shapes Booklet (A.I.A. File No. 15 J), or call your nearby Alcoa sales office. ALUMINUM COMPANY OF AMERICA, 1866 Gulf Bldg., Pittsburgh 19, Pa.



**MORE** PEOPLE WANT **MORE** ALUMINUM FOR **MORE** USES THAN EVER

**ALCOA** **FIRST IN**  
**ALUMINUM**



IN EVERY COMMERCIAL FORM



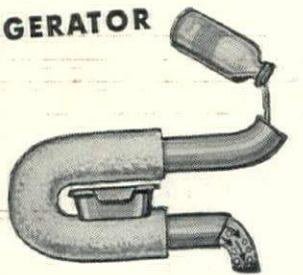
# SEE HOW THE FREEZE

## LIQUIDS COOL ON EVAPORATION

When you pour alcohol into the palm of your hand and blow on it, you know what happens. You experience a cooling sensation. That's because liquids remove heat from the surrounding area as they evaporate. You can prove it with a thermometer. This principle of cooling by evaporation is used by both gas and electric refrigerators. But there's a big difference in application. You'll see why the Gas Refrigerator's method is superior by studying the following illustrations.

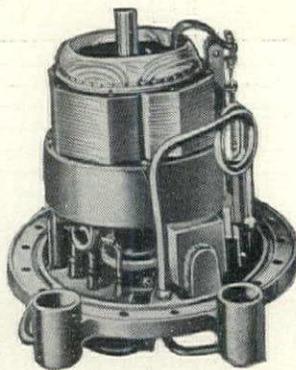
## SUPPOSE YOU MADE A SIMPLE REFRIGERATOR

All that's necessary would be to pour continuous streams of ammonia (or any other refrigerant) and air through a bent metal tube. Evaporation will take place on the inside of the tube, causing the outside to cool. Thus, you have simple refrigeration. The evaporated ammonia goes off in vapor gas. However, in practical refrigeration, vapor gas cannot be allowed to escape and go to waste. It must be recovered and used again.

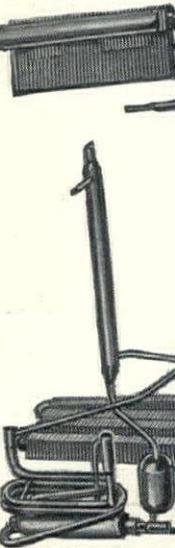


## THERE ARE TWO WAYS OF CHANGING VAPOR BACK TO LIQUID FOR RE-USE

In an electrical refrigerator, the vapor is compressed back into liquid by the use of machinery. This machinery, or moving parts, includes a motor, a pump, valves, pistons, and a compressor.



But in the Gas Refrigerator, the vapor is changed back to a liquid by first being passed through water. The water absorbs the ammonia. The mixture is then boiled by a tiny gas flame. The ammonia is driven off in the form of hot ammonia vapor. Cooled by passing through pipes, it condenses again into a liquid. *This entire operation has been performed without the use of a single moving part.*



STAYS SILENT  
LASTS LONGER

Servel

# GAS REFRIGERATOR WITH NO MOVING PARTS

You've heard many times that the Servel Gas Refrigerator has a simpler, basically different method of operation. Now you can see why Servel is different . . . why Servel can operate without making a sound and freeze without using a single moving part. The chart on the left tells the story.

Servel doesn't need a motor . . . pistons, pumps, valves, and compressors have no place in the Gas Refrigerator. There's nothing in the freezing system that makes annoying sounds like the humming and rattling so prevalent among mechanical refrigerators. Only a gas flame does all the work.

Today—amid the many noises of this modern

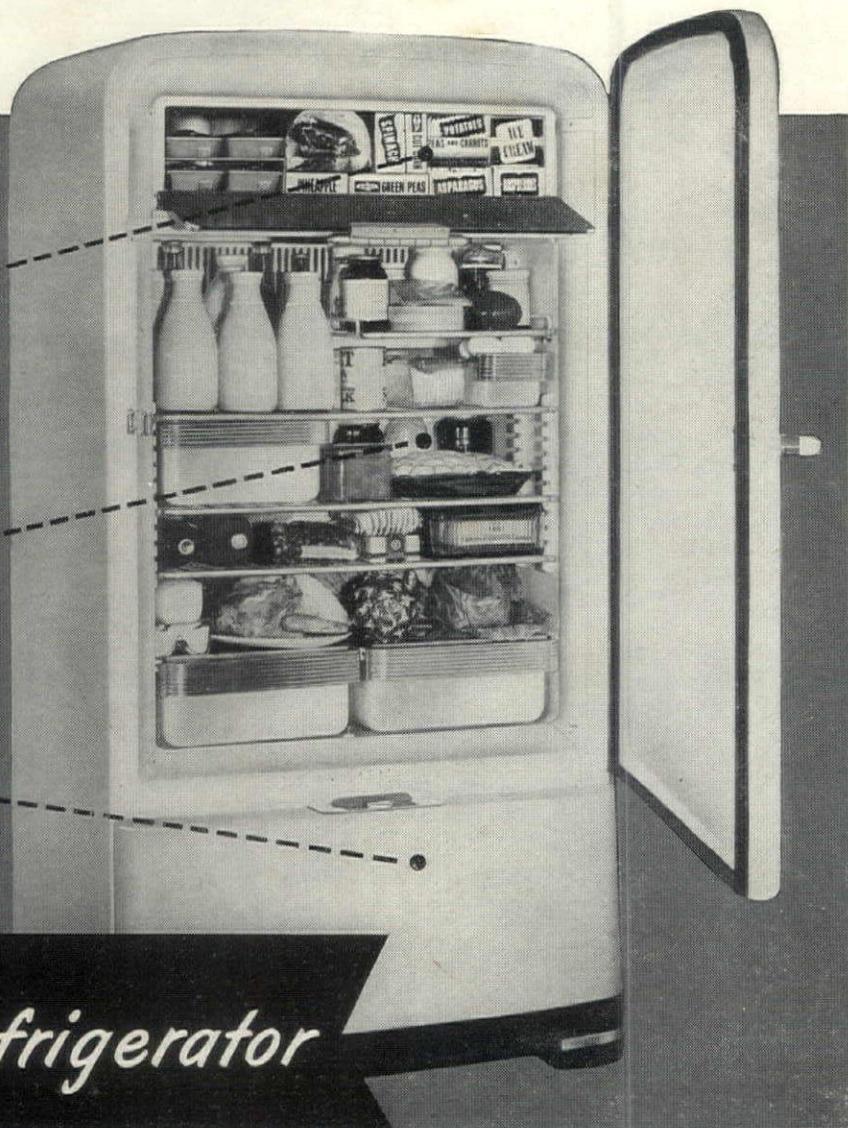
mechanical world—people are seeking silence . . . especially for their homes. When the housing shortage becomes less acute, many prospective tenants and buyers will ask for homes that are noise-free. That's why more architects and builders are specifying Servel when they order new refrigerators.

There's another reason, too. Users profit from Servel's long life and year-after-year operation economy. And you profit from its lasting dependability and low overhead costs. Repair and replacement bills remain exceptionally low. For complete information, consult Sweet's catalog . . . or write to Servel, Inc., Evansville 20, Indiana.

Big Frozen  
Food  
Compartment

Moist Cold  
Dry Cold

No Noise  
No Wear



The GAS Refrigerator

# Color Dynamics

Pittsburgh's modern painting method uses the energy in color as an aid in Color Therapy...speeds convalescence of hospital patients—increases efficiency of hospital staffs.



## Pittsburgh's new system aids you to suggest the right colors to use in hospitals!

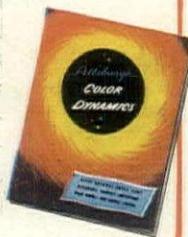
**A**n entire hospital that radiates warmth, cheerfulness, comfort. Patients' rooms and wards whose colors hasten recovery. Operating rooms that reduce eye fatigue. Nurses' stations that promote alertness and efficiency. Corridors and solariums that are cheerful at all times.

That's the kind of institution you can plan, too, if you use Pittsburgh's system of COLOR DYNAMICS in its decoration.

Working with medical men and psychologists, Pittsburgh's color experts and technicians have based this new painting method upon the reactions of human beings to color.

In many hospitals and sanatoriums, COLOR DYNAMICS has transformed drab and uninviting institutions into charming and attractive establishments in which patients have made speedier recoveries and entire staffs have done their work more pleasantly and efficiently.

You will find the story of COLOR DYNAMICS as an aid to Color Therapy explained in our new book on this subject. Send for your free copy today. Pittsburgh Plate Glass Company, Paint Division, Dept. AF-97, Pittsburgh 22, Pennsylvania.



### Paint RIGHT With Color Dynamics Paint BEST With Pittsburgh Paints!

The benefits of COLOR DYNAMICS are made more enduring when you use Pittsburgh's long-lasting quality paints. There's a PITTSBURGH PAINT for every need!

**WALLHIDE**—in three types: **PBX**—extra durable finish which can be washed repeatedly without streaking or spotting. **SEMI-GLOSS**—for higher sheen. **FLAT**—velvet-like finish for offices, libraries, dining rooms. These paints are enriched with "Vitalized Oils" for live-paint protection.

**WATERSPAR ENAMEL**—for furniture, woodwork, metal trim—its rich gloss resists marring and abrasion.

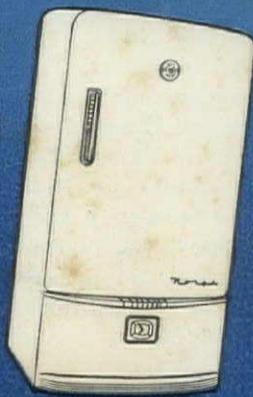
**FLORHIDE**—for floor surfaces. Quick-drying, tough, can be scrubbed frequently with soap solutions.



# PITTSBURGH PAINTS

PITTSBURGH PLATE GLASS COMPANY, PITTSBURGH, PA.

PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS



REFRIGERATORS



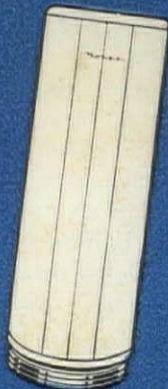
ELECTRIC RANGES



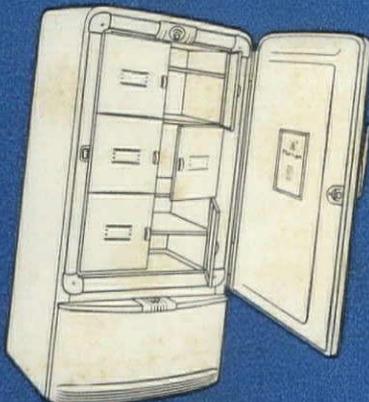
HOME HEATERS



WASHERS



ELECTRIC WATER HEATERS

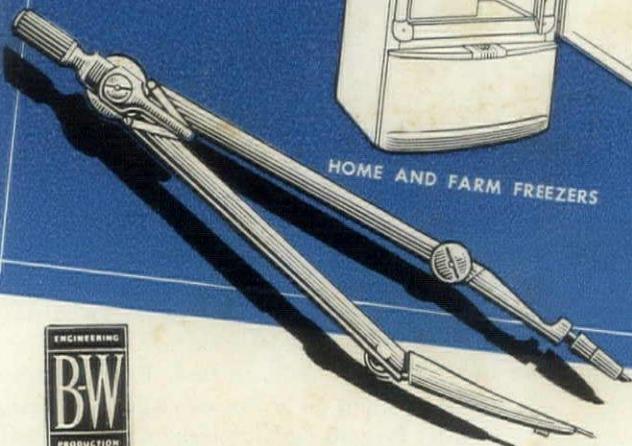


HOME AND FARM FREEZERS



GAS RANGES

# BLUEPRINT OF CUSTOMER SATISFACTION



Products of BORG-WARNER

Norge Division, Borg-Warner Corp.  
Detroit 26, Michigan

# SEE NORGE BEFORE YOU BUY

THE AIR YOU BREATHE SHOULD BE AS PURE AS THE WATER YOU DRINK



### ... again available!

Wall-switch operation of ILG "Built-in" Kitchen Ventilators is back again! Encased, lubricated-for-life auxiliary motor, actuated by wall switch, opens or closes outer door, automatically turning fan on or off. Simple, safe, reliable, quiet—nationally advertised—tested and proved in thousands of installations. One of three sizes, eight models of ILG Electric Ventilators. Write for Catalog 146, or phone nearby Branch Office (consult classified directory).



## VITALIZED VENTILATION

AND AIR CONDITIONING



**FREE!**  
Catalog 146 covers  
ILG Kitchen Ventilators, Night Cooling Fans, Ligairators, Self-Cooled Motor Propeller Fans. Free for the asking.

ILG ELECTRIC VENTILATING CO., CHICAGO 41, ILL.  
2899 North Crawford Avenue • Offices in More Than 40 Principal Cities

Send free copy Catalog 146

Name .....

Address .....

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

EVENING COURSES IN HOUSING, PLANNING AND REAL ESTATE will be given at Columbia University, New York City, during the coming fall and spring sessions. Seminar and lecture groups will be conducted by J. Marshall Miller, Planning Housing Associate, Columbia University; Frederick C. Planning Director of the Regional Plan Association of New York City; Hugh Pomeroy, Director of Westchester County Department of Planning; and Dewit Van Buren of the Home Title Guaranty Co. Registration for these courses is September 18-24.

THE UNIVERSITY OF NORTH CAROLINA, Chapel Hill, N.C., announces the continuation of its Department of City and Regional Planning established in 1946. This will confer a degree of Master of Regional Planning.

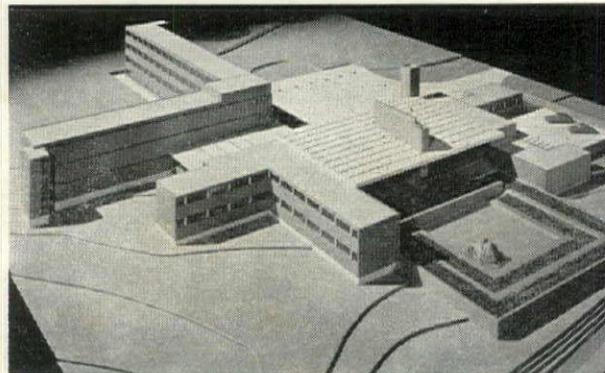
THE SCHOOL OF REAL ESTATE PRACTICE at Boston Business Institute offers a two-year program including field study in property law, principles of architecture and construction, appraisal and property management. Further information may be obtained from the school at 15 Commonwealth Street, Boston, Mass.

### BUILDING PREVIEWS



THE GEORGIA SCHOOL OF TECHNOLOGY has under construction a \$4,000,000 student housing project which will include an 8-story structure containing 156 apartments (see cut left) and seventeen 3-story buildings providing 156 units. The buildings—all of reinforced concrete construction—will give architects and engineers

an opportunity to study the cost and performance differences between radiant and convective heating systems in multi-story dwellings. Half of the 8-story apartment will be heated by each method as will identical buildings in the 3-story group. Results will be checked after making allowance for exposure. The North Carolina University Board of Regents is sponsoring this project which was designed by Stevens & Wilkinson, architects and engineers, of Atlanta, Ga. J. A. Jones Construction Co. is builder.



A NEW TYPE OF HOSPITAL for the Keeley Institute, Dwight, Ill. (which specializes in the care and cure of alcoholics) will undergo construction soon. Differing from the conventional hospital in that all its patients are ambulatory, this building will have 84 bedrooms, lounge, dining facilities for laboratory and medical rooms. Patients are free to come and go at will, but the wings are so designed that constant ventilation control over all building elements can be maintained by a man on duty. The reinforced concrete and brick structure will have radiant panel heating. (Continued on page 59)

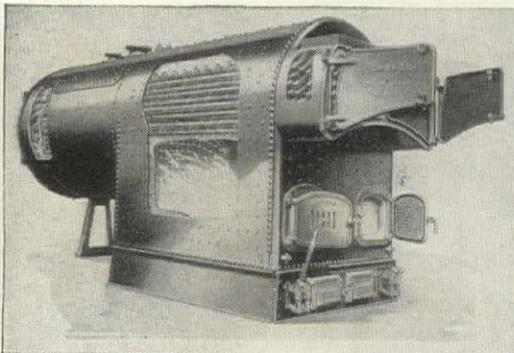
*Of Steel* **HAND TAILORED**



On these Spacing Machines, operated by skilled boiler-makers, rivet holes are "tailored" into heavy steel plate with an accuracy that's really uncanny.

# KEWANEE

## HEAVY DUTY BOILERS



Highly skilled boiler-makers . . . working with the most modern equipment in America's finest steel boiler plant . . . "hand tailor" into Kewanee Boilers that extra precision and stamina which makes them such outstanding performers.

*For OIL, GAS, STOKER or Hand Fired  
Convertible from one fuel to another quickly and easily*



Reg. U. S. Pat. Off.  
MEMBER



**KEWANEE BOILER CORPORATION**  
KEWANEE, ILLINOIS

Branches in 60 Cities—Eastern District Office: 40 West 40th Street, New York City 18

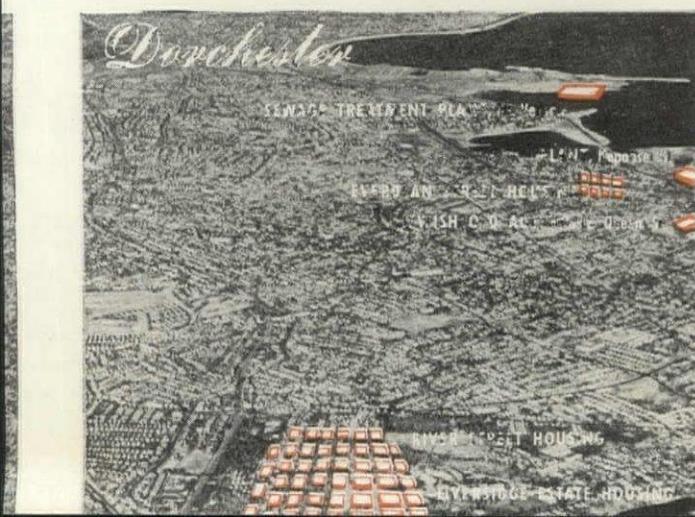
Division of **AMERICAN RADIATOR & Standard Sanitary CORPORATION**

**OVER  
75 YEARS  
BOILERMAKERS**





*Boston Harbor*



*Dorchester*

# In BOSTON, talk shifts to new building

Those whose picture of Boston has been framed by Mr. Marquand had best prepare to raise their sights. Boston is getting ready to build, and to build on a scale that will match, size for size, the other major U.S. cities—which is saying plenty.

We invite all of you to enjoy the fine experience of seeing our cities rebuilt. You may even learn to love the noise if you think of it as a sort of economic and social symphony.

The men who dominate this great nation-wide program—some 60,000 of them—will be too busy to watch the other fellows' buildings going up. But they have a better way to keep their eye on what is significant in building. They take time to study a magazine once a month—the FORUM. Long experience has taught them that FORUM editors pick the best and the newsworthy, present it clearly, completely, correctly.

Naturally, successful manufacturers of building products have discovered the FORUM, too. Year after year after year more of their advertising dollars are spent in the FORUM than in any other building magazine.



THE ARCHITECTURAL  
**FORUM**  
MAGAZINE OF BUILDING

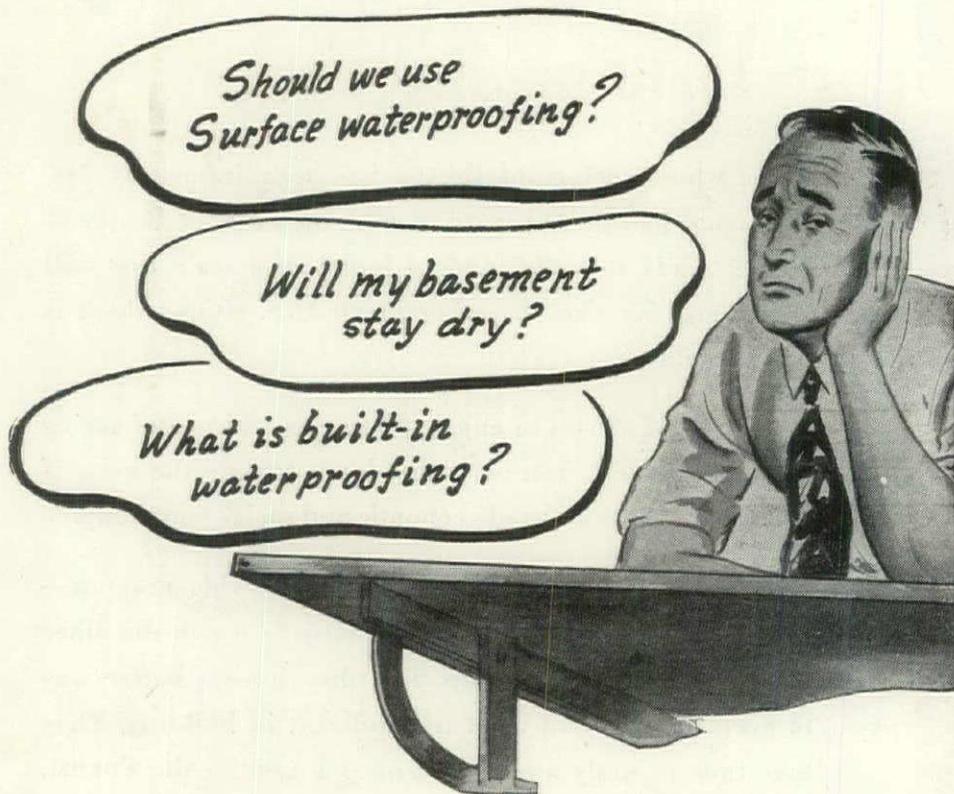
Building product manufacturers and their advertising agencies are invited to send for a new booklet "SOMETHING HAPPENS."

Address: THE ARCHITECTURAL FORUM, 350 Fifth Avenue, New York 1, New York

To those regularly engaged in any branch of building—design, construction, financing, distribution, ownership or management—the FORUM (published monthly) is available at the professional rate of \$5.50 (U.S. and Canada). Letterhead or other proof of occupation must accompany orders. Subscription to nonprofessionals, \$8.50 (U.S. and Canada). Foreign rates on application.

Address: THE ARCHITECTURAL FORUM, 540 North Michigan Avenue, Chicago, Ill.

## ANNOUNCEMENTS



### Are your clients bombarding you with WATERPROOFING QUESTIONS?



Today more than ever before, the public—your clients—are waterproofing conscious. For a ready reference, use Medusa Waterproofing literature. It tells the complete story of integral waterproofing, gives actual construction details, and shows why "built-in" waterproofing, made with Medusa Waterproofed Gray Portland Cement, is the best method to insure dry interiors.

This "built-in" waterproofing makes waterproofing jobs easy. Just specify Medusa Waterproofed Gray Portland Cement\*—the rest is automatic. That's because this cement has a waterproofing material mixed-in at the mill during manufacture. This means concrete made with Medusa Waterproofed Cement has the waterproofing "built-in" all the way thru. Waterproofing can't chip, peel, or crack because it is an integral part of the concrete. As long as there is concrete, there is waterproofing!

And Medusa "built-in" waterproofing is inexpensive—much less than the cost of the surface coats and repair bills. It requires no additional time or labor. It is mixed and placed exactly as regular gray cements, has the same structural strength, but gives lifetime waterproofing as a bonus to your clients.

Let Medusa Waterproofed Gray Portland Cement make your waterproofing job easy. Specify it for all below grade and all above grade concrete that must repel or retain water. Thousands of buildings—small homes to large plants, built in the past forty years—attest to the fact that Medusa "built-in" Waterproofing is lifetime waterproofing.

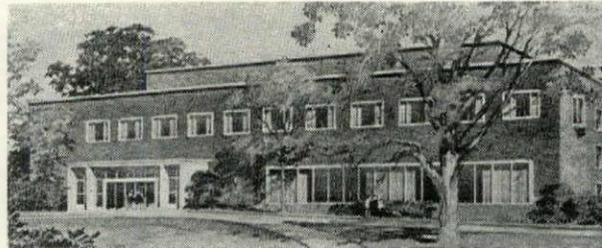
Send a postcard for your free copies of "Integral Waterproofing Explained" and "How To Waterproof Concrete, Stucco, and Masonry."

\*Where Medusa Waterproofed Cements are not available, use Medusa Waterproofing Paste or Powder.

## MEDUSA PORTLAND CEMENT CO.

1013 MIDLAND BUILDING • Dept. "D" • CLEVELAND 15, OHIO  
"FIFTY-FIVE YEARS OF CONCRETE PROGRESS"

heating. Schweikher & Elting of Roselle, Ill. are architects; Thomas Shaver, consulting structural engineer; and S. Lewis & Assn., consulting mechanical engineers.



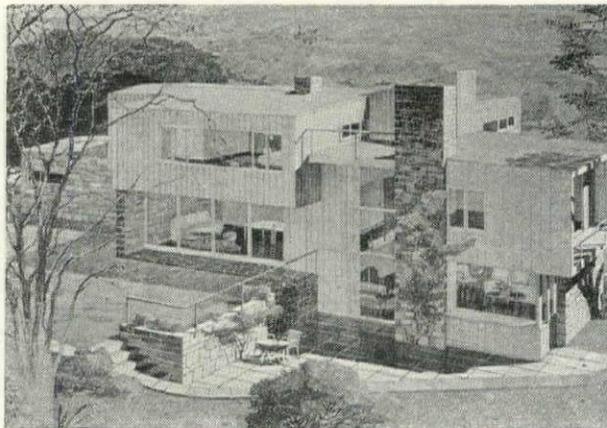
THE LAMONT LIBRARY FOR HARVARD UNIVERSITY undergirds (sketch above) will provide facilities for about 100 readers to circulate freely among its three floors of stacks. The air-conditioned, steel and concrete structure will also have several large reading rooms, seminar rooms, study alcoves and additional storage space in the basement for 400,000 books. Coolidge, Shepley, Bulfinch & Abbott, Boston architects, designed the library which will be finished in the fall of 1947.

### EXHIBIT

"VISUALIZING THE MODERN HOUSE," an exhibit at the Bertha Schaefer Gallery, New York City, centers about modern sketches and floor plans for four modern houses now under construction. It illustrates effective coordination of architecture with examples of current painting, sculpture, ceramics, textiles and furniture. Houses presented in the exhibit are by architects: Elder, Raymond & Breck; Jackson & Callender; Reisner & Urbahn (sketched below); and Edward Stone Associates. The interior designs as planned by Bertha Schaefer



incorporate furniture by Ames, Bings, Nelson and Wormley; paintings by Will Barnet, Ben-Zion, Siv Holme, Vasilieff; and sculptures by Wolf Behl, Wharton Esherick, Michael Lekakis and Seymour Lipton (planned left). Supplementary landscape designs by Evelyn Poehler, and samples of wallpaper and draperies now on the market round out the presentation. After a New York showing from September 15 to October 11, the exhibit will be on view at the University of Virginia, Charlottesville, Va.



### AWARDS

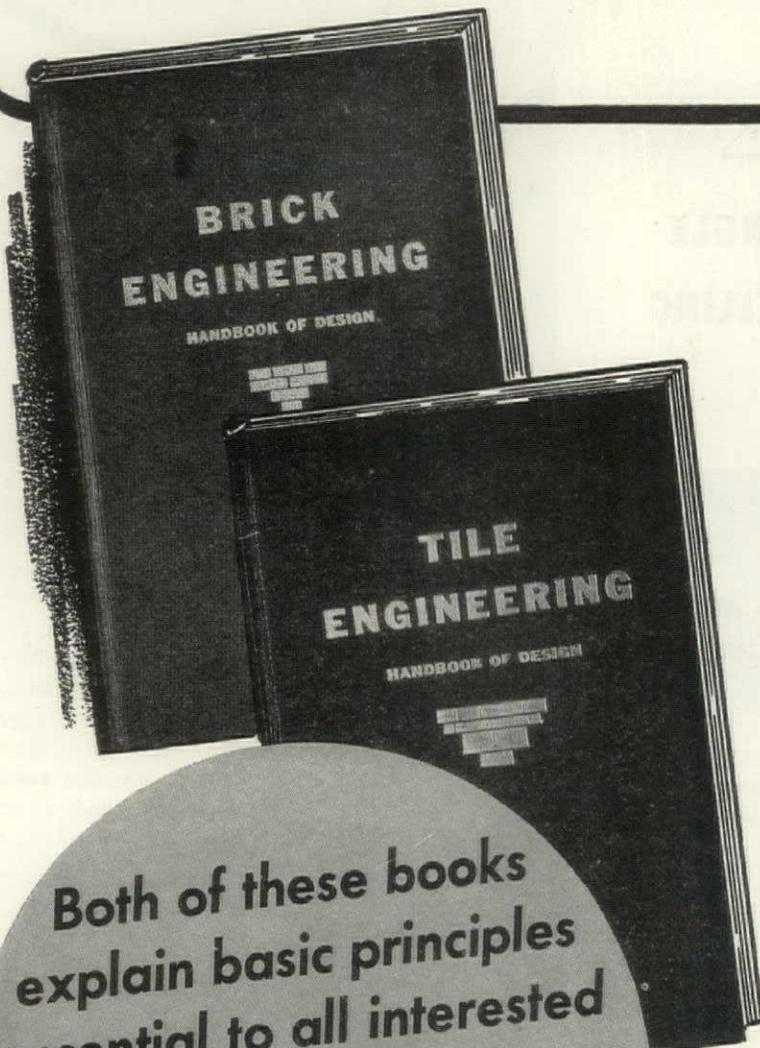
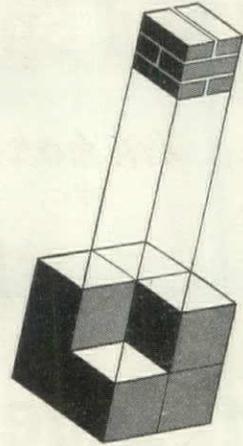
THE AMERICAN ACADEMY in Rome recently announced the winners of the 1947 Rome Prize Fellowships, the first to be awarded since 1940. The two (Continued on page

Structural Clay Products Institute offers you

# TWO NEW BASIC BOOKS

*featuring*

# MODULAR COORDINATION



The Engineered Housing Program is made possible by modular coordination. The first complete industry to accept the idea of modular dimensions for building materials sizes was the Brick and Tile Industry.

These two books—"Tile Engineering" and "Brick Engineering" are basic handbooks for modular coordination—the new scheme of design. They are essential to all who employ modular coordination in their work . . . for the smallest dwelling to the largest building.

Each book has over 400 pages of helpful information. Included are brick and tile masonry, footings, foundations, floors, walls, gardens, R-B-M columns and piers, moisture control, estimating tables, standard specifications and many other details. Each is well printed and bound—well illustrated.

Send for your copies today! Price: \$2.50 per copy postpaid.



Both of these books explain basic principles essential to all interested in the design of the **ENGINEERED HOUSE** or larger construction **\$2.50 each**

STRUCTURAL CLAY PRODUCTS INSTITUTE, Dept. AF-9  
1756 K Street, N. W., Washington, D. C.

Please send me copy of "Brick Engineering"   
Please send me copy of "Tile Engineering"

I enclose \$ \_\_\_\_\_

Name \_\_\_\_\_ Profession \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

*Wherever*  
**Floor-Plan Flexibility,**  
**Time and Space-Saving**  
*are important—*



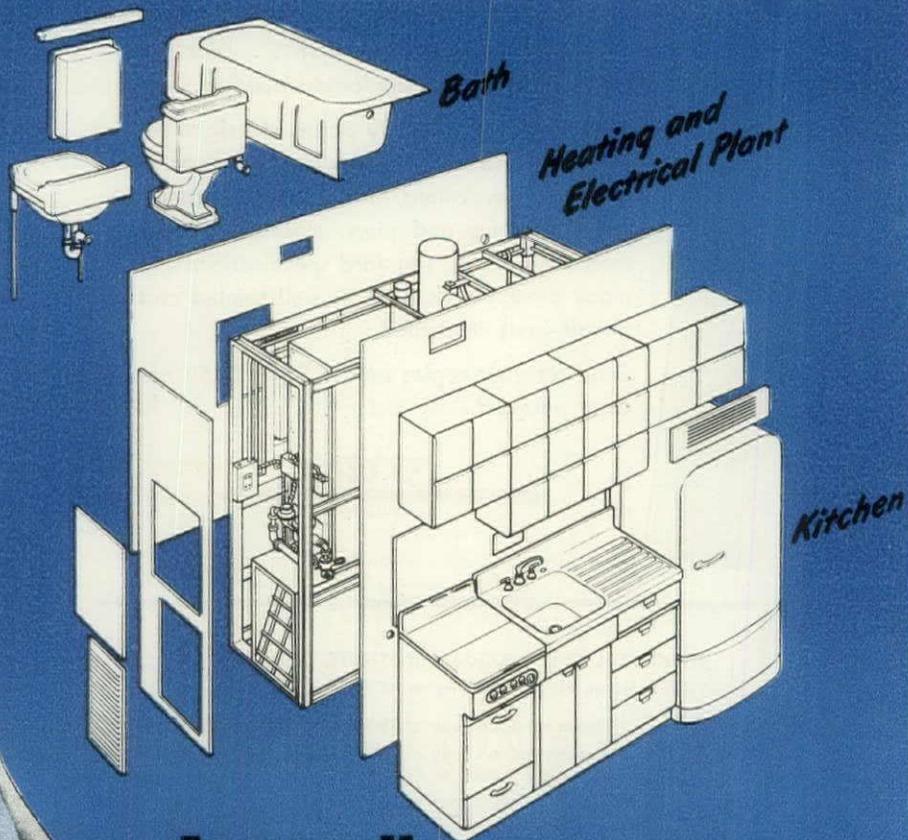
*The* **Ingersoll**  
**UTILITY UNIT**  
TRADE MARK

**IS SAVING WEEKS IN SINGLE  
 HOME AND MULTIPLE-DWELLING  
 CONSTRUCTION**

**1 PACKAGE  
 PURCHASE  
 INSTALLATION**

Architects and builders everywhere are specifying the Ingersoll Utility Unit for single homes and large building developments because it is:

- A single-engineered assembly of the fixtures, appliances, controls and fittings of kitchen, bath, room and heating plant, plus all basic plumbing and electrical lines.
- Adaptable and flexible to a wide variety of individual plans and needs.
- Complete—eliminates costly, time-consuming specifications—everything comes with one purchase.
- Compact—requires less than 80 square feet of floor space providing extra cubage without restricting design.
- Convenient—can be installed before, during or after construction of building framework—no time lost waiting.
- Available for immediate delivery . . . either gas or oil heating plants.
- Backed by Ingersoll distributor service . . . assures complete owner satisfaction.
- Economical—cuts building time from three to four weeks.



**Ingersoll**  
**UTILITY UNIT**  
TRADE MARK

**Ingersoll Steel Division**  
 Borg-Warner Corp., Chicago 4, Illinois

**INGERSOLL STEEL DIVISION**

Borg-Warner Corp., Dept. F 9,  
 310 S. Michigan Ave., Chicago 4, Ill.

Please send me illustrated booklet showing details of the complete Ingersoll Utility Unit.

Name .....

Firm .....

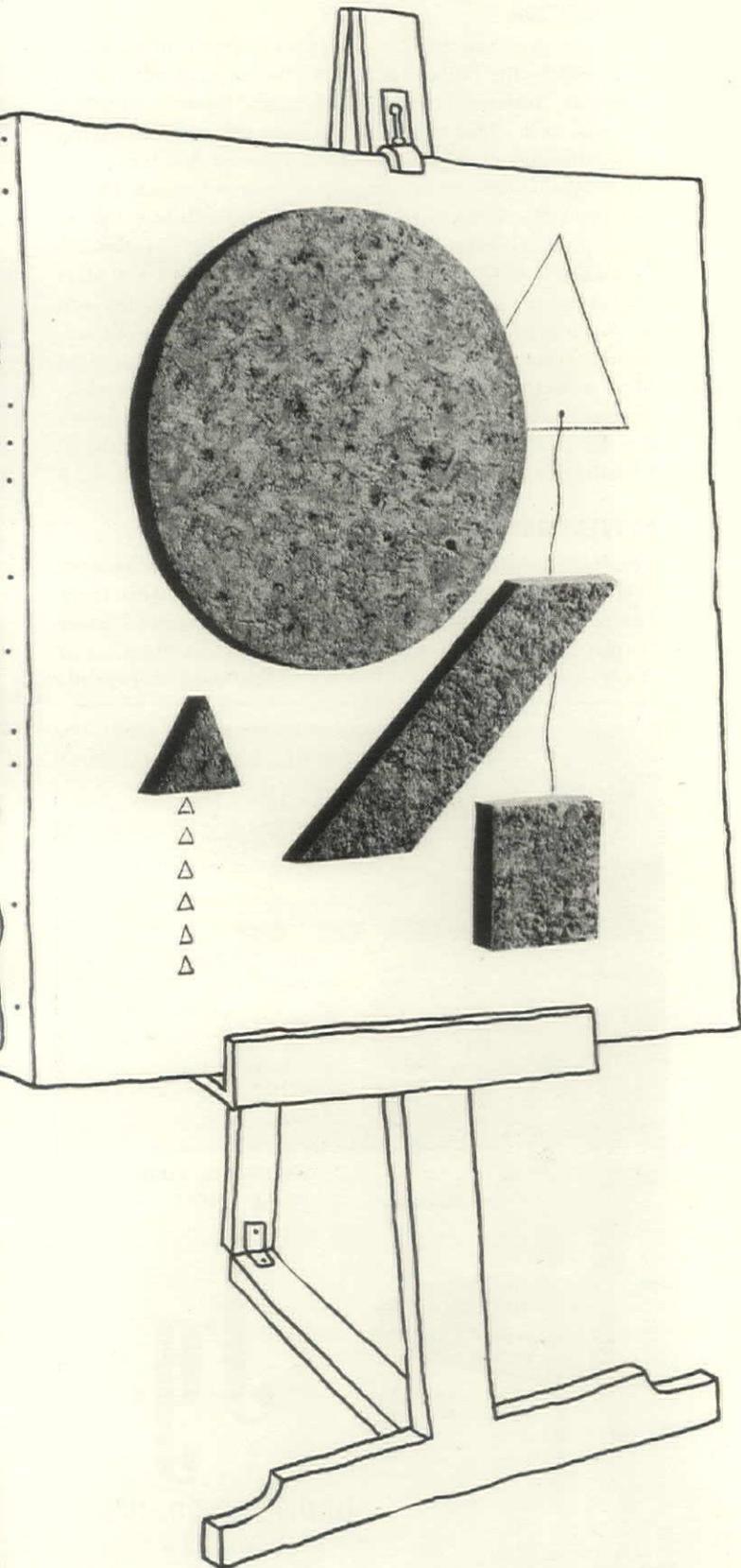
Address .....

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



● So you're convinced now that the building picture is really "modern". But how do you personally feel about it? Do you still have some lingering fondness for the charm and solid comfort of the Astor and Vanderbilt mansions? Or are you a bright young fellow

## so you think the picture's modern?



with brilliant new dreams? Well, there's a bridge between . . . Kencork, pride of the rich at the century's dawn and "discovery" of the smartest modernists today.

Comfort? Man has yet to invent a floor or wall covering that offers so much. It provides the most resilient smooth-surface flooring known. It is wonderfully quiet underfoot. On floors and walls it acts as a sound wave "cushion". It has definite insulating values, making rooms warmer in winter, cooler in summer. It is warm and dry to the touch and, being cork, just sheds water. It is naturally non-skidding. And it is so durable some forty year old installations are still perfect.

But the modernists really use Kencork on floors and walls because it *looks* so very modern. The rectangular patterns formed by these tiles have the interesting yet "clean" lines so typically modern. They can be large or small as required. And the soft golden browns and leafy tans of these baked tiles add just the restrained color wanted, yet blend with any color of fabric or accessory used. On walls it even has tactile interest.

Yes, Kencork is certainly modern—in fact, it's the "newest" material preferred by many successful building men. Have *you* rediscovered Kencork yet? Ask your flooring contractor—or contact your nearest Kennedy office.

### DAVID E. KENNEDY, INC.

69 Second Avenue, Brooklyn 15, N. Y.

324 Fourth Avenue

1211 NBC Building

1355 Market Street

Bona Allen Building

452 Statler Building

58 E. Washington Boulevard

Pittsburgh 22, Pa.

Cleveland 14, Ohio

San Francisco 3, Cal.

Atlanta 3, Ga.

Boston 16, Mass.

Chicago 2, Ill.

**KENCORK**  
®  
*floors and walls*

## ANNOUNCEMENTS

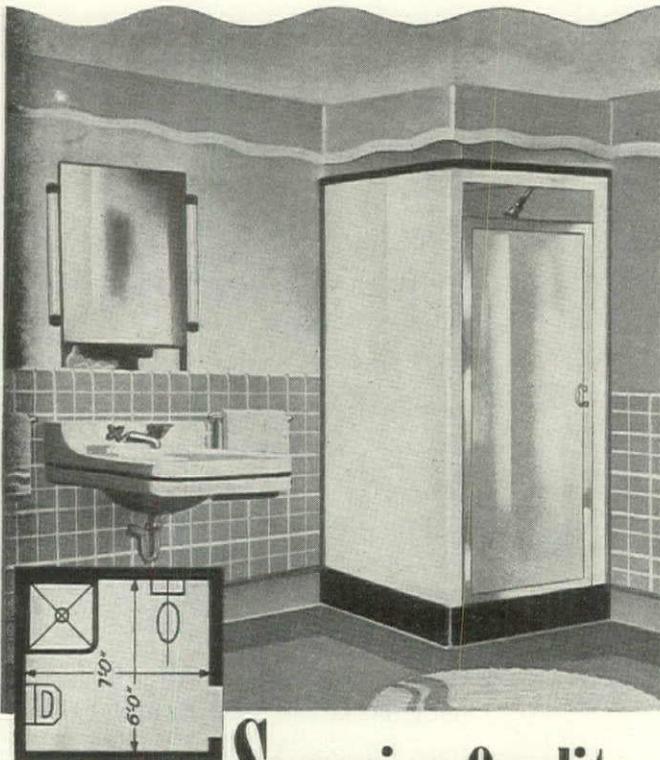
architectural fellowships were given to Frederic Coolidge of Cambridge, Mass. and Charles Wiley of Chicago, Ill. Charles Currier of West Hartford, Conn. received a fellowship in Landscape Architecture. Walker Cain, New York architect, and Fred Edmondson, landscape architect of Middlebury, Vt., will join the Academy group this fall on fellowships previously awarded but delayed because of the war.

### COMPETITION

CONTESTS IN STAGE SET DESIGN AND PLAYWRITING are being sponsored by the Philadelphia Art Alliance, a member of the American National Theater Association. Open to any professional or amateur within a 75-mile radius of Philadelphia, the contests offer prizes of \$100 for first award, \$50 for second, \$10 honorable mention in each group. State set models (which may be of any classic or contemporary play) will be exhibited in the Art Alliance Galleries from November 17 through December 7, 1947. If in the opinion of the judges any plays (either one-act or three-act) are considered worthy, they will be recommended for professional production at the Experimental Theatre in New York. Deadline for submission of play manuscripts is October 15; for stage set models, November 16. Further information about any of the contests may be obtained from the Art Alliance, 251 South 18th St., Philadelphia 3, Pa.

### CONVENTIONS

THE ILLUMINATING ENGINEERING SOCIETY will hold a National Technical Conference in New Orleans, September 15-19. The program will include discussion of "Fluorescent Fixture Development" and "Correlation of Brightness Ratios and Decorations." *(Continued on page 70)*



## Superior Quality and Durability in Bathe-Rite SHOWER CABINETS

ASSURE YOUR CLIENT  
GREATER SATISFACTION . . .

Bathe-Rite Shower Cabinets offer you modern stream-lined cabinet beauty that compliments the finest bathrooms . . . Quality, appearance, durability that means client satisfaction and enthusiasm throughout long years of service . . . A quality

plumbing fixture with engineered design and construction features, light to handle and ship, saves time and labor on erection and installation.

### Showers for All Needs . . .

The complete Bathe-Rite Line offers quality shower cabinets in all sizes, styles, prices to fit every time of need—in homes, hotels, clubs, institutions, public buildings, factories, tourist cabins, camps—all built to the same high standard of excellence that has made Bathe-Rite quality the leader in modern shower facilities.

Prices, materials and installation available from your plumbing contractor

*Write* for complete catalog showing modern bathroom designs, drawings, and installation suggestions.



### MILWAUKEE STAMPING CO.

BATHE-RITE DIVISION

8025 South 72nd Street • Milwaukee 14, Wisconsin  
Our 53rd Year of "Quality" Production

### MULTI-LINGUAL CONFERENCE ROOM UNITED NATIONS, LAKE SUCCESS, N. Y.



ARCHITECTS: VOORHEES,  
WALKER, FOLEY & SMITH



# J.g.

FURNITURE CO., INC.  
MANUFACTURERS

SHOW ROOM

318 EAST 32ND ST., NEW YORK 16, N. Y.

# The PLANNING BOARD



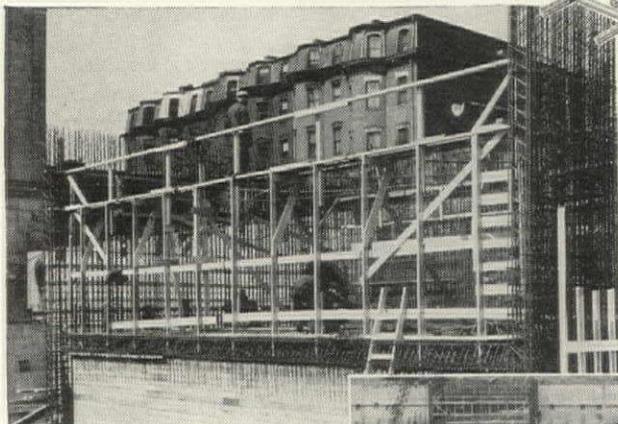
The Truscon Planning Board Says, "Normal delivery on many of our Steel Building Products is now possible. In fact, on all material for which raw

material is readily available, a normal rate of production and delivery is currently in effect." However, since production and delivery schedules change from week to week, we suggest you contact the nearest Truscon sales office for the latest information.

## 109 Tons of Truscon Welded Bank Vault Reinforcing in this job

When completed, the new John Hancock Mutual Life Insurance Company Office Building will be one of the most beautiful commercial buildings in Boston, Mass. And behind that handsome exterior will be a great measure of fortified strength to guard the physical and financial assets of the company. The bank vault in the John Hancock struc-

ture is a masterpiece of design in impregnable strength. It required 109 tons of Truscon Welded Bank Vault Reinforcing to build this unusual part of the building. Contrary to the general run of vaults, the John Hancock vault extends from the sub basement floor through the basement to the first floor. This required that the bank vault walls act as supporting walls for the basement and first floors in that particular part of the building. The dual need for structural strength and vault protection was met adequately by the distinctive design of Truscon Welded Bank Vault Reinforcing.



Truscon Welded Bank Vault Reinforcing as used in the John Hancock Life Insurance Co., Building, Boston Mass. Cram & Ferguson, Architects. Turner Construction Co., Builders.

Truscon Concrete Reinforcing Bar as used in the Heavy Foundation of the John Hancock Life Insurance Co., Building.

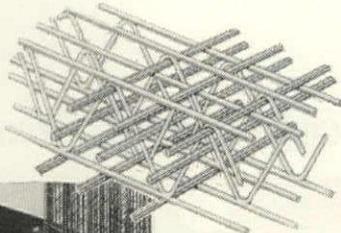


ture is a masterpiece of design in impregnable strength. It required 109 tons of Truscon Welded Bank Vault Reinforcing to build this unusual part of the building. Contrary to the general run of vaults, the John Hancock vault extends from the sub basement floor through the basement to the first floor. This required that the bank vault walls act as supporting walls for the basement and first floors in that particular part of the building. The dual need for structural strength and vault protection was met adequately by the distinctive design of Truscon Welded Bank Vault Reinforcing.

Where protection against unauthorized entry into a single room or an entire structure is paramount, use Truscon Welded Bank Vault Reinforcing. It assures maximum economy in the placing of construction materials, maximum efficiency of materials in resisting

## 1200 Tons of Truscon Concrete Reinforcing Bars Also Used

The details of the foundations for the new John Hancock Life Insurance Company building also are interesting. Truscon furnished 1,200 tons of concrete Reinforcing Bars for the foundation slab and foundation walls. The foundation measures approximately 250 feet along each of the four walls. The foundation slab is 10 feet thick, supported on H piles. Some of these piles extend 120 feet below the bottom of the slab, to fill the requirement for resting on solid rock. The foundation walls are approximately 30 feet high. The 10 feet thick foundation slab is reinforced with 1 1/4" square bars both ways

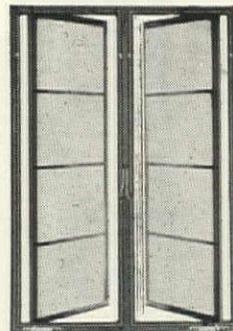


top and bottom, spaced on an average of approximately 10" on center.

Truscon Steel Bars for reinforcing are applicable to a wide range of concrete work, such as concrete slabs, beams and girders, columns, walls, and footings; in the construction of buildings, bridges, tanks, and all other concrete structures subject to tension and compression stresses. Write for details.

## Residential Steel Casements

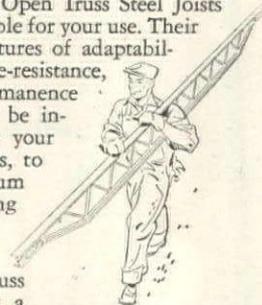
In rooms where windows are opened and closed frequently or where ventilation needs are great and varied, Truscon Residence Steel Casements fill a utilitarian need in addition to being decorative. Side hinged casements can be opened to a position that will invite or retard the flow of air as desired. High, small or unusually placed window openings all become more useful and attractive when fitted with Steel Casements. Screens and storm sash are available at reasonable prices. Write for details.



Early in the 60's of the last century, Monier, a French gardener, conceived the novel idea of making flower pots and basins out of cement mortar embedded with wire, in order to increase the strength and simultaneously decrease the thickness and consequently the overall weight of the containers. To F. Joseph Monier, sometimes called the father of reinforced concrete, is given the credit for the invention of this comparatively new form of construction, probably because the patent issued him in 1865 constituted the first officially recorded endeavor involving the principle of reinforcing concrete.

## Prompt Delivery on Steel Joists

Truscon "O-T" Open Truss Steel Joists are again available for your use. Their outstanding features of adaptability, economy, fire-resistance, safety and permanence can once more be incorporated into your building plans, to provide maximum values in building construction.



The Truscon "O-T" Open Truss Steel Joist is a Warren truss having top and bottom chords of wide tee-shaped members and a plain round continuous web member. The bottom chord is continuous from end to end of joist and bent up at the ends to form the bearings. The underslung design of the bearing permits maximum head-room under the supporting girders. The open web allows the passage of pipes and conduits in any direction. Write for full details.

## New Literature

A new 32 page catalog on Truscon's complete line of steel doors is now available. Includes illustrations, installation details and specifications. Write for your copy today.



**TRUSCON**  
**STEEL COMPANY**  
YOUNGSTOWN 1, OHIO  
Subsidiary of Republic Steel Corporation



# THE WONDER WOOD OF 1000 USES • MASONITE PRESDWOOD

Won't split, splinter, snag, dent or corrode

Can be bent permanently to curved designs

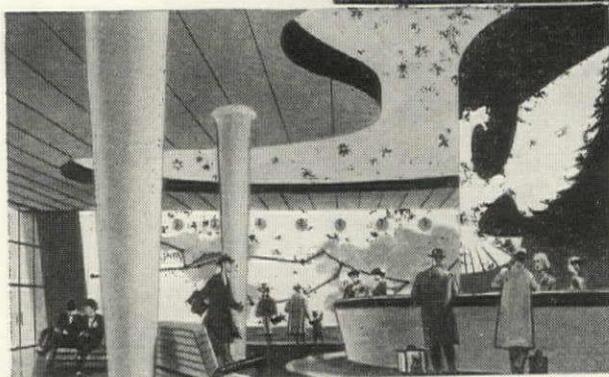
Takes almost any applied finish

Great structural strength

Resists moisture permanently—no tendency to warp

Can be sawed, planed, routed, beveled, laminated

Worked easily with carpenters' tools



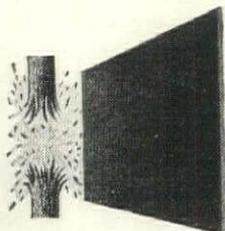
Presdwood is used extensively in construction of modern interiors. It combines a high degree of beauty, smart styling and practical utility.

Architects . . . designers . . . builders — here's the material to fire your imagination! Time-proved Masonite\* Presdwoods\* combine beauty, durability and strength — perhaps more useful characteristics than any other basic material. Unusual effects are possible when you use this versatile hardboard for curved surfaces. It takes an almost unlimited variety of finishes, too. Presdwood is made from natural wood, refined to a better, stronger, wonder wood. Its dense, smooth panels can be applied easily and quickly. Progressive lumber dealers have Presdwood — Untempered, or Tempered to extra hardness. For complete technical data, write Masonite Corp., Dept. AF-9, 111 W. Washington St., Chicago 2, Ill.

THE LEADING HARDBOARD

# MASONITE PRESDWOOD

Reg. U. S. Pat. Off.



FROM EXPLODED WOOD TO VERSATILE HARDBOARD

\*Trade-marks Reg. U. S. Pat. Off. "Masonite" signifies that Masonite Corporation is the source of the product.

## ANNOUNCEMENTS

*Another Matched Set of*  
**CHROMEDGE**  
 Reg. U.S. Pat Off.

**Metal Trims**

For every  
Point of  
Application

For all Gauges  
of coverings  
up to 1/2"

You'll find trims for *every* need in the big line of *over 450* Chromedge stainless steel and extruded aluminum moldings. The *matched* series at right adds a modern, *uniform* finish to wall-board installations, on corners, wainscot, cove base, and wall paneling—from *floor to ceiling!* Available for all wall and floor materials. Bright or satin finish, or in B & T's "rub-proof" Chromalite finish.

NEW complete "Builder's Guide" to Chromedge moldings for every purpose. Your copy of this *planning aid* is ready to mail as soon as we hear from you.



**The B & T Metals Co.**  
 Columbus 16, Ohio

*Distributed through Authorized Wholesalers Only*

THE CONVENTION OF THE SOCIETY OF MOTION PICTURE ENGINEERS at the Hotel Pennsylvania, New York, from October 20-24, will feature a Theater Engineering Conference and an Educational-Scientific Exhibit.

WESTCHESTER COUNTY, N. Y. will hold a Better Homes Exposition in White Plains Auditorium, October 14-19.

THE NATIONAL HOTEL EXPOSITION will be on view at the Grand Central Palace, New York November 10-14.

### APPOINTMENTS

ARTHUR DEAM, Professor of Design at University of Pennsylvania, has been appointed Chairman of the Department of Architecture.

MARION ROSS and THEODORE REYHNER have recently been named members of the staff of the University of Oregon School of Architecture.

ELI CONSTANTINE is now a member of the architectural firm of O'Hara, Hedlander & Edson, Greenwich, Conn.

WILLIAM EDIE AIA announces that he is associated with Bamberger & Reid, 417 Market St., San Francisco 5, Calif.

O. D. PECORA has been named Account Executive of the Store Department Unit of Ken White Associates, Industrial Designers, New York City.

BERNARD McRONALD is now General Sales Manager for Kurt Versen Co., lighting equipment firm, Englewood, N. J.

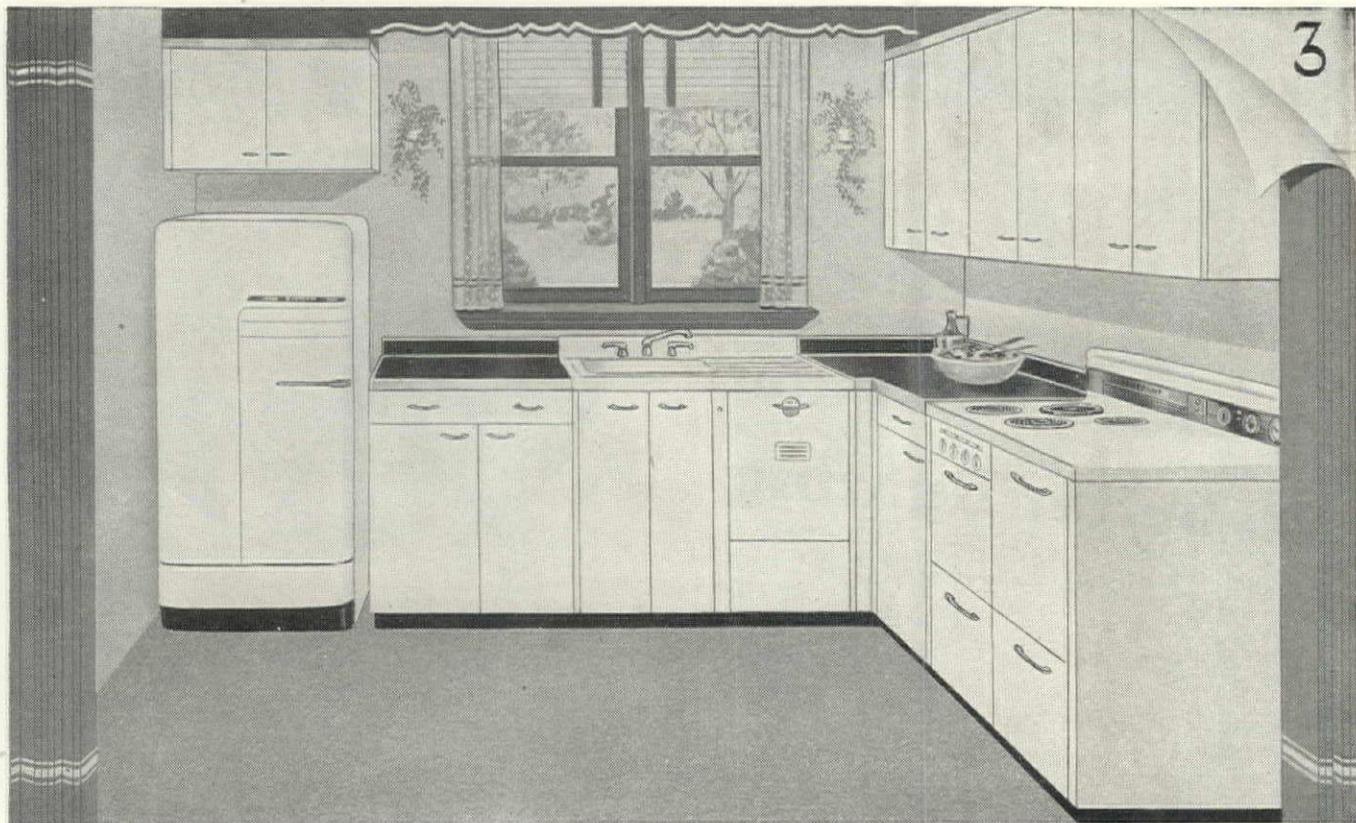
### NEW OFFICES

W. W. MEYERS RA and R. A. KRIDER RA with F. D. ELLENBERGER RE are associated in architectural practice at 407 Commerce Bldg., Erie, Pa. *(Continued on page 74)*

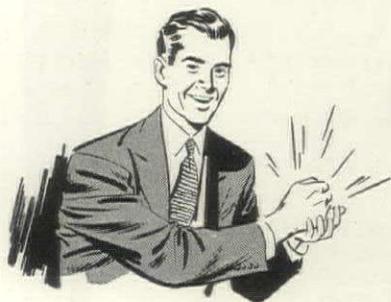
CONTEMPORARY  
LIGHTING

kurt versen  
company

ENGLEWOOD, N. J.



No. 3 in the important "America Picks Its Favorite Kitchen" Series



## Everybody's pointing to Hotpoint and its inquiry-pulling "DANDELION" Kitchen

### Farsighted Builders and Architects Capitalize on this Popularity!

**H**OTPOINT kitchens like the little "Dandelion" plan pictured here receive more fan mail than a Broadway leading lady! Thousands of inquiries are received by the Hotpoint Kitchen Planning Service—and each one represents a potential client for you! Powerful national advertising has stressed that there is a plan to fit every financial and physical requirement so your field is wide open! These cheerful, convenient kitchens with their time- and labor-saving appliances can do much to add to your prestige in building homes that have the luxuries of tomorrow!

**HOTPOINT CAN HELP YOU.** The Portfolio of Personalized Kitchen Plans is prepared especially to offer helpful suggestions on kitchen planning and installation. You'll find advice from Hotpoint architects, engineers and home economists, plus handy short cuts that make your work easier and more economical. Send for your copy. It will be an invaluable aid for years to come.



The Hotpoint Institute  
5651 West Taylor Street, Chicago 44, Illinois

Without obligation, please send me your *Portfolio of Personalized Kitchen Plans*. This offer available to architects, builders and contractors only — in the United States, Territories of Hawaii and Alaska.

Name \_\_\_\_\_

Firm Name \_\_\_\_\_

Address \_\_\_\_\_

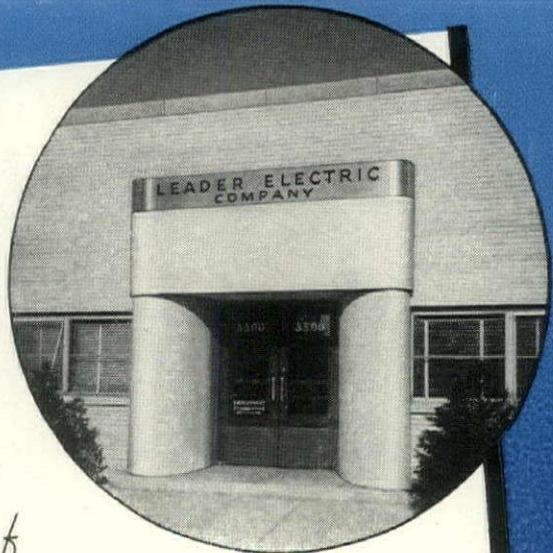
City \_\_\_\_\_ State \_\_\_\_\_

**Hotpoint**  
HOTPOINT INC. A GENERAL ELECTRIC AFFILIATE

# Leader

opens a **NEW** door  
to better lighting

... with a competent staff of  
illumination engineers to serve you



Conrad F. Bond  
7804 Linden Rd.,  
Wyndmoor  
Philadelphia 18, Penn.

Frank W. Collins & Co.  
788 Spring St. N.W.  
Atlanta, Ga.

Paul F. Douty  
16 E. Franklin St.  
Baltimore, Md.

R. G. French  
1221 Baltimore  
Rm. 715 Midland Bldg.  
Kansas City 6, Mo.

General Products,  
10228 98th St.  
Edmonton, Alberta, Can.  
W. C. McCormack, Mgr.

W. A. Goll & Associates  
1820 Harney St.  
Omaha 5, Nebr.

H. S. Gregory  
1511 Louisiana  
New Orleans 15, La.

Harris-Hanson Co.  
427 N. Euclid Ave.  
St. Louis 8, Mo.  
H. H. Harris  
K. O. Hanson

Heron Electric Sales  
RKO Bldg., Radio City  
New York 20, N. Y.  
Mal Heron  
R. P. Forsyth

R. E. Jacobs  
3520 E. Fall Creek Blvd.  
Indianapolis, Ind.

Robert E. Lawton  
P.O. Box 292  
Bloomfield, N. J.

A. A. MacPherson  
585 Boylston Ave.  
Boston, Mass.

D. C. McCabe  
Park Hotel  
Great Falls, Mont.

Harry D. Morton  
Calif. Industrial Sales  
1406 S. Grand Ave.  
Los Angeles 15, Calif.

Willis H. Murphy  
4520 N. Woodruff Ave.  
Milwaukee 11, Wisc.

Cam Norton Co.  
2261 Glenwood Ave.  
Toledo 10, Ohio  
John O. Garrett  
Ernest Buehrer

Ray A. Paynter  
7 Whitney Ave.  
New Haven, Conn.

Richards & Lancaster  
Alvarado Hotel  
Albuquerque, N. Mex.  
Hastings Richards

G. L. Roof  
521 Corona Ave.  
Dayton, Ohio

Harold A. Roseberry  
322 Stephenson Bldg.  
Detroit 2, Mich.

S. T. Schoolar & Co.  
5 Shockoe Slip  
Richmond, Va.  
Lewis Crews

Charles L. Schwab  
& Associates  
303 Commerce Bldg.  
4th & Wabasha Sts.  
St. Paul 1, Minn.

Sillcox International  
Corporation  
70 Pine St.,  
New York, N. Y.  
H. Allen Sillcox

Stover & Rust, Inc.  
4401 Centre Ave.  
Pittsburgh, Penn.  
C. A. Stover  
C. R. Smiley  
R. S. Holt

L. R. Ward  
2711 Commerce St.  
Dallas, Texas

W. W. Wheat & Son  
560 First Ave. S.  
Seattle 4, Wash.  
D. M. Wheat

Leader Electric Co.  
2040 Livingston St.  
Oakland 6, Calif.  
Perry B. Miller

Walter Clinton,  
% Ward & Company  
932 M. & M. Bldg.  
Houston, Texas

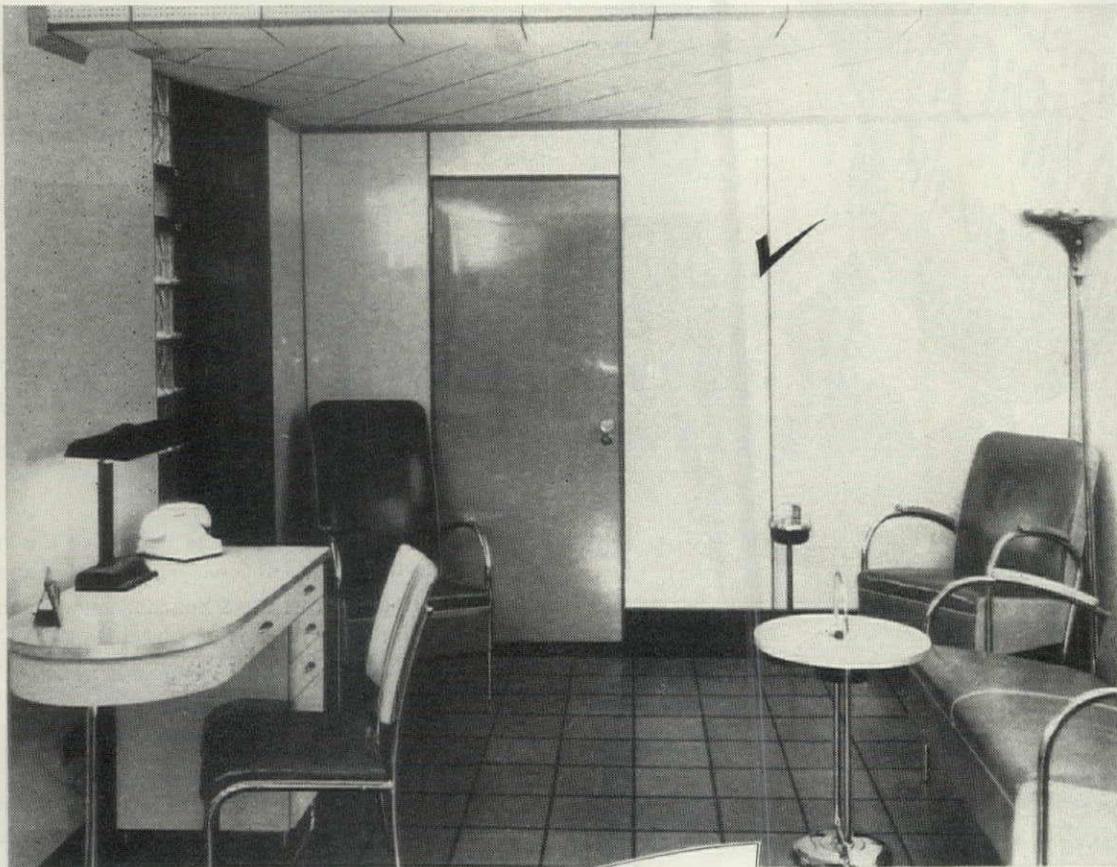
Edgar H. Hammond, Jr.  
127 Brevard Court  
Charlotte, N. C.



**LEADER ELECTRIC COMPANY**  
3500 N. KEDZIE AVE. CHICAGO, ILL.  
WEST COAST FACTORY • 2040 LIVINGSTON ST. OAKLAND 6, CALIF.



Leader's New Home  
Recently completed, with 50,000  
square feet of completely modern  
manufacturing facilities for Ameri-  
ca's finest fluorescent fixtures.



*Prescription  
for Perfection*

plan on  
*Marlite*  
walls

**I**nteriors that meet the most rigid requirements for sanitation, yet retain the warmth and cheerfulness that benefit patients and staff alike . . . that's the prescription for perfection in hospital interiors. Planning interiors that perform this double-duty service is easy—just specify Marlite plastic-finished

wall and ceiling panels. Wherever sanitary, colorful interiors are needed . . . plan now on modern, hygienic Marlite. Wide range of colors and patterns plus unusual flexibility of material give full freedom to your architectural ingenuity. Although production has reached an all-time high, the tremendous demand for Marlite makes it necessary to continue to allocate deliveries for the present.

MARSH WALL PRODUCTS, Inc.  
901 Main Street,  
DOVER, OHIO



*Marlite*  
REG. U. S. PAT. OFF.  
PLASTIC-FINISHED  
**WALL PANELS**

FOR CREATING BEAUTIFUL INTERIORS

## ANNOUNCEMENTS

CHLOETHIEL WOODARD SMITH AIA is resuming practice at 814 Seventeenth St., NW, Washington 6, D. C.

ALFRED PARKER, architect, has opened an office at 2921 SW 27th Avenue, Miami 33, Fla.

LYOUD KNUTSEN, architect, until recently Colonel in the U. S. Army, has resumed practice at 527 Hoeschler Bldg., La Crosse, Wis.

JOSEPH BARROW, announces that he is practicing architecture at 713 West Illinois St., Urbana, Ill.

LILLIAN GARRETT has opened a studio for the design and handloomng of contemporary textiles at 5630 Blackstone, Chicago 37, Ill.

CORTLAND ENGINEERING CO. is now in offices at 5 Beekman St., New York 7, N. Y.

THE WALTOM CONSTRUCTION CORP., general contractors, have opened a new office at 124 W. 30th St., New York, N. Y.

WILLIAM RAFFEL, builder of scale models and dioramas, is now at 55 E. 9th St., New York 3, N. Y.

### CHANGES OF ADDRESS

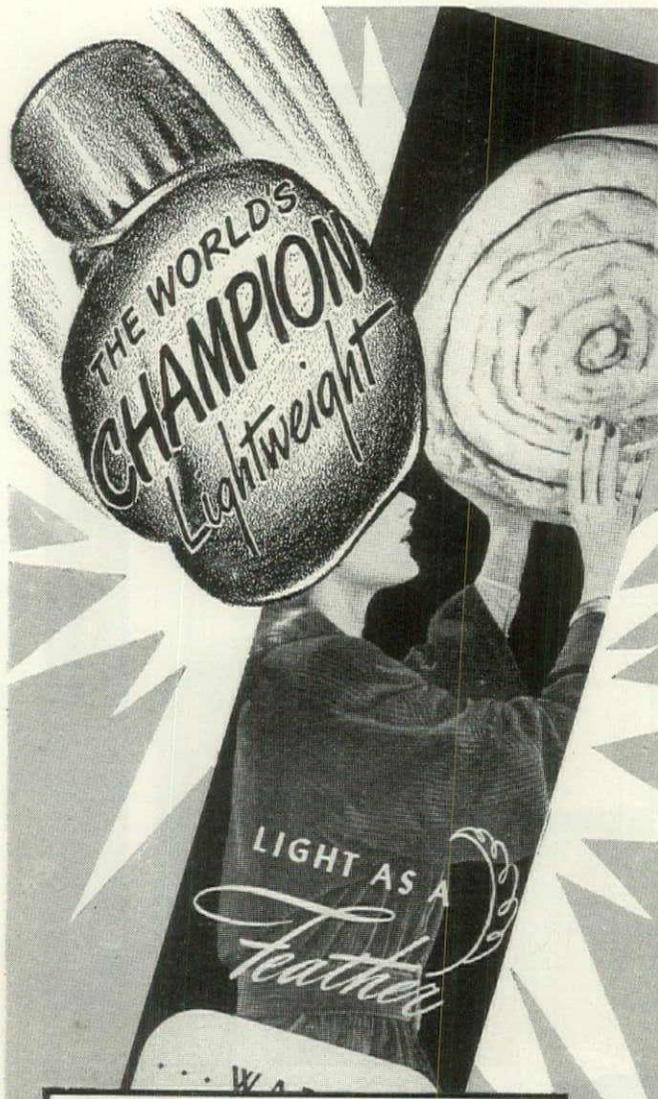
PAGE & STEELE, architects, announce the removal of their offices to 72 St. Clair Ave., W., Toronto, Canada.

VAN DOREN, NOWLAND & SCHLADERMUNDT announce that their New York City office is now located at 205 E. 42nd St.

NORMAN ENTWISTLE AIA is practicing at 56 North Hill Ave., Pasadena 4, Calif.

PDA, industrial designers, are now located in the Chester-12th Bldg., Cleveland 14, Ohio.

PREFABRICATED HOME MANUFACTURERS' INSTITUTE announces that its new address is 908 20th St. NW, Washington, D. C.



With one-tenth the weight of other types of insulation - Cotton delivers a greater wallop in controlling heat or cold. That's the result of U. S. Department of Agriculture Laboratory tests in which Cotton met all challengers in the insulation field.

Get the full, amazing story of lightweight, flameproof Cotton Insulation as it is being told to millions of home owners and builders through national magazines. Write today for your copy of "Featherweight, Flameproof Cotton Insulation" listed below. It's free.

THE ABOVE ADVERTISEMENT WILL APPEAR IN SEPTEMBER ISSUES OF:

American Home • House & Garden

ALSO IN OCTOBER ISSUES OF:

Better Homes & Gardens

House Beautiful

Small Homes Guide

TOTAL CIRCULATION

OVER 5¼ MILLION

**FREE!** Send for your copy of the new folder "Cotton Insulation." It gives you many suggestions for dramatizing the powerful sales story of this amazing product. Address National Cotton Council, Box 18, Memphis, Tenn.



COTTON INSULATION ASSOCIATION  
NATIONAL COTTON COUNCIL OF AMERICA



Where, oh where, is the right color? You'll find a quick answer in the Moletg COLOR GUIDE. This handsome COLOR GUIDE gives a selection of 150 beautiful colors to show your clients...each tint displayed on a large page (9" x 15") and shown in true-life, right-on-the-wall effect... every tint from the palest to the darkest. And on the reverse of each sheet is given the exact mixing formula.

Write for your copy of the Moletg COLOR GUIDE—\$5.00, delivered anywhere in the U. S. A.  
MONROE, LEDERER & TAUSSIG, INC.  
606 N. American St. Phila. 23, Pa.

**Moletg**  
ARCHITECTURAL

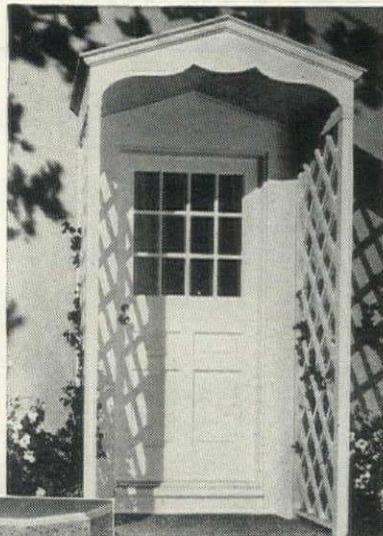
FLAT OIL PAINT  
THE TRULY WASHABLE FLAT PAINT

HOW TO TAKE THE

*Chill*

OFF ECONOMY

Economy is a "must" in the design and construction of many a home today. But economy need not be cold and repellent. At modest cost, Curtis Woodwork can add the extra charm and convenience that mean so much to the home owner—as witness this Curtis entrance (Design C-1767). One of many new Curtis entrances, it is priced for the modest building budget. All Curtis entrances are toxic and water-repellent treated.

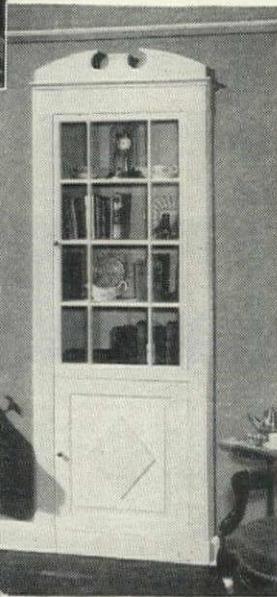


For the small home or apartment—for dining room, bathroom, or any room—these Curtis cases will fit in for almost any use. They may be built-in in corners or walls, or set out in the room. (Curtis Design C-6571.) Priced to meet the smallest budget. Curtis offers a selection of eighteen styles of wall and corner cases. All are shown in large size in the new Curtis catalog.

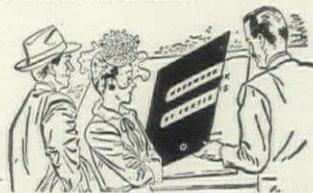
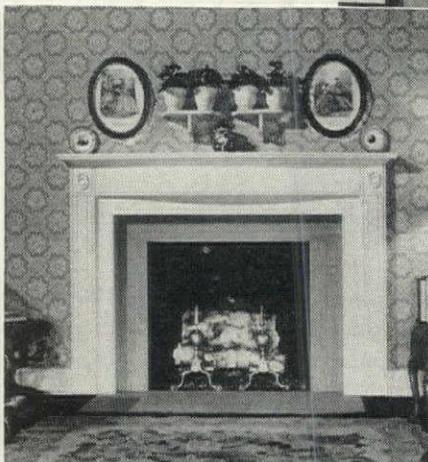


*When in New York, visit the Curtis Woodwork display at Architects' Samples Corporation, 101 Park Avenue.*

Nothing makes a room more homelike than a well-chosen built-in cabinet. This one (Curtis Design C-6558) is suitable for any room of the house. It is also made for corner installation. One of many new designs.



The "magic touch" for making a room modern and friendly is a Curtis mantel. This design (C-6049) has an inspired simplicity, yet it is smart enough to meet today's demands. Like all Curtis Woodwork, it is built with the precision of fine furniture.



Have your Curtis dealer show you the big new Curtis Woodwork Style Book—an entirely new and different way of presenting the Curtis Woodwork line. Measuring 15 x 19 inches, this book contains 100 pages of beautiful woodwork styles and decorative ideas in natural home settings—many photographs in full color.



Curtis Companies Service Bureau  
AF-9W Curtis Building  
Clinton, Iowa

Gentlemen: Please send me your book on the new Curtis Woodwork line.

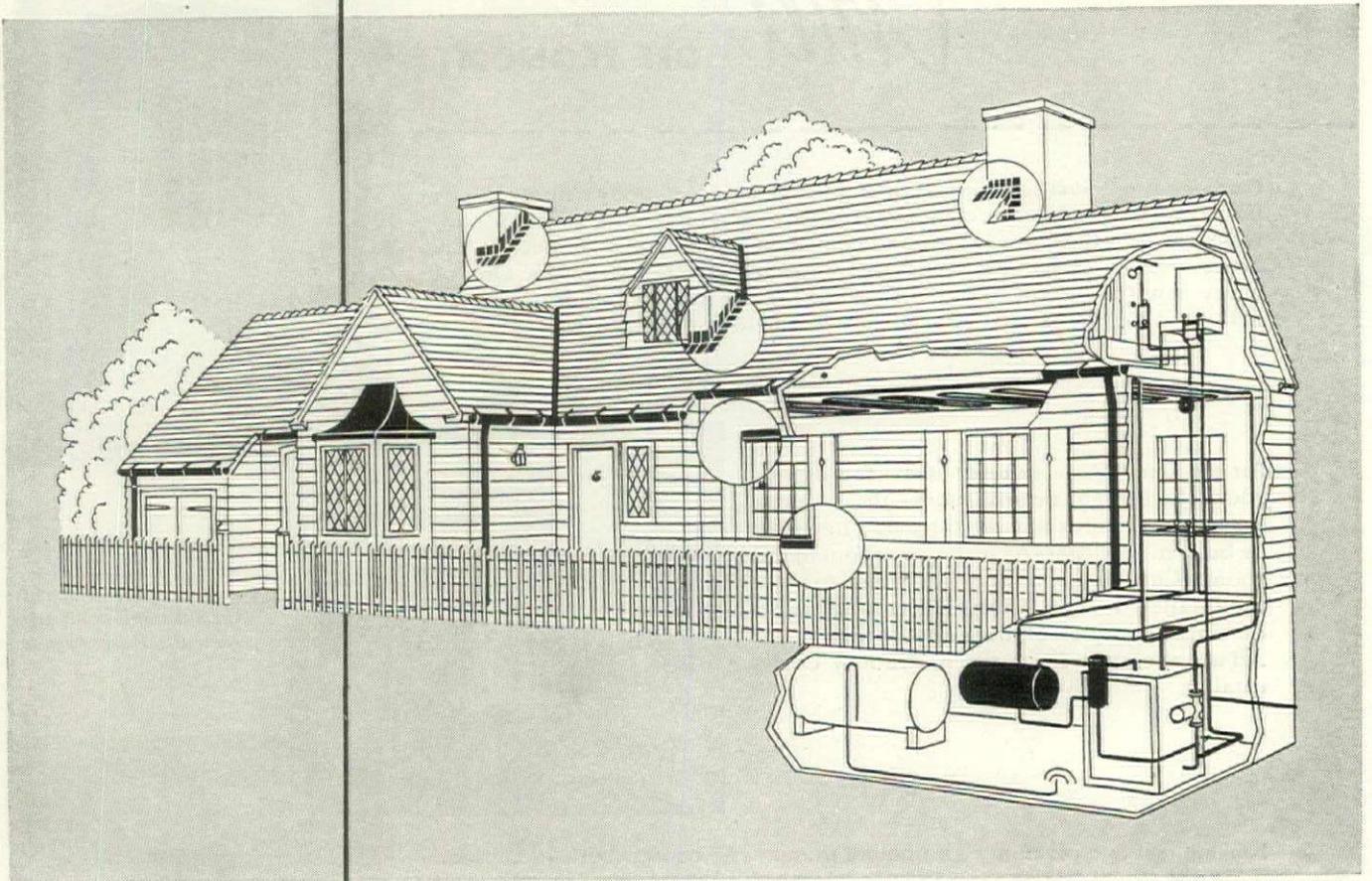
Name.....

Address.....

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

I am  Architect,  Contractor,  Prospective Home Builder,  Student  
(Please check above)

## COPPER AND COMMON SENSE



**TROUBLE** always costs more than **REVERE COPPER**

**F**ROM the start of your plans throughout the life of the house, Revere Copper and Brass Incorporated works with you to insure your client's lasting satisfaction.

- Revere Literature helps you convey to your clients a better understanding of the part copper plays in protecting a home.
- Revere Research is constantly at work to develop the new data you need to design ever-finer copper construction.
- Revere's Technical Advisory Service, Architectural, is always ready to help you solve new or difficult problems.

It is because of this all-around cooperation—in addition to the consistently fine quality of Revere copper and brass building products—that *trouble always costs more than Revere Copper.*

Revere products include: Copper Water Tube for use with soldered fittings for hot and cold water lines and heating lines; Red-Brass Pipe; Sheet Copper and Herculoy for tanks, pans, ducts and trays; Copper oil burner, heat control and capillary tubes . . . and, of course, Sheet Copper for roofing, flashing and other sheet metal construction. They are handled by leading distributors in all parts of the country.

**REVERE**  
**COPPER AND BRASS INCORPORATED**

*Founded by Paul Revere in 1801*

230 Park Avenue, New York 17, New York

*Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N. Y.—Sales Offices in Principal Cities, Distributors Everywhere.*

## SEVEN POSTWAR HOUSES

THIS issue is devoted almost entirely to seven houses, all completed since the war, all in the owner-built, individually-designed, medium-price category, and all the work of mature exponents of the contemporary school of architecture which has grown and flourished in the U. S. in the past fifteen years. As a group, they are undoubtedly the best houses of their kind this country has ever produced. They are more comfortable, more thoughtfully planned, more compact, better lighted, more open and attractive, easier to care for. They are honest houses, designed to satisfy real needs simply and without sham. They cater to no picture-postcard nostalgia for the outworn symbols of an earlier and—at least in retrospect—more secure time. They follow no momentary literary flights to Spain or medieval England. They seek no escape from the realities of family living in a U. S. suburban neighborhood in the year 1947. That they have been built at all in the past two years is something of an achievement. That they are so excellent is striking evidence of the validity of an approach to building which The FORUM is proud to have championed—and, to a considerable extent, influenced—from the beginning.

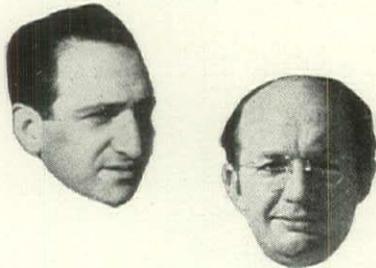
We are aware, of course, that there are still many people, a good many architects and builders, and some FORUM readers to whom such houses seem somewhat outlandish. To adherents of this side of the “cowshead” argument, we recommend particularly careful study of this issue. Where, we would like to know, are the “amplified orange crates with innovations,” the “super-colossal ultra-modern designs,” the “corn crib and chicken coop patterns” which readers have complained of? Which of these houses is “barren in livableness,” which shows a “preference for the freakish and fantastic?” And in what respect do these designs evidence a tendency to be “different for the sake of being different?”\* We would like to know.

One threadbare contention which is finally ripped to shreds by the work shown here is the notion that big windows, low-pitch roofs and open planning are all right for California but out of place in other parts of the U. S. It is no accident that the designs chosen for this issue are so evenly distributed across the map. Even more significant is the fact that each of the houses represents the work of not just one architect, but of a regional group of designers all working in much the same vernacular—and that each such group contains not one, but several outstanding firms. The architects' statements accompanying the presentations show that they have been giving a great deal of attention to the peculiarities of their local climate, and that this study has not only produced significant local variations in room arrangement, window treatment, roof overhangs, and so on, but has also revealed glaring practical shortcomings in the stereotypes that have so long passed as “traditional” architecture.

In fact, if there is one thing that pleases us more than anything else about the design trends the issue reveals, it is that the houses are so different in execution, and so alike in spirit. The FORUM carries no torch for regionalism as an end in itself, but we are glad to see that the logic of a rational design approach produces a visibly different house in the hot, humid climate of Florida, the hot, dry climate of Texas, and the temperate, moist atmosphere of the Pacific Northwest. At the very least, this indicates a breaking away from cliché that is more than welcome. Owner-built, individually-designed houses are, of course, only the yeast in the housing bread, but we are happy to report that a healthy new culture has been established.

\* All quotes are from readers' letters.

# House in the Northwest features a three-spoked plan which opens the view on all sides



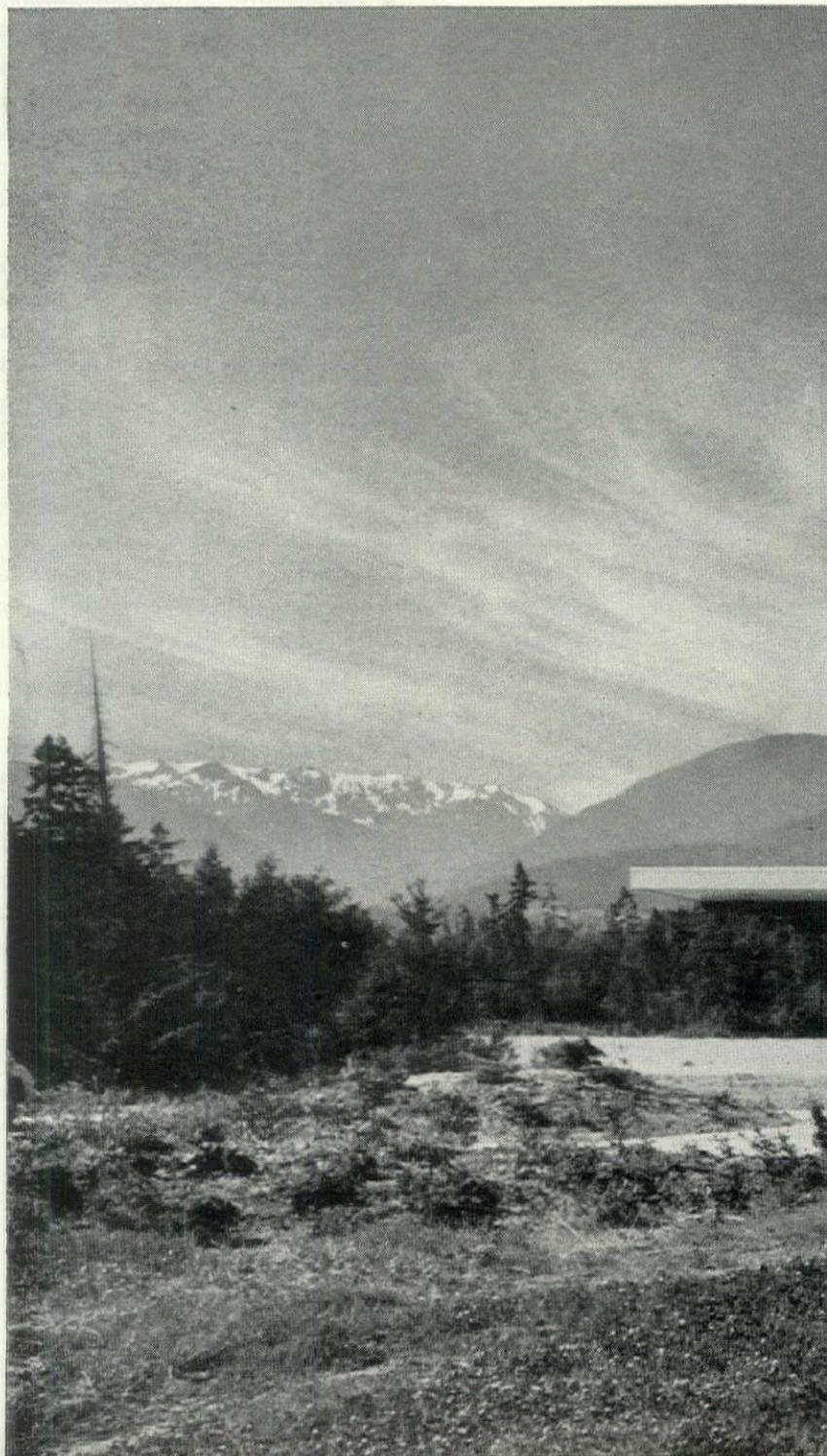
*Our weather, moderate in most respects, gives us freedom to use large glass areas without excessive cold or excessive heat making them a problem. On the other hand, our rainfall does demand certain protection such as sufficient overhangs. It is also desirable to have sheltered terrace areas to protect summer furniture in case of a sudden rain. As we do have a great deal of gray weather, we feel that we can use even stronger, clearer colors than in sunny southern climates. This was done on the Schueler house by staining the exterior siding red to match the Madrona trunks, and painting the soffits yellow to blend with field grasses around the house.*

*We have always felt that the terraces are better situated off a dining area than a living room. Because terraces in general have constant circulation, they should be located off rooms that have floor surfaces withstanding either the wet or the dirt tracked in and out repeatedly. In the Schueler house the terraces all serve into the central dining hall-kitchen area surfaced with concrete, and the living room, which is surfaced with a heavy textured rug, is isolated from this circulation. Also, this prevents the porch furniture from blocking the view from the living room windows.*

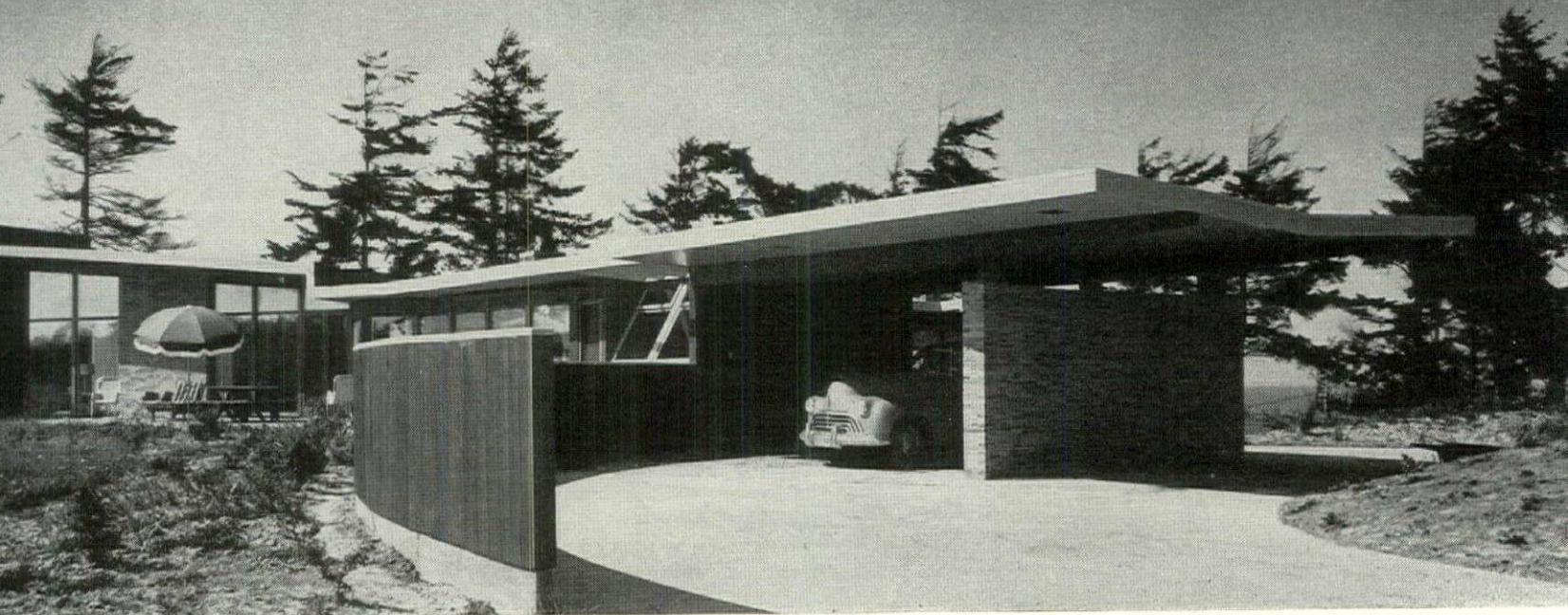
*With our abundance of wood, we have always felt that a northwestern house should accent this to the utmost: the Schueler house is a good example, with all the walls and ceilings of fir plywood produced in Port Angeles. Exteriors are of native western cedar.*

JAMES J. CHIARELLI & PAUL H. KIRK.  
Architects

SEEN FROM HIGHER GROUND TO THE NORTHEAST, COVERED WALK LEAD



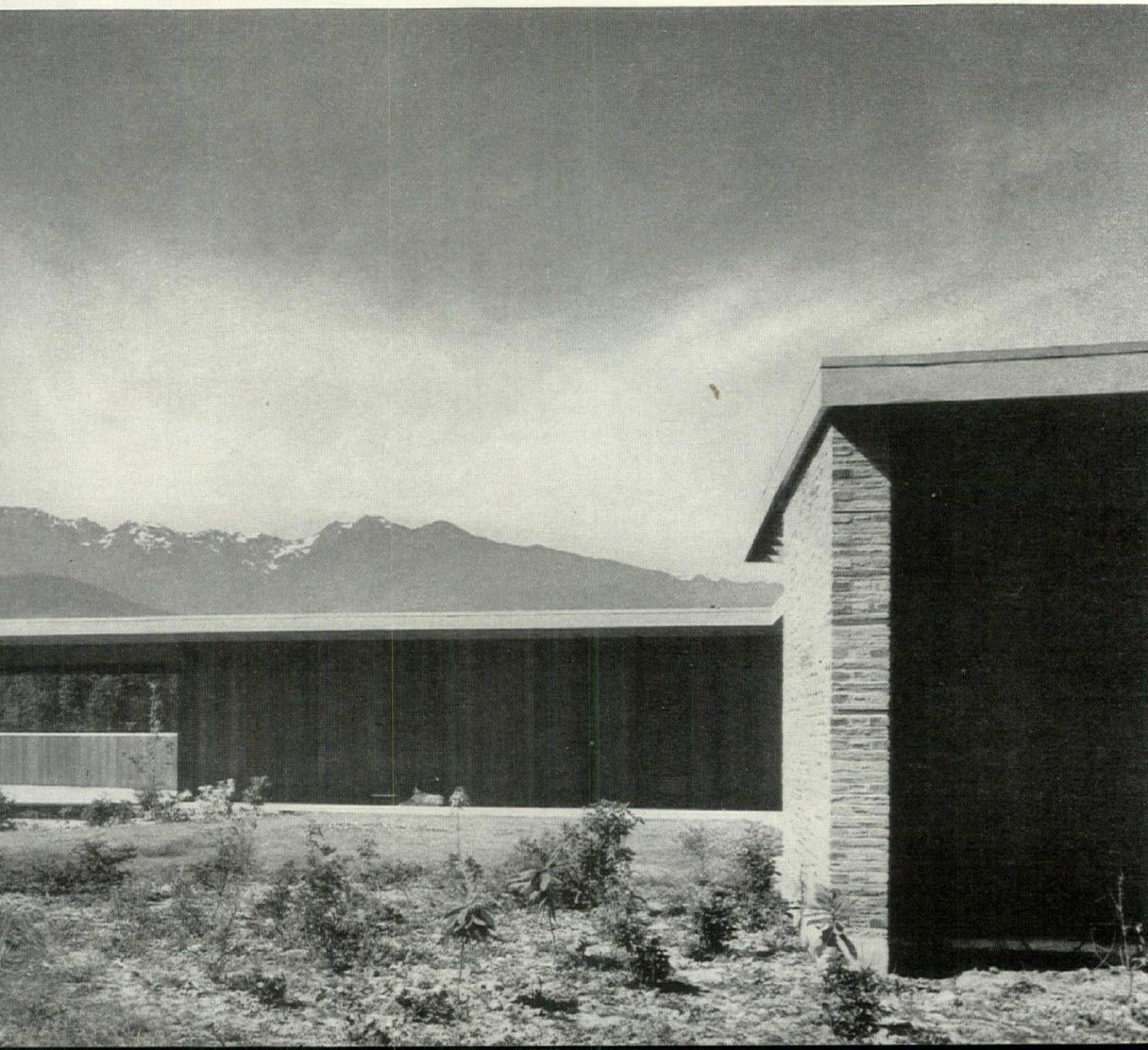
P. A. Dearborn Photos

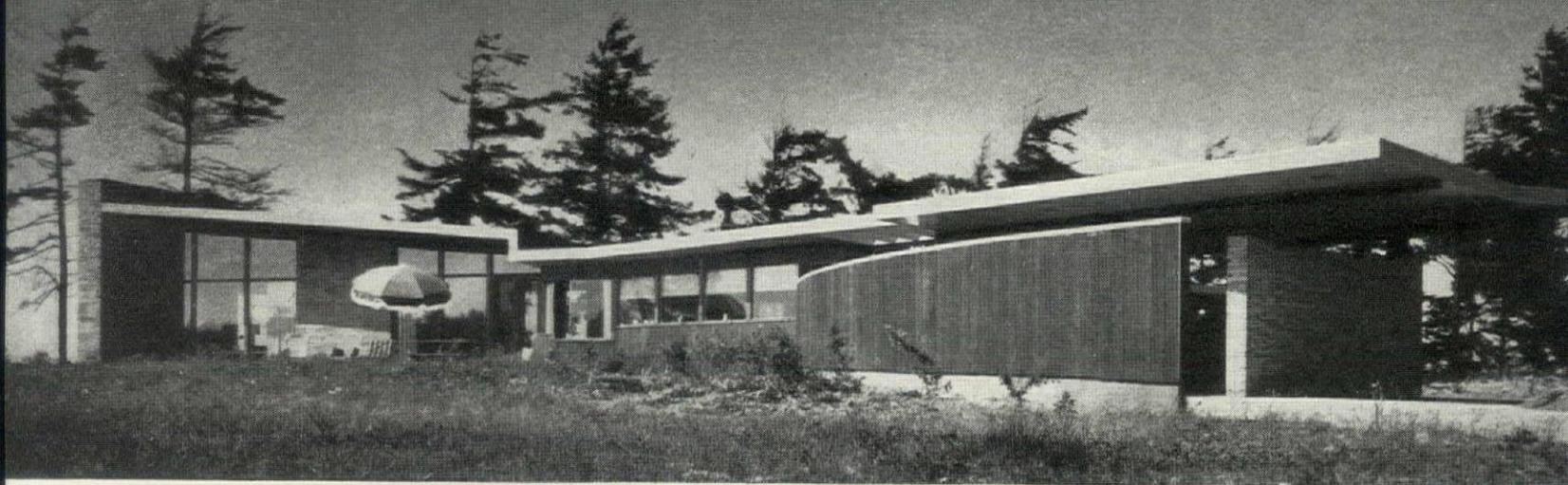


TO THE HOUSE IS FROM THE CARPORT, AN EXTENSION OF THE SERVICE WING. CURVED WALL SCREENS OUTDOOR LIVING AREA

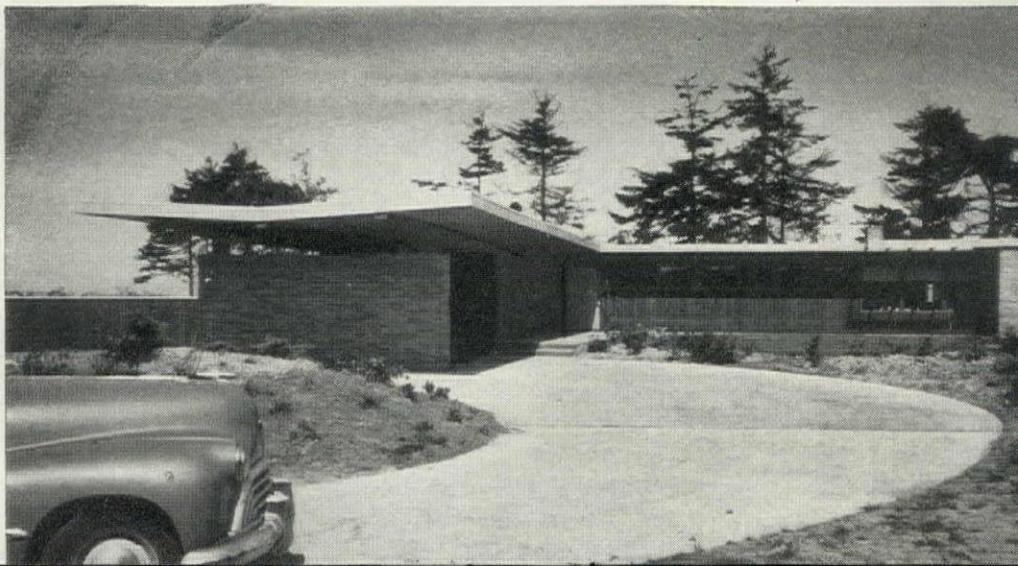
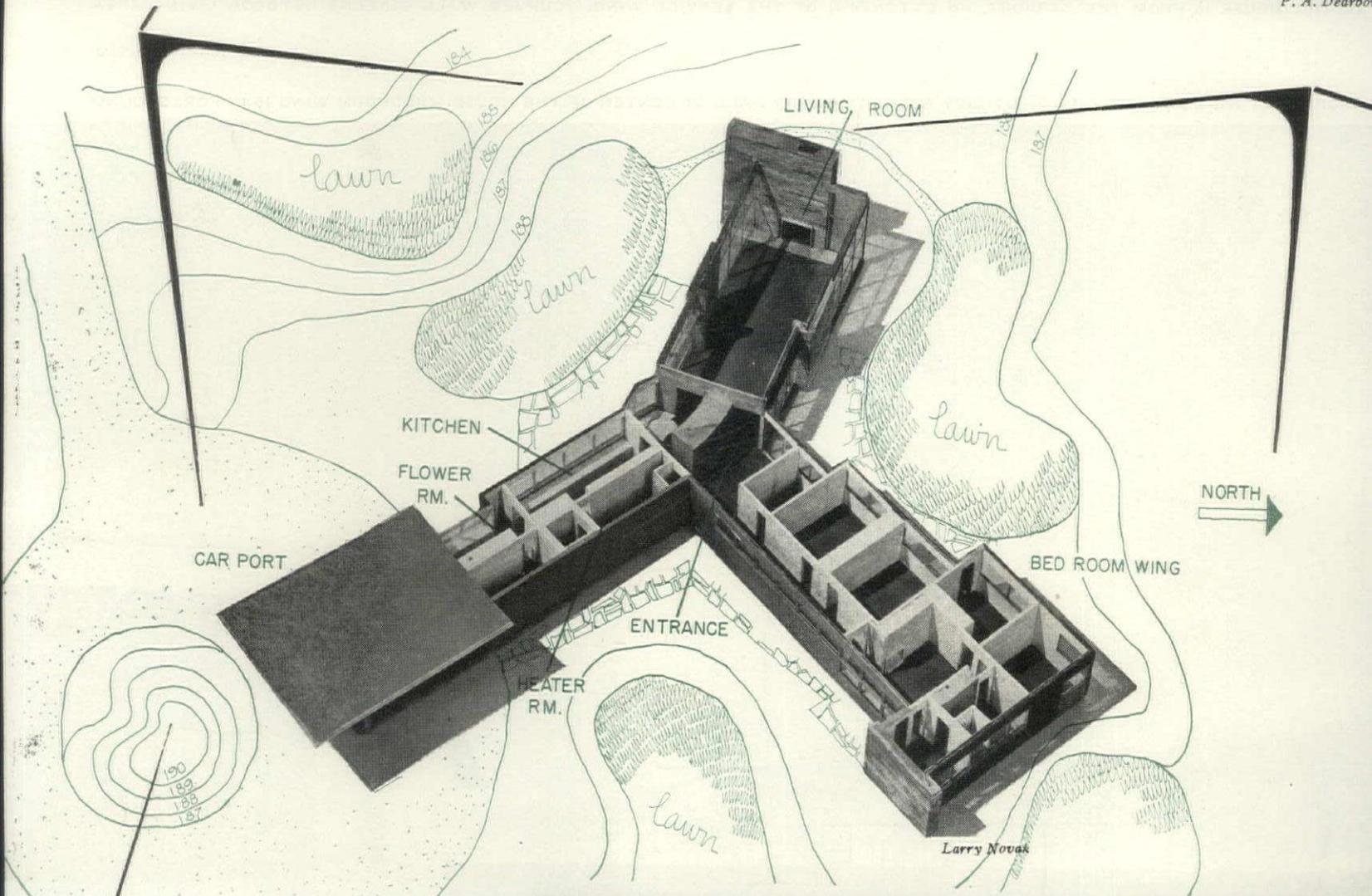
*P. A. Dearborn Photos*

CARPORT PAST WINDOWLESS WALL OF UTILITY ROOMS TO ENTRY HALL AT CENTER OF THE HOUSE. BEDROOM WING IS IN FOREGROUND





P. A. Dearbo



ARELLI & KIRK, Architects GORDON LYNCH, General Contractor

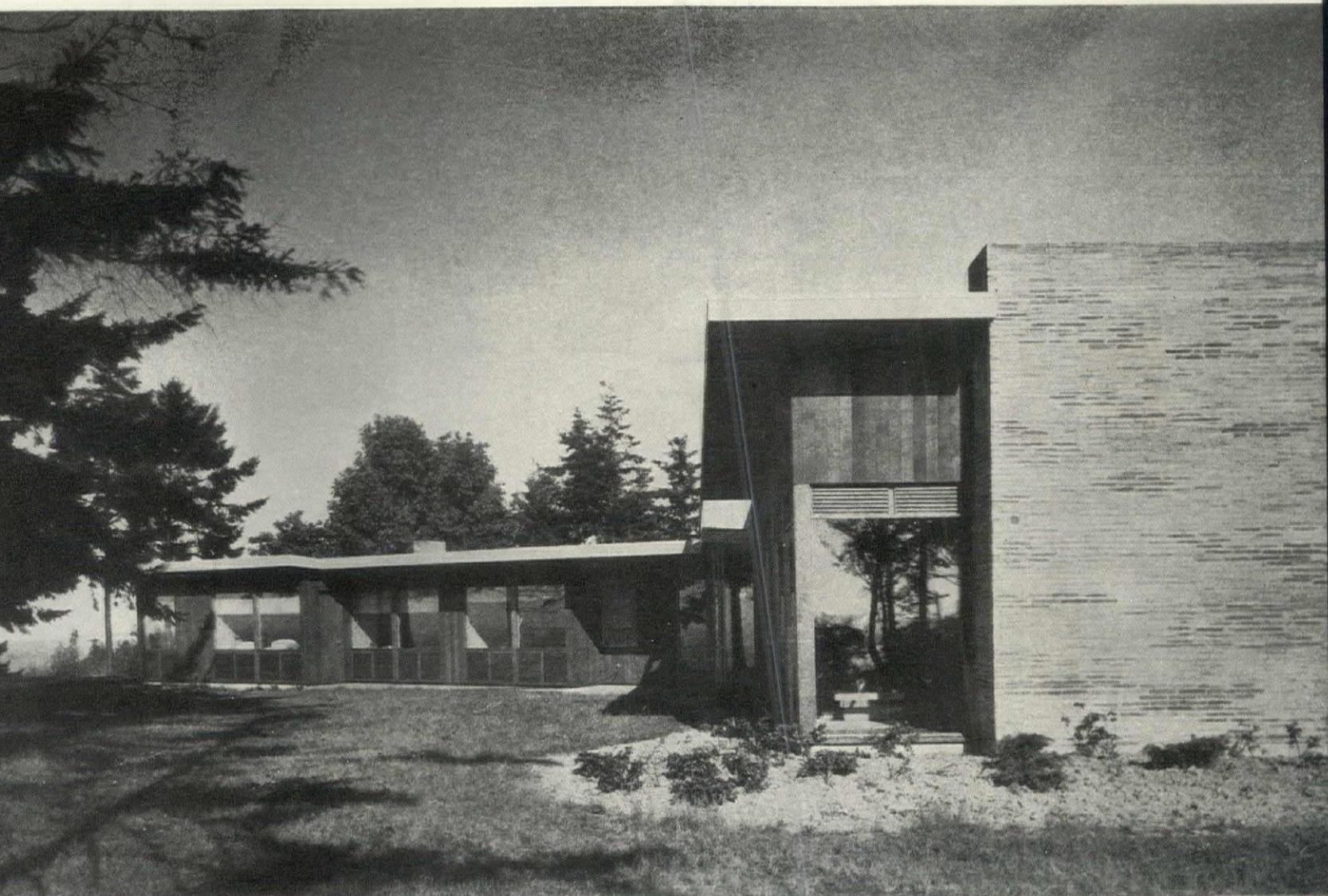
*OWNER'S STATEMENT:*

*We are particularly pleased with the way the living, cooking and sleeping areas are zoned and still tie together smoothly, and the way the views are brought out to so great an advantage and such dramatic fashion.*

LAWRENCE A. SCHUELER, M.D.

Chronic splendor of the northwestern landscape notwithstanding, a site like this is an unusually fortunate one. Approach is from the south across a 20-acre, hay-covered plateau to a dominant knoll rising to the north end of the meadow. The knoll is fringed with windswept firs, drops in a precipitous 300 ft. bank to the Straits of Juan de Fuca on the north and Morse Creek on the east. The top of the knoll is level so that building the house on a slab was a natural solution and one that concurred with the owners' desire to avoid changes in floor level. The radiant plan was worked out to incorporate a 360-degree view, which takes in the magnificent Olympic Mountain range and the small town of Port Angeles as well the dramatic seascape.

The house was designed for a doctor, his wife and two daughters, and consists of a living room, dining room, breakfast room and bar,



IN-LINE BEDROOMS FACE WEST, OPEN ON A LAWN SHARED BY LIVING AND DINING ROOMS. EXTERIOR FINISH IS OF MASONRY AND RED CEDAR

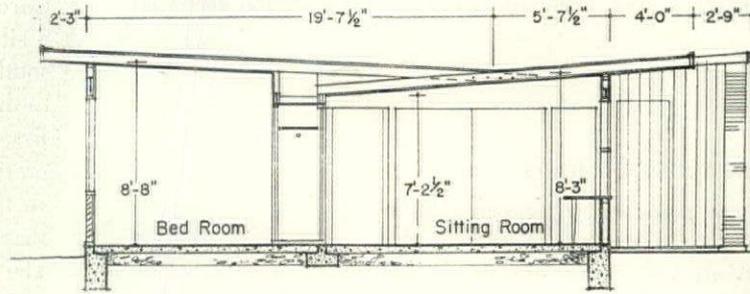
a combined kitchen and laundry, greenhouse, storage and furnace room complete with a cold storage plant.

Rough-sawn vertical cedar siding, stained a red brown, is used on the exterior in combination with tawny yellow split brick. The soffit and most of the trim is painted chrome yellow. Living room sash is painted rust color. All windows are fixed with louver panels beneath for ventilation.

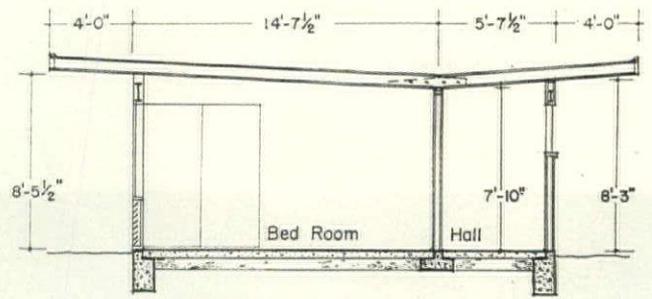
Two types of roof construction are used. On the living-dining wing the roof slopes mildly up from the center of the house giving almost a story and a half at the chimney end. The bedroom and service wings have mildly pitched valley roofs.

The unique plan which offers an unlimited visual scope divides the three areas of the house more definitely and dramatically than would be possible with a more conventional layout. The entrance hall is the heel of the plan. Both the living and sleeping wings enjoy three exposures.

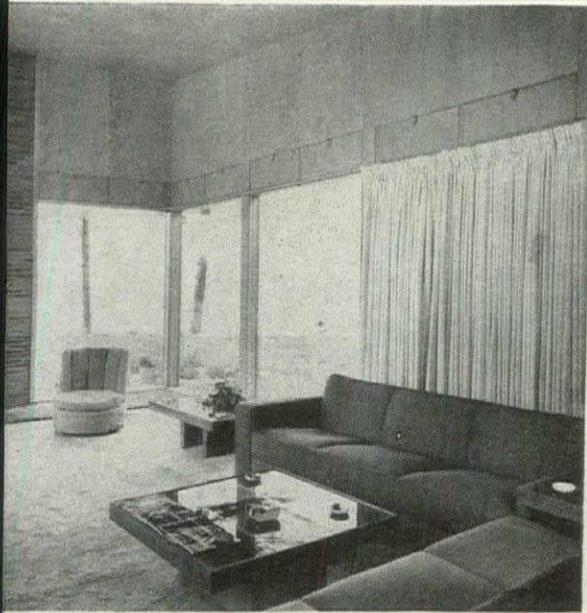
One of the factors in the owner's decision to settle in this part of the country was the splendid opportunity for hunting and salt water fishing, at which both he and his wife are experts. This interest accounts for the rather unusual combination of a gun-dressing room in the owner's suite. It was designed with access from the outdoors to avoid tracking wet gear through the rest of the house. Natural fir plywood, characteristic of the region, is used as interior finish in the living room, hall, kitchen and bedrooms. The long, narrow kitchen contains a laundry unit at one end. Predominant colors are greens, rust and yellow. Furniture was designed by Paul Laszlo.



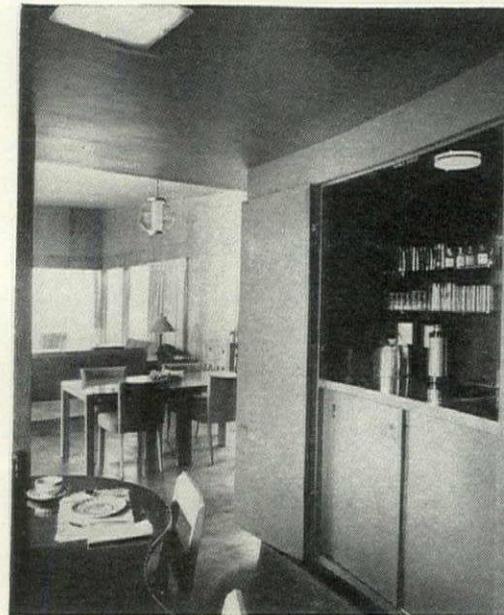
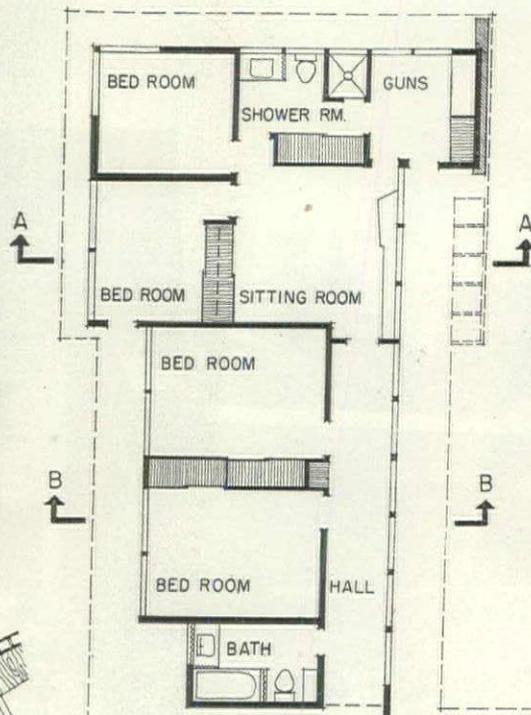
SECTION A-A



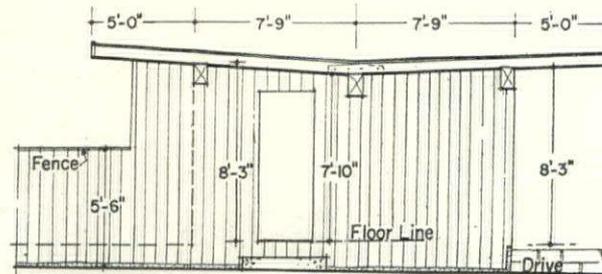
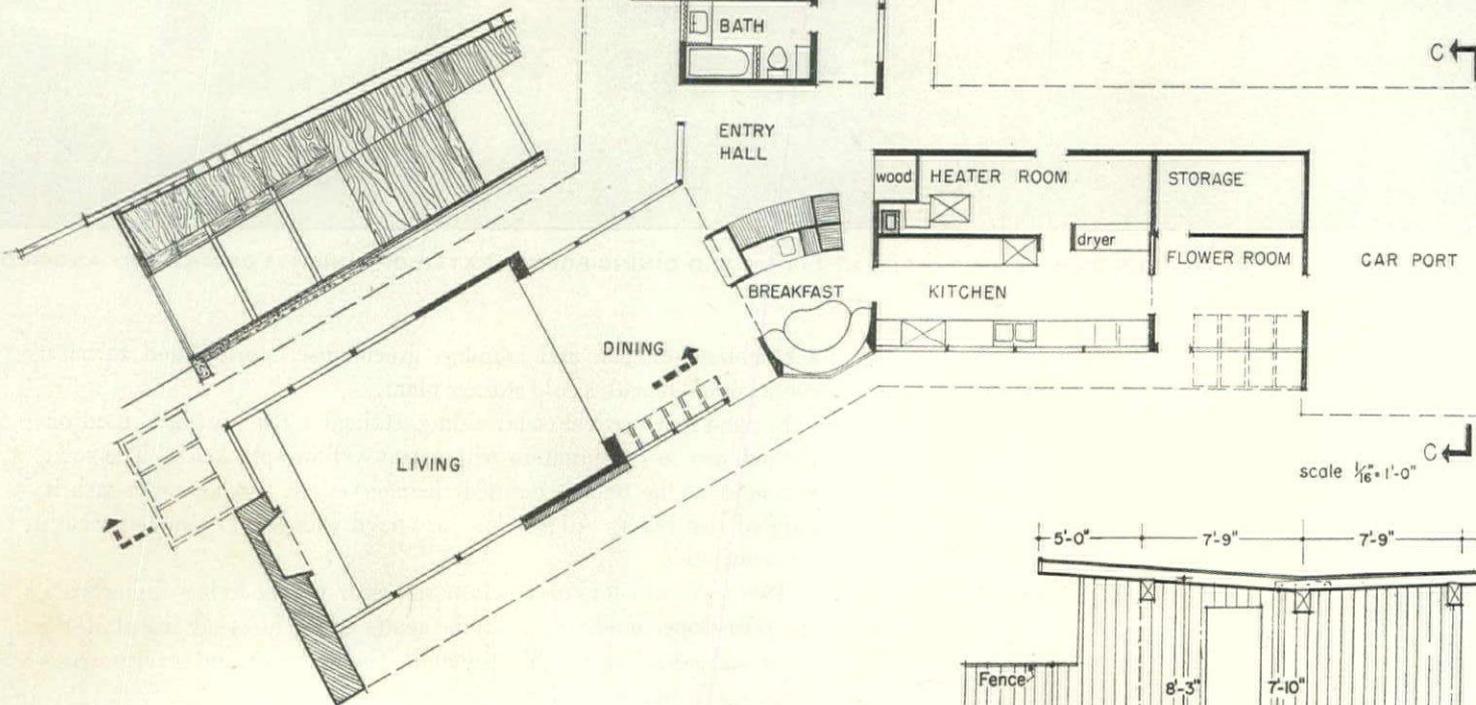
SECTION B-B



LOUVERS OVER WINDOWS PROVIDE VENTILATION

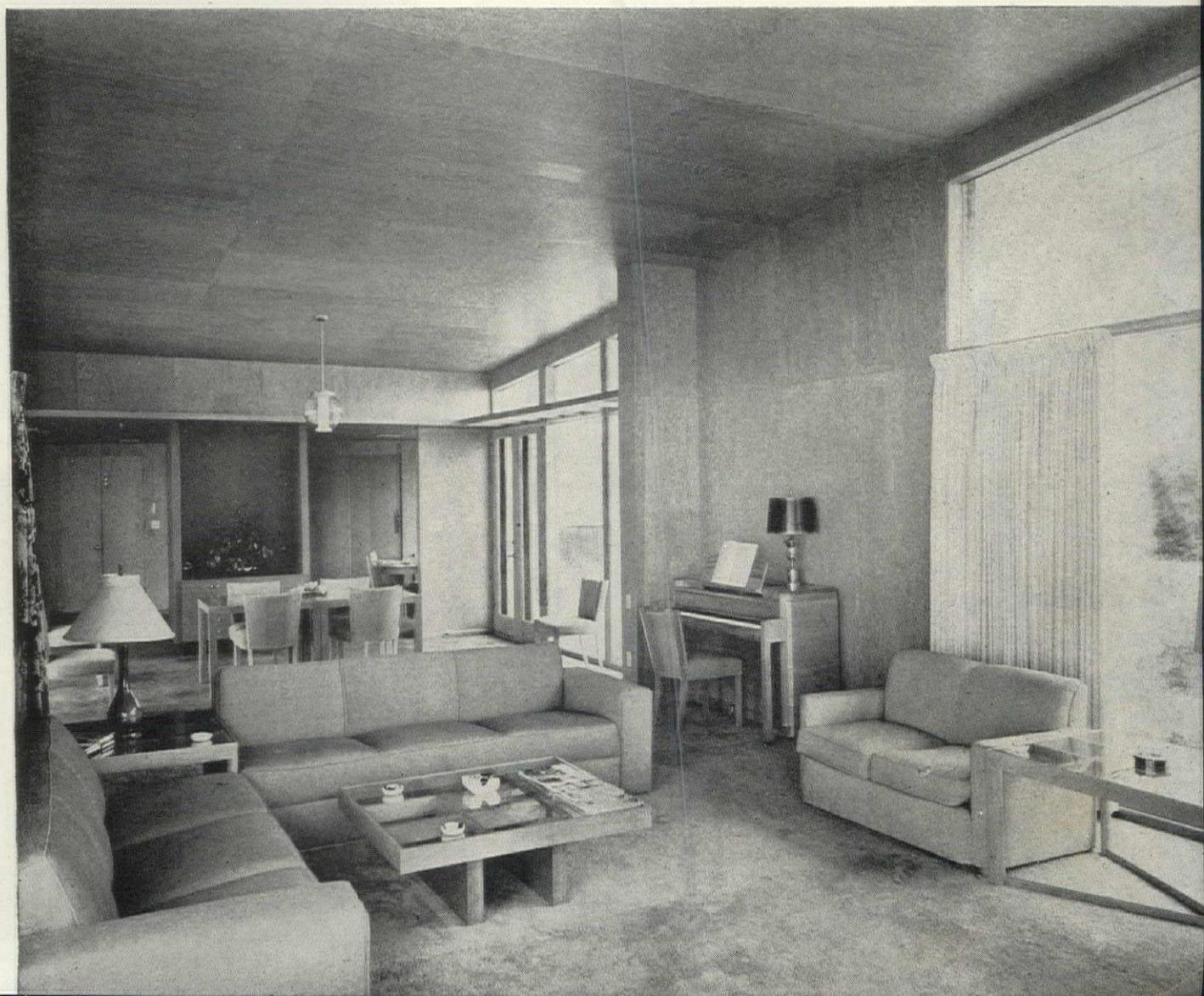


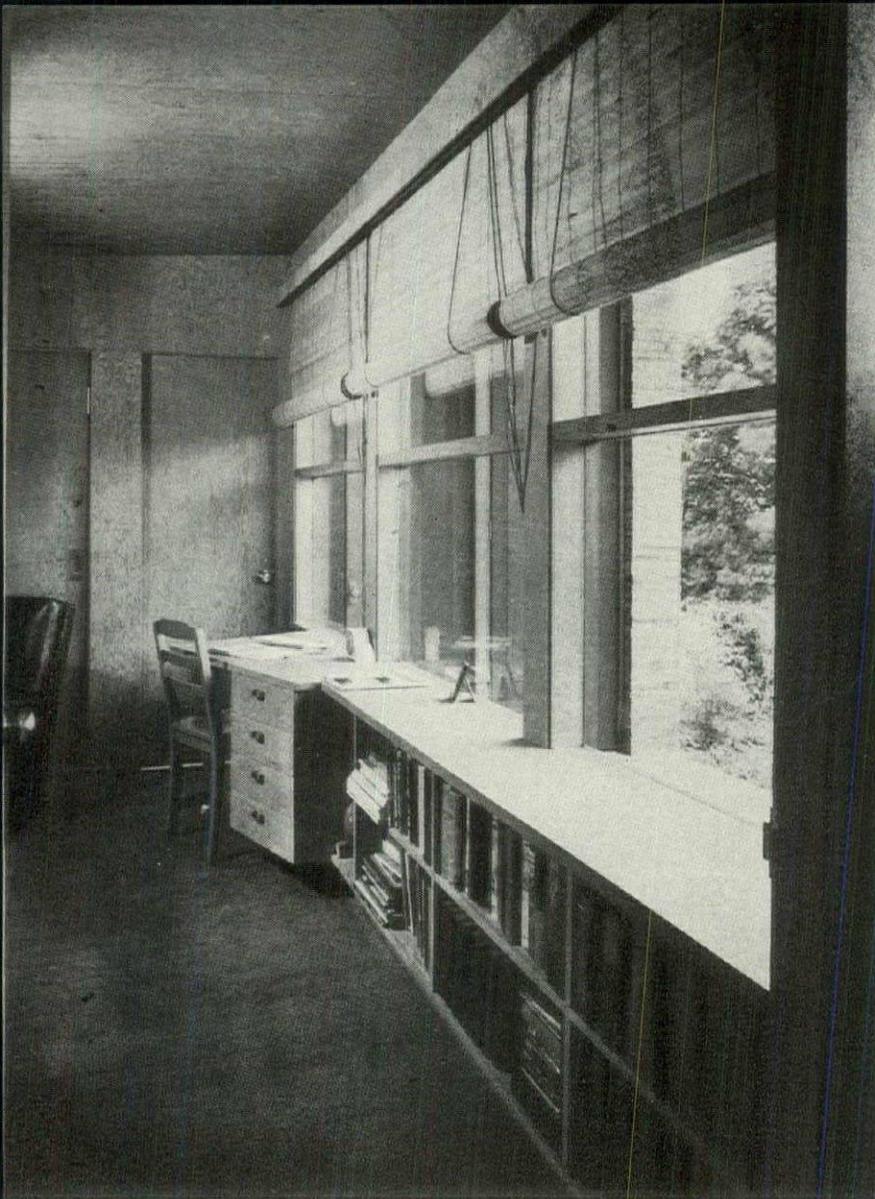
BAR FACES CIRCULAR BREAKFAST ALSO





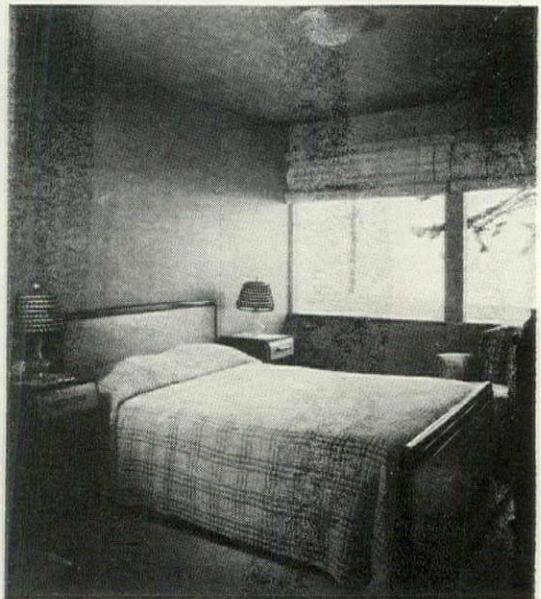
IN LIVING-TERRACE IS ON THE SOUTH SIDE. LIVING AND DINING ROOMS, TREATED AS A UNIT, FORM A CUL-DE-SAC IN CIRCULATION



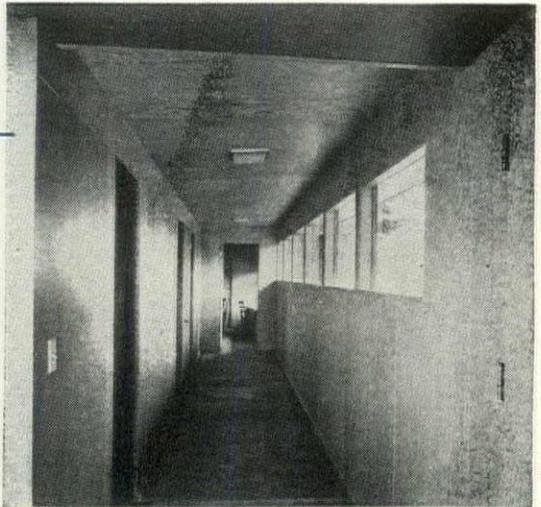
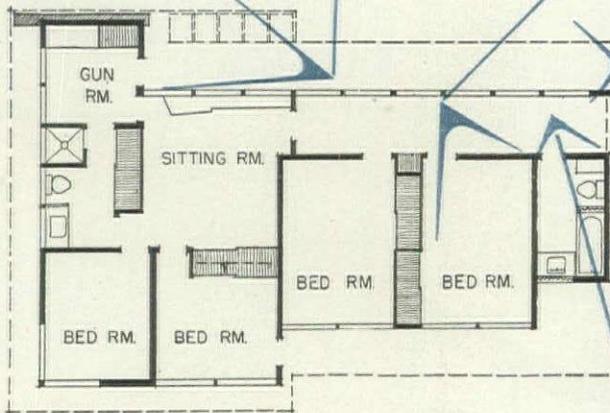


CHIARELLI & KIRK, Architects GORDON LYNCH, General Contractor

P. A. Dearborn Photos



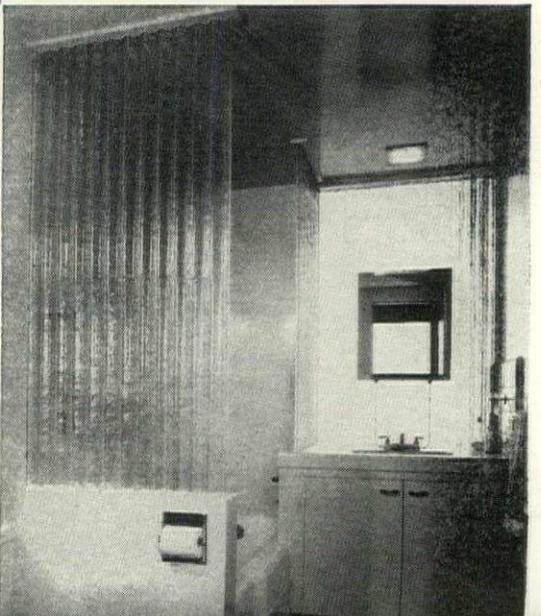
OWNER'S SITTING ROOM HAS BUILT-IN DESK AND BOOKCASES. TYPICAL BEDROOMS HAVE WALL-TO-WALL GLAZING



GOOD CARPENTRY TYPIFIES INTERIOR FINISH

**CONSTRUCTION OUTLINE**

**STRUCTURE:** Exterior walls—red cedar, building paper, fir ship-lap, insulation; inside—fir plywood. Floors—concrete slab. Ceilings—fir plywood. **ROOF**—4-ply built up, asbestos cap sheet. Roof drains—Josam Mfg. Co. **INSULATION**—rockwool. **WINDOWS:** Sash—wood. Glass—Libbey-Owens-Ford Glass Co. **FLOOR COVERINGS:** Kitchen and bathrooms—rubber, Goodyear Tire & Rubber Co. **WALL COVERINGS:** Main rooms—plywood. Bathrooms—Masonite over plywood, Masonite Corp. **PAINTS**—A. C. Horn Co. and Bens Chemical Co. **HARDWARE**—Schlage Lock Co. **KITCHEN FAN**—West Wind Corp. **LAUNDRY EQUIPMENT:** Washing machine and drier—Bendix Home Appliances, Inc. **BATHROOM EQUIPMENT**—American Radiator-Standard Sanitary Corp. **HEATING**—hot water radiant system, copper coils in slab. Boiler, burner and water heater—Allen Copper Coil Co.





## Small house in Southeast is designed for hot humid climate, built with breathing concrete walls

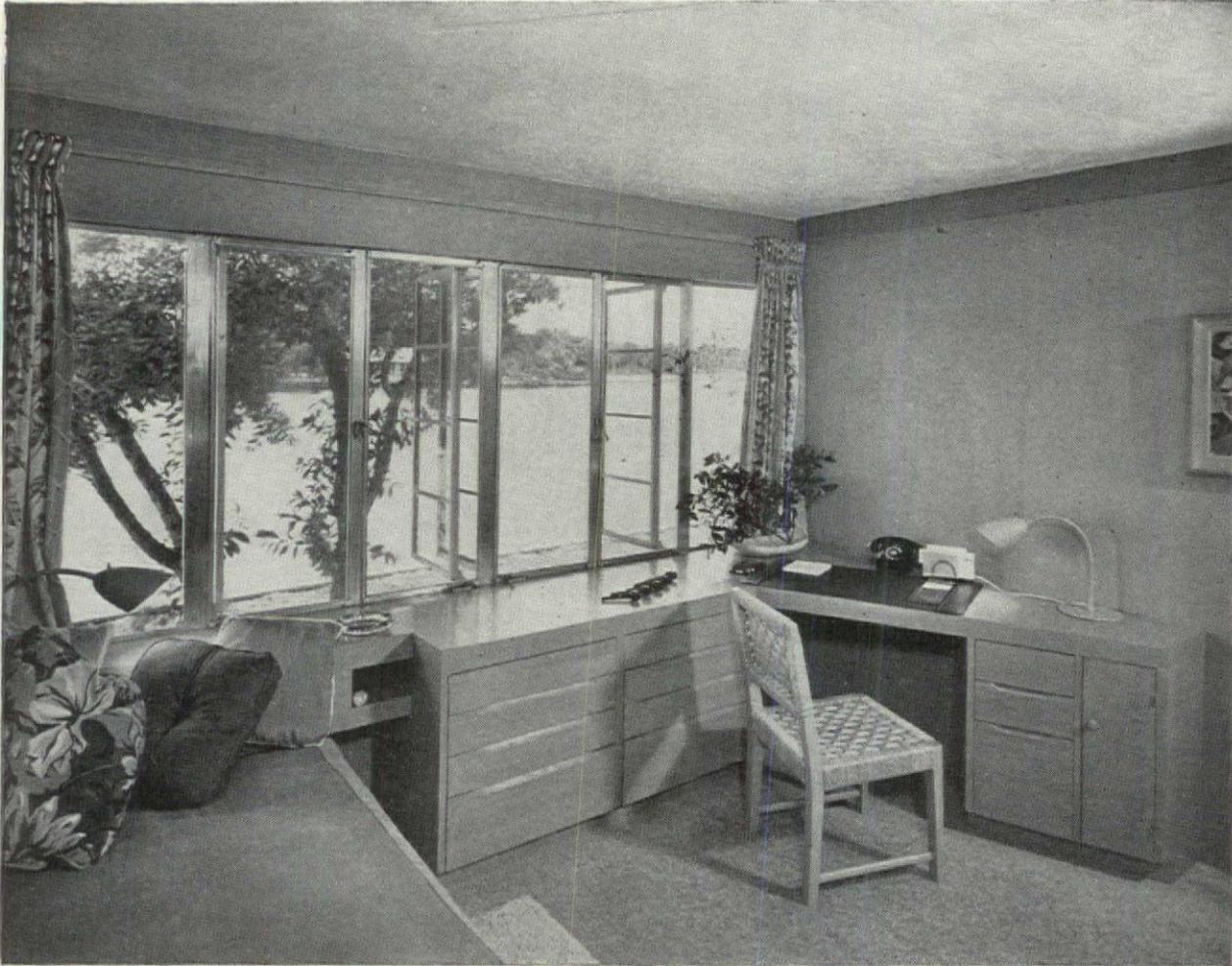
*This is a climate of high humidity and soft sun, of sea breeze by day and land breeze by night, with rainy summers and dry, sunny winters. True "modern" architecture fits the climate in every way.*

*Sliding glass walls with wide overhangs, ventilated masonry walls that breathe and do not hold moisture, insulated roofs that do not hang down over windows to darken them, masonry floors that are on the ground, dry and termite-free, permitting the out-of-doors and sunshine to be one with the protection and personal conveniences of a dry, well-arranged interior—these are the "musts" of a "House for Florida Living."*

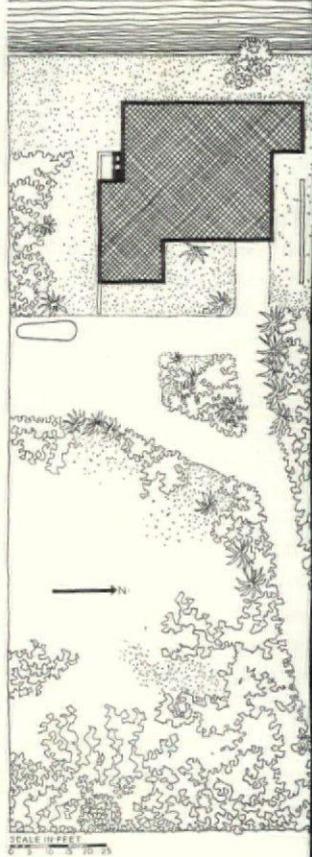
RALPH S. TWITCHELL, Architect  
PAUL M. RUDOLPH, Associate

SCREENED PORCH FACES WEST ON NAVIGABLE BAYOU, ENJOYS EXTENSIVE THREE-DIRECTIONAL VIEW AND PREVAILING DAYTIME BREEZE

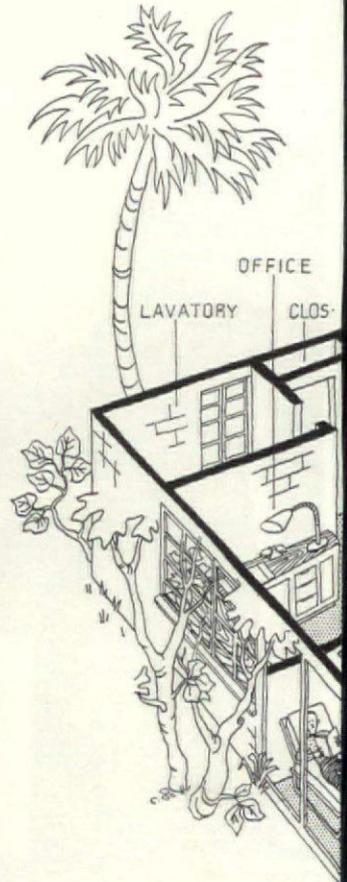
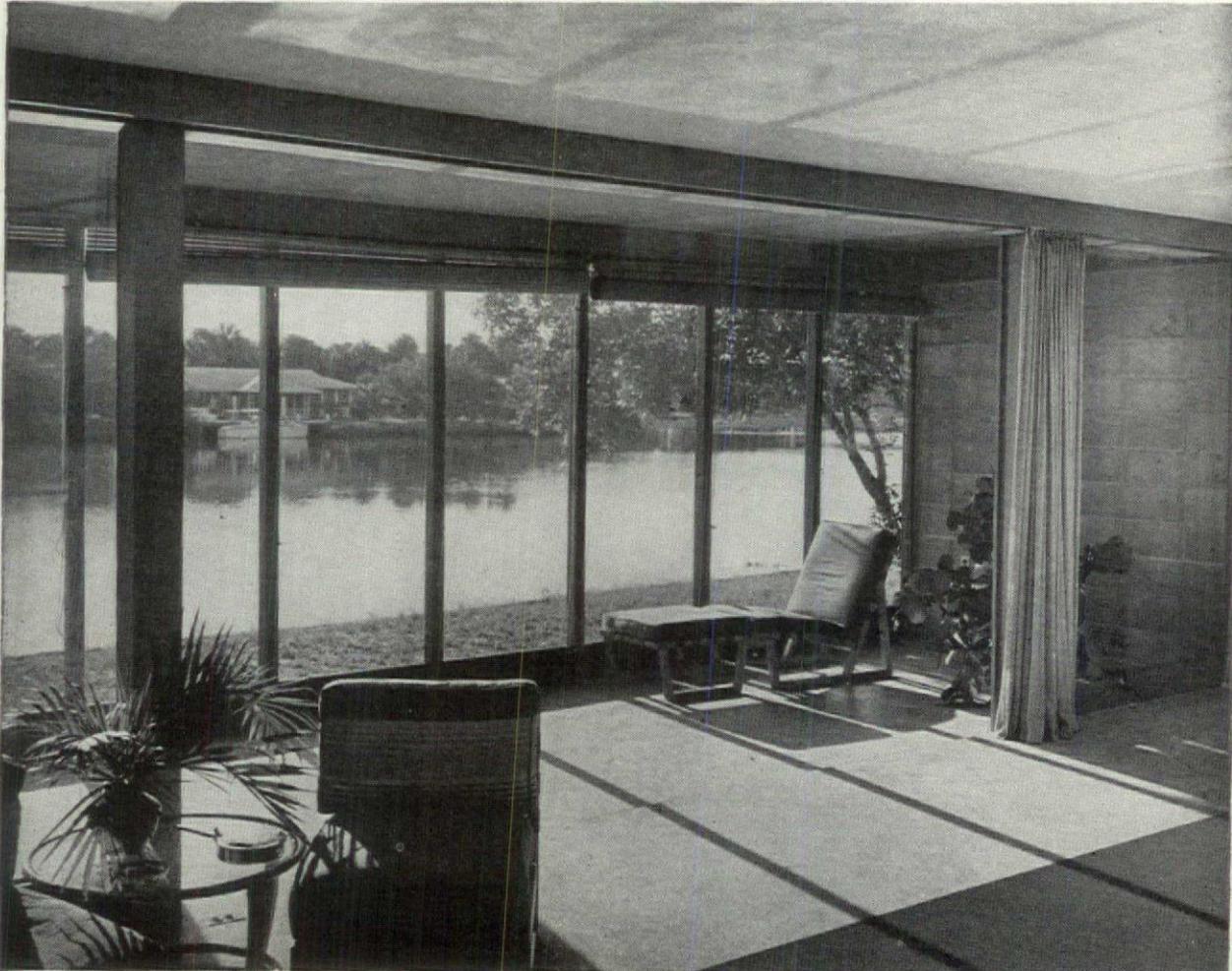




STUDY WITH BUILT-IN FURNITURE DOUBLES AS GUEST ROOM, HAS SAME EXPOSURE AS LIVING ROOM



SCREENED PORCH ACTS AS LIVING ROOM SUN SHADE, ELIMINATES NECESSITY FOR SLIDING SCREENS

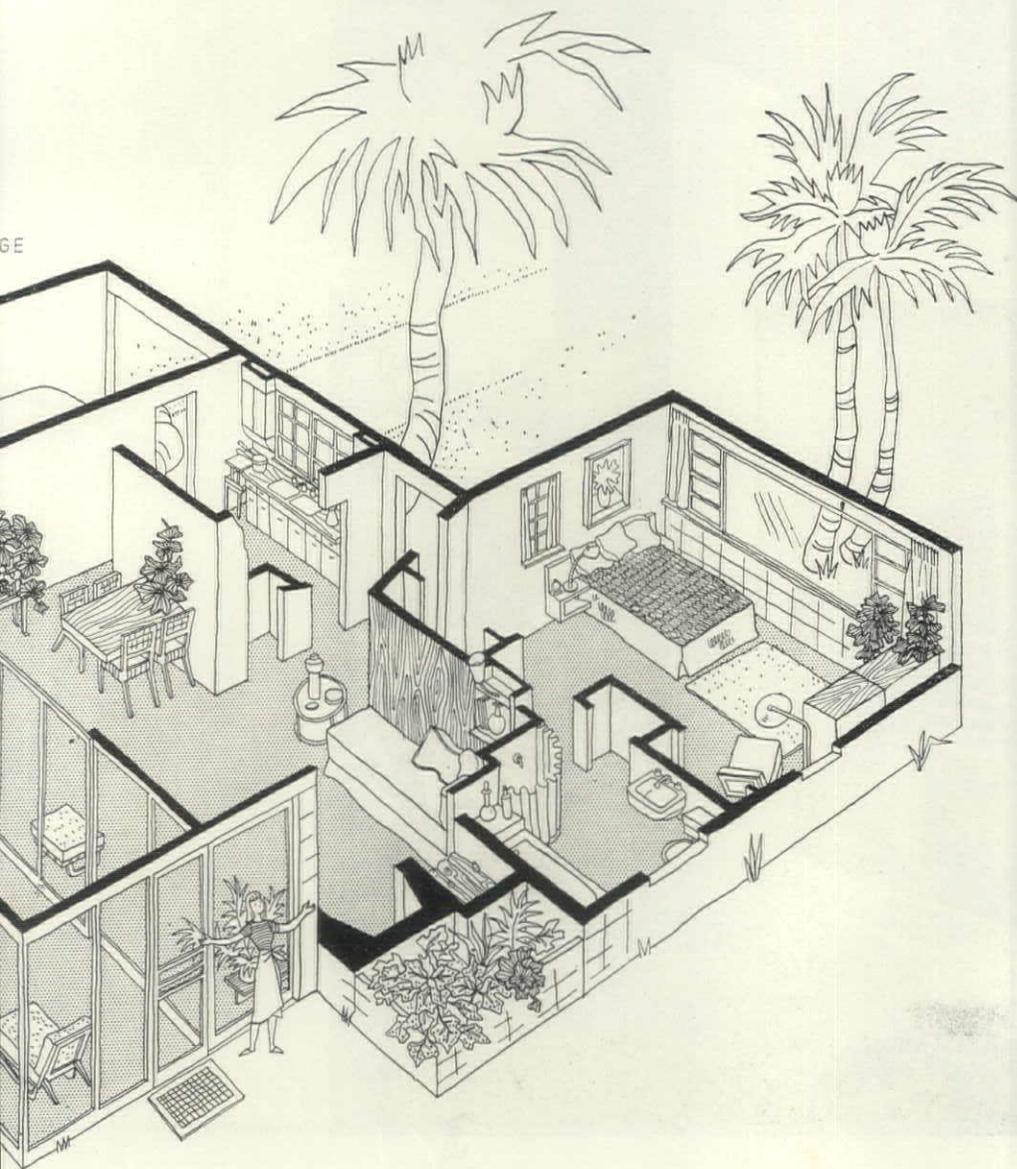


Joseph Steinmetz Photos

PH S. TWITCHELL, Architect; PAUL M. RUDOLPH, Associate  
 ASSOCIATED BUILDERS, INC., General Contractor

ated on filled land between one of Sarasota's salt water inlets and  
 ardar grove, this small, economical house was tailored to the site's  
 usual amenities, Florida's warm, humid climate and last year's  
 erial shortage.

he plan includes a large screened porch which shields the living  
 n from the western sun and adds immensely to its apparent size.  
 ing most of the year the sliding glass doors are left open day and  
 it to capitalize on Gulf breezes. The office-study is conveniently  
 ed for private outside access and for use as a guest room. At the  
 of the house, the master bedroom faces the cedar grove, the morn-  
 sun and the prevailing night breezes. Similarly oriented, the  
 hen enjoys easy access to hall, dining space and garage.  
 o foil Florida's notorious termites, a concrete slab was poured on  
 le. Selected for its coolness, durability and cleanliness, the ter-  
 o floor finish contains white and coral colored marble chips which  
 oduce the warm gray appearance of native beaches, an effect  
 ch is enhanced by the natural color of the concrete block. The  
 m gray tone of the sand-finished ceilings, obtained by the use  
 red plaster sand, is repeated on the plywood soffits of the  
 overhang, painted a soft gray tinted with red lead. Plywood par-  
 ns are painted to match the concrete and then surfaced with a  
 varnish. Even the gravel on the built-up roof and the curtains  
 e selected to carry out the soft gray color scheme. This careful  
 ation to color creates an effect of spaciousness and complements  
 exterior and interior use of unfinished concrete block—a material  
 eted for its economy and availability.

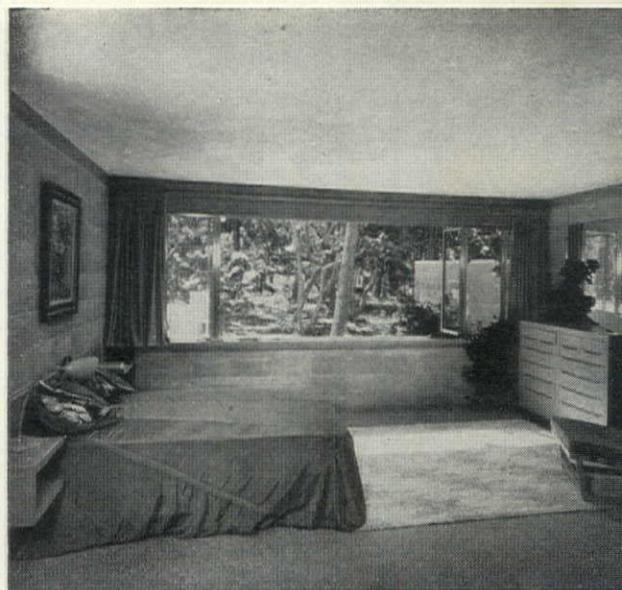


OWNER'S STATEMENT:

*I have lived in apartments all my life, have never owned a home of my own. I wanted a house that would be different from what I was accustomed to see in Florida—one with plenty of light (because my hobby is painting), roomy, cool and compact. That is just what I got. The house is always cool—I never know the outside temperature until I go out. As it is right on the water and all glass is on that side, I have a beautiful picture facing me all the time.*

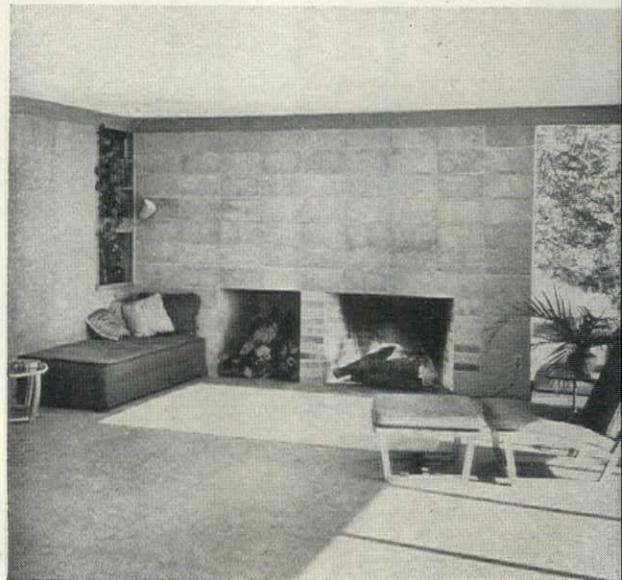
*The natural concrete block inside, tinted just the least bit, and the light, almost-natural plywood together with the terrazzo floors give the house a cool feeling throughout. All my friends who contemplate building make sketches of various parts that they want to incorporate in their new homes.*

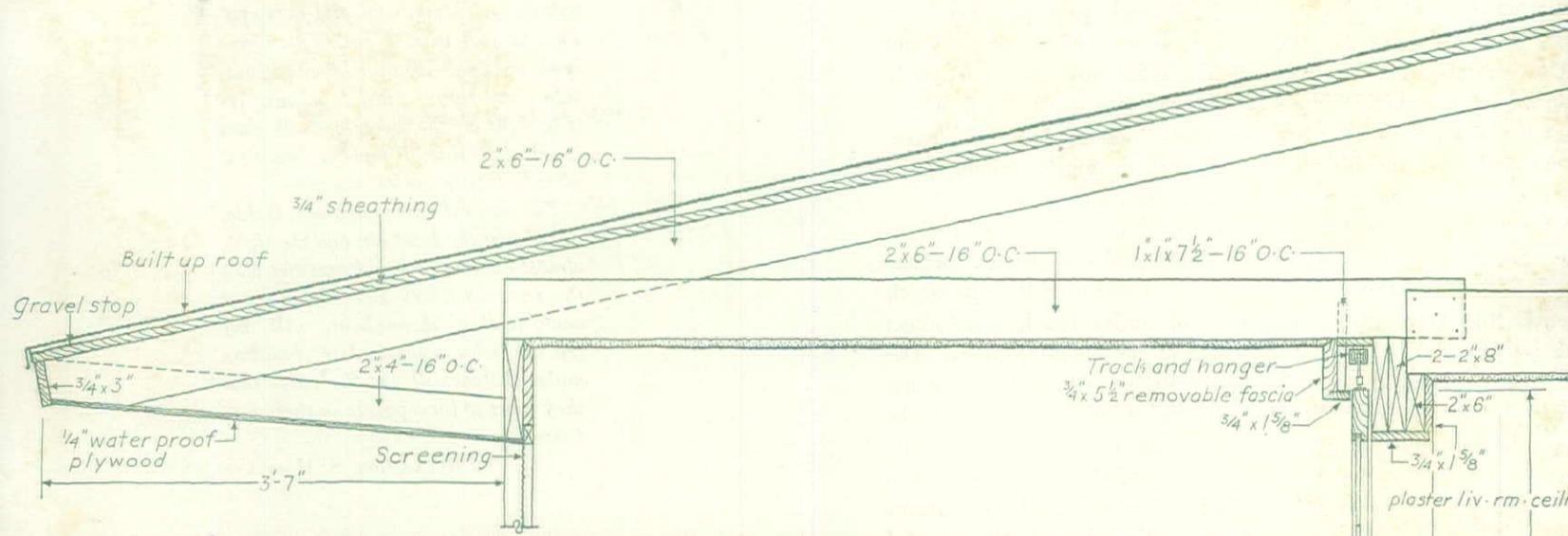
ALEXANDER S. HARKAVY



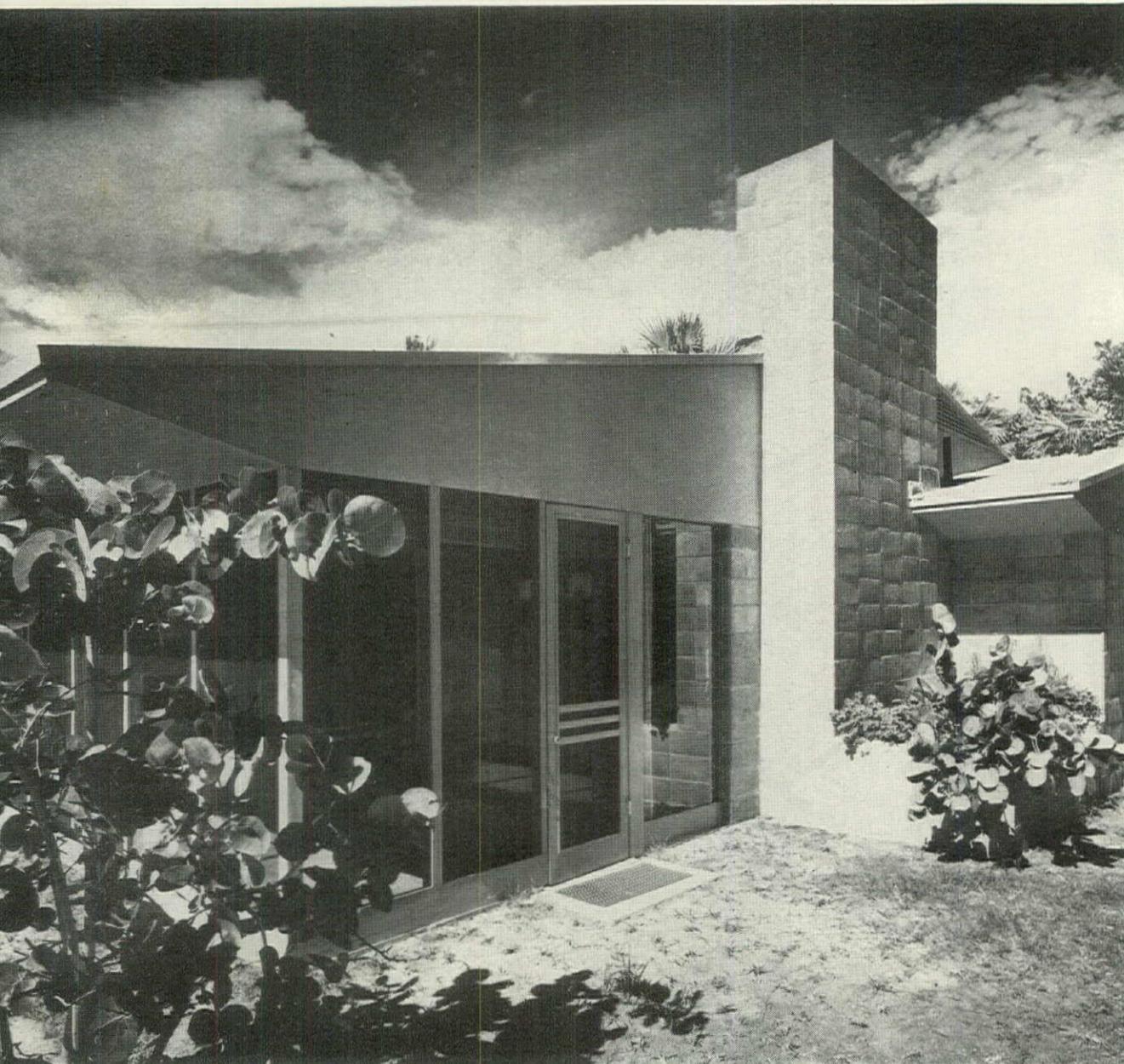
BEDROOM OPENS TO WOODS AND NIGHT BREEZE

CHIMNEY WALL OF LIVING ROOM HAS WOOD BIN





ROOF OVERHANG, SHIELDING PORCH FROM SUN, SLOPES UP TO ADMIT MAXIMUM LIGHT TO LIVING ROOM



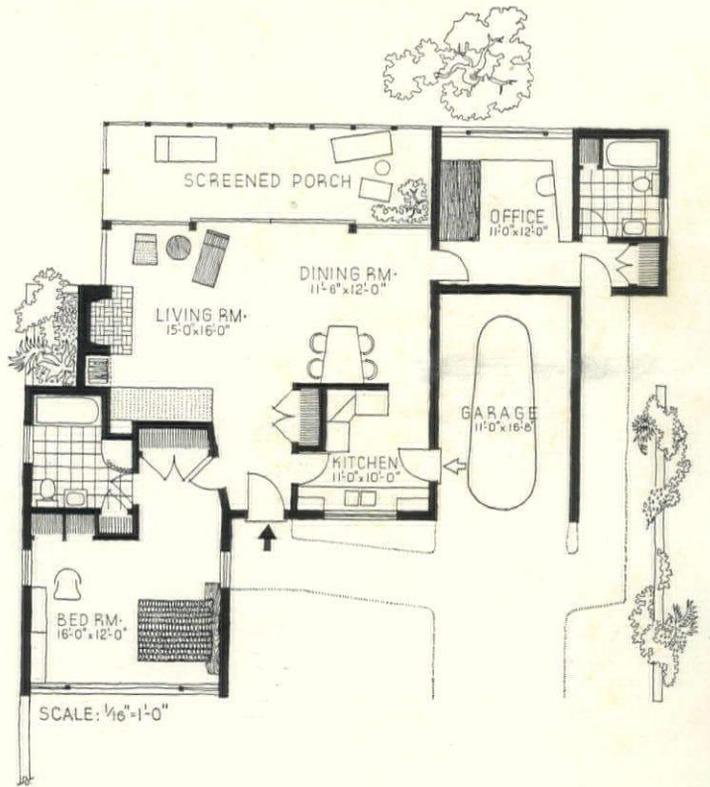
Joseph Steinmetz Photos

create a decorative tiled effect, concrete block walls were laid with all joints aligned. Claimed to be hurricane-proof, they are strengthened by 1/4-in. steel rods laid horizontally in every third course. Over, corners are poured full of concrete and reinforced with 1/2-in rods tied to the floor slab and the reinforced concrete wall

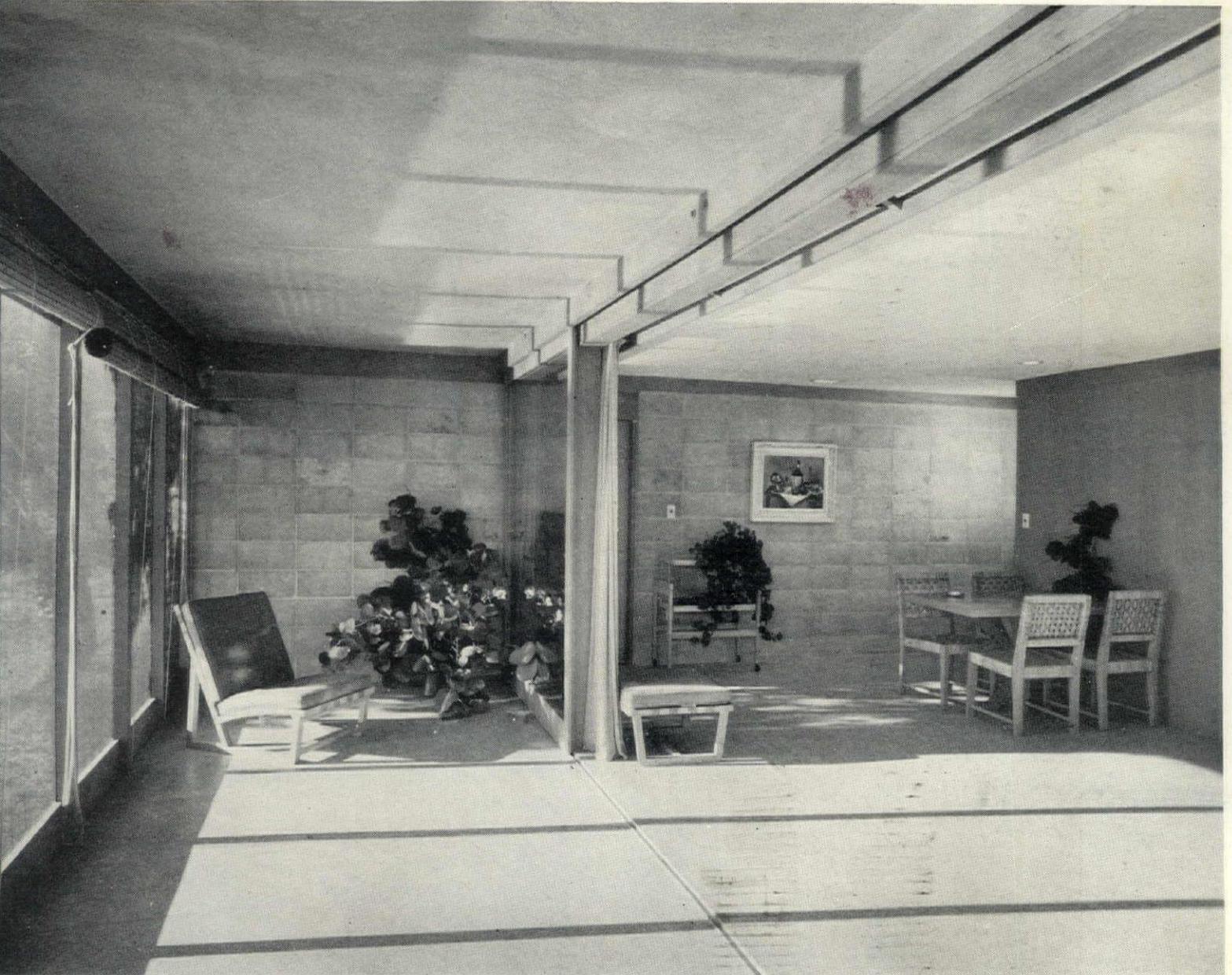
Walls are ventilated to prevent moisture penetration and the formation of mold and mildew, a common Florida scourge. This was accomplished by keeping the center web sections of the block free from mortar and by venting the walls top and bottom.

#### CONSTRUCTION OUTLINE

**FOUNDATION**—reinforced concrete, Florida Portland Cement Co. **STRUCTURE**—Exterior walls—concrete block, Anti-Hydro Waterproofing Co.'s permanent waterproofing. Floors—reinforced concrete with terrazzo finish. Walls—plaster on metal lath, National Gypsum Co. **ROOF**—felt, tar and gravel, Barrett Div., Allied Chemical & Dye Corp. **INSULATION**: Roof—Rockwool, Johns-Manville. **WINDOWS**: Sash and screens—aluminum, ABC Steel Equipment Co., Inc. Glass—double strength and plate, Pittsburgh Plate Glass Co. **PAINTS**—O'Brien Varnish Co. and Pittsburgh Glass Co. **DOORS**—Paine Lumber Co., Ltd. **HARDWARE**—Schlage Co. **ELECTRICAL INSTALLATION**: Wiring system—conduit and cable, National Electric Products Corp. Switches—toggle, Hart & Schaffner Electric Co. Fixtures—Kurt Versen and General Lighting Co. **KITCHEN EQUIPMENT**: Range—electric, Hotpoint, Inc. Refrigerator—National Electric Products, Inc. Sink—stainless steel, Tracy Mfg. Co. Cabinets—Mullins Corp. and Palley Mfg. Co. Fan—Hig Electric Ventilating Co. **BATH EQUIPMENT**—Crane Co. Shower—Speakman Co. Cabinets—Hoegger, Inc. **HEATING**: Electric wall-type space heaters with fan in each room, National Electric Products, Inc. Mfg. Co.

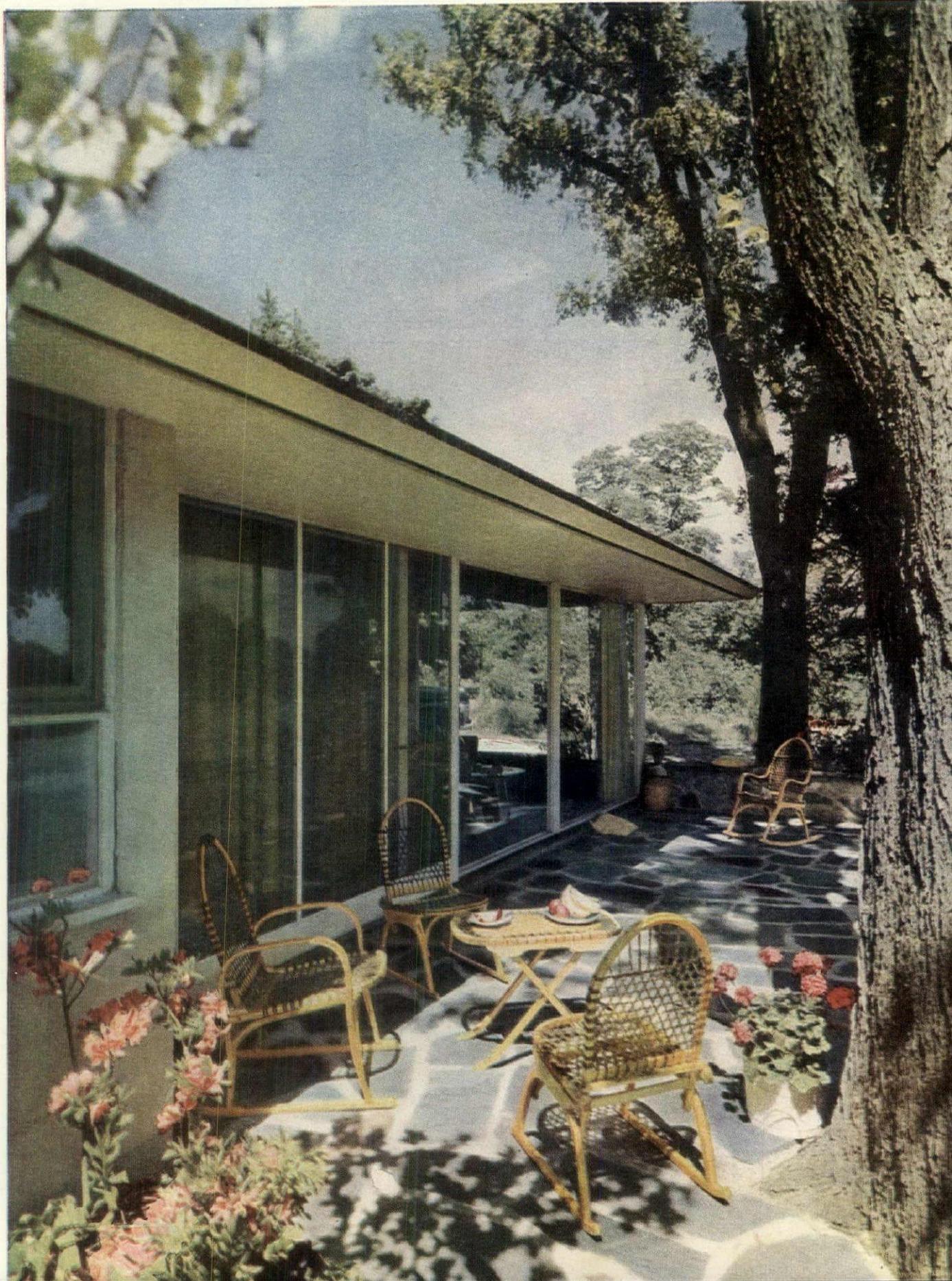


THE LIVING AREA AND DINING SPACE ARE ONE BIG ROOM WHEN GLASS DOORS ARE PUSHED ASIDE. NOTE REFLECTED LIGHT FROM WATER



Northeastern solar house is compact  
economical, relies on architectural  
restraint to conform to its locale

FINE OLD TREES SHELTER INFORMAL TERRACE OUTSIDE LIVING ROOM, CONTRAST APTLY WITH HORIZONTAL LINES OF H



*Ezra Stoller*  
*Courtesy McCall's*



New England has probably the best building traditions in the country. The existence of many old houses is at least partially due to their being so well built. Construction has been mainly of wood and despite expensive maintenance and the presence of termites throughout the region, a prejudice in favor continues. Masonry construction is in general use, too, but the severe climate prevents its being entirely satisfactory. A New England house must weather a wide range of temperatures—heavy rain and snowfalls, frequent serious storms. The land's rocky subsurface presents difficulties in building but, despite its obvious economy, many people still dislike the idea of basementless houses.

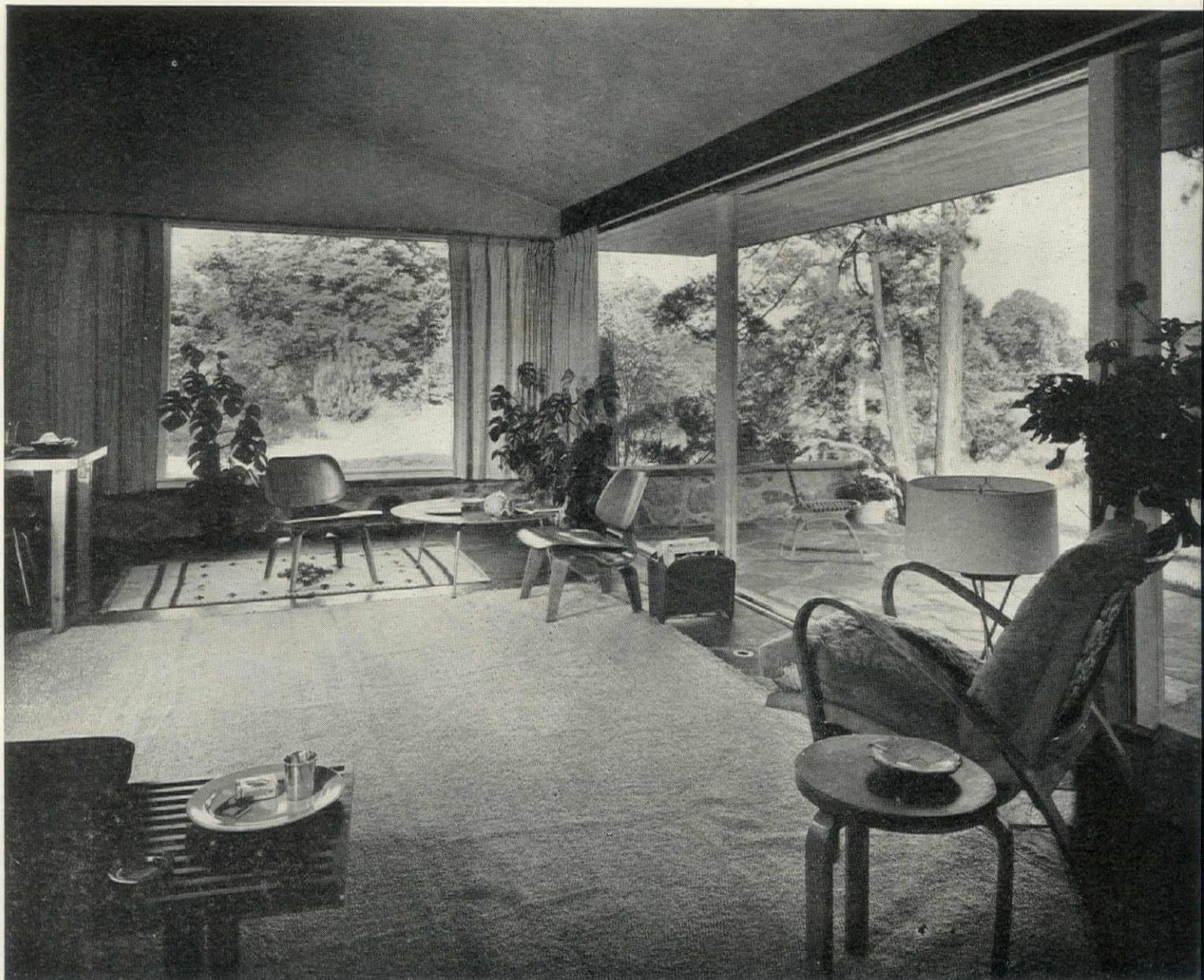
The uneven landscape makes standardization of plans very difficult—the Nichols house is one of the few we have seen on one level.

CARL KOCH, Architect

Indicative of the wide appeal of this house is the fact that *McCall's* magazine has adopted it as a pet project, will publicize it extensively in a forthcoming issue. Like many other people, the owners were not particularly enthusiastic about contemporary architecture but at the same time realized they could not build a Cape Cod cottage that would supply all the light and air they wanted, nor provide a comparable amount of space for the money. After living in the house they are extremely pleased with the large windows which make the most of a pleasant country view, give them sun in winter, protection in summer.

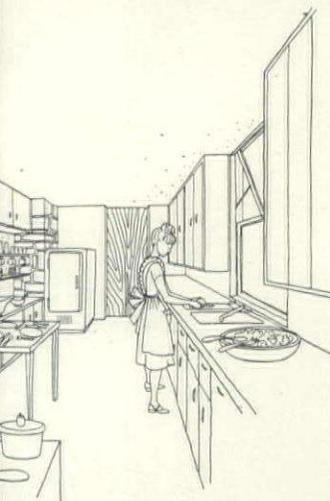
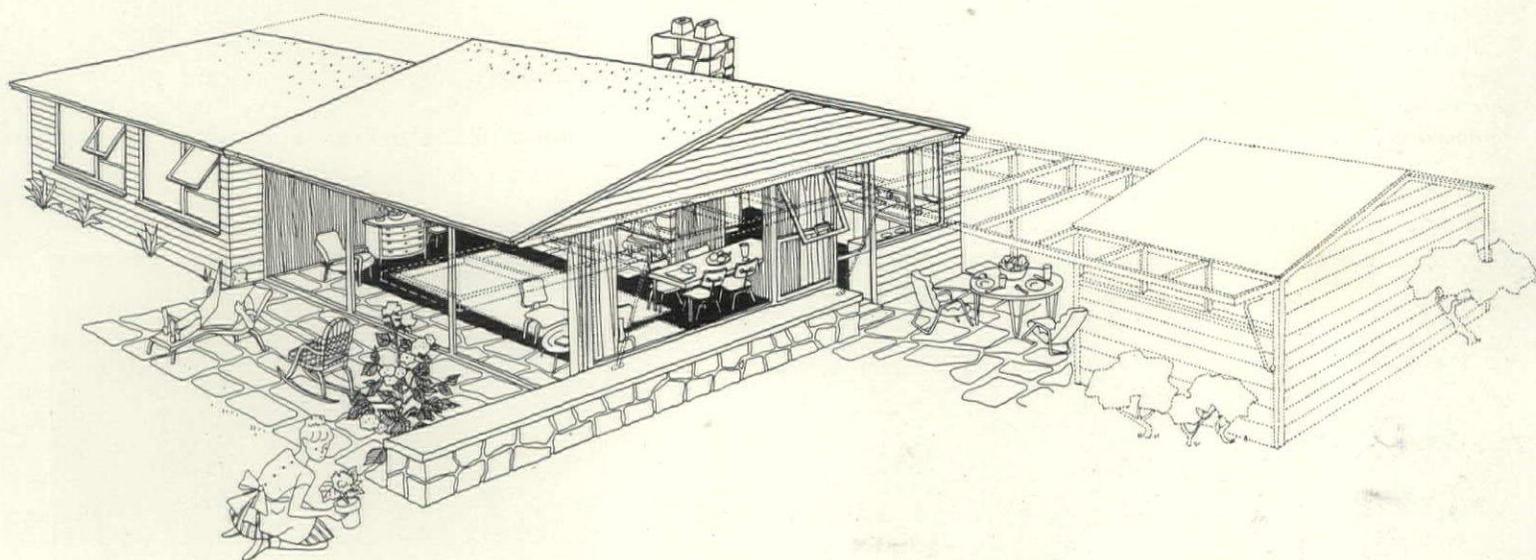
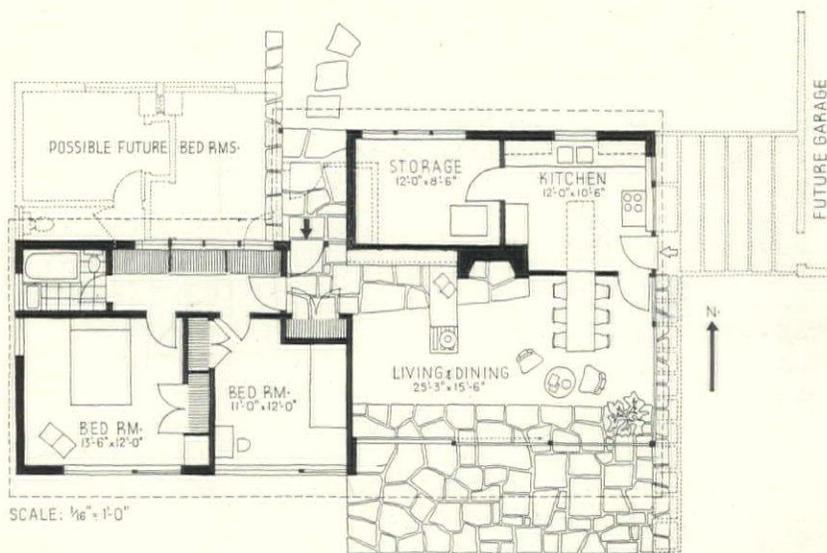
Despite the relatively conservative character of the design, in plan and execution the house is up to the minute. Indoor-outdoor living has been stressed as much as is feasible for the climate, while compact planning of the balance of the house permitted the generous dimensions of the living-dining area within a limited budget. Further increasing the spaciousness of this room is a ceiling which follows the contours of the gently sloping roof. Two of the three large panes of glass are fixed. However, for the region, one sliding panel provides an ample opening and cross ventilation is furnished by two small windows flanking the kitchen door. The living room, located on the opposite side of the house from the approach, is oriented to the south and east.

FIELDSTONE WALL CARRIES THROUGH FROM LIVING ROOM TO TERRACE, FURTHER INTEGRATING INDOOR-OUTDOOR SPACE





of the neatest features of the house is the dining table which is moved into the kitchen for setting and can also serve as additional space or for eating in the kitchen. In clearing the table, this procedure is reversed. The stones for the fireplace and foundation came from the site—were lovingly hauled to the mason by the architect himself. With the exception of the storage cabinets and bookshelves to the left of the fireplace, living room walls are plastered. The overhang of the roof, located a few feet forward of the hearth, creates a spatial division, works admirably in the foyer and entrance to the bedroom wing. Slate used at the entrance and carried a few feet into the living room from the terrace is combined with painted concrete flooring which holds the radiant heating coils. Except for the large kitchen window, the north side of the house is well closed off from the approach. It is lit by high strip glazing. Dotted lines on the plan indicate how the house can be extended. Although only one additional toilet is anticipated, the two bedrooms will be equipped with washbowls. The entry will be extended and a coat closet installed in the existing storage room.



**KITCHEN** is laid out in a rectangle with the movable dining table occupying the center of the room. Both stove and sink are located under large picture windows. Storage and utility room is accessible only through the kitchen. Master bedroom (right) has built-in storage facilities.

**CONSTRUCTION OUTLINE**

**STRUCTURE:** Exterior walls—concrete block, 1 in. air space, wood furring; waterproofed with asphalt paint, Flintkote Co.; inside—Rocklath and plaster, Gypsum Co. Floors—Vermont slate waxed and concrete painted, California Stucco Co. **ROOF:** asphalt roofing, Flintkote Co. **INSULATION:** 4 in. rockwool on Vaporseal, Celotex Corp. **FIREPLACE:** Damper—Donley Bros. Co. **WINDOWS:** Sash—Hope Windows, Inc. Weatherstripping—Chamberlin Co. of America. Glass—Pittsburgh Plate Glass Co. **FLOOR COVERINGS:** Living room—carpet, Bigelow Sanford Carpet Co., Inc. Bedrooms—linoleum, Armstrong Cork Co. **DOORS:**—Paine Lumber Co. Garage—Crawford Door, Ltd. **ELECTRICAL INSTALLATION:** Wiring—BX. Appliances—Sears-Roebuck. **KITCHEN EQUIPMENT:** Range and refrigerator—General Electric Co. **BATHROOM EQUIPMENT:**—American Radiator Standard Sanitary Corp. **HEATING:**—hot water radiant system, wrought iron radiators—A. M. Byers Co. Boiler—Bryant Heater Co. Grilles—H. A. Thrush & Co. Regulator—Minneapolis-Honeywell Regulator Co. Water heater—Bryant Heater Co.

*Ezra Stoller Photos*



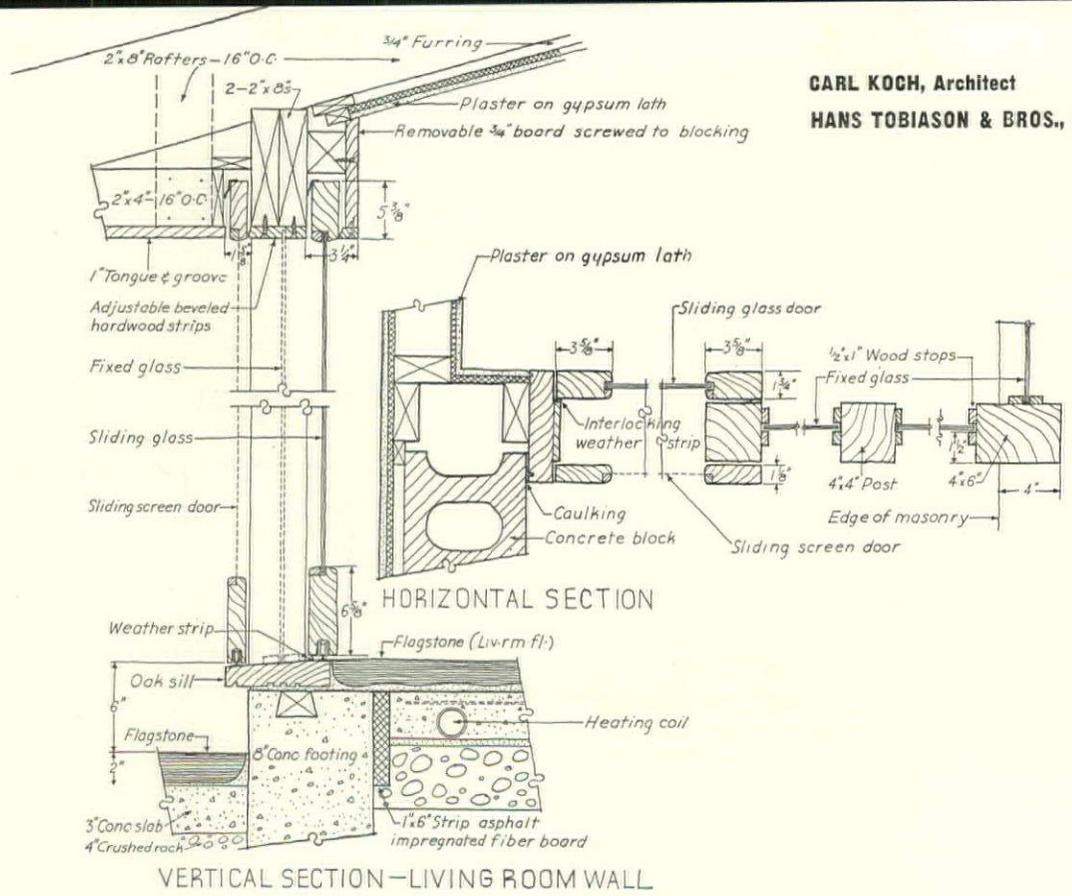
**OWNER'S STATEMENT:**

The radiant heating worked very well once we got it properly adjusted. At first the living room became too warm when we had enough heat to warm the bedrooms and give us hot water but this was remedied by installing valves which regulated the living room temperature . . . We like the living room window panels as they are—two fixed and one movable. But if we had it to do over I think we'd have all fixed panels and a conventional-type door. The movable panel was expensive and the required weatherstripping makes it a little hard to move.

One of the things that worked out surprisingly well is the flooring. We were afraid it would be uncomfortably hard and that the dark green rubber paint would wear off—but neither happened. It's very good-looking and comfortable.

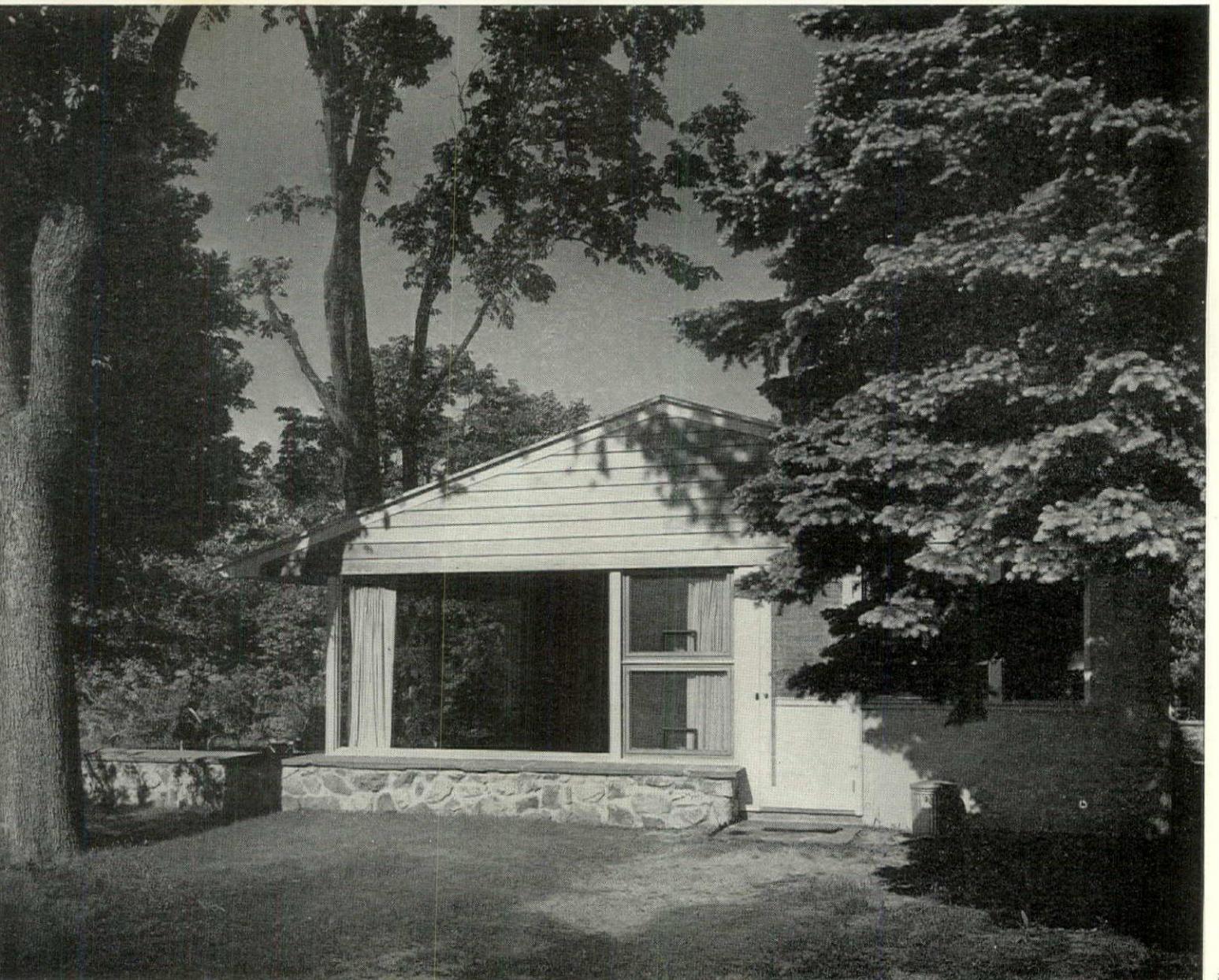
We're very fond of having ceilings that follow the roof lines—the rooms are airier and look larger. It is an economical idea, too.

L. V. B. NICHOLS



OUTDOOR EXTENSION OF STONE FLOORING HELPS OFFSET BLEAKNESS OF THE WINTERS

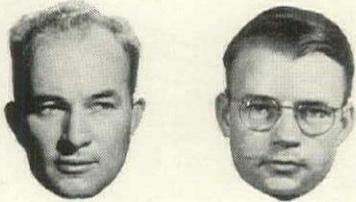
SERVICE DOOR IS AT EAST END OF HOUSE. KITCHEN HAS TWO LARGE WINDOWS—ONE ON THIS SIDE, ONE FACING NORTH



Esra Stoller



# In the tradition of the Southwest, the San Antonio house offers maximum comfort despite hot, dazzling summers and sharp winter col



Our section of Texas is extremely conservative. There is hardly a person who, if he thinks of houses at all, doesn't have a head full of "Spanish Colonial," "Texas Ranch Style," "Greek Revival," etc. This is understandable when one sees such fine examples of these traditions in the missions, the early urban mansions and in the old German towns near San Antonio. But few architects have made any effort to move toward a comparably progressive architecture of and for today, and our speculators do just what is done in Kansas City and Jersey City. As a matter of fact, I know of no section of the U. S. where there is such a hodge-podge of nondescript and unsuitable habitation. Not even the local tradition of simple houses of stone or caliche blocks has been regarded. Instead, there has arisen a new tradition that is generally characterized by "peanut-brittle rock work"—angular and pointed flat stones laid up flat against sheathing. During the twenties and thirties almost no houses were built with the very necessary wide overhangs; most were big and square and porchless—and pompous. The good reason for shutters on the old houses was forgotten.

This has happened everywhere, but somehow it seems more ludicrous in Texas where the climate is such a real challenge—where even casual analysis demands certain fundamental approaches and solutions—where traditional architecture was not "Spanish" but simple, straightforward small houses that were built to stand against intense heat, bright sun, torrential rain (on occasion) and bitter cold that comes quickly.

We look with envy and amazement at the very arbitrary placing of rooms as regards orientation in the California houses. Our latitude is the same as the northern Sahara and the sun is very bright. The wide-brimmed cowboy's hat is not an accident—likewise, roof overhang is essential. The great cumulus clouds bring heavy blowing showers on

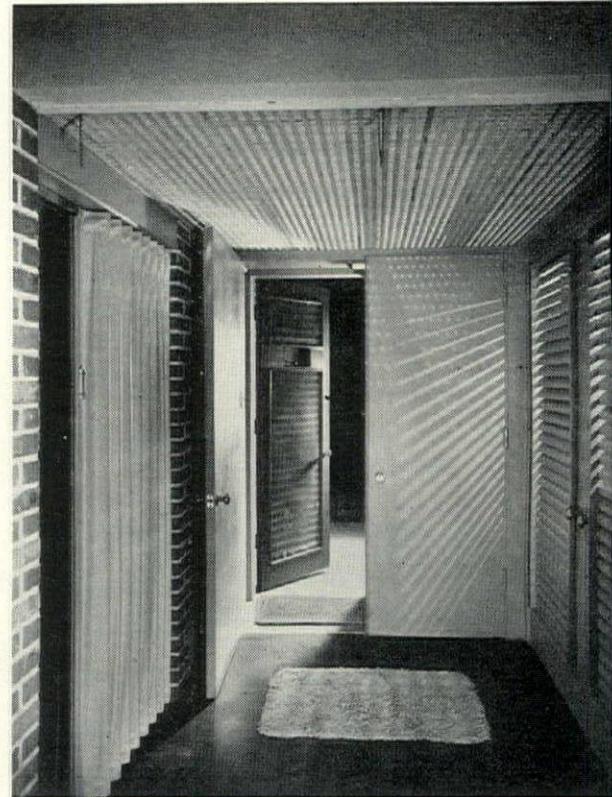
hot days when windows must remain open—another good reason for roof overhang.

If there is any breeze at all, one can be pretty comfortable in hundred-degree weather, provided the house has adequate openings. However, they must not be finished with great sheets of fixed glass on the southeast breeze side. Nor can we indulge in unprotected glass or openings on the west—we must shut out the hot afternoon sun as completely as possible.

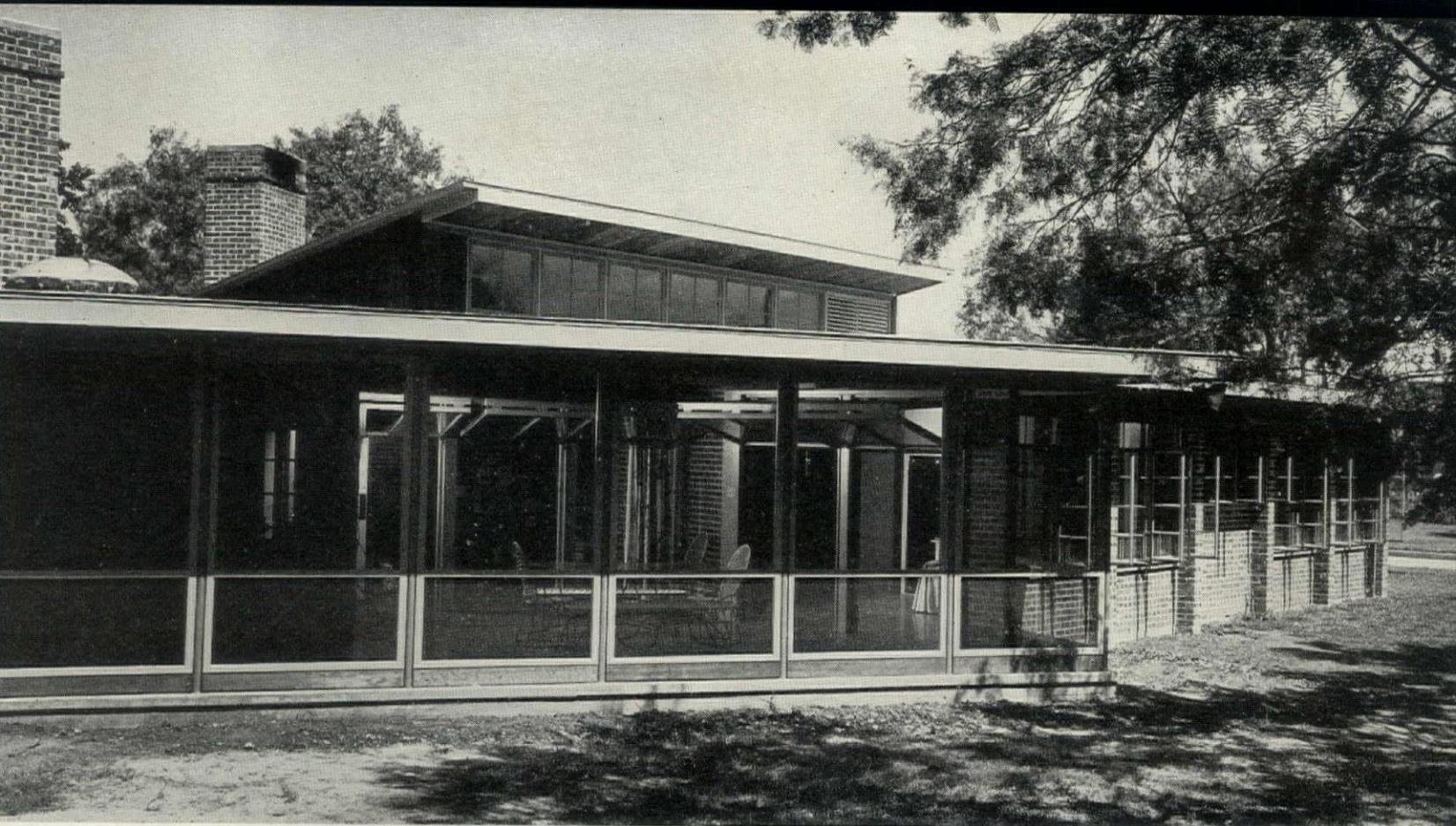
Solar heating—or solar assistance to heating—is quite difficult, and very fine points must be drawn in the design of openings and overhangs. While the Texas sun has not yet reached a safe high angle in March, temperatures sometimes exceed 80 degrees during that month. In September, the sun is again getting down to a low angle, but it is still quite hot—with the temperature often as high as 95 degrees. Therefore, the early morning sun that cuts the early chill and adds cheer to the "far side" of rooms is about all of the direct sun we can allow in the house. Although several days this past winter found San Antonio and South Dakota reading the same 18 degrees, "cold spells" are short and hardly justify the expense of movable slatted overhangs that will accommodate our violently variable winters and very long summers.

Without air conditioning, Texas house planning is difficult. Every effort must be made to get the precious southeast breeze into all rooms. The use of large exhaust fans is a splendid supplement when there isn't any breeze. This, however, permits only selective breezes, and free movement of the people from room to room becomes a problem. The attic fan is most useful on hot nights or during an evening of entertainment when all openings are closed except those in the occupied rooms.

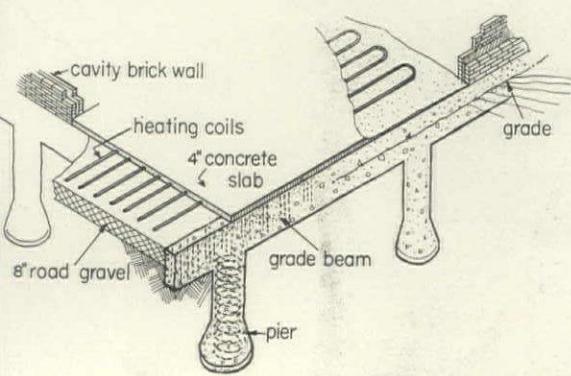
O'NEIL FORD & GERALD R. ROGERS,  
Architects



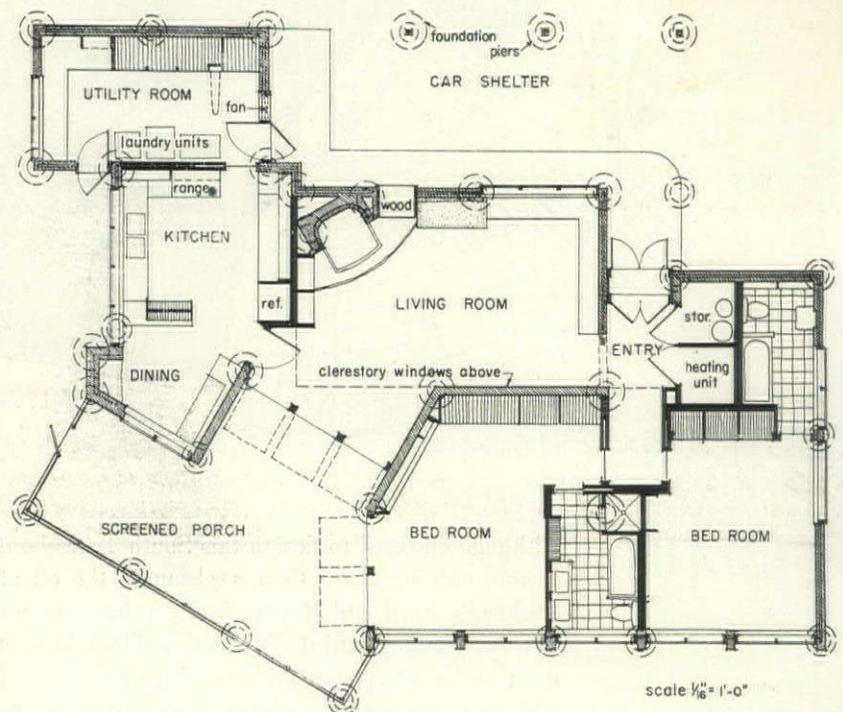
**ENTRANCE HALL** has latticed ceiling above which is a large quiet ventilating fan. Beyond solid entrance doors—closed only in cold weather—are heavy, louvered summer doors screened on the inner face. They give privacy, admit breeze



GARDEN FRONT, THE HUGE SCREENED PORCH ACTS AS FUNNEL TO TRAP COOL SOUTHEAST BREEZE, HAS HEATED FLOOR FOR COOL DAYS



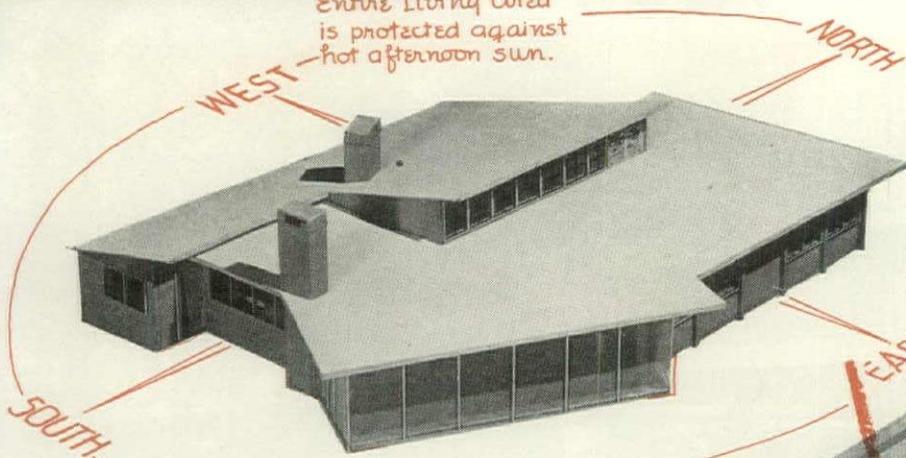
**FOUNDATION FRAMING** consists of concrete piers and grade beams which are poured integrally into monolithic frame. This frame carries all load-bearing cavity brick walls. Concrete floor slabs are poured separately.



STREET FRONT, OPEN CARPORT BLOCKS HOT WESTERN SUN, SHIELDS BOTH FRONT AND SERVICE ENTRANCES



Entire Living Area is protected against hot afternoon sun.



Living Room and Bedrooms are open to morning sun.

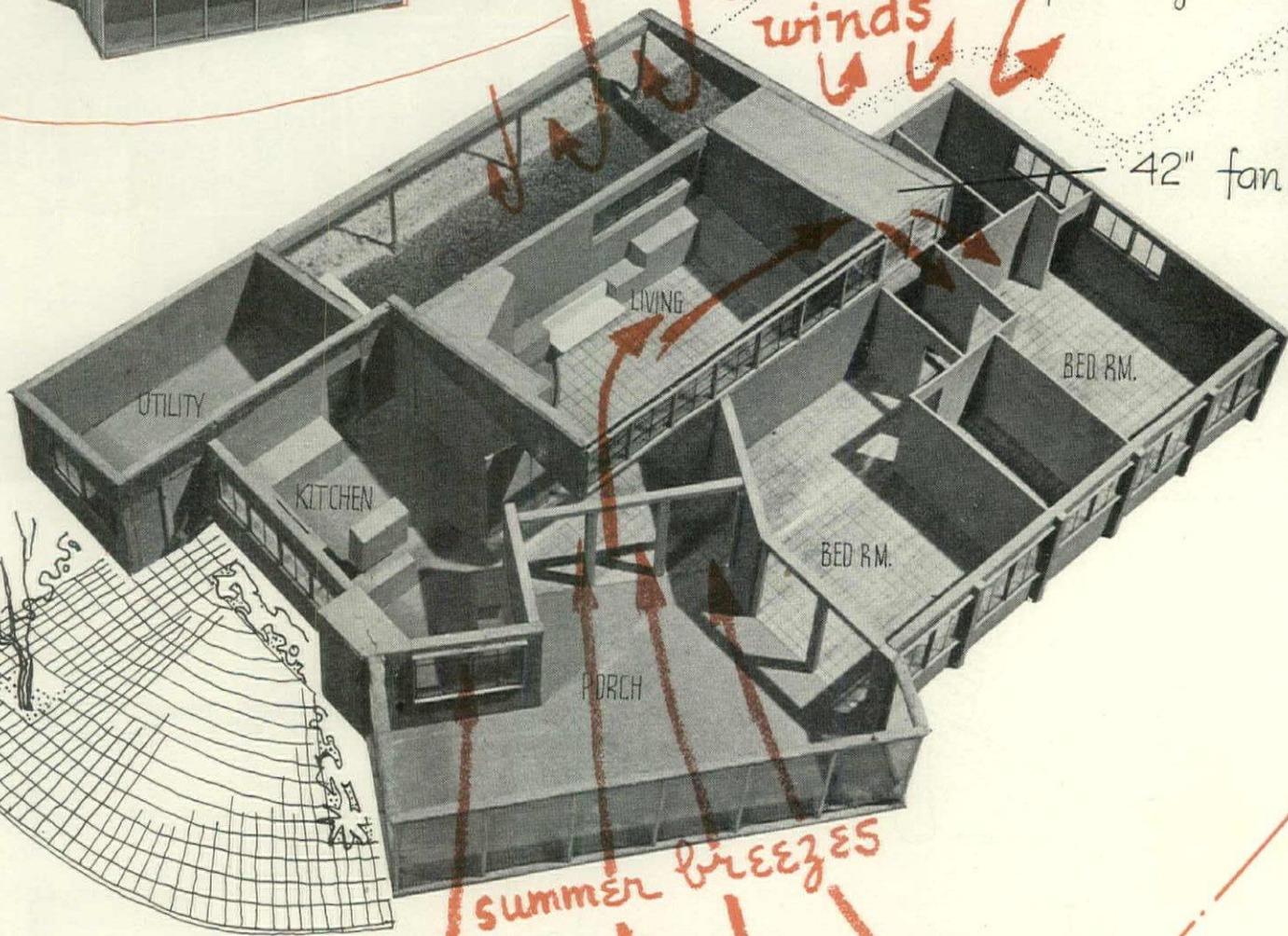
lot line

drive

parking

winter winds

42" fan



summer breezes

Although engaged to design this South Texas house when it was nothing more than a gleam in the clients' eyes, Architects Ford and Rogers firmly refused to put pencil to tracing paper until the McNeels had bought a lot. "You can't design a hypothetical house," is the way Ford puts it. "All that does is create a lot of preconceptions which later have to be unravelled." A definite piece of land was thus acquired, an inside lot which was level, faced north, and had no particular outlook. It was 75 ft. wide, 135 ft. deep, and zoning required a 30 ft. setback along the street front. On this plot the architects were to build a house whose controlling factors were to be year-round comfort and easy housekeeping. Both have been neatly accomplished. The siting and floor plan of the house are such that all rooms are exposed to the prevailing summer breeze from the southeast—of critical importance in this land of low humidities but high temperatures—and to early morning sunshine. The screened living porch and terrace at the rear of the house achieve both breeze and privacy, while the service areas along the west act as buffer against the blistering western sun and cold winter winds.

Housekeeping is facilitated in many ways. All surfaces were selected for ease of cleaning: floors are of waxed cork tile, concrete and clay tile; walls are brick, plaster or

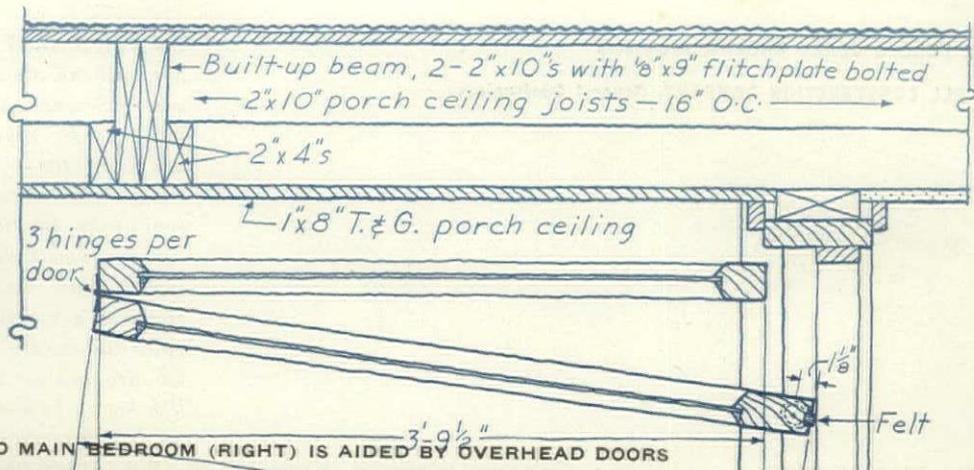
waxed wood. There are no baseboards, little trim and doors are flush. This same determination to reduce detail to the minimum led to replacing furniture as much as possible with built-in storage units. Kitchen counter-tops, all table tops are surfaced with laminated plastic. The draperies and upholstery fabrics are rough-textured, dye-fast cottons which wash or clean easily.

No effort has been spared to make the house comfortable the year around. Its fenestration is designed to take in as much of the prevailing breeze and to exclude as much of the sun and light as possible. Its plan is designed for natural ventilation. This is supplemented by a large 42-in. fan above the entrance hall ceiling which can evacuate air from any or all of the principal living rooms, a smaller exhaust fan for utility room and kitchen. For winter heating, the McNeel house employs an oil-burner system working through hot-water coils embedded in the concrete floor slab.

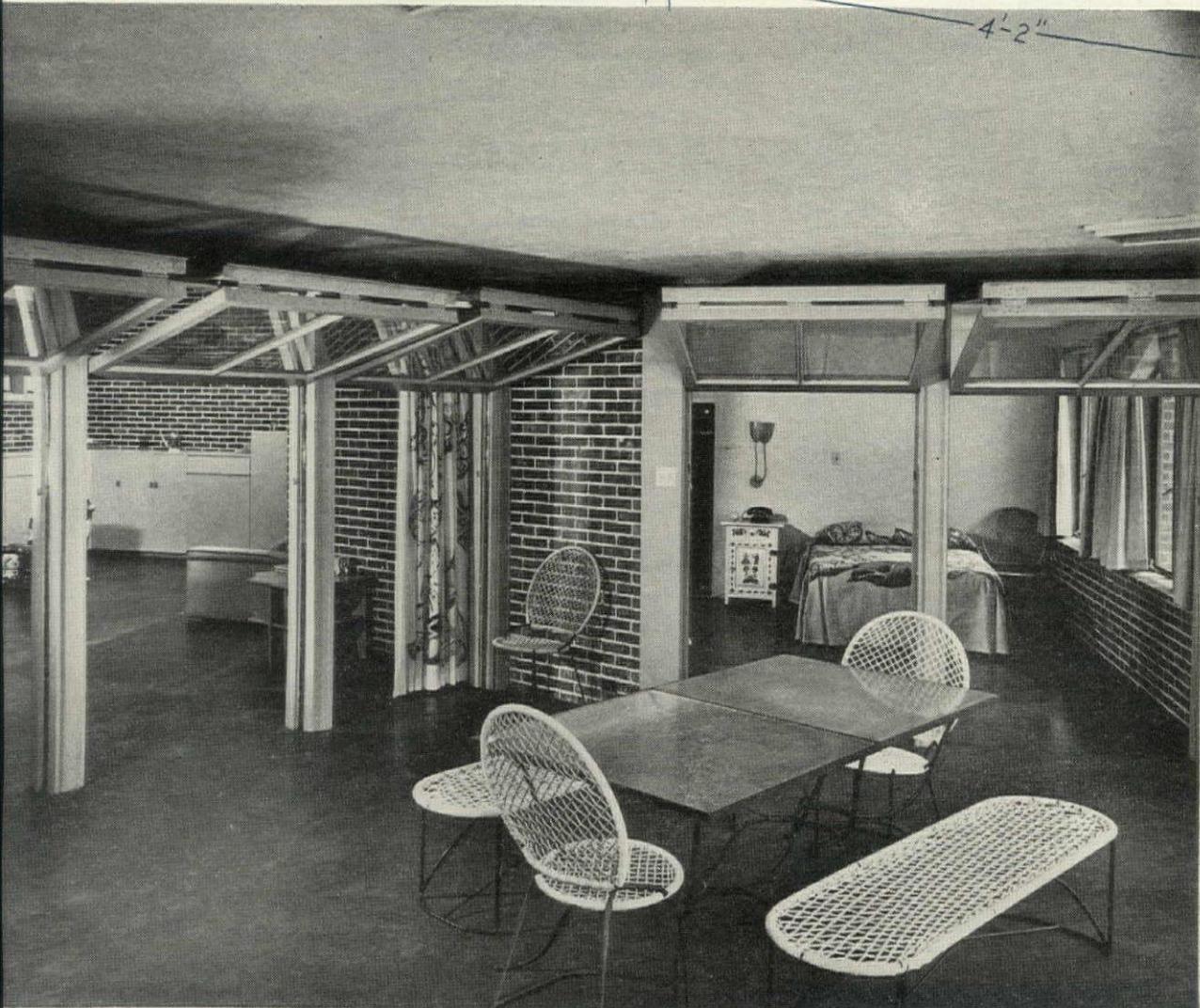
Structurally, the house is straightforward and efficient. It rests on a monolithic system of concrete piers and beams which carries 9 in. cavity brick bearing walls. The heated floor slab rests on gravel fill. Ceiling lines follow the roof framing throughout, except in entry where the room clerestory is continued to house main ventilating

HEIL FORD & JERRY ROGERS, Architects  
 SHELL CONSTRUCTION COMPANY, General Contractors

**BEATING HOT WEATHER** almost the entire living area of the house can be thrown together by means of jack-knife doors which fold up onto porch ceiling. Designed by the architects, these doors employ an ingenious counter-balanced suspension system which makes for easy, safe operation. (See below.)

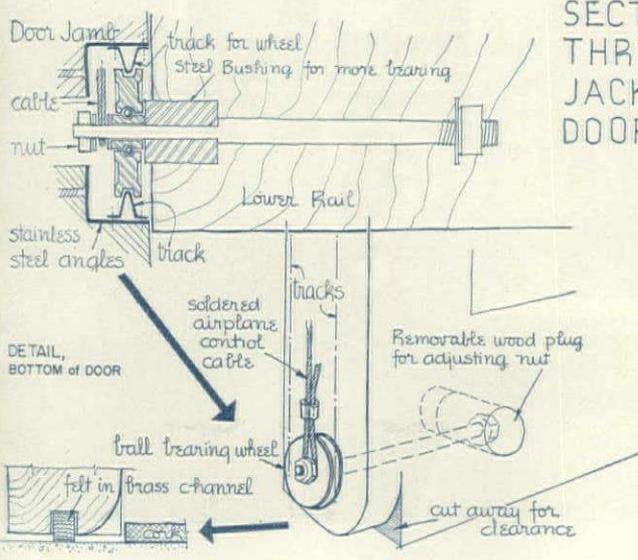


CROSS-VENTILATION THROUGH LIVING ROOM (LEFT) AND MAIN BEDROOM (RIGHT) IS AIDED BY OVERHEAD DOORS



Ulric Meisel Photos

RESTORY GIVES LIVING ROOM ADDED LIGHT, VENTILATION



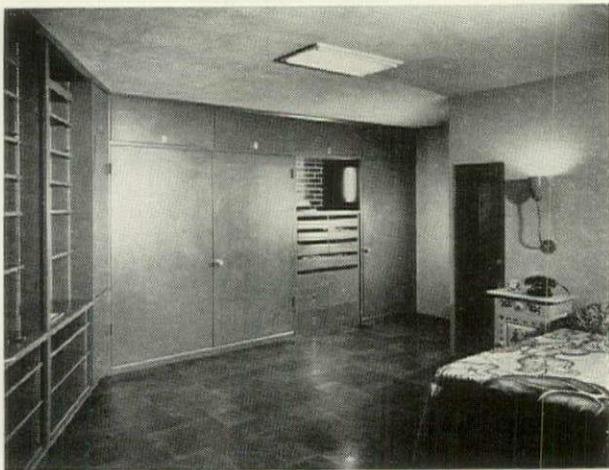
SECTION THROUGH JACK-KNIFE DOORS

Cem-tile

O'NEIL FORD & JERRY ROGERS, Architects

MITCHELL CONSTRUCTION COMPANY, General Contractors

**AMPLE STORAGE SPACE** is a feature of every room in the house. Mrs. McNeel finds that this saves floor space, facilitates cleaning, contributes to neatness.



Ulric Meisel Photos

**OWNER'S STATEMENT:**

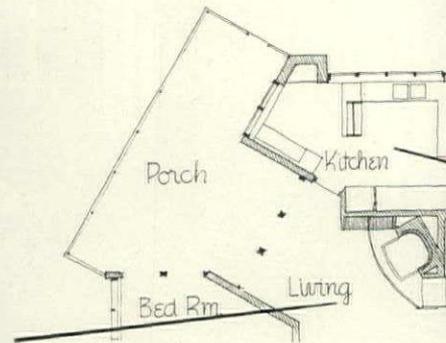
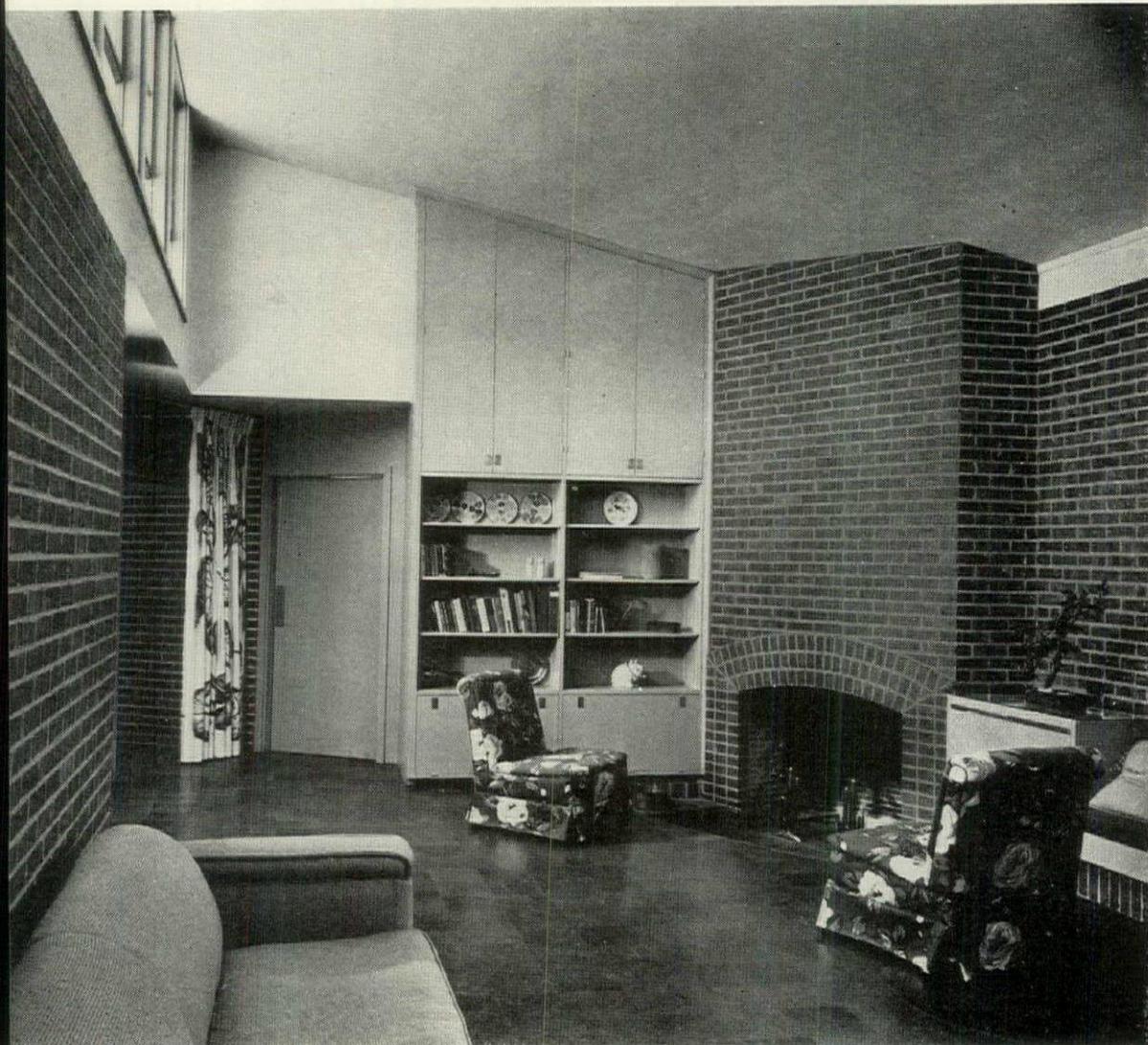
*My husband always had a yen for a sort of Southern Colonialness; I was intrigued by ranch style because I had lived for a while on a ranch. Along with about ninety-nine per cent of the American public, we were concerned with deciding on a house type. Then we saw Tomorrow's House in a bookstore, read it to each other and anyone else who would listen, dropped our widely diverse ideas like hot rocks and knew modern was the best for both of us.*

*We knew there were certain things we wanted the house to do for us, but hadn't the vaguest idea what it should look like—which was a good thing, as we had to overcome no preconceived ideas of appearance. We wanted a lot on the south side of the street so we could live at the rear in privacy—the only thing in a part of the country where so many months a year are spent outside. We wanted clerestory windows; so did Mr. Ford. And there are many more such examples of agreement. In every case of a decision on materials, the one easiest to mop, clean or dust was the one selected. We have no servant, and there are many things I would rather do than dust bric-a-brac or clean woodwork.*

*Not that we went around in an aura of blissful accord—we had some pretty hot discussions, but few fights. However, the principle we were working toward usually benefited these arguments. One thing we never specified was the exterior appearance, but the manner in which the architect has put it all together is completely attractive, unusual and extremely satisfying to us.*

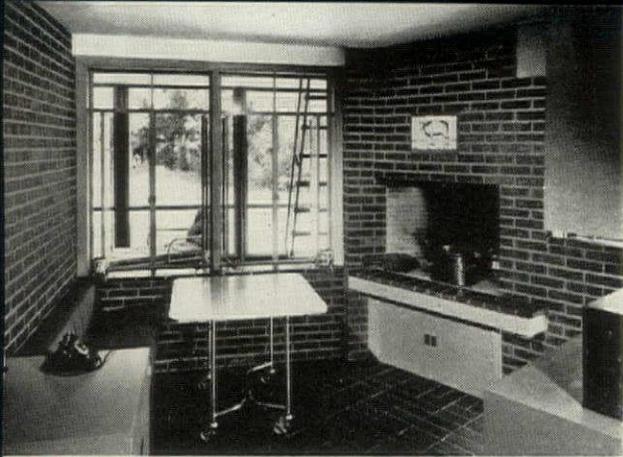
*Bill's favorite room is the utility room where his workbench is located, although his inhabiting it is strictly a matter of mood. My favorite room is the kitchen, which was tailor-made to fit my working requirements and habits. Mr. Ford endeared himself to me by saying on our first consultation, "Let's put the kitchen in the nicest place in the house," which he did. It has windows on the south, on the porch, a double-action door into the living room and a sliding door to the utility room near the back. With good ventilation, a view, an electric stove that reduces heat, a place, and the built-in sofa cabinet, the kitchen is the most constantly used, visited and appreciated room in the house. From June to September, the screened-in porch is a close second.*

MRS. WILLIAM D. McNEEL



**ARCHITECTS' SELF-CRITICISM:**

*We made certain mistakes, especially because of immediate problems. We don't like the muntins in the windows, but couldn't get large panes at that time. Some details, such as window frames and outside trim, seem a bit coarse; and I wish we might have held the window sill in east bedrooms on the same level as bedrooms. The windows and slides of jack-knife doors are needlessly wide and bulky but we didn't know what warping stress would be exerted in lifting them. I don't like the lowered hearth in the living room fireplace. It uses too much room, is a romantic idea not suitable to a weekend lodge. Nevertheless, I do like the arched opening [above the fireplace] as it suggests a center line which doesn't exist.*



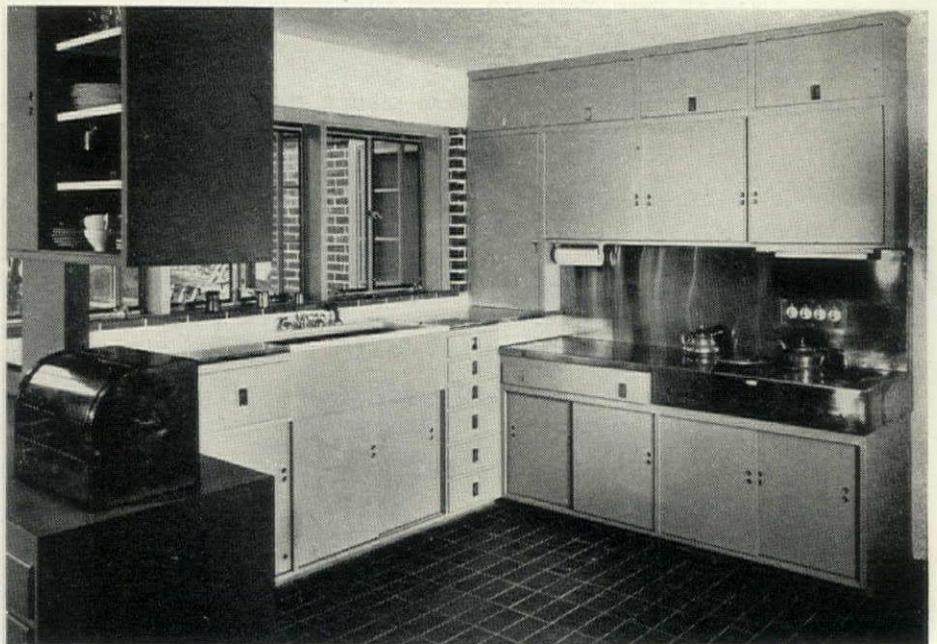
**HEART OF THE HOUSE IS THE KITCHEN.** Designed to reduce drudgery of cooking to a minimum, it has many special features, including an electric stove and oven built into cabinets at counter height, counters 3 in. higher than usual and a dining alcove with raised fireplace for broiling.



*Ulric Meisel, Photo Associates*

**CONSTRUCTION OUTLINE**

**STRUCTURE:** Exterior walls—9 in. cavity brick wall with wire ties, brick finish inside and out. Floors—5 in. concrete slab; coloring, Master Builders Co. **ROOF:** Ply built-up tar and gravel, The Texas Co. **INSULATION:** roof—4 in. rockwool batts, Texrock Insulation Co. **WINDOWS:** Sash—steel casement and projected, Hope Windows, Inc. Glass—double strength, quality A, Libbey-Wens-Ford Glass Co. **FLOOR COVERINGS:** Main rooms—Kencork, David E. Kennedy, Inc. **WOODWORK:** Trim and cabinets—white pine, Prassel Sash & Door Co. Doors (rolling)—Kennatrack, Jay G. McKenna, Inc.; (folding)—Modernfold, New Castle Products. **HARDWARE:** Schlage Lock Co. **ELECTRICAL INSTALLATION:** Switches—The Arrow-Hart & Hegeman Electric Co. Panel boards—Square D Co. Fixtures—fluorescent. **KITCHEN EQUIPMENT:** Range—Hotpoint electric, Hotpoint Inc. Cabinet tops—Formica, Formica Insulation Co. **BATHROOM FIXTURES:** Crane Co. and Kohler Co. Seat—C. F. Church Mfg. Co. Cabinets—F. H. Lawson Co. **HEATING:** Radiant in concrete slab; wrought iron pipe, A. M. Byers Co. Boiler—gas fired, Richmond Radiator Co. Controls—Minneapolis-Honeywell Regulator Co. Pump—Bell & Gossett Co. Time Clock—Tork Clock Co. Regulator—White-Rodgers Electric Co. Water heater—Permaglas, O. Smith Co. **SPECIAL EQUIPMENT:** Attic fan—Ferman Nelson Corp.; metal louvers—Outside Venetian Lind Co.



# Year round house for middle Atlantic region shows skillful use of available materials, built-in features



EDWARD D. STONE, Architect

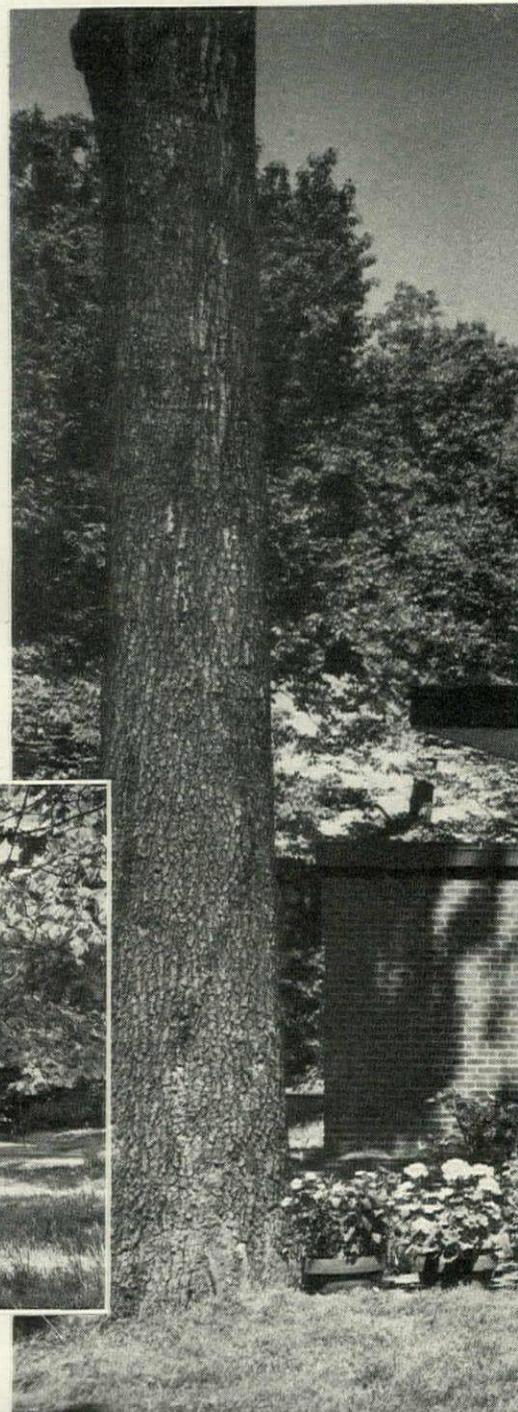
By locating this house at the edge of a steep bluff which commands a peaceful meadow view, the architect was able to provide a really open plan, arranged so that all principal rooms face in one direction. Since the majority of his clients prefers a one-story house, he and his associates\* have found, through experience, that only a certain number of room arrangements are practical. As this house demonstrates, one criterion for convenience and efficiency is a center entrance with the kitchen and bedroom units on opposite sides.

At the time of construction, lack of materials prevented anything but the most conventional method of building. Dry wall construction was out, as were metal sash and finishes such as plywood, oak floors, etc. Nevertheless, the owner obtained a 60 per cent mortgage from the Suffolk County Federal Savings & Loan Assn., who were enthusiastic about the house. Stock doors and windows and standard finishes were used for economy's sake. The handsome brick flooring in the living room and hall was found to cost more than wood. In the bedroom wing, cork flooring is used throughout. Interior color scheme is predominantly blue and green, complementing the warm color of the brick.

The covered entry holds the driveway away from the house, economizes on the amount of roadway needed for service since the kitchen is accessible through the adjacent drying yard. A curved wall to the left of the entrance way is planned for future construction. This will create a pleasant little garden on the approach side, overlooked by the playroom-study and dressing room. It will be noted that no stress has been put on cross ventilation in the bedroom wing, but the general circulation of air in the house has proved this unnecessary.

\* Stanley C. Reese, Alexander Knowlton, J. Graham Stewart and Karl J. Holzinger, Jr.

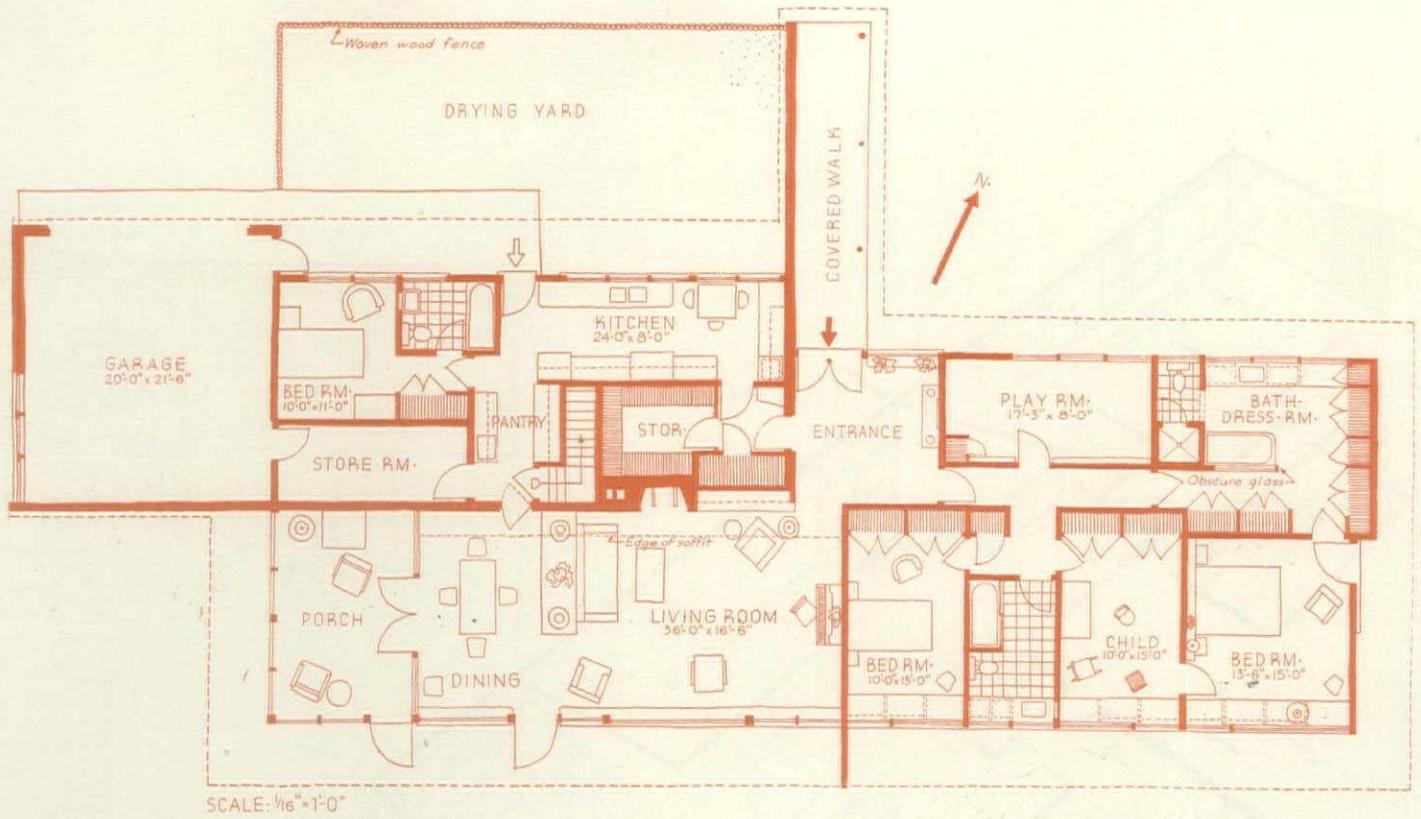
WIDE OVERHANG SHELTERS THE SOUTH



TERRAIN IS LEVEL ON APPROACH SIDE OF HOUSE, DROPS PRECIPITOUSLY ON THE SOUTH

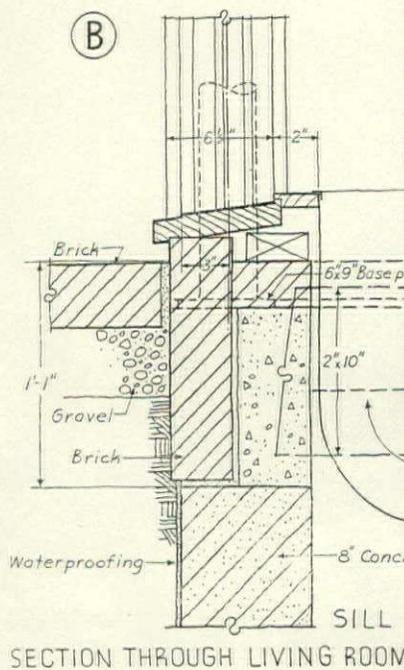
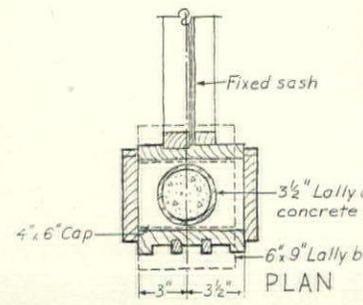
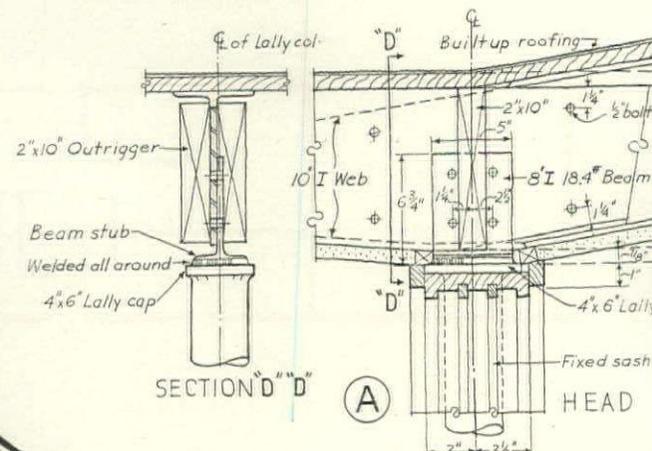
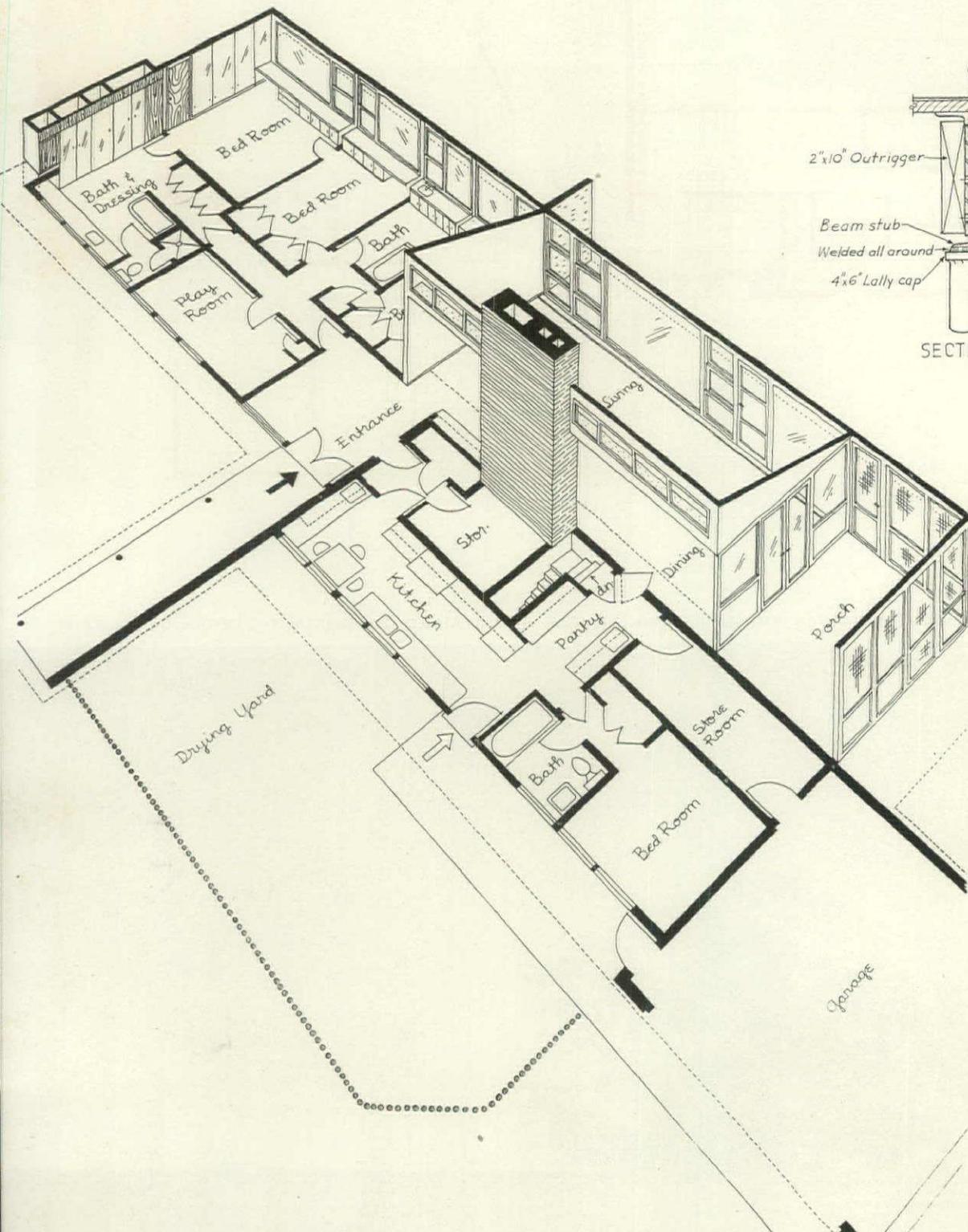


Lionel Freedman Photos



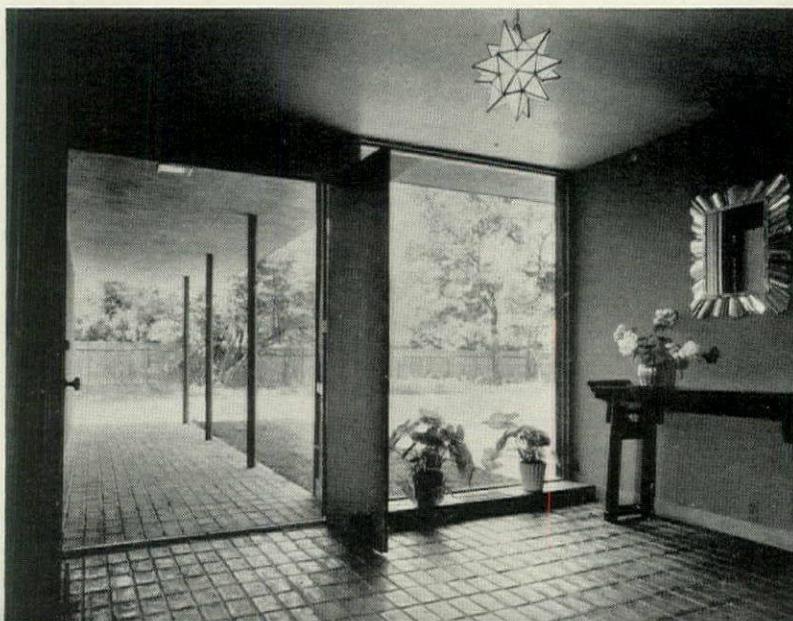
BRACE OUTSIDE DINING AND LIVING ROOMS. EXTERIOR FINISH IS BRICK VENEER AND STAINED CYPRESS WITH TERRA COTTA TRIM



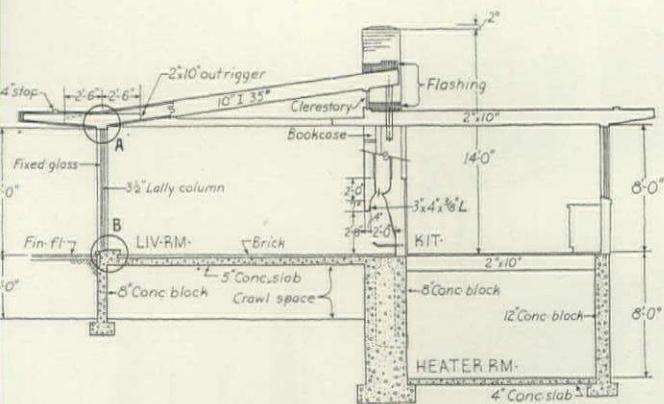


**CONSTRUCTION OUTLINE**

**STRUCTURE:** Exterior walls—brick veneer; inside—plaster. Columns—Lally Co. Floors—concrete slab. **ROOF**—5-ply built-up. **SHEET METAL WORK:** Ducts—galvanized iron; remainder copper. **INSULATION:** Walls and roof—rockwool, Baldwin Hill Co. **WINDOWS:** Sash—wood. Glass—Pittsburgh Plate Glass Co. **FLOOR COVERINGS**—brick; Haskelite cork, Haskelite Mfg. Corp. and linoleum, Armstrong Cork Co. **WOOD AND METAL TRIM:** Trim—Milcor Steel Co. Doors—Roddis Lumber & Veneer Co. Garage doors—Barber Colman Co. **HARDWARE**—Schlage Lock Co. **PAINTS**—Pittsburgh Plate Glass Co. and Breinig Bros. **ELECTRICAL FIXTURES**—Lightolier Co. **PLUMBING FIXTURES**—W. A. Case & Son Mfg. Co. **KITCHEN EQUIPMENT**—Frigidaire Div., General Motors Corp. **LAUNDRY EQUIPMENT**—Westinghouse Electric Co. **HEATING**—forced warm air system, Jamaica Stove Co. Oil burner—Petroleum Heat & Power Co. Regulator—Minneapolis-Honeywell Regulator Co. Water heater—Heat-Pak, Aldrich Co.



EDWARD D. STONE ASSOCIATES, Architects  
 MURPHY-BRINKWORTH, INC., Contractors



SECTION THROUGH LIVING ROOM, kitchen and heater room (the only excavated portion of the house), above. Detail of north window of living room, left.

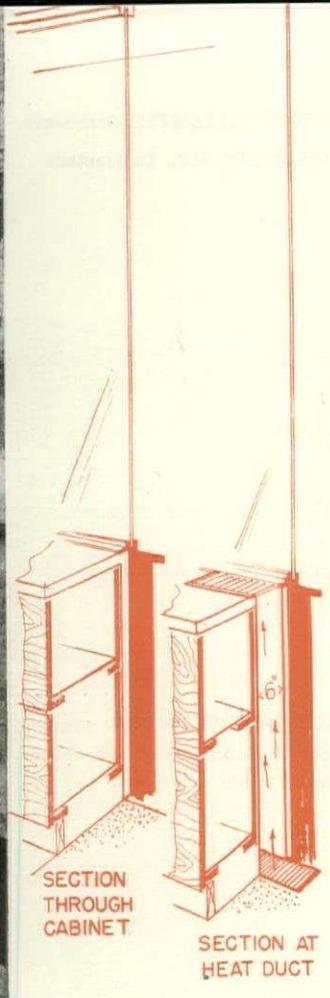
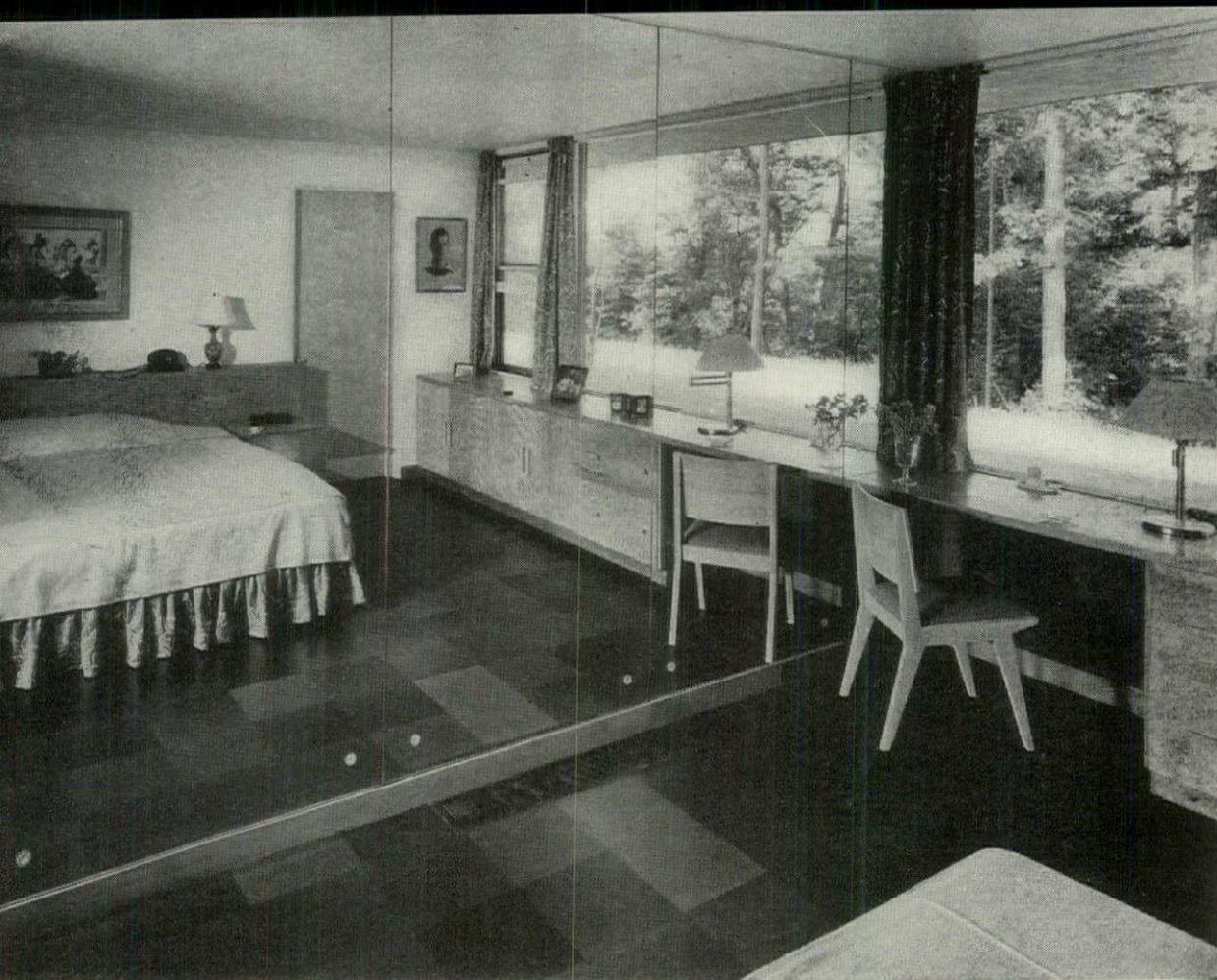


CLERESTORY ON NORTH SIDE OF LIVING ROOM DRAMATIZES CEILING PITCH

*Lionel Freedman Photos*

LIVING AND DINING ROOMS ARE FULLY OPEN TO EACH OTHER BUT PINPOINT LIGHTING IN THE LATTER LENDS IT INDIVIDUALITY BY NIGHT





WHERE CABINET WORK INTERFERES WITH FLOOR DUCT SYSTEM, OUTLET IS RAISED TO COUNTER LEVEL

**OWNER'S STATEMENT:**

We wanted a house that would be roomy but still not too large to keep easily. We were thinking ahead, too, to fifteen or twenty years from now when the children would be grown up and off on their own. For this reason we decided on a large living-room and just comfortable sized bedrooms.

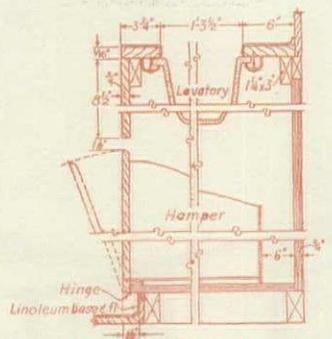
The built-in furniture and cabinets are wonderful—they not only make the rooms very easy to take care of but give a feeling of spaciousness. They're especially good when there are children around. They can't knock over the furniture or hide things behind it.

There were a number of changes which came up during the planning process. We intended to have the garage beside the entrance but it would be too near the road (a local ordinance says that the building must be 40 ft. back). However, we still kept the covered entry and used the left wall to conceal the drying yard—when you have two small children you must have a drying yard.

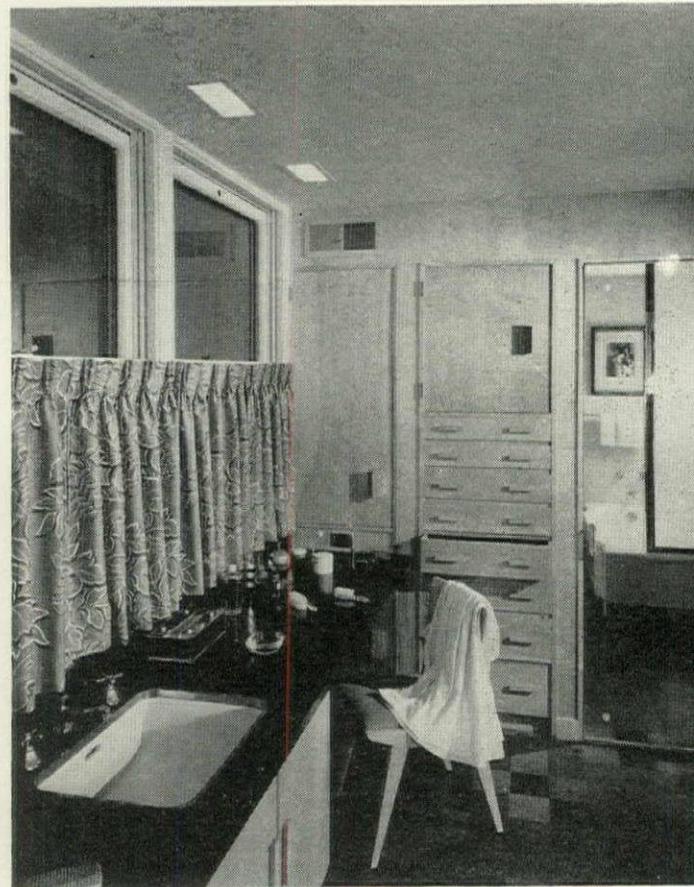
One thing we were worried about has worked out very well—the sound-proofing of the children's bedroom which is right next to the living-room. The bookshelves and closets between the bedroom and the hall augment conventional sound insulation on the living room wall and are completely effective. The outside fin also insures visual privacy too.

MRS. WALTER JANNEY

Lionel Freedman Photos

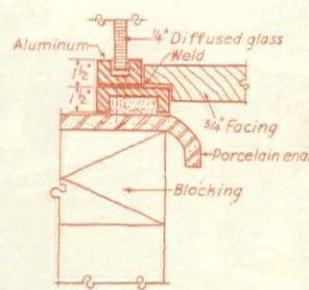


SECTION THROUGH COUNTER



DRESSING ROOM HAS LARGE WINDOWS, AMPLE STORAGE SPACE

FIXED LIGHTS FLANK DOUBLE-HUNG SASH IN BEDROOMS



SECTION AT GLASS WALL IN BATHROOM

# This Midwest house, with solar windows, water-cooled roof, cavity walls and cellular floors, masters a difficult climate



*In the Midwest, temperatures of minus twenty and plus one hundred are often encountered. These are the temperatures that Midwest houses must be designed for, and they impose certain limitations on design and costs. It is my belief that such factors ultimately will develop regional types of architecture for the States.*

*The Davies house was built in the summer and fall of 1946. All materials were difficult to obtain, and workmen were difficult to obtain. It was difficult to get special window frames made, mention one item.*

*It is difficult to build anywhere today. There are forces in this country that have held the construction industry to prewar techniques, which were obsolete. The conditions still obtain. We cannot expect too much from an industry that has been dormant since 1919. New talent was not attracted to the industry because there were no compensations. It takes time for new industries to develop; it does not happen in a week or a month or two, or in a couple of years. On top of all this, a product better than any that has come before must be developed. Such experimentation has been going on for years, and certain matters have proved themselves, many have not.*

*The Davies house was not cheap in terms of prewar costs, which many of us will not forget. It contains many features that prewar houses do not. An ordinary house with prewar specifications might have cost a little less, but not much.*

*The house is a solar house with all important rooms facing south. Construction is simple and substantial, as is necessary in this climate. Upkeep on the house will be low; materials chosen were available at the time of construction; workmanship not perfect, but as available at the time of construction.*

*As the building industry changes over the years, this house will not be as obsolete as others that do not meet contemporary needs and ideas. This fact should justify the difficulties encountered in construction.*

GEORGE FRED KECK, Architect

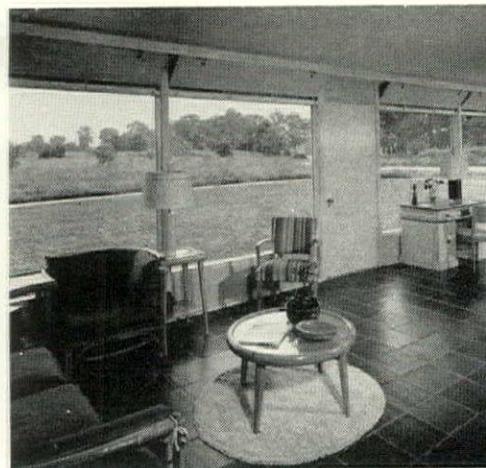


For some years George Fred Keck has developed, with thoroughness and consistency, a characteristic approach to domestic architecture. In his latest house, for Mr. and Mrs. Sydney Davies near Chicago, this attitude is restated. Here again is the unequivocally rectilinear plan all of whose principal rooms are disposed so as to face south, while circulation and service areas occupy the northern face. Here, too, is the all-glass wall across the southern facade, with continuous bands of louvered vents along top and bottom. Divided into approximately even bays, this solar wall is protected by wide eaves and projecting wing walls. And the rooms, like the exterior, reflect Keck's insistence on order and simplicity.

In structure, as in general appearance, many familiar details of Keck's work appear in this house. Typical is his structural response to a rigorous climate. Floors, walls and ceilings have each been designed for maximum resistance to heat in summer, cold in winter. The built-up roof is dead level, designed to carry a one-inch sheet of water as summer insulation; and air spaces between joists are open for cross ventilation, with mineral wool blanket and plaster ceiling suspended below. The masonry walls are of cavity brick construction with a mineral wool filler. The radiantly-heated floors employ hot air forced through a cellular tile whose upper surface is only cleaned and waxed to form the finish floor.

#### CONSTRUCTION OUTLINE

**FOUNDATION**—concrete. **STRUCTURE:** Exterior walls—hollow core brick, The Waylite Co., insulation and inside brick, Streater Brick Co. Floors—RadianTile, Carrelton Sewer Pipe Co. Ceilings—plaster, U. S. Gypsum Co. **ROOF**—built-up tar and gravel, The Barrett Co. **INSULATION:** Exterior walls—The Waylite Co. Roof—rockwool. **FIREPLACE:** Damper—Colonial Fireplace Co. **PAINTS**—Casein Co. **WOODWORK:** Doors—Roddis Lumber & Veneer Co. **HARDWARE**—Dexter Hardware Co. **ELECTRICAL INSTALLATION:** Wiring—thin wall conduit. Switches—tumbler. **KITCHEN EQUIPMENT:** Range and Refrigerator—electric, Frigidaire Div., General Motors Corp. Sink and cabinets—American Central Mfg. Corp. Fan—Pryne & Co., Inc. **LAUNDRY EQUIPMENT:** Washing machine and drier—Lauderall, F. L. Jacobs Co. **BATHROOM EQUIPMENT**—Crane Co. Seat—C. F. Church Mfg. Co. **HEATING**—forced warm air radiant floor panel system. Heating unit—American Furnace Co. Regulator—Minneapolis-Honeywell Regulator Co.

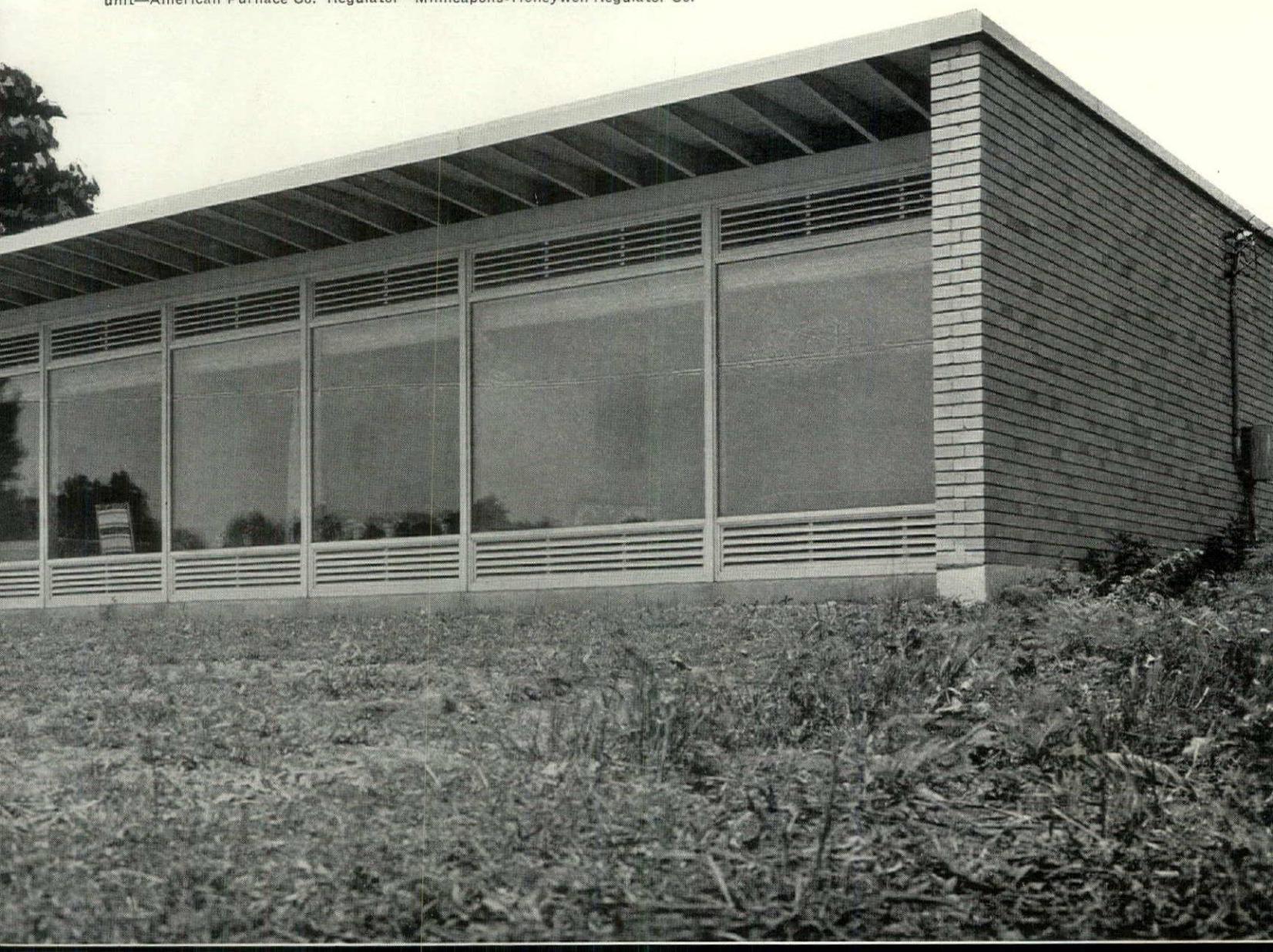


WINDOWS FIT BETWEEN INSULATED TRAN

LIVING ROOM HAS RAISED HEARTH, NO MA



Hedrich-Bl





EN IS WELL LIT BY GLASS SOUTH WALL

E TURNS BLIND SIDE TO STREET FRONT

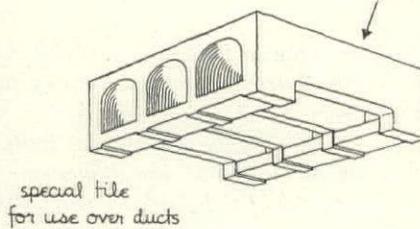
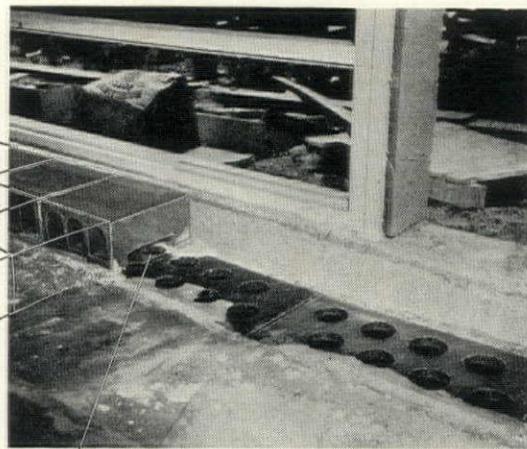
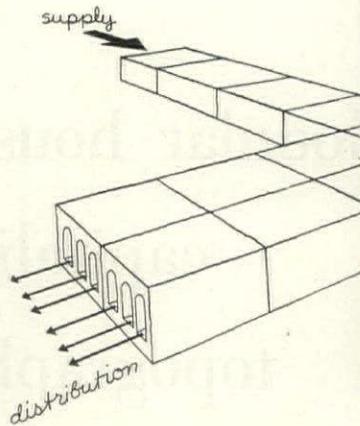


Hedrich-Blessing Photos

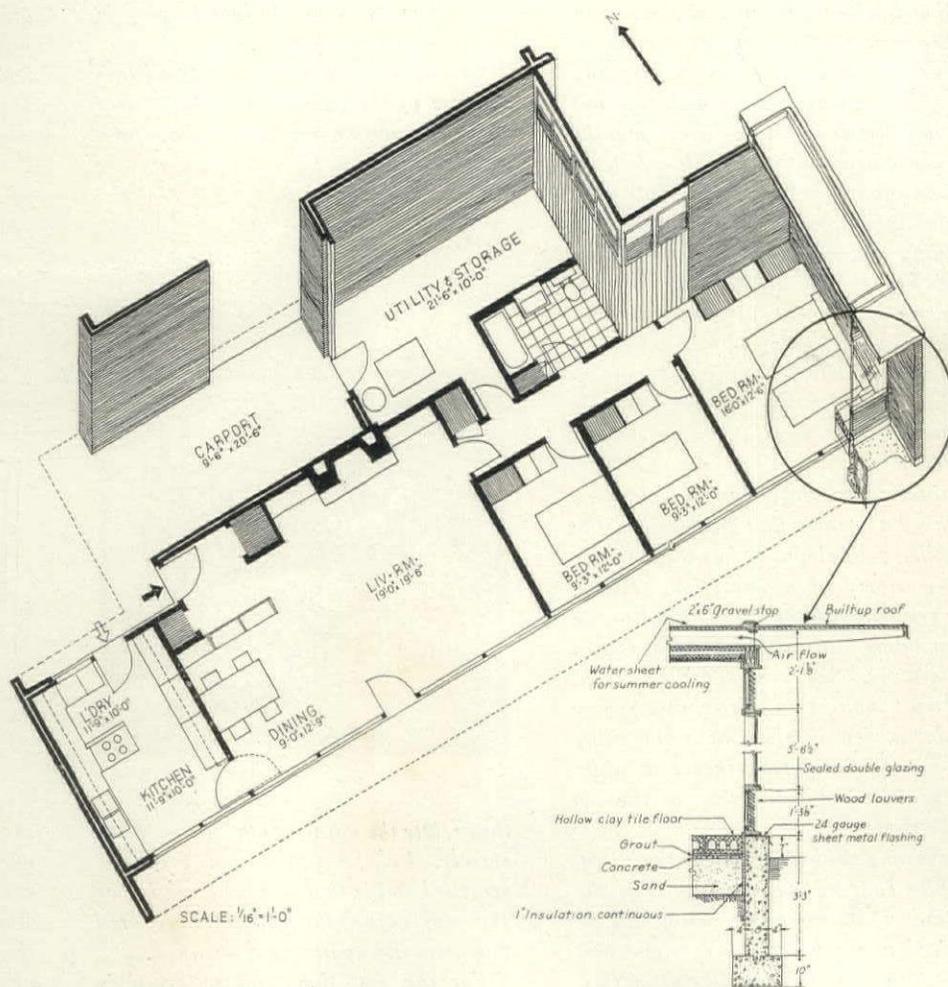
NER'S STATEMENT:

Davies and I have always been interested in modern design. Prior to the war, when living in Puerto Rico where I was working on the construction of an air base, we became accustomed to living in open houses that afforded lots of light, sunshine and beautiful vistas. We missed the great lack of these things when we came back to conventional houses in Chicago. On my return I was commissioned by the Navy and served two years in the South Pacific, again enjoying the feeling of living out of doors. Through correspondence Mrs. Davies and I decided that modern design was for us because it tried to obtain the tropical atmosphere in our cooler climate. We probably get more enjoyment out of the one glass wall in each room than from any other feature in which the house differs from the conventional type.

SYDNEY H. DAVIES



**FLOOR HEATING SYSTEM** consists of cellular clay tile blocks laid on concrete subfloor. Before grouting, metal sleeves are slipped between tiles to connect cells to form continuous tubes across floor. Supply and return ducts, also clay tile, have perforated tops, are laid below floor tile. Originally designed by Architect Keck, this system is now in commercial production.



# Modular house on Pacific coast capitalizes on the area's famous topography, climate and materials



The dominant factor in the development of California's domestic architecture has been the existence of a growing native tradition, or, rather, the lack of a stifling formal tradition. The resulting freedom of thought has given the architect an untrammelled concept that does not exist in other parts of the country.

Geographically, many California cities are located upon land so mountainous that they defy the usual gridiron plan; thus, sites have the grace of vista, sun, wind and privacy. Climatically, a season of heavy rains followed by months of hot sun permits a freedom in breaking down the outside wall to a degree not possible elsewhere. Even in the months of intense heat, the constant breeze from the sea affords coolness. Materially, the availability of wood as an inexpensive building material and the appreciation of its beauty and strength has brought about a refinement in structure and detailing that is almost oriental in its sparing simplicity. Finally, the concentration of wealth—wealth available for immediate use—has been of great importance.

Initially, land development took place in the flat valleys that lie between the foothills, a development based upon ease and economy of construction. Today, new residential building is forced to the surrounding hills or to satellite cities miles away. Site considerations, then, are most interesting. From almost any height, a view is given of a sprawling city—particularly magnificent at night—the ranges of mountains, or the sea to the west.

Assuming the basic needs of the client, the plan is freed and yet limited by the climate. Portions of the house may be directed to the breathtaking views, but there also must be the completely sheltered garden that becomes part of the living area, and finally the protected shelter where one may withdraw completely from the outside. Other considerations that affect the form of the roof

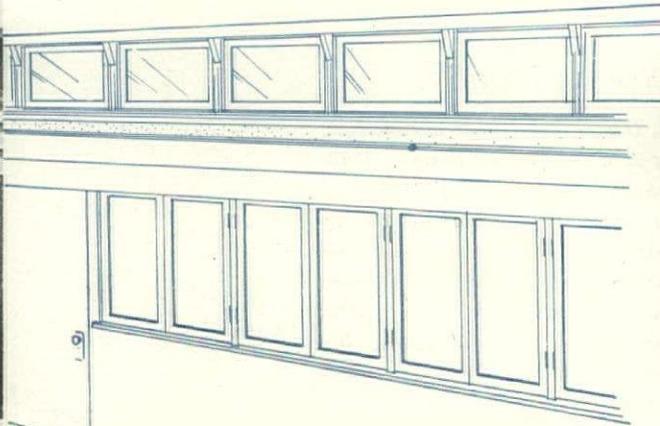
and the disposition of wall and mass are the extremes reached by both sun and rain in their major seasons.

Perhaps the use of light itself is the great influence upon planning. The quality of light of each part of the day must be used or limited as the use of the particular living area requires. This is accomplished by clerestory venting windows, sheltering walls of the sleeping rooms, translucent screens that turn sun into coolness, and glass walls that allow the full measure of sunlight to play in the general living spaces.

Green planting to relieve the harsh dryness of the summer months is used to interpenetrate the living space and

be used as a foil for the magnificent sophistication of waxed plywoods on the interior.

Youth has learned to recognize that contemporary architecture represents a way of living that transforms the home from its role as mere shelter to the center of an existence. Architects capable of making this possible must work toward this end as one phase of their practice. This, of course, can be economically possible only when it is approached through industrialized mass production or when the field of speculative building is entered with the force of outstanding design. The time has now come when decent living no longer



Julius Schulman Photos →

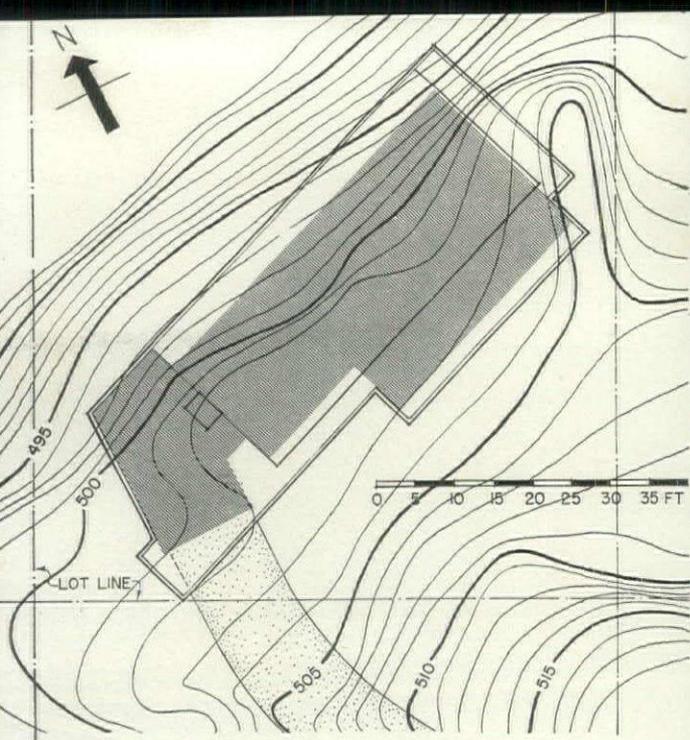
thus relate the garden to the house. Conversely, by the use of an overhead screened trellis that is a continuation of the roof plane, the actual living area flows out and embraces the garden.

For the first time, natural wood is enjoying the greater use in contemporary work than plaster, for economy nods toward the use of wood as an exterior wall covering. Rough-sawn boards on exterior walls for form and texture may

should be the exclusive right of the wealthy or the intellectual, but, rather, must be shared with the great mass of America that cannot afford the luxury of the architect. Realizing the social needs of his time, the architect must accept the responsibility of leadership in this field regardless of a minimum schedule of fees or any other consideration which has heretofore acted as a moral barrier.

GORDON DRAKE, Designer



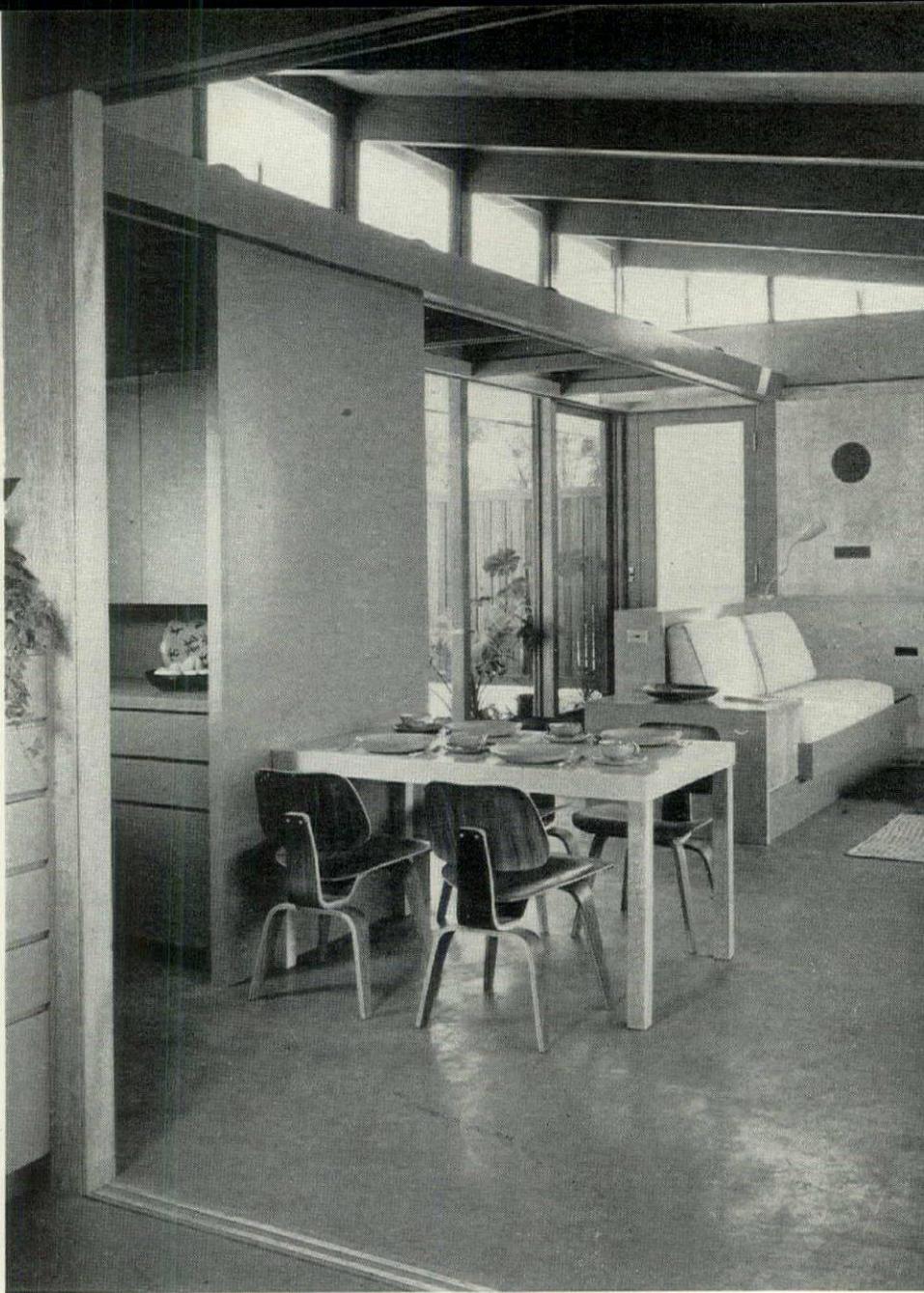


Hugging the north side of one of Los Angeles' steepest hills, this house is a compromise in design between the free planning suggested by the ruggedness of the site and the rigidity of an eminently simple construction system. Although its design was also influenced by the rather lush requirements of a well-to-do client, the house is a mock-up of a modular, panelized building which may eventually be prefabricated for the average family and the average site.

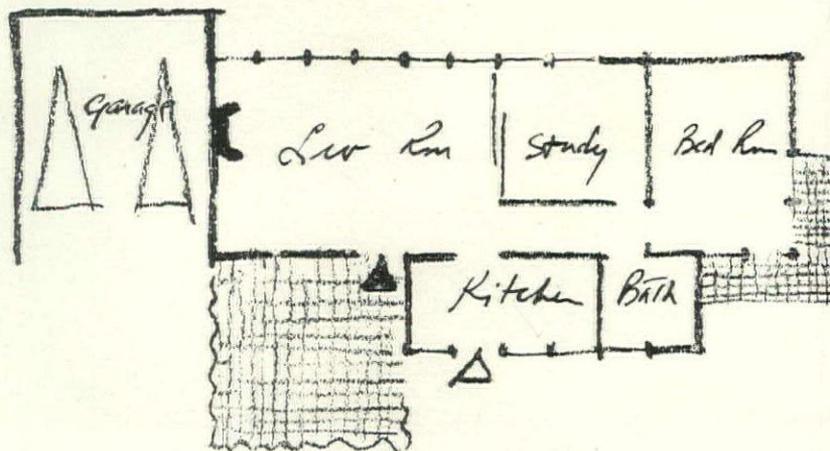
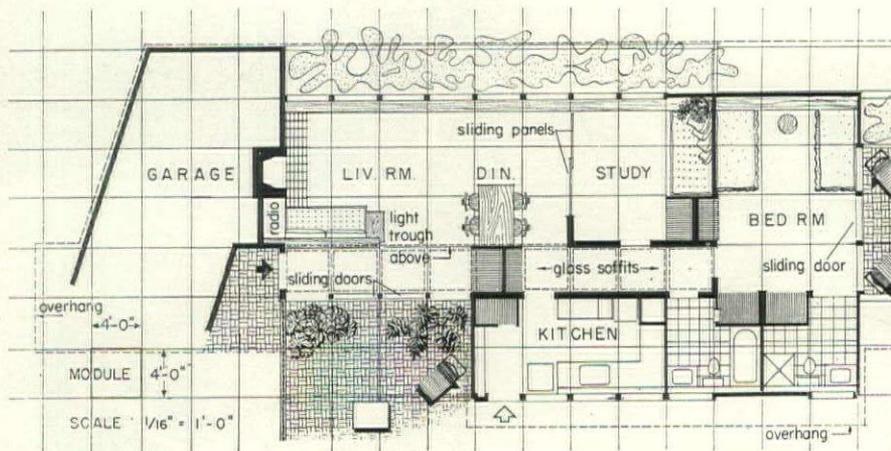
The construction system demanded that the house be on one level, but otherwise the plan was dictated by the requirements of site and client. Thus, the house opens mainly to the north because there was no alternative; the steep slope of the site allowed only one possible garage location; the city view to the north, the sheltered vista to the east and the garden area and hillside to the south controlled the location of glass and plywood panels. To retain as much garden area as possible, the entry was located next to the garage, screened from the garden terrace by a wood wall and from the living room by a huge built-in sofa. Occupying the least desirable portion of the site's leveled area, the kitchen and baths look directly into the hill.

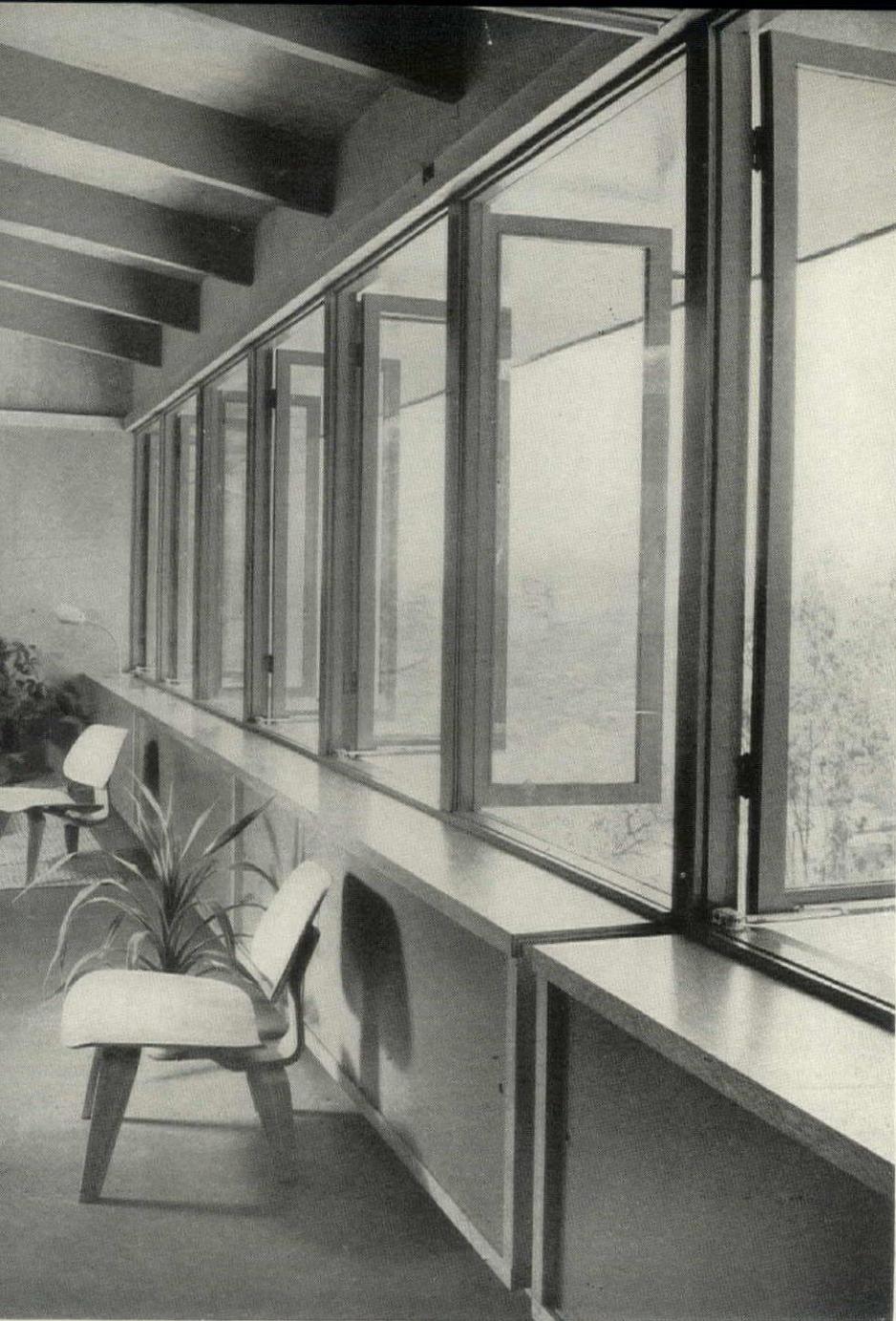
In addition to many large windows, a clerestory benefits all living and sleeping areas by admitting the morning sun, achieves an eye-comforting balance of light and gives the rooms a pleasant feeling of vertical spaciousness. The dominant design feature of the south front, this clerestory also adds interest to the birdseye view of the house which is seen by the approaching visitor. Its delicate tracery is set against a roof finish of crushed brick, whose color creates a subtle transition between entourage and house.

Although this quasi-experimental project clearly demonstrates the attractive possibilities of prefabricated panel construction in the hands of an expert designer, the designer himself has noted several modifications in plan which would make the house more suitable for mass production and universal application. Embodied in the sketch plan (right), they include a rectangular two-car garage, a central entrance, casements instead of sliding glass doors, and one instead of two baths.

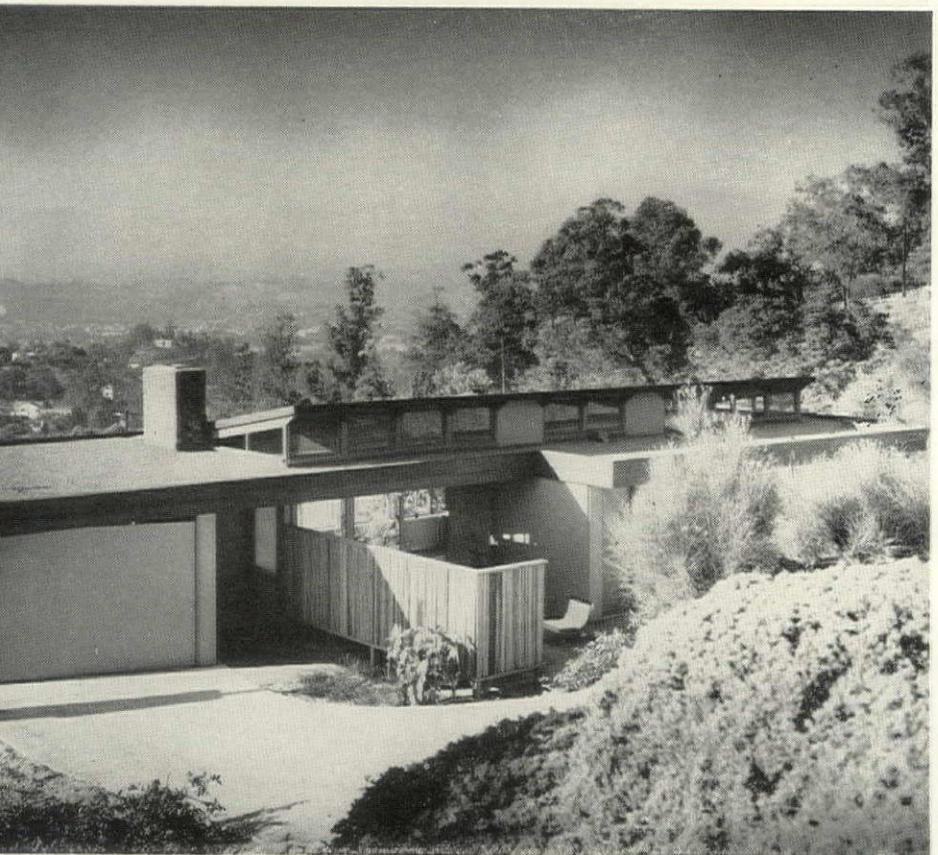


LIVING-DINING ROOM IS BRILLIANTLY LIGHTED BY SOUTH CLERESTORY WINDOW



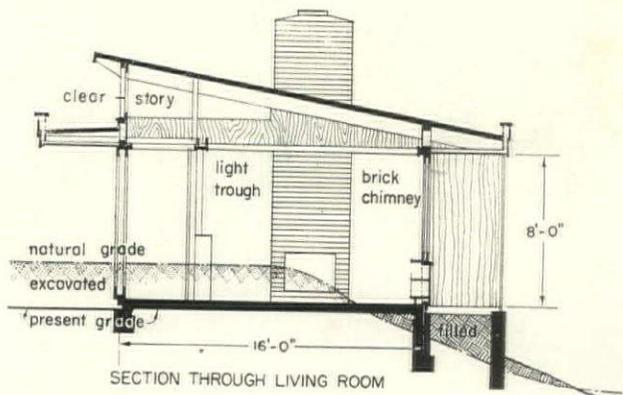


NORTH CASEMENTS. TROUGH AT CLERESTORY CONCEALS INCANDESCENT LIGHTS  
 RACE ON SOUTH FRONT IS SCREENED FROM ENTRY AND STREET BY WOOD WALL



Julius Shulman Photos

GORDON DRAKE, Designer STRUCTON, General Contractor



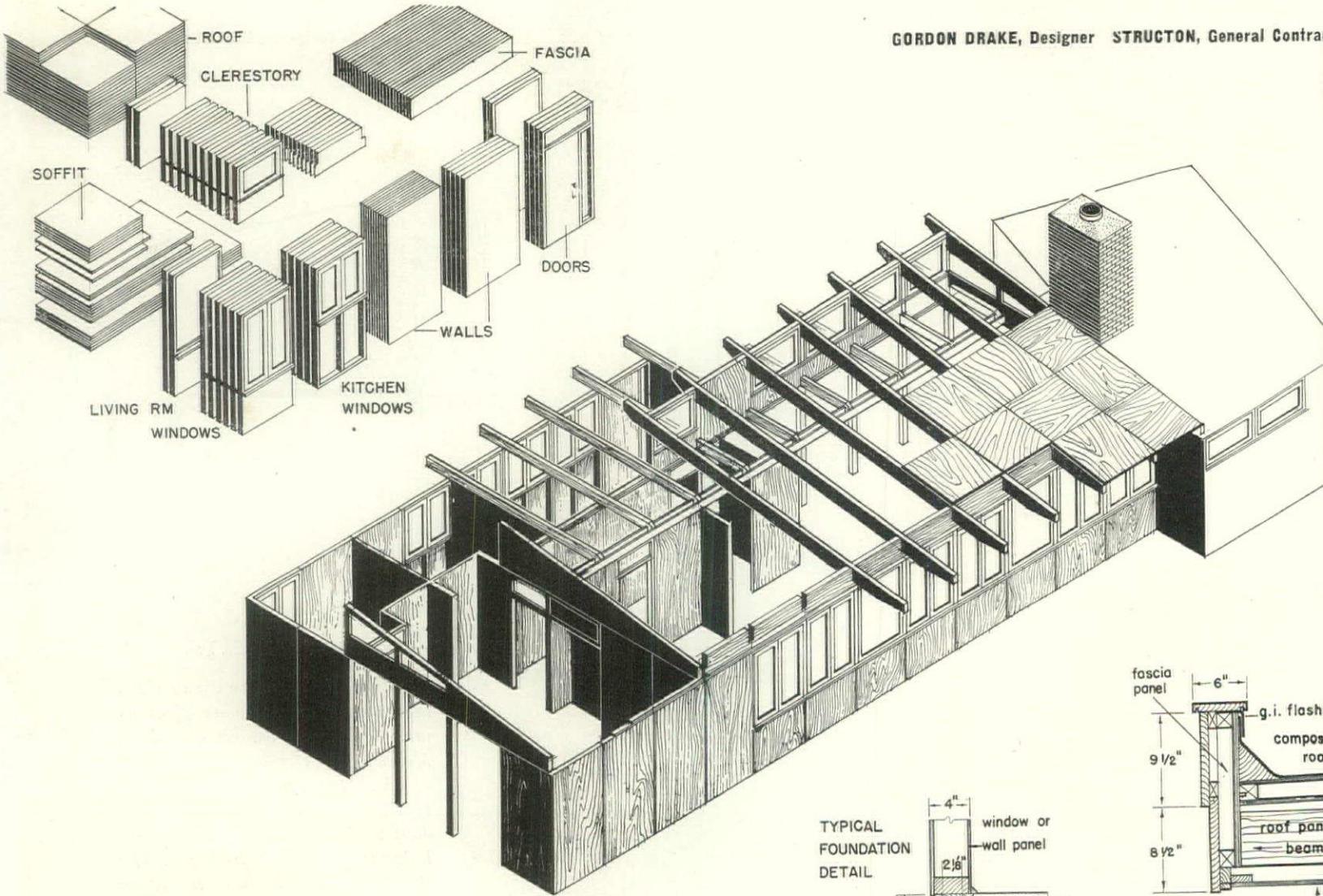
OWNER'S STATEMENT:

Even with the extensive use of glass, the position of the house gives us utmost privacy from all directions. Moreover, the clerestory windows, all of which open, make for marvelous ventilation so that even on the hottest days we have a lovely breeze circulating through the entire house. The lightness and airiness of the house are actually what we appreciate most; also the fact that the light is so well-balanced that there is never glare.

The many built-in cabinets are excellent because of their simple lines, the ease of cleaning them, and the ample storage space they provide. By their use, the kitchen, which actually is small in area, is so well planned that there is more cupboard and closet space than in some kitchens much larger in size. The position of the kitchen is fine, for it is equally easy to serve meals outside in the patio and indoors.

The only thing which displeased us was, of course, the cost. Had we known at the outset that the final figures were to be so much greater than the preliminary estimates, we probably would have built a smaller home. However, having lived in the house, we find it hard to think of any feature we could have eliminated. Considering that the completed building was not far short of a completely furnished house, and comparing it with other houses for the same cost which offer far less, we are confident that we got our money's worth even in this inflated market. And, being the type of house it is, it can hardly depreciate in commercial value, or in intrinsic value to us.

DAVID PRESLEY

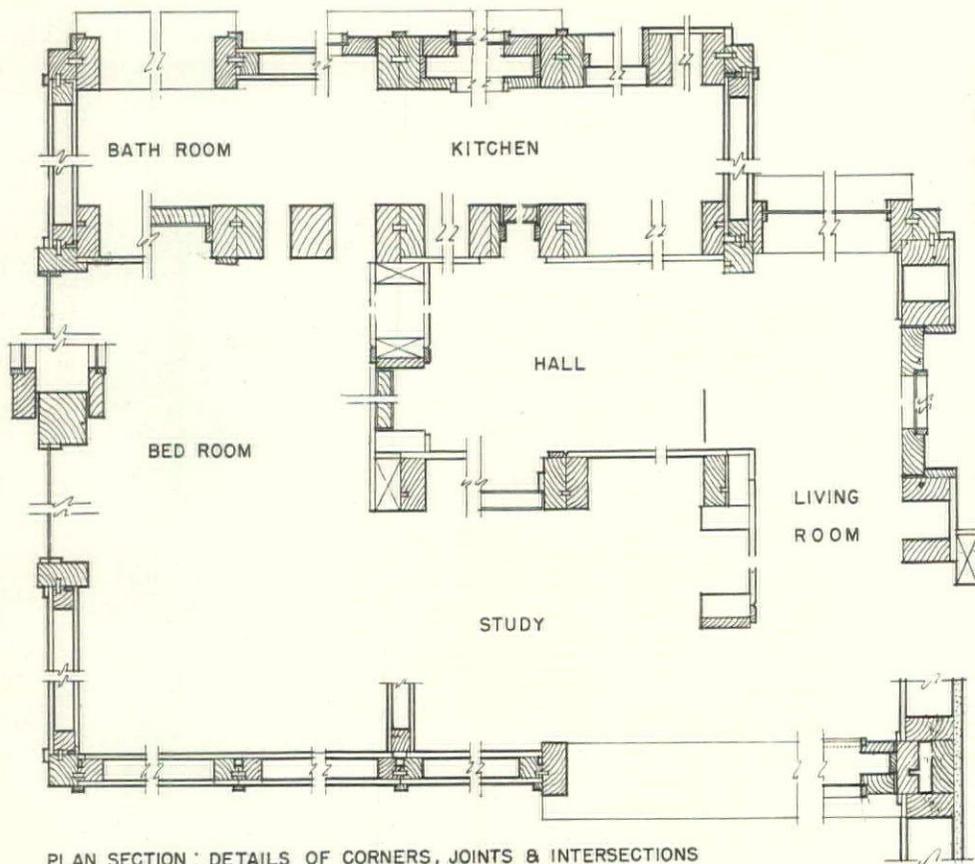
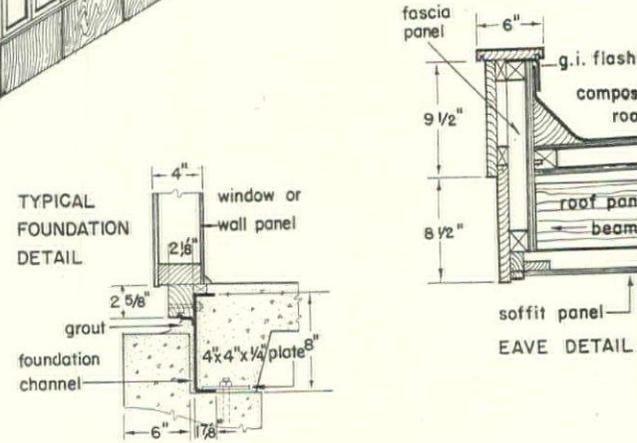


Designed to a 4 ft. module, the 15,560 cu. ft. house is comprised mainly of 4 x 8 ft. stressed skin plywood panels. When they fitted the design, the stock panels of an established prefabricator were used; otherwise, panels were locally fabricated. The diagram above indicates the extent to which the house is panelized, while the detail drawings to the right show how the various elements go together.

So pleased are the architect and prefabricator with this combination of contemporary design and panelized construction that they are negotiating for the mass production of panels from which this and similar houses may be built. If and when mass production is effected, unit costs will be cut below the \$1.30 per cu. ft. cost of the experimental mock-up.

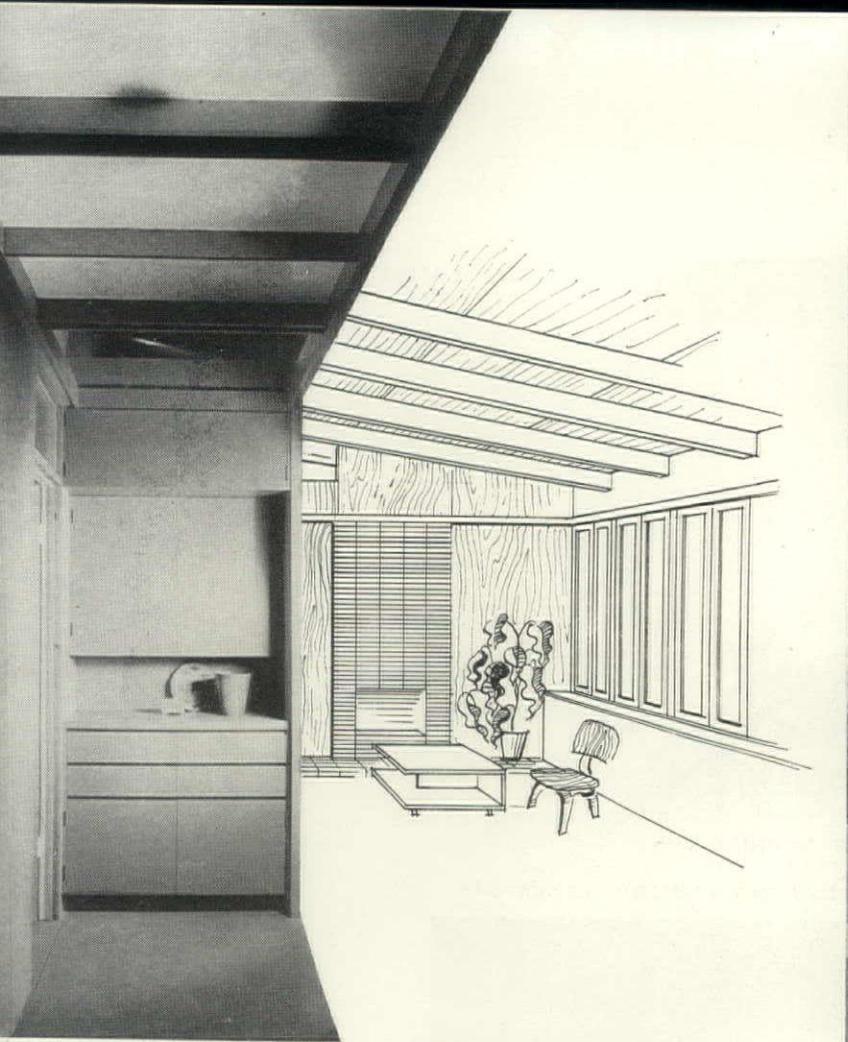
**CONSTRUCTION OUTLINE**

**FOUNDATIONS**—reinforced concrete, Colton Cement Co. **Waterproofing**—Super Concrete Emulsion, Inc. **STRUCTURE**: Exterior walls, partitions and roof— $2\frac{1}{8}$  in. stress skin plywood panels,  $\frac{1}{4}$  in. plywood on either side of 2 x 2 in. frame, Homeola Corp. and Structon. **Floors**—cement. **Ceiling**—plywood. **ROOF**—built-up, Pioneer, The Flintkote Co. covered with crushed brick. **INSULATION**: Outside walls and roof—Celotex, The Celotex Corp. **SHEET METAL WORK**: Flashing—aluminum, Aluminum Co. of America. Leaders—copper, Revere Copper & Brass, Inc. **WINDOWS**: Sash—wood. Glass—polished plate, Libbey-Owens-Ford Glass Co. and frosted, Blue-Ridge Glass Corp. **WALL COVERINGS**: Plywood, U. S. Plywood Corp. **PAINTS**—The Sherwin Williams Co. **HARDWARE**—Schlage Lock Co., Grant Pulley & Hardware Co. and H. B. Ives Co. **ELECTRICAL INSTALLATION**: Wiring—General Electric Co. Fixtures—Kurt Versen Co. **KITCHEN EQUIPMENT**: Range, washing machine and Refrigerator—Westinghouse Electric Corp. **BATHROOM EQUIPMENT**—American Radiator-Standard Sanitary Corp. Shower—Fiat Metal Mfg. Co. **HEAT**—warm air, Thermador Electric Mfg. Co. Water heater—General Electric Co.

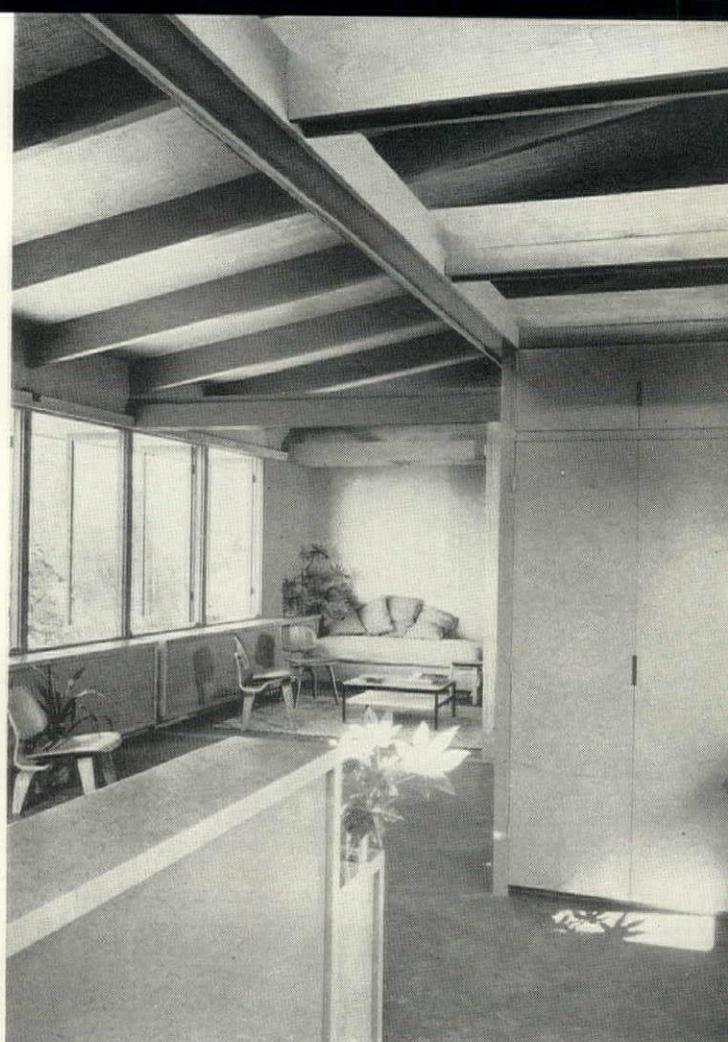


PLAN SECTION: DETAILS OF CORNERS, JOINTS & INTERSECTIONS

SCALE 0 3 6 9 12 INCHES



ALL CEILING OF FROSTED GLASS DIFFUSES CLERESTORY LIGHT

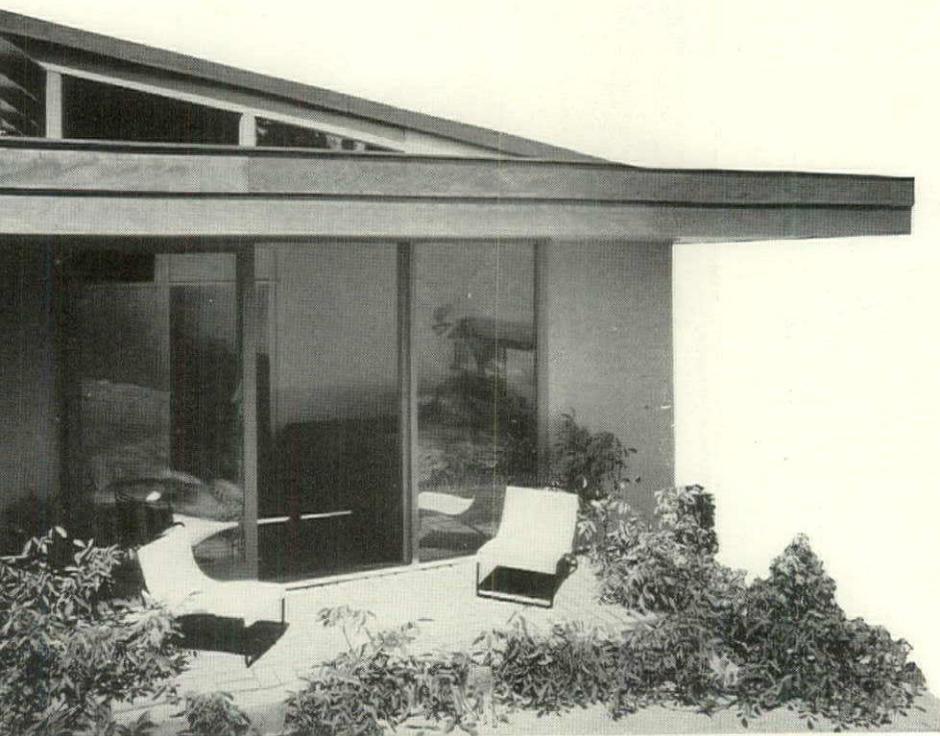


VIEWED FROM ENTRY, STUDY-BEDROOM OPENS TO LIVING AREA

*Julius Shulman Photo*

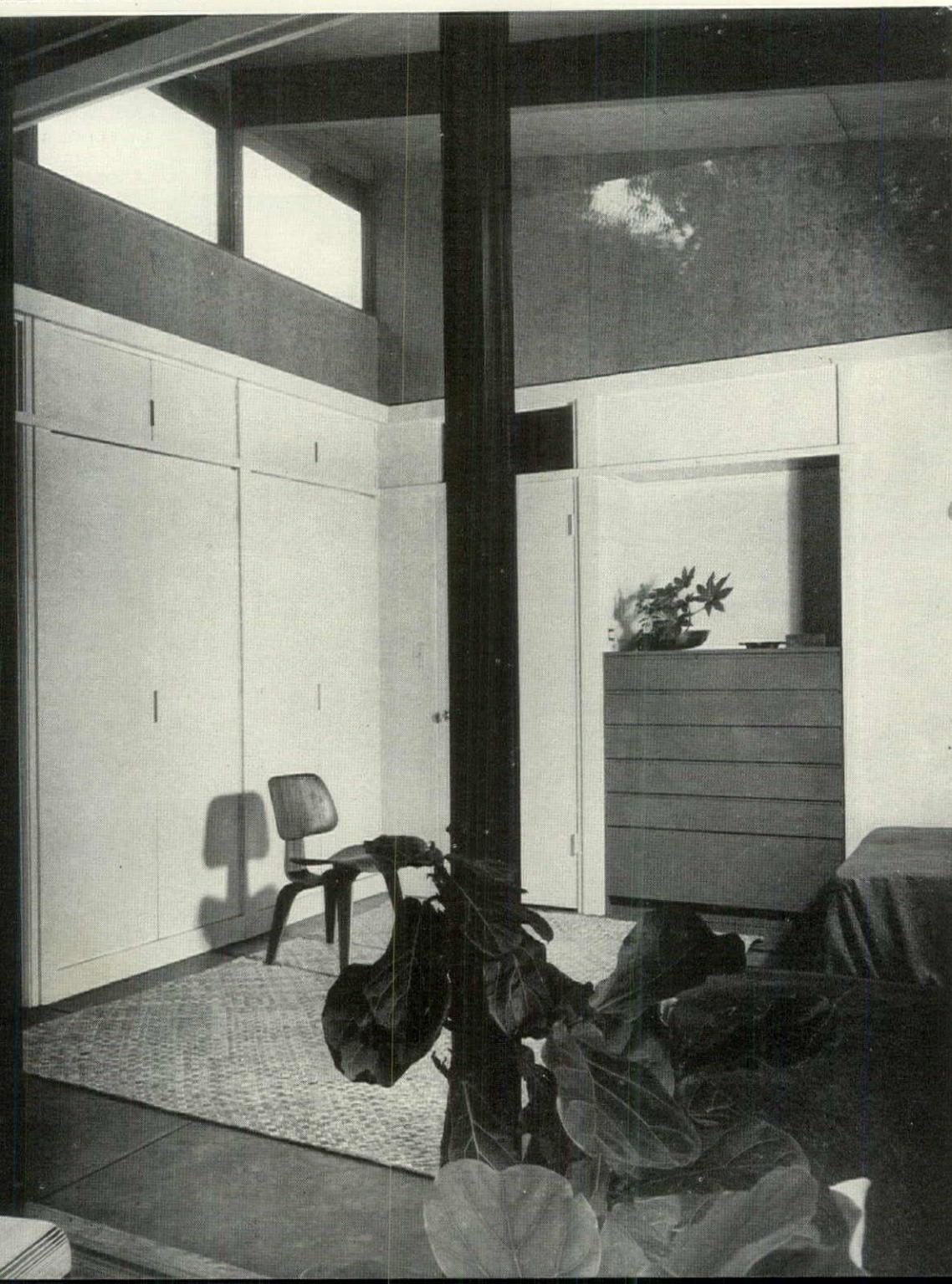
LARGE BEDROOM FEATURES BUILT-IN CABINETS, CLERESTORY LIGHTING AND EAST WALL OF GLASS OPENING ON INTIMATE GARDEN TERRACE





GORDON DRAKE, Designer    STRUCTON, General Contractor

OF OVERHANG PROTECTS THE MASTER BEDROOM FROM DIRECT MORNING SUN  
VIEWED FROM TERRACE, BEDROOM IS BRIGHTENED BY LIGHT WALLS AND TWO-SIDED CLERESTORY



*Julius Shulman Photos*

# PRODUCTS AND PRACTICE

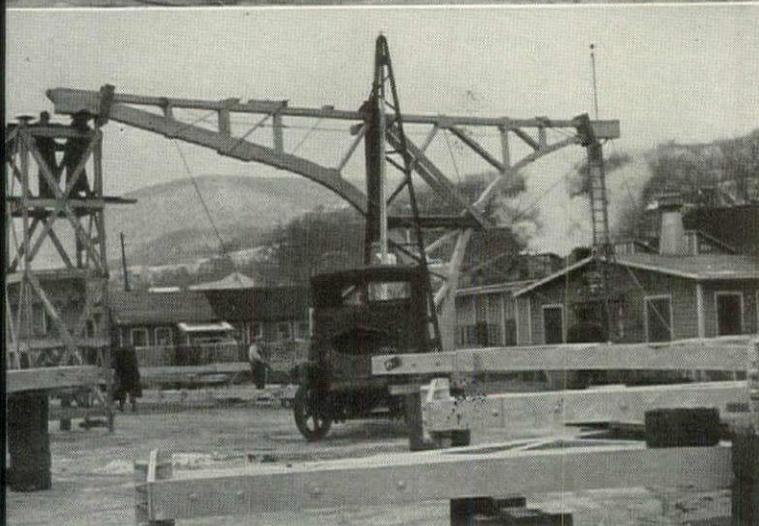
**PREFABRICATED FACTORY,** born of war-time shortage in steel, is built entirely of wood products and boasts many interesting structural features in laminated wood. Ervay Baker, architect.



One-half of hinged arch is swung into place.

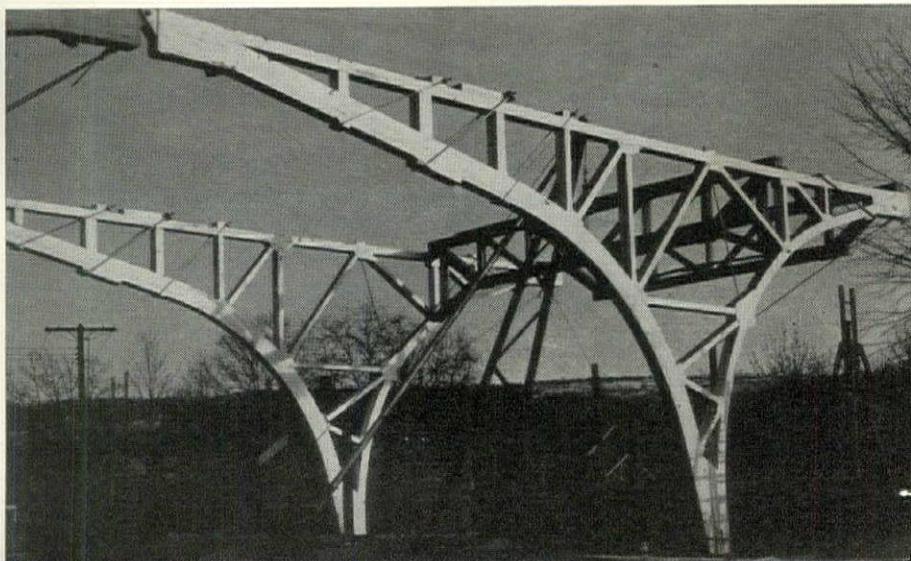
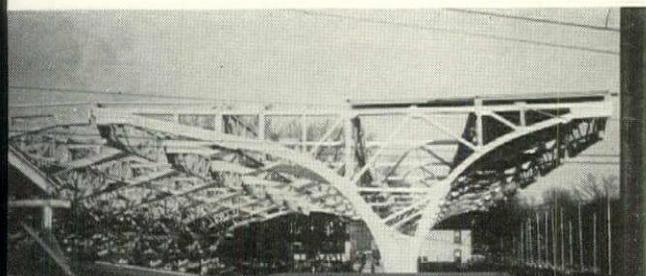


Foot of arch is fixed in steel hinge anchored to concrete foundation.



Half arch is in place, ready for joining to other half.

**HALVES** are bolted together at apex (right) to form striking arches with cantilever arms along either side (below).



Typical of the many interesting experiments in wood and timber construction produced by wartime steel shortages is the Hammondsport (N. Y.) plant for Mercury Aircraft, Inc. Designed by Architect Ervay J. Baker at a time when steel was all but unobtainable, the Mercury plant is perhaps the largest all-wood, all-prefabricated structure of its kind. Every element in it—columns, trusses, hinged arches; floor, wall and roof panels—is of wood, and all of them are prefabricated. Moreover, all the more complex units were “home made.” Since there were no nearby facilities for fabricating, Architect Baker set up a circus tent (see next page) and successfully produced the units right on the site.

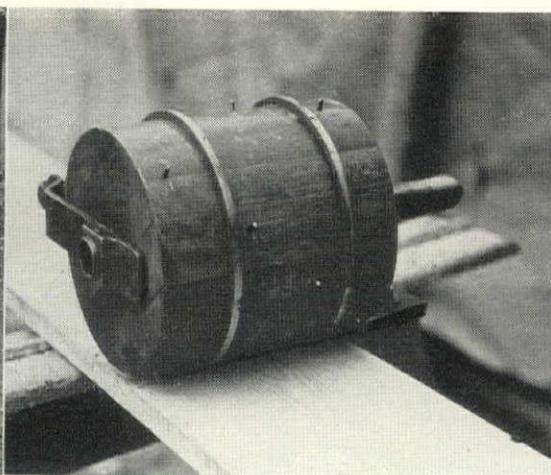
Handsomest of all the elements employed in the Hammondsport factory are the composite hinged arches in the main assembly building. In this unit, a span of 60 ft. and a clearance of 20 ft. was required down the center aisle, with sub-assembly mezzanines along either side. Baker solved the problem of a series of eight giant arches whose 17 ft. cantilever arms carry the mezzanines.

The arches proper are of laminated wood, designed for eccentric loading. After fabrication in the shop, each half arch was swung into place, fixed to prepared foundations and bolted to its partner at the apex hinge. When the whole series was in place, connection was by wood trusses using timber connectors instead of by nails or glue. Acting as purlins, these trusses received the prefabricated wood and plywood roof panels. After panels were in place a standard built-up roof was laid on their upper surface. Side walls were composed of similar panels, supported at main floor and mezzanine.

Despite the fact that both fabrication and erection took place during cold weather, and despite the utter lack of equipment normally considered essential to production of complex laminated wood, Architect Baker produced the system both moderately priced, simple and rapid to erect.



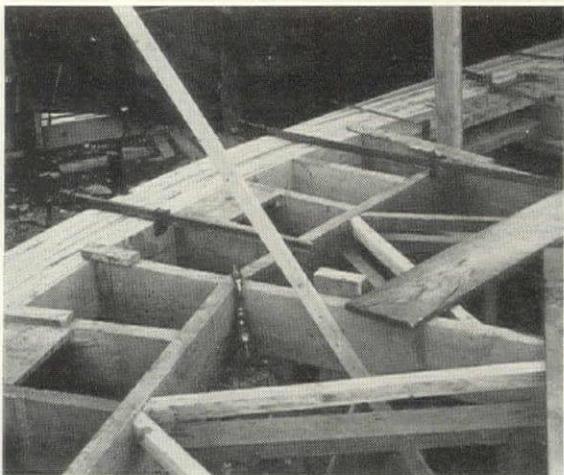
**STEAM-HEATED TEMPLATES** sped site fabrication of hinged arches during cold weather. Using a waterproof resin and engineered nailing pattern, lower chord of arches was built up to 15 plys.



**NAILING PATTERN** was controlled by this ingenious marker. Rolled along outer surface of each ply, it spaced all nails so that they were evenly distributed through chord's cross-section.



**ADHESIVE** was spread on inside of each successive plank. Then, working from one end of template plank was bent into place, pre-set nails driven home. Another ply had been added.



**CLAMPS** hold each nailed and glued ply in place until resin has set. Composed of 15 plys, these chords depend upon nailing for a large portion of their total strength.

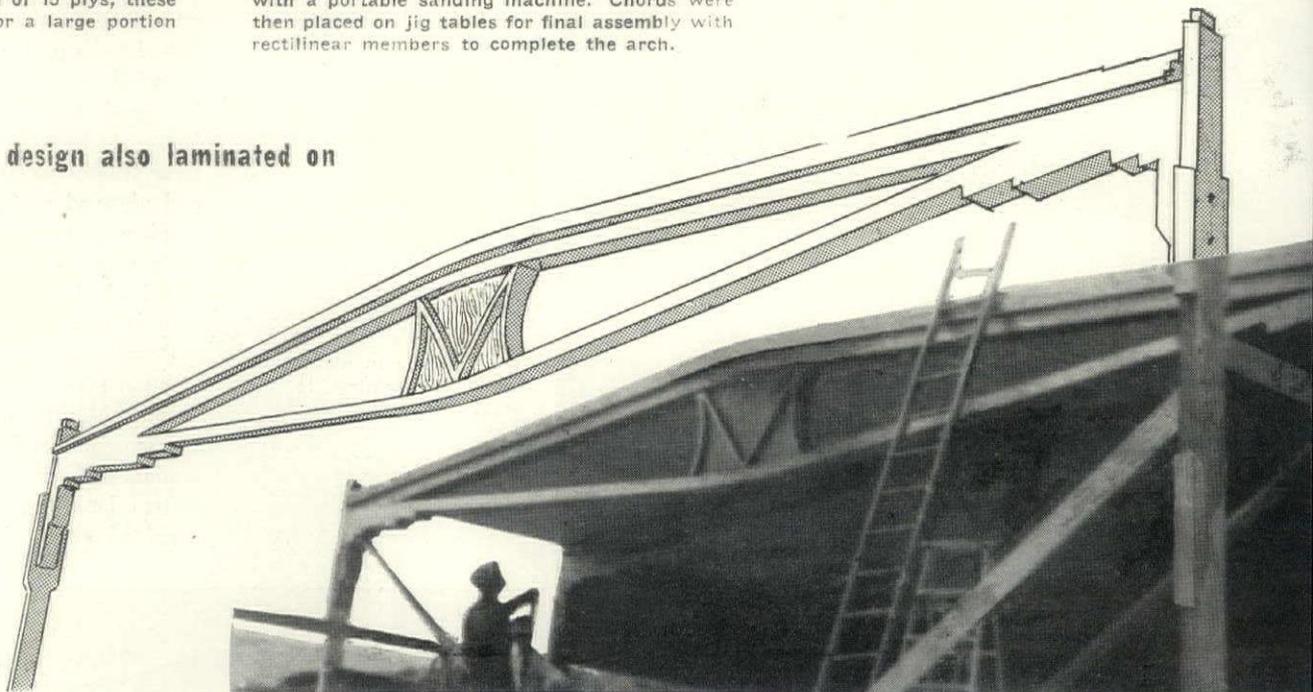


**SANDING** of completed lower chords was done with a portable sanding machine. Chords were then placed on jig tables for final assembly with rectilinear members to complete the arch.

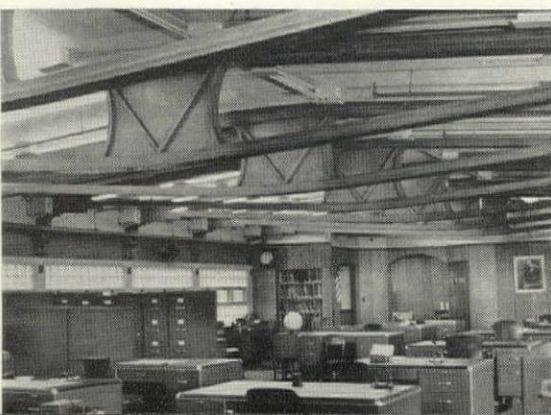
### Ninety-six foot laminated arches successfully fabricated in tent.

Ingenuity marked the fabrication of the eighty hinged arches used in the Mercury factory. Although structurally quite advanced, the arches were successfully fabricated with simple tools under almost primitive conditions. Under a circus tent, Architect Baker built his templates for the curved members of the arches. He built them waist high to make fabrication easier, then ran a steam pipe around the outside of each template. This served the double purpose of warming the workmen and drying the glue. The rest of the process was largely a matter of carpentry.

### Webbed truss of novel design also laminated on site by Architect Baker.



Among the many laminated elements used by Ervay Baker in the Hammondsport plant were these webbed trusses of his own design. Employed only on the second floor of the office wing, the trusses span 36 ft. and are bolted directly to the tops of two-story timber columns. Like the hinged arches above, they were fabricated on templates and jigs built on the site. The webs are of plywood, stiffened with laminated ribs, and glued into the truss proper under heat and pressure.



**SWUNG INTO PLACE** by cranes after first floor framing was complete, these laminated trusses were bolted directly to tops of two-story timber columns. Prefabricated roof panels were then fixed to upper chord of truss and prefab wall panels fixed in place.

*Modern Photo Service*

**1,483**  
**UNITILITY BATHROOM UNITS**  
*installed to date*

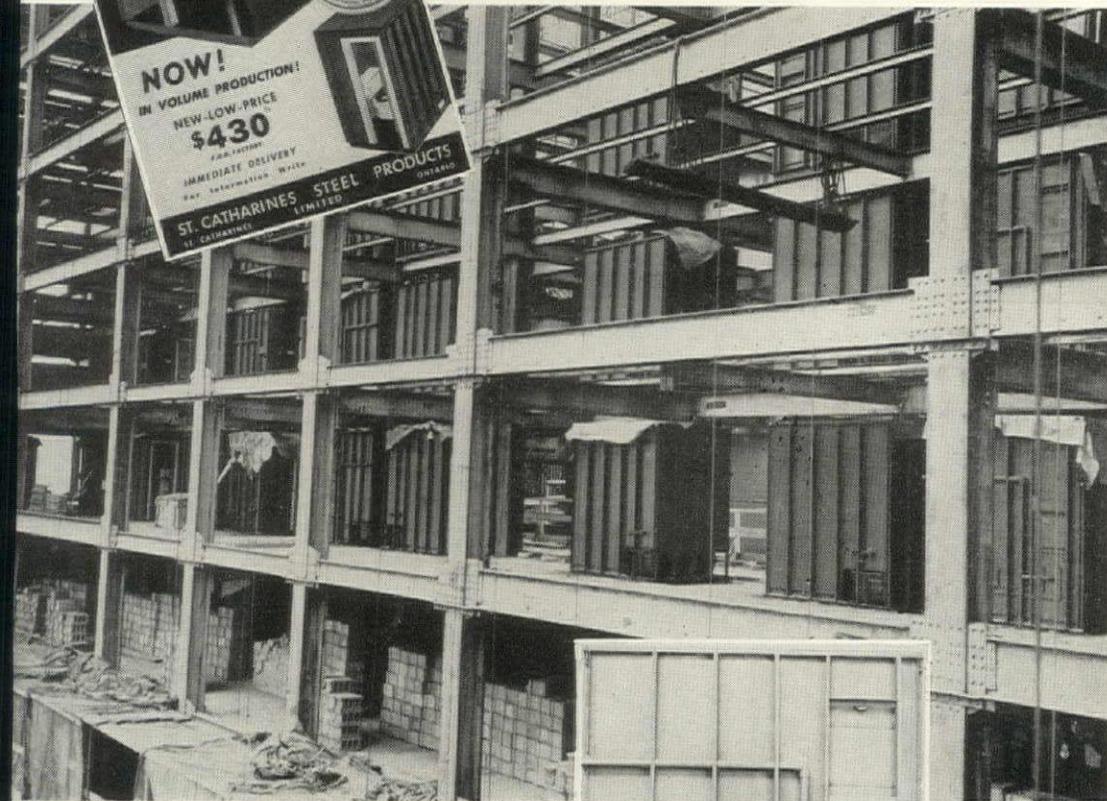
**NOW!**  
 IN VOLUME PRODUCTION!  
**NEW LOW PRICE**  
**\$430**  
 F.A.B. FACTORY  
 IMMEDIATE DELIVERY  
 BY INTERCITY BUS

**ST. CATHARINES STEEL PRODUCTS**  
 LIMITED  
 ST. CATHARINES, ONTARIO

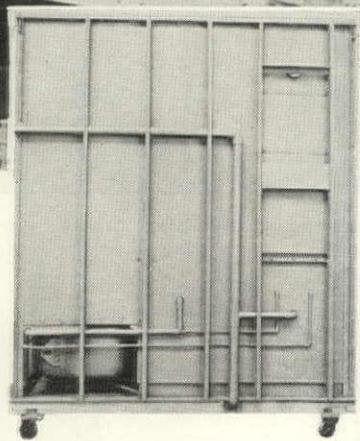
## 1,100 PREFAB BATHROOMS swung into place in new 22-story Canadian hotel.

Graphic proof of the merits of prefabrication is available in Montreal these days, where 1,100 neatly-packaged factory-built bathrooms are being swung into place in the new 22-story Laurentian Hotel. And Montreal citizens who might have doubted their eyes had the fact confirmed by newspaper ads (top, left) offering packaged bathrooms to all comers for as little as \$430, f.o.b. the factory. Prime movers behind this long-awaited development are St. Catharines Steel Products Ltd. (producer) and Canadian Comstock (distributor) who last year pioneered with a mechanical core (FORUM, Jan., '46). Together they have produced, sold and, in some cases, installed some 2,100 units of their factory-built "Unitility" bathrooms.

Newsworthy as is the actual commercial availability of a bathroom which can be installed and ready for use in a couple of hours, there is nothing extraordinary about either the process or the product. The manufacturers of Unitility have only done what everyone has been talking about for a decade. The designs themselves are merely rationalizations of the typical, site-assembled bathroom. The fixtures are identical, the plumbing harness similar. Major innovation is, of course, the metal structural shell. This consists of rigid, welded steel frame; aluminum walls and ceilings with baked enamel finish; linoleum floors and integral base cemented to rigid, steel plate floors. All joints are sealed by extruded rubber trim, and the exteriors of all floor, wall and ceiling surfaces are covered with heat- and sound-insulating mastic.

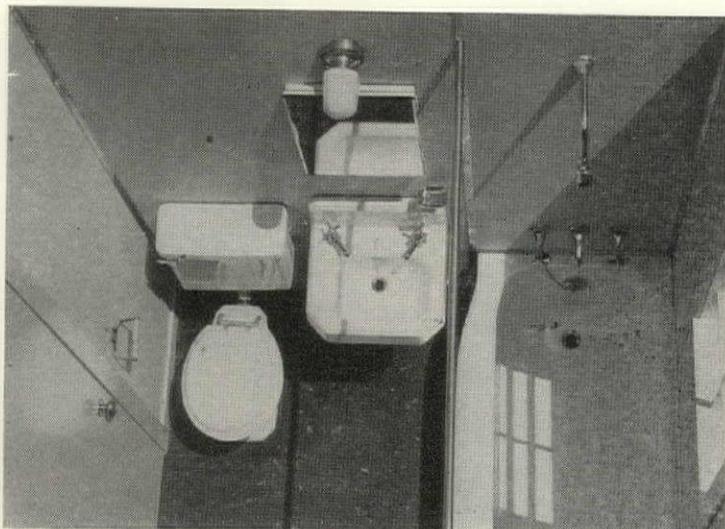
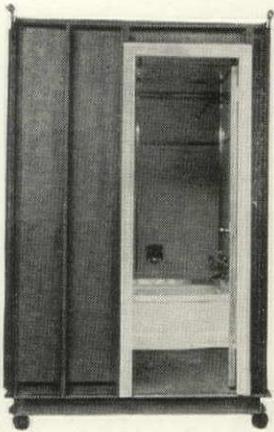


**INSTALLED** immediately after precast concrete floor slabs, these factory-made bathrooms are complete in every respect, need only lath-and-plaster on outside walls. Plan and elevation (below) show unit as delivered to site.

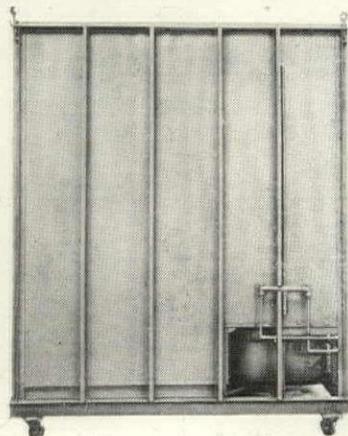
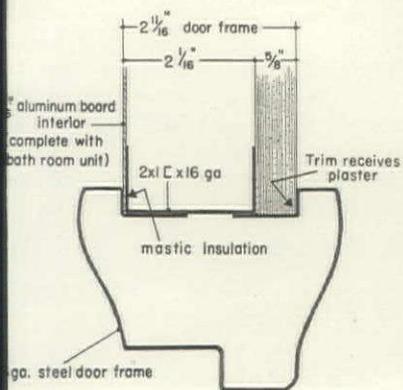
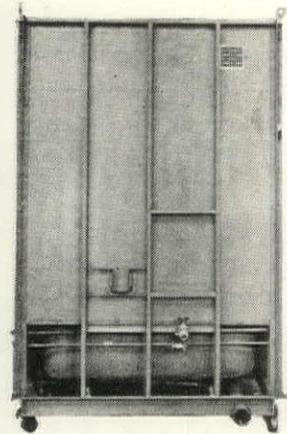


Graetz Bros. Photos

Villiers & Company Photos

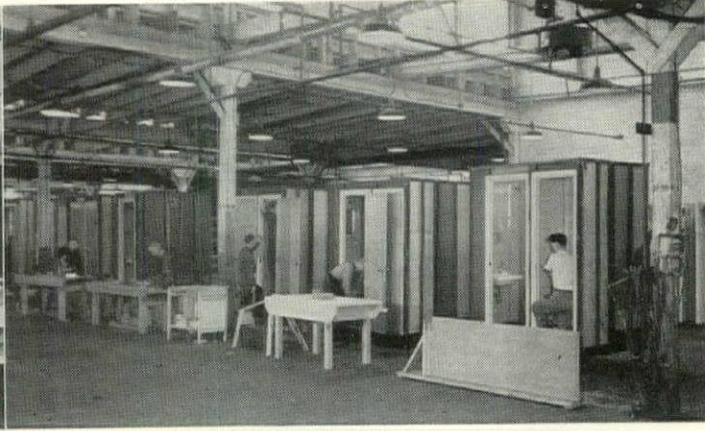
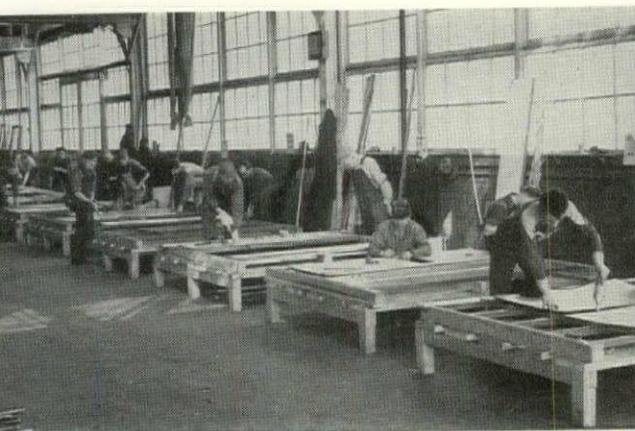


Canada Pictures



Each bathroom is completely equipped when it leaves the factory, includes towel racks, shelving, mirrors, light, etc. Each unit has wood or metal door, complete with hardware, metal trim and threshold. Thus, the Unitility requires only four connections to complete installation: ventilation, water, sewer and electricity. Moreover, *these are all made from the outside*, so that the bath need not be unlocked until building is finished.

Exterior of the Unitility walls is designed to take any type of finish—plaster on metal lath, hardboard, plywood—and the metal door jamb is detailed to receive and cover it (left).



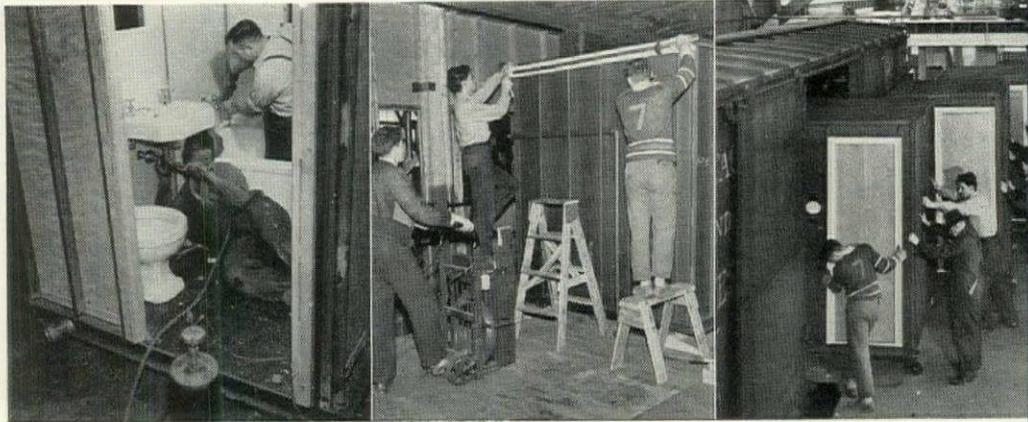
PRODUCTION LINE USES COMMON-SENSE RATIONALIZATION TO PRODUCE 300 BATHROOM UNITS PER MONTH

**Unitility production employs standard trades, materials, equipment.**

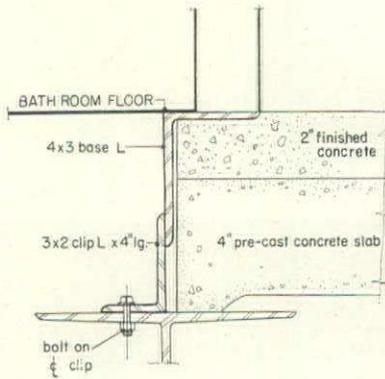
Using a converted war plant at St. Catharines, Ont., the Unitility people have set up a 100 per cent-unionized production line currently turning out 300 units per month. The working force of 126 men works an 8-hour day, 5-day week and is drawn almost exclusively from the building trades. Floor space is available for tripling this production if conditions warrant. As the pictures indicate, there is nothing radically new about the operation. On the contrary, the manufacturers are only exploiting the inherent advantages of shop fabrication: controlled working conditions, precision, cleanliness, access to power tools, etc.

Three basic models (with tub, with shower stall, with lavatory and w.c. only) are produced in both left and right hand versions. All component parts are standard brands—most of them from American companies. The standard unit, weighing about 1,500 lbs., is shipped without crating, seven to a freight car or five to a trailer.

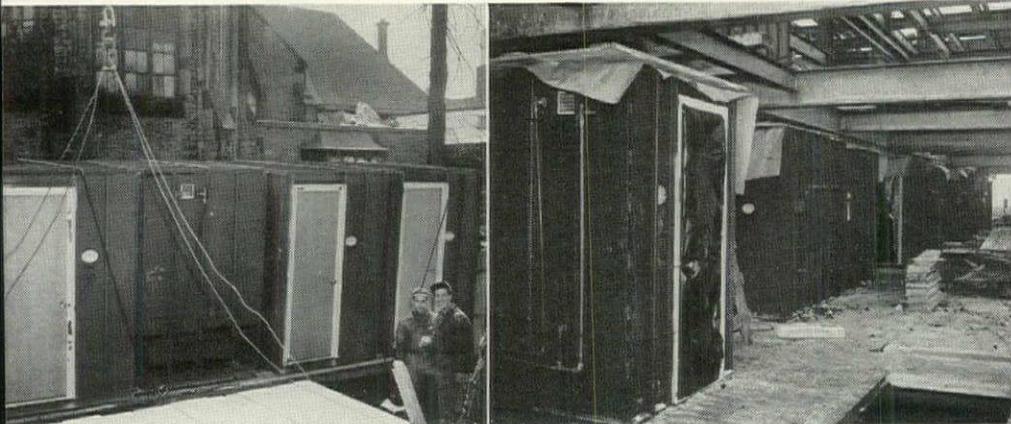
Easily and safely handled by crane or derrick, the Unitility installation in the Laurentian



UNITS ROLL PAST VARIOUS TRADES ON DOLLIES. NO CRATING IS NEEDED FOR SHIPMENT

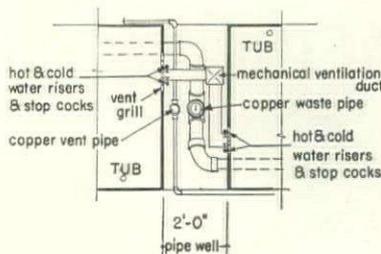


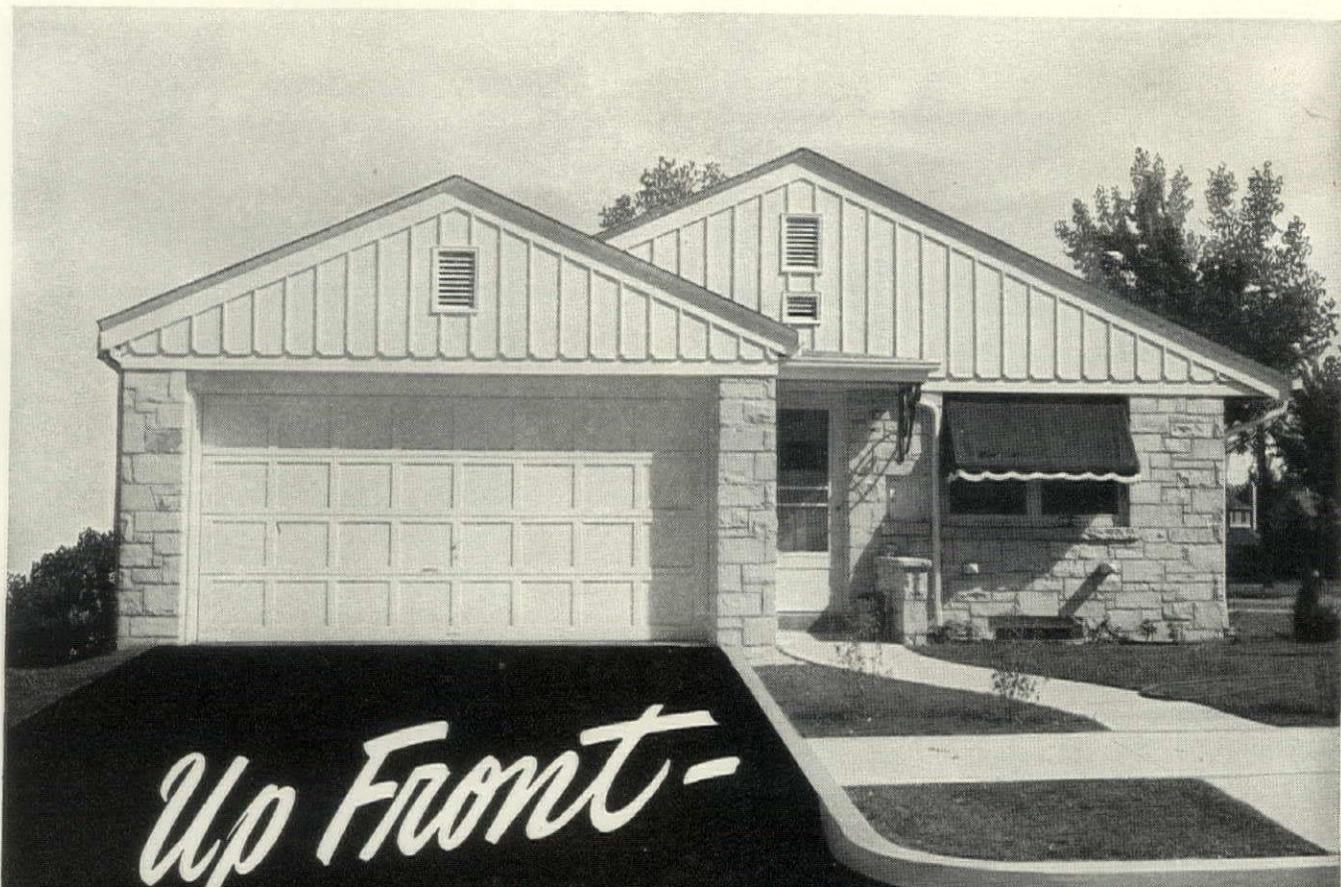
Hayward St



Hotel (right) is a typical multi-story one. As precast floor slabs were laid floor by floor, units were hoisted up, rolled across floor, slipped into slots exactly sized to receive them. Units' floor channels were then bolted to structural steel from below (above, right). When finish floor was poured, bathroom floor thus was on same level. In the Laurentian, the units were set back-to-back and hooked up to vertical ventilation and plumbing stacks (right).

(Continued on page 124)





# Up Front- AND CENTER OF "SATISFACTION"

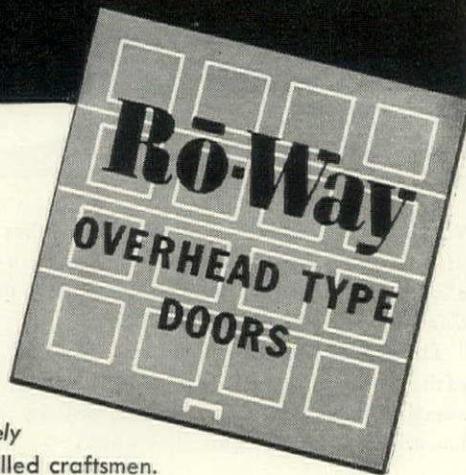
Time was when a garage door didn't dare show itself in the front of the house. Now—with the lasting good looks of Ro-Way Overhead Type Doors—it is both "a center of attraction" and of satisfaction.

Back of Ro-Way's simple beauty are exclusive features that make Ro-Way the smoothest-operating door any client could ask for.

Friction-reducing track; ball-bearing track rollers; power-metered springs; "crow's foot" outer bearing support.

Ro-Way can and does lead in value because every Ro-Way Door is completely fabricated and built in the Ro-Way plant—from finest materials—by skilled craftsmen.

No wonder Ro-Way is the most wanted door for today's "up-front" garages.



*Dependable Ro-Way sales and installation service available  
all over America. Write for free catalog.  
See our catalog in Sweet's.*

## ROWE MANUFACTURING COMPANY

926 Holton Street

Galesburg, Illinois, U. S. A.

*There's a Ro-Way for every Doorway!*

**Best**

## for Cast Iron Radiators

... as well as for radiant baseboards,  
convectors and radiant panels

It's hard to beat the cast-iron radiator for the cheery comforts of radiant heat. *Particularly when heat is supplied by a B & G Hydro-Flo System!*

Today's radiators are slim, streamlined beauties, bearing little resemblance to their old-fashioned predecessors. Amazingly smaller in size, they give off just as much heat. Modern radiators can be recessed—made so inconspicuous that they blend in smoothly with any decorative plan.

Most important of all, radiators can, *and should be*, placed under the windows where they meet cold where cold comes in.

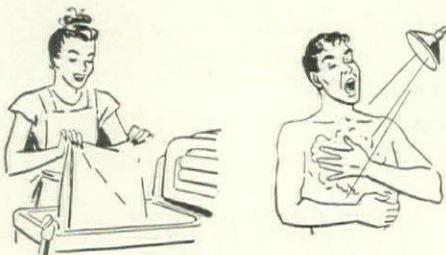
B & G Hydro-Flo Heating equipment enables you to get the utmost benefits from radiator heating. This forced hot water system *automatically* regulates the average temperature of the water in the radiators so that the heat supply is in accurate balance with the building heat loss. Never overheats—never underheats.

That's why B & G Hydro-Flo Heating Systems are preferred for homes, apartments, commercial and industrial buildings.

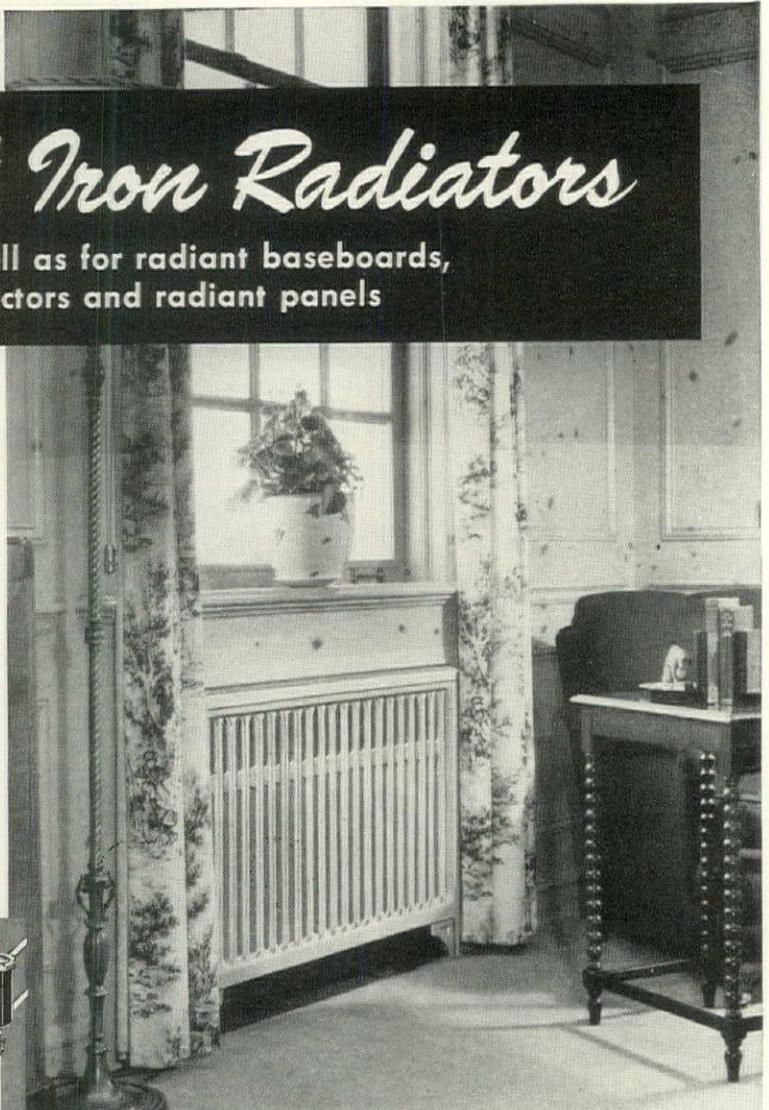
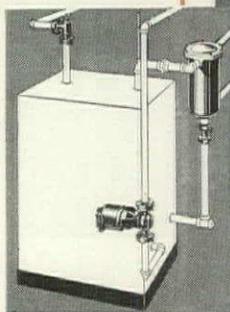
**Year 'round hot water  
from the same boiler that  
heats the house**

With the sharp increase in the use of clothes and dish washers, *low-cost* hot water is more than ever a necessity. Showers, too, requiring large quantities of hot water, are on the rise.

The B & G Water Heater is a component part of the Hydro-Flo System. Winter and Summer, with amazing economy, it furnishes a virtually inexhaustible supply of piping hot water.



Send today for complete file of  
descriptive literature on B & G  
Hydro-Flo Heating Products



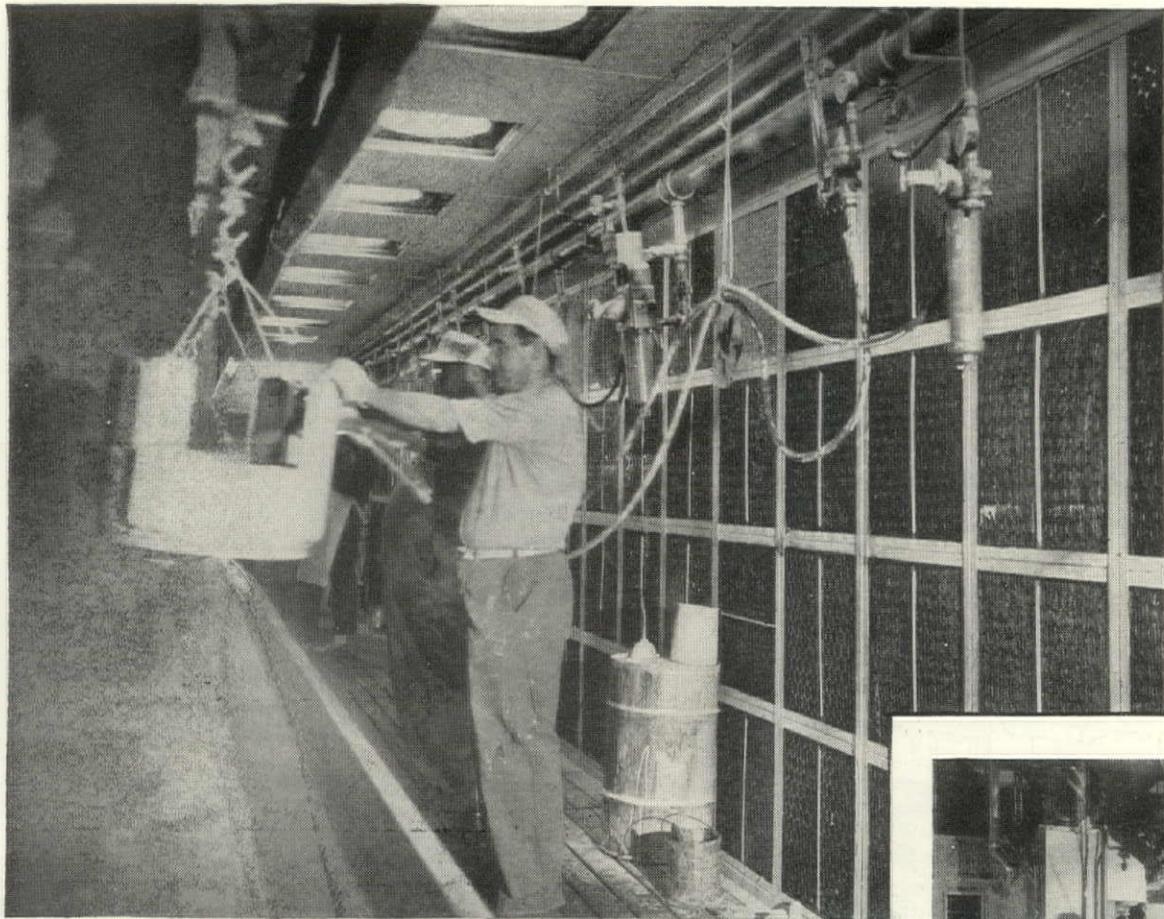
The simple dependable units  
of a B & G Hydro-Flo Heating  
System can be installed on  
any hot water boiler.



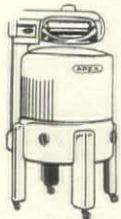
# Hydro-Flo<sup>\*</sup> HEAT

BELL & GOSSETT CO.  
DEPT. AE-10, MORTON GROVE, ILL.

\*REG. U.S. PAT. OFF.



**DUST-STOPS** help give *Apex*



**washers a superior finish**

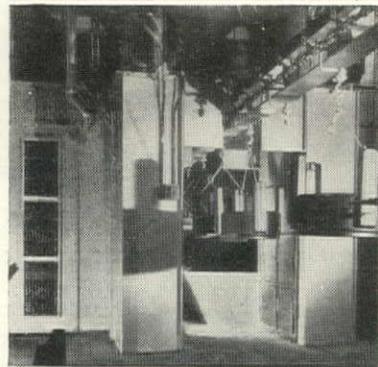
Here's an important section of the production line in the Apex Electrical Mfg. Co. plant in Cleveland, Ohio. It's the spray booth where DUST-STOP Air Filters (behind the operators and in the air intake areas at the doorway) prevent dust, dirt and foreign matter from causing costly damage. DUST-STOPS also protect electrical controls and other equipment from air-borne paint.

Because DUST-STOPS can be replaced easily and economically, maintenance time and costs are kept at the minimum.

DUST-STOP Air Filters are used in commercial and industrial heating, ventilating and air conditioning systems of all sizes. They may be installed in custom-built or the complete, ready-to-assemble, steel frame cells—to handle any cfm of air required. And DUST-STOPS are readily available from suppliers in nearly every community.

See Sweet's Files for complete information or write for booklet—"Air Filtration in Central Systems" (A 5.2.1), Owens-Corning Fiberglas Corporation, Dept. 830, Toledo 1, Ohio. Branches in principal cities.

*In Canada: Fiberglas Canada Ltd., Toronto, Ontario.*



DUST-STOPS are adaptable to a wide range of requirements—in huge buildings or custom-built areas.



DUST-STOPS mounted on this sliding door provide filtered protection for sensitive electrical controls.

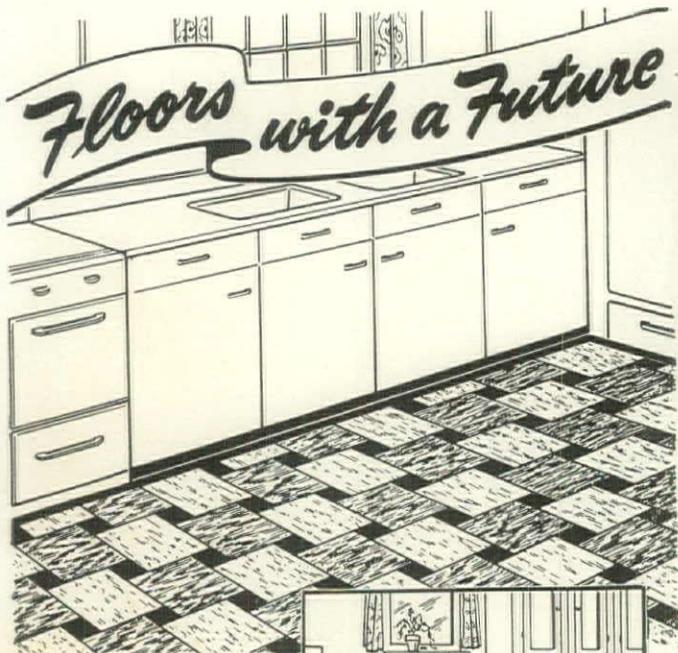
**DUST STOP\***

\*T. M. REG. U. S. PAT. OFF.

**AIR FILTERS**  
a Fiberglas product

## PRODUCTS AND PRACTICE

New composition found effective for use in radiantly-heated floors.

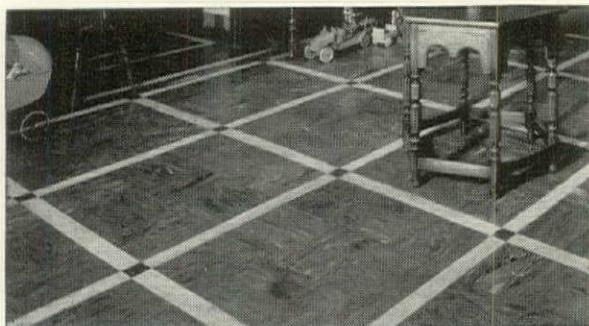


... AND AN  
UNEQUALLED  
PAST



If some smart prophet would gaze into a crystal ball today and predict a brilliant future for *Wright Rubber Tile* floors, he wouldn't be guessing, he would be stating a truth proved by a quarter century of performance. Because over a period of years, *Wright* floors have proved superior to other floors in long life, low maintenance and lasting beauty. Architects and builders depend on *Wrightex* and *Wrightflor* to assure customers satisfaction.

To meet flooring requirements in modern homes, institutions and business places . . . *Wrightex*, the softer surface tile, is best where greater resiliency and quietness is preferred . . . *Wrightflor*, the harder tile, is best where heavy traffic and low maintenance costs are principal factors. Help along your own future sales success by writing us today for details.



**TAYLOR MANUFACTURING COMPANY**  
Wright Rubber Products Division  
3062 W. Meinecke Ave., Milwaukee 10, Wis.

**WRIGHT RUBBER TILE**  
*Flooring of Distinction.*



1. After scratch coat of bark and magnesite is poured and screeded, resistance coils are laid out and tacked in place.

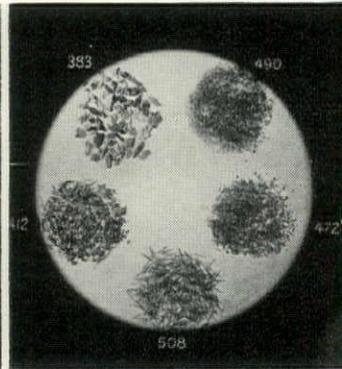
2. Finish coat, using same one-to-four formula but integrally colored, is then troweled over coils.



3. When floor has set properly, finish coat is polished with ordinary sander. Photo at right shows five sizes in which bark "aggregate" is produced.



Photos by Loren Smith



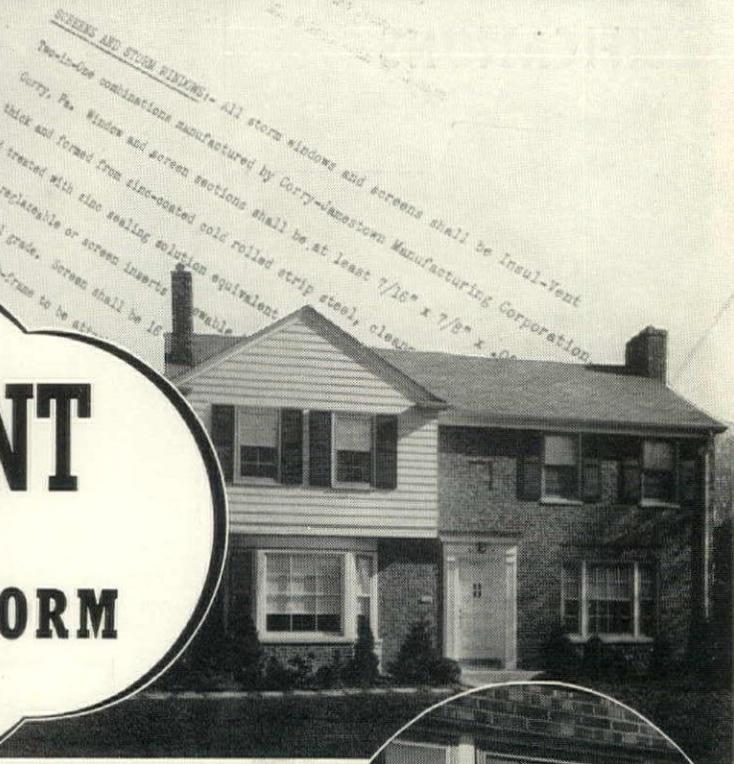
The new composition floor shown above is one of several recently installed by the Raecolith Flooring Company in Seattle. Composed of powdered tree bark and magnesium oxychloride cement, the floor is laid like concrete, polished like terrazzo and yields a surface almost as quiet and resilient as linoleum or rubber. Moreover, the composition is "exceptionally economical" when used with heating coils—either electrical or pipe, according to the firm.

The aggregate used in these floors is *Silvacon*, new Weyerhaeuser product made of powdered treebark. Designed primarily for use as a filler for industrial plastics, *Silvacon* comes in five particle-sizes (right above) and a color range of yellow and brown. The Raecolith company used type #412, in proportions of about 1 to 4, with a standard oxychloride cement. Highly resistant to oils and acids, the new floor may be integrally colored and polished to any desired finish. Its light weight and com-

paratively high strength permits its use for resurfacing old floors as well as new. It can be applied in continuous sheets, without dividers or expansion joints. Although this cement cannot stand continuous exposure to water, its long use on ship and railroad cars indicates its resistance to frequent washing, traffic and vibration.

Surface characteristics of the flooring can be varied with the mix, but tests indicate that best workability and highest strength are achieved when *Silvacon* aggregate is held to 15 or 20 per cent by volume. As used on the Seattle jobs, a 1-to-4 mix was used as a base or scratch coat (although the composition is said to bond equally well to standard concrete, wood or even steel plates). After the scratch coat has set, the electric coils were laid out and tacked in place. A finish coat with color added was then poured and screeded. After the floor had thoroughly set, it was sanded and waxed. (Continued on page 126)

...and last but not least **SPECIFY**



**INSUL-VENT**  
*two-in-one*  
**SCREENS and STORM**  
**WINDOWS**

**Add a Final Touch of Distinction to the Home!**

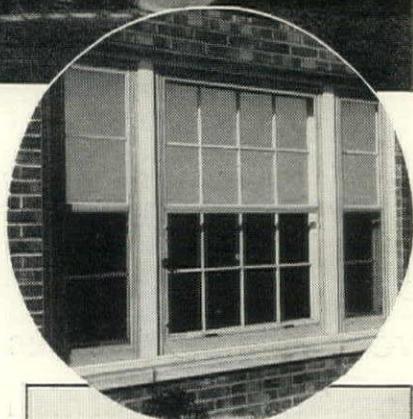
● Insul-Vent Two-in-One Screens and Storm Windows enhance the beauty of any home. The outer permanent frame molds itself into the window opening giving a modern appearance of sturdiness and symmetry. Sash sections are formed by roller dies. Ribs at strategic points give added strength. Between all walls on both screen and glass panels, string solder is inserted and melted for added sash rigidity. An average Insul-Vent sash, less glass or wire, can be suspended from any corner and sustain without collapse weights up to 100 pounds.

● Both glass and screen inserts are internally reinforced and welded. A quality product in every respect, the steel in Insul-Vents is triple-treated for lifetime protection; first it is electro-

zinc coated; next, chemically treated with Iridite to form a base for paint and as a protective finish; finally it is heavily coated with Frescote Enamel baked at 350° F. Glass is best commercial grade. Screens 16 mesh, .0113 diameter bronze wire cloth.

● The last word in modern efficiency, Insul-Vents work as any windows do. The bottom sash slides up and down easily. Both sections can be quickly removed from the inside for washing. Their use insures substantial fuel savings; no-draft ventilation and only one-third of the usual space required for storage of old-fashioned storm windows or screens.

● Write for complete details and nearest outlet.



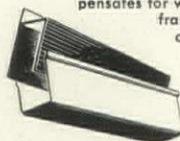
**Attention!**  
**Building Supply and Lumber Dealers...**  
 Aggressive dealers seeking a new line with big sales potentials may find their territory still open. Write today regarding an Insul-Vent dealership.

**INSUL-VENT combination screen and storm windows are built to last a lifetime!**

**Tubular Steel Construction**  
 Lifetime service.  
 No warp. No bend.  
 No spring.



**Closure Channel Adjustable**  
 for permanent tight fit. Compensates for window frame out of true.



**Glass Insert Easily Reglazed**  
 No staples.  
 No mess.



**Screen Insert Easily Rewired**  
 No special tools.  
 No time-wasting.



*another  
 Steel Age  
 quality product*

**CORRY-JAMESTOWN**  
 Corry, Penna.



**MANUFACTURING CORP.**  
 Branches in Principal Cities

# DEVOE CREATES A NEW STANDARD FOR VARNISH SPECIFICATIONS



The synthetic resin used in Devoe 87 Spar Varnish is an entirely new molecular structure created for the specific purpose of producing a finer, more durable all-purpose varnish.

## Improved characteristics of Devoe 87 Spar Varnish

**CLEAR, PALE:** Water-clear and notably lighter in tone than previous all-purpose varnishes.

**HARD AND TOUGH:** Exceptionally resistant to abrasion. It is unusually hard, yet so resilient it does not crack or chip even under blows which dent the wood underneath.

**ALCOHOL AND ALKALI RESISTANT:** Unharmful by hot, soapy water, alcoholic liquids, or mild acids such as fruit juices.

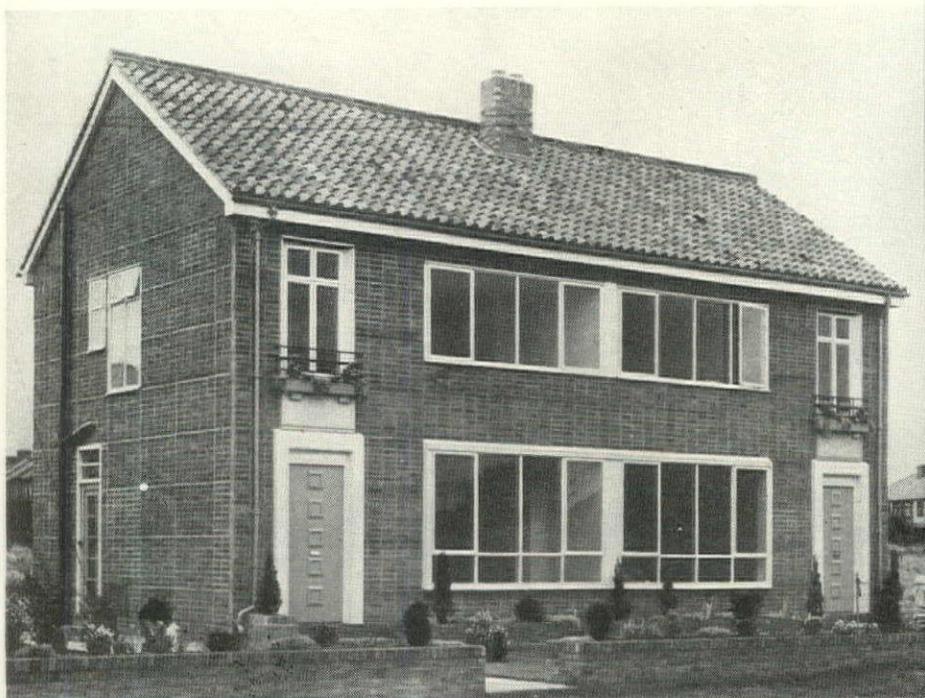
**FAST-DRYING:** Dries in four hours.

**ECONOMICAL COVERAGE:** Spreading rate of Devoe 87 Spar is approximately 600 sq. ft. per gallon—so that the customary standards for estimating requirements for high quality varnish may be followed, depending on the type and condition of the surface.

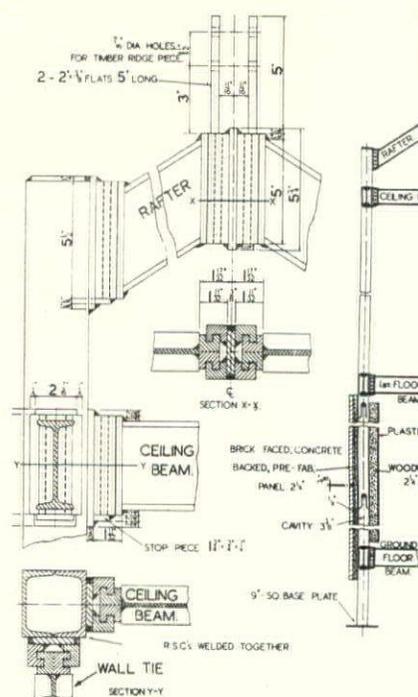
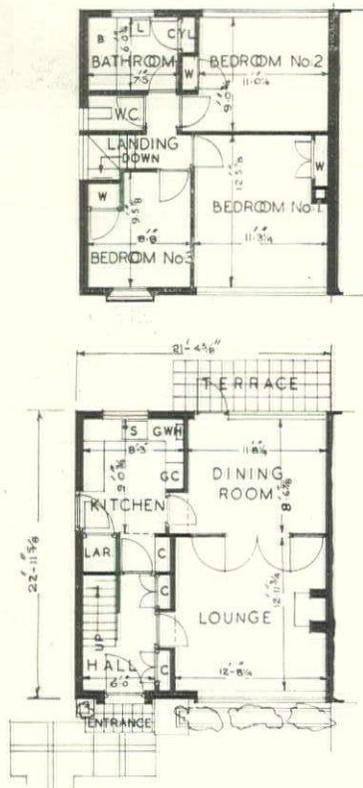
## ANOTHER DEVOE PRODUCT

Distributed by  
 PEASLEE-GAULBERT PAINT & VARNISH CO.  
 TRUSCON LABORATORIES  
 WADSWORTH HOWLAND & CO.  
 DEVOE & RAYNOLDS CO., INC., 787 FIRST AVENUE, NEW YORK 17, N. Y.

## BRITISH PREFAB used precast brick panels to surface steel frame.



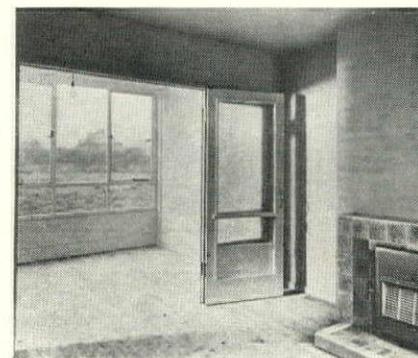
EACH DUPLEX HAS THREE BEDROOMS IN A COMPACT, EFFICIENT PLAN



FIRST FLOOR ROOMS ARE SUN

Another contender for the permanent housing market in Britain is the Cussins House—a semi-detached, two-story prefab which costs approximately \$5,200 per dwelling unit. The house is framed of steel and surfaced with a precast, brick-faced concrete panel. Although the roof is tile, applied at site, and all interior walls are finished in plaster, the manufacturers have been able to erect complete unit in seven days.

(Continued on page 130)



**A Distinctive New Product...**  
***for A Widespread Need!***



*American* **66 Inch Sink**  
**KITCHENS**  
**STYLED IN STEEL**

Here it is . . . the sink that most satisfactorily meets the need for unusual capacity and convenience—a product of the combined *experience, research, and know-how* that has made “American Kitchens” the pride of the homemaker and the envy of competition.

This double bowl, double drainboard sink—66 inches wide—provides utmost working comfort, convenience and beauty. Its outstanding features—such as larger bowls, front to rear, due to exclusive American design, wide drainboards, extended front and recessed bases,

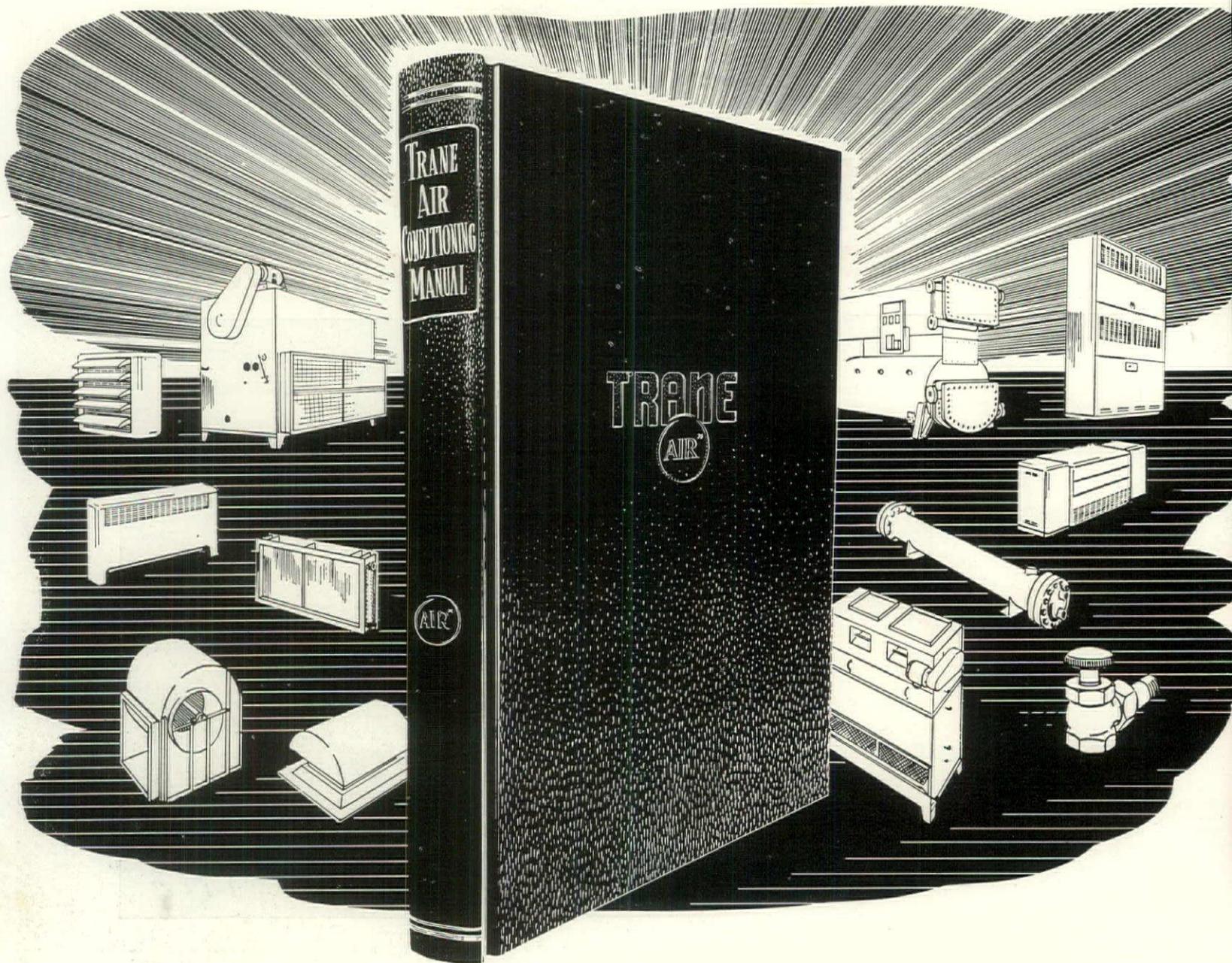
rounded drawer interiors—give architects and builders reason for pride in their part in its development—and provide important reasons for recommending its installation in new homes or remodeled kitchens.

Note the numerous and unusual advantages of this new sink...designed to make kitchen tasks easier for any woman.

**AMERICAN CENTRAL**  
**Division—Avco Manufacturing Corporation**  
 Connersville, Indiana

Total width . . . 66 inches  
 Depth, front to back . . . 25 inches  
 Height, incl. backsplash . . . 40 inches  
 Drainboards . . . 14 $\frac{3}{16}$  x 19 $\frac{3}{16}$  inches  
 Each bowl . . . 15 x 19 $\frac{3}{8}$  x 7 inches  
 Three storage compartments  
 Two regular drawers  
 Two concealed drawers





## ENGINEERED AIR CONDITIONING

### by the Men Who Wrote the Book

The "bible" of the air conditioning industry is a 376-page book, entirely devoid of commercialism. In it are clearly explained the terms, workings, and applications of all phases of air conditioning. So helpful and complete is this book—written by Trane Engineers at Trane expense—that it has worldwide use as a standard reference by architects, engineers, and contractors, and also as a text by students of air conditioning.

The same men whose experience made the Trane Air Conditioning Manual possible produce *Engineered Air Conditioning*. It is these men who engineer and build the most complete line of products for air conditioning and heating in the industry—products that are designed and built together for use together, and that reflect the high standards of Trane product engineering.

Because Trane manufactures a complete line, architects, engineers and contractors

can plan entire Trane systems, obtaining all the necessary elements from one source with one responsibility. Trane Field Offices in 85 principal cities offer these men the entire cooperation.

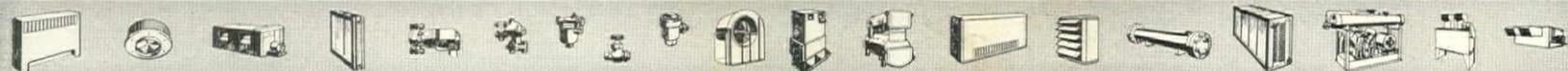
\* \* \*

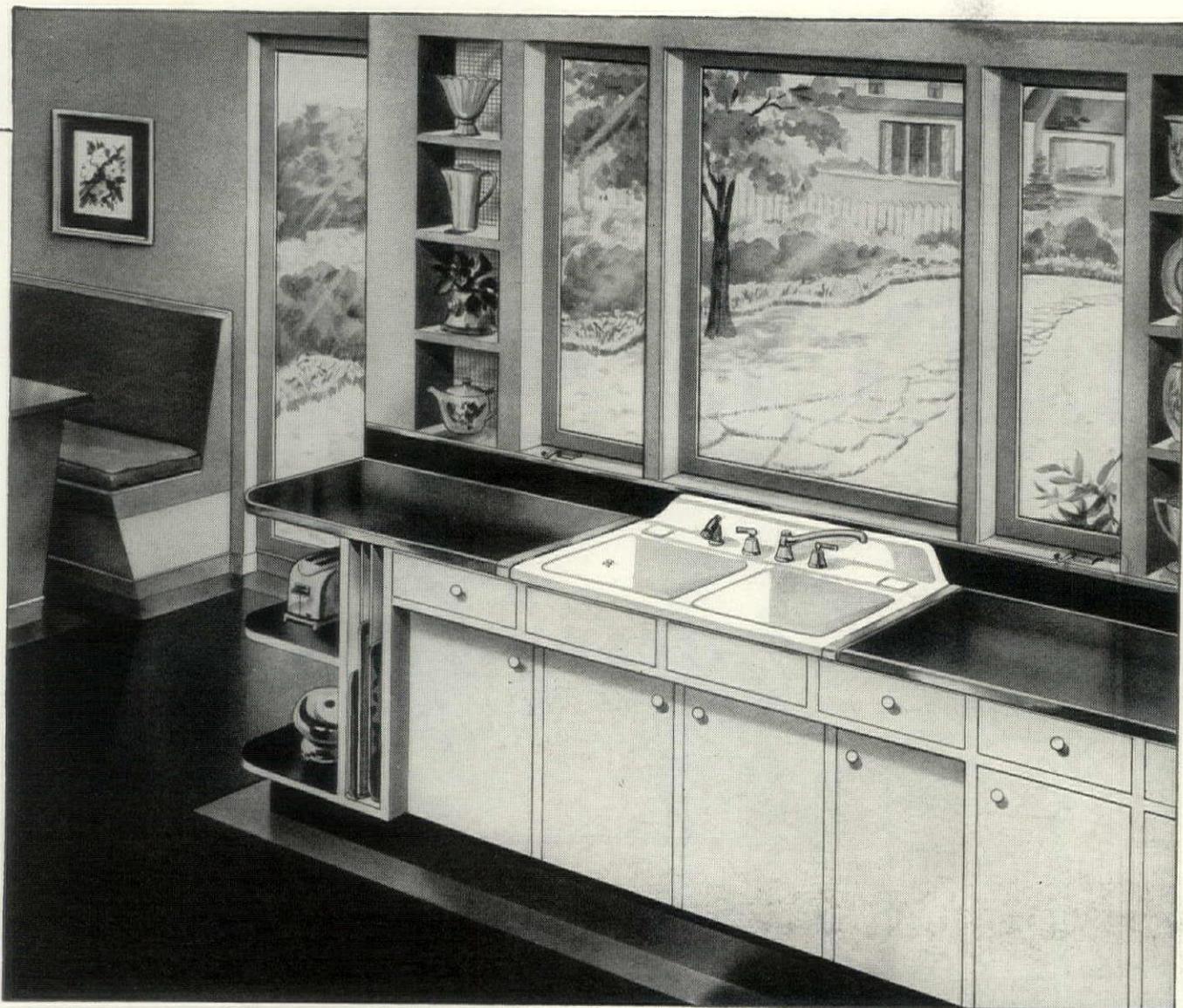
*The Convector-radiator—modern successor to the old-fashioned cast iron radiator—has been engineered by Trane for universal application to steam and hot water heating systems, and is being produced in quantities so you can now secure it from local distributors' stocks.*

# TRANE

Manufacturing Engineers of Equipment for  
HEATING AND AIR CONDITIONING

THE TRANE COMPANY, LA CROSSE, WISCONSIN • Also TRANE COMPANY OF CANADA, LTD., TORONTO, ONTARIO





## For well-planned kitchens: The KOHLER Wellwin sink

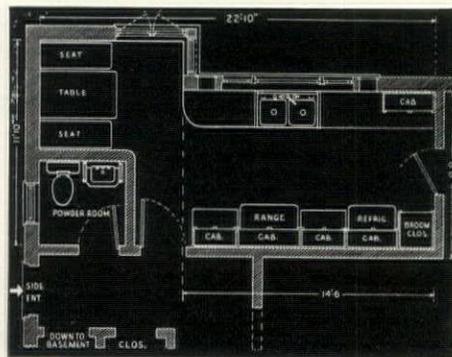
THE Kohler Wellwin sink has advantages that can easily be recognized and appreciated by the average home owner. It carries immediate assurance of first quality, of which the name Kohler is a well known symbol. Its two roomy compartments make it ideal for working comfort, and it fits readily into convenient kitchen arrangements of various types.

The Wellwin has a time-tested, solid base of cast iron to which is fused the lustrous, pure white Kohler enamel. Housewives appreciate the easy-to-clean surfaces which are acid resisting and give long wear. The Edgewater

fitting with swing spout is made of durable, chromium plated brass, and mounted on a 3 1/8-inch ledge. The spray operates conveniently by pressure of a lever on the nozzle. Write for further information.

Kohler Co., Dept. M, Kohler, Wis. Established 1873.

*An example of how the Kohler Wellwin can be adapted to a modern floor plan that provides for economy of both space and effort. Size, 42 x 25 inches.*



# KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS

# Only Sloan *can say this:*



QUIET ZONE  
HOSPITAL

**92.5% OF ALL HOSPITALS\* ARE  
SLOAN EQUIPPED—**

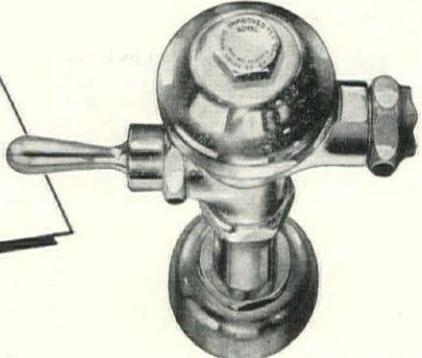
**61.3% OF ALL HOSPITALS ARE  
EXCLUSIVELY SLOAN!**

There are several reasons for Sloan's pre-eminence. For one thing, maintenance costs are reported as low as  $\frac{1}{4}$  of 1c per valve *per year*. Then, too, Sloan Flush Valves save water; they protect public

health by preventing back syphonage; they can now be whisper quiet; they have unlimited life—yet cost no more. That is why more Sloan Flush Valves are sold than all other makes combined.

**SLOAN VALVE COMPANY • 4300 W. Lake St., Chicago, Ill.**

\*Hospitals of 100 beds or more.

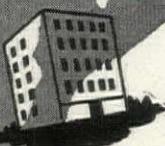


sloan *Flush* valves

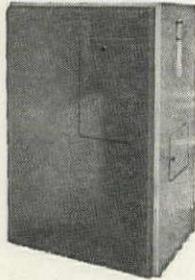
# BURNHAM BOILERS SPELL

*Dependability and Efficiency*

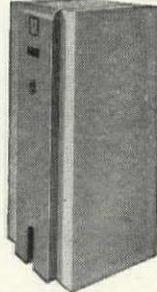
## FOR EVERY TYPE OF

residential  and commercial   
 institutional  and commercial **INSTALLATION**

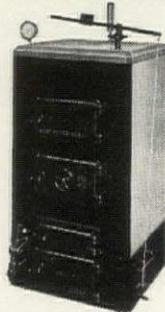
**BURNHAM DE LUXE**  
*For Oil Only*—Designed for highest efficiency at minimum operating cost. A vertical fire-travel boiler with combustion chamber completely surrounded by water. Heat absorbing fins avoid heat waste.



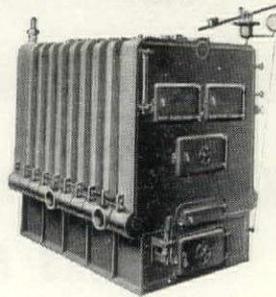
**BURNHAM YELLO-JACKET**  
*For Automatic Firing—Oil, Gas, Stoker.* Famous for its low-cost operation and dependability. Large combustion space to assure rapid heat absorption. Sections with heat grabbing fins. Built-in heaters for year 'round automatic hot water.



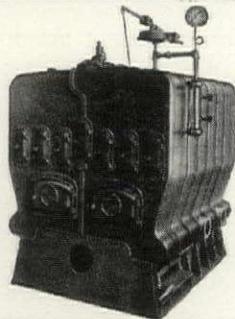
**BURNHAM SQUARE SECTIONAL—17"-21"-27" Series**  
*For All Fuels*—Designed for medium and large homes and buildings. Tube type construction establishes higher operating efficiencies on hand-fired coal or automatically fired boilers. Famous "three times back and forth fire-travel—the big fuel saver!"



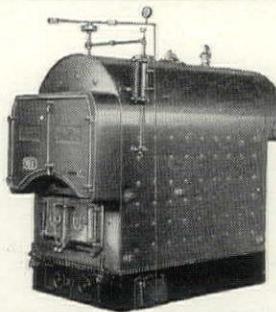
**BURNHAM SQUARE SECTIONAL—36"**  
*For All Fuels*—A larger version of boiler at left—for large dwellings and buildings. Same extended fire-travel—same fuel saving efficiency—same heat absorbing design. Unjacketed. A popular and highly satisfactory heating unit.



**BURNHAM SQUARE SECTIONAL—50" TWIN**  
*For All Fuels*—A husky boiler built in twin sections. For apartment houses, hotels and other public buildings. Twin grate assembly. A superior boiler that will deliver maximum heat at lowest cost. 80 inches high overall; 71 inches wide.



**BURNHAM WELDED STEEL (Compact Series)**  
*For Coal, Oil, Gas and Stoker*—Famous Burnham extended fire-travel—3 times length of boiler. High boiler efficiency—low flue temperatures. There's no better designed boiler of this type construction. Conforms with ASME Code and SBI Code for low pressure boilers.



Steadily increasing production has placed us in a position to make reasonably prompt deliveries on most styles and sizes. Let us know your requirements.

**Burnham Corporation**

BOILERS and RADIATORS  
 IRVINGTON, N. Y., Dept. AF97

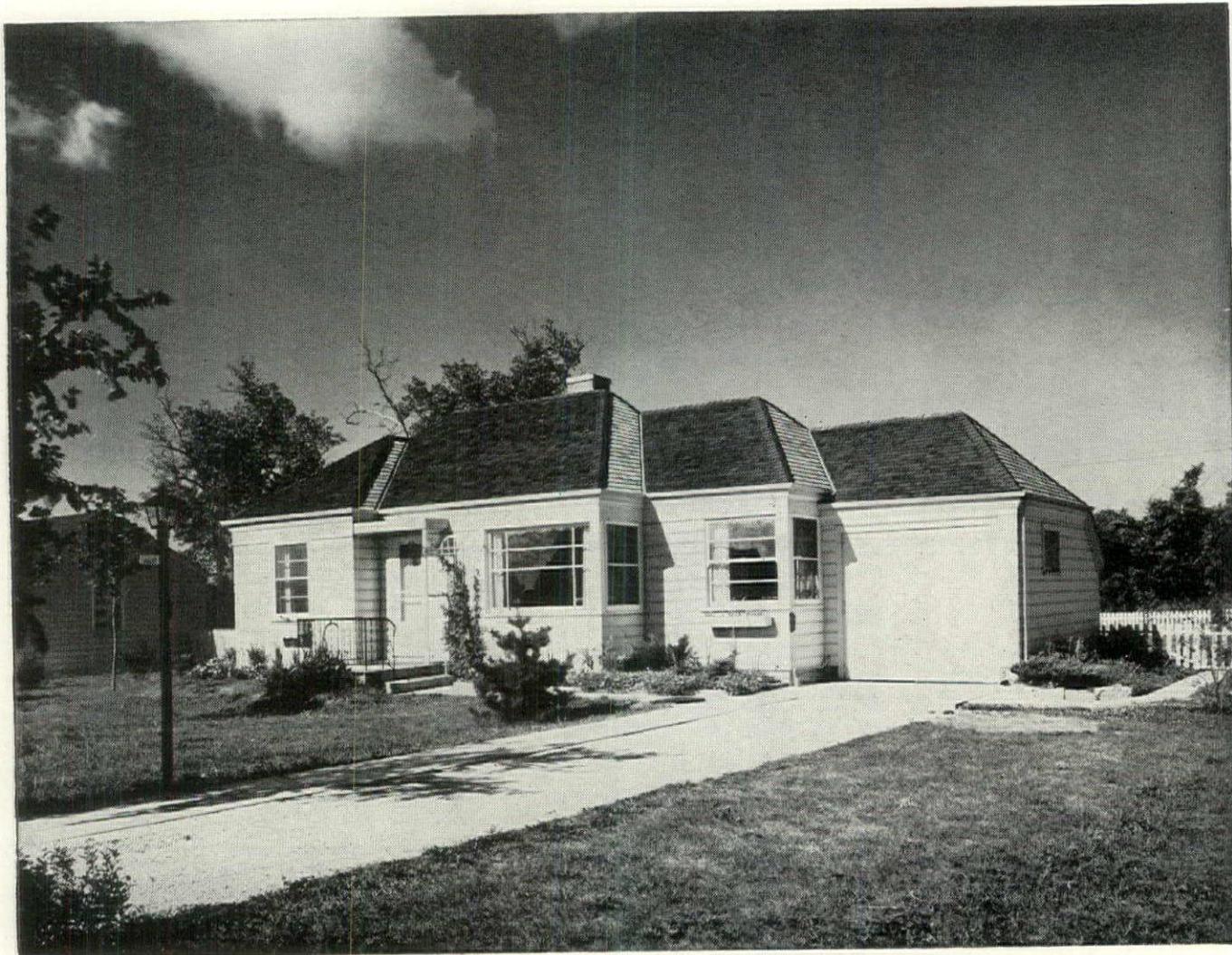


### MAIL THIS COUPON TODAY!

Burnham Corporation Dept. AF97  
 Irvington, New York

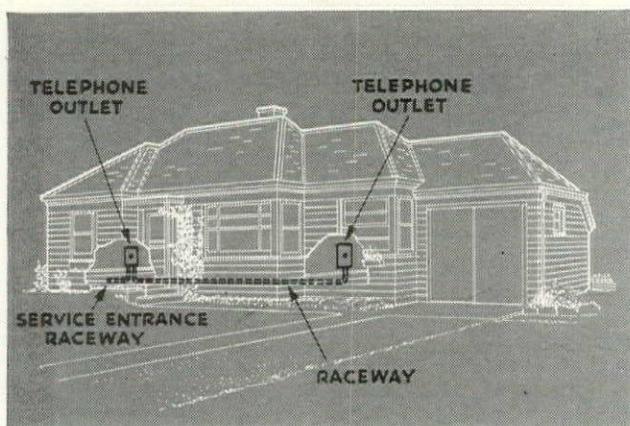
I am interested in your \_\_\_\_\_  
 Boiler. Please send booklet. (fill in type here)

Name .....  
 Address .....  
 City ..... State .....



*Bertram Weber, Architect*

## THIS SPICK-AND-SPAN MODERN HAS A RACEWAY FOR TELEPHONE WIRES



Conveniences are important in small homes as well as large. Certainly a raceway for concealing telephone wires belongs in every plan.

The builder can easily install telephone raceways while construction is going on. A few pieces of pipe or electrical tubing are often enough to provide a clear passage for telephone wires through outside and interior walls to convenient telephone outlet locations.

Your Bell Telephone Company will be glad to help you plan modern telephone arrangements for small as well as large homes. Just call your Telephone Business Office and ask for "Architects and Builders Service."

**BELL TELEPHONE SYSTEM**





*"above thy fruited plains"*

This, too, is America. For true character is no better symbolized than by the fundamental goodness of the soil . . .

And the more than six million fertile farmsteads, peopled with the earthy, land-wise sons and daughters of the country, who multiply the talents of nature to feed and clothe their fellow men. Nowhere does the "nobility of man" find kinder expression!

On the farm, as in industry and commerce, imagination and determination have always mixed freely to achieve our highest aims. But the painful transition from tilling earth with sharpened sticks to roll-

ing the furrows of soil with multiple plows was no harder for the farmer to affect than the change from the sweep well to the automatic water system.

Only the invention and mass production of *steel pipe* finally banished the old oaken bucket and made fresh, pure water under pressure available at the turn of a tap in the house, the barn or the "north forty."

Today America is the "bread basket of the world" largely because *steel pipe* . . . for irrigation, stock watering, spraying, labor saving, sanitation and just plain convenience . . . has made farming a modern industry. It is the medium by which

and through which the energies of water, gas, steam, oil and other resources of America are made the servants of Americans. Yes, *steel pipe makes it possible!*

The interesting story of "Pipe in American Life" will be sent upon request.

*Committee on  
Steel Pipe Research*  
OF  
AMERICAN IRON AND  
STEEL INSTITUTE

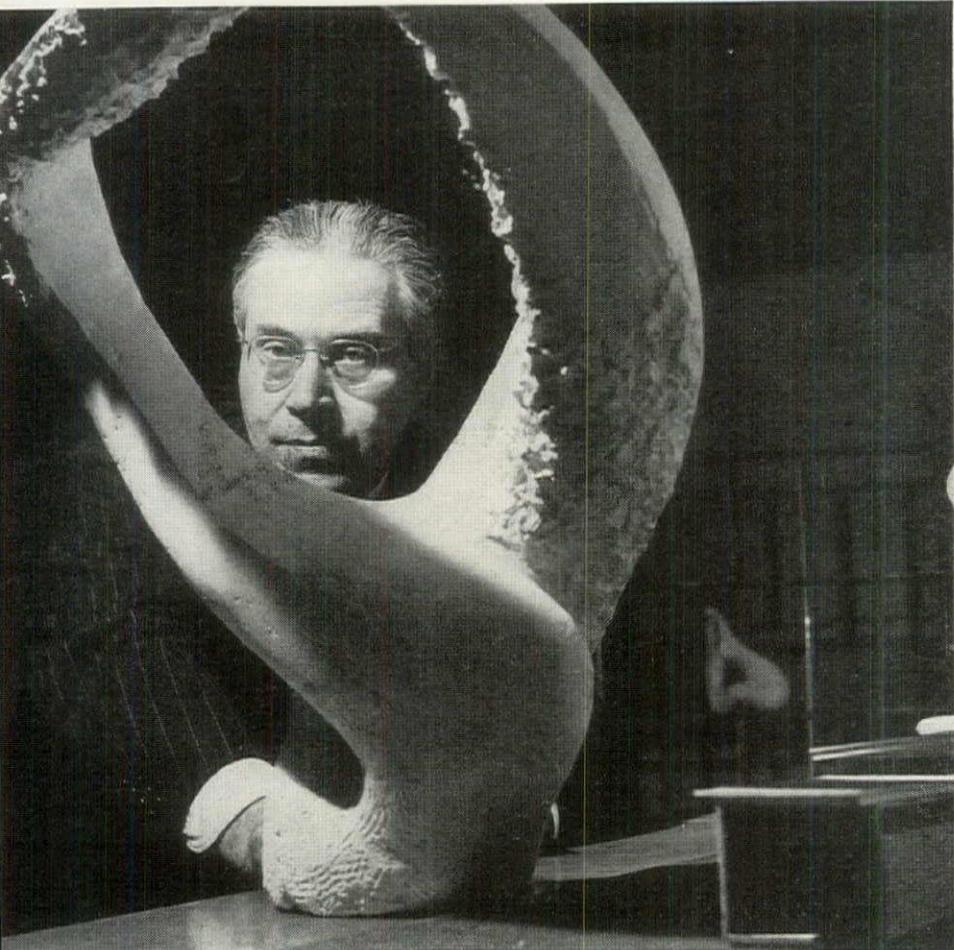
350 Fifth Avenue, New York 1, N. Y.

**STEEL PIPE MAKES IT POSSIBLE!**



*. . . better living through pipes of steel for plumbing and heating purposes.*

Vories Fisher



**VISION IN MOTION.** By László Moholy-Nagy. Paul Theobald, 5 North Wavash Ave., Chicago 2, Ill. 361 pp. Illustrated. 7 full color plates. 8½ in. x 11 in. \$10.50.

As an extension of his previous work, *The New Vision*, which attempted to explain the educational methods of the old Bauhaus, this posthumous book by Moholy-Nagy expounds the philosophy underlying the educational program of the Art Institute, Chicago—successor organization founded by the author. While the second work is more ambitious and extensive in coverage, it is also a shade less esoteric. However, it is still no intellectual cinch, despite the fact that it was written “for the artist and the layman, for everyone interested in his relationship to our existing civilization.”

Whether or not Moholy-Nagy was, in his own right, a creative artist of great significance is, in the light of this book, secondary to his life-long attempt to effect a complete integration of contemporary art, technology and science and a resulting liberation of modern creative ability along constructive lines. His influence as teacher and artist has been one of the strongest of our generation but, in order to realize its full scope, it must be made comprehensible to laymen as well as to students. Unfortunately, although *Vision in Motion* does not entirely accomplish this end, it is a step in the right direction, tending to offset the deep aura of mysticism with which his more fanatical apostles have surrounded the name of Moholy-Nagy.

Appreciation of the author's cultural efforts lies in understanding his philosophy. Their realization lies in mass re-education, the embryo of which is to be found in the old Bauhaus program.

Speaking of this re-education, Moholy says: “The public is eager to learn; but without having been taught to think analytically, it succumbs to the influence of quick-flash commentators hired by, or unconsciously servile to, pressure

groups. . . Not given the tools of integration, the individual is not able to relate all this casual and scattered information into a meaningful synthesis. He sees everything in clichés. His sensibility dulled, he loses the organic desire for self-expression even on a modest level. His natural longing for direct contact with the vital, creative forces of existence becomes transformed into the status of being well informed and well entertained.” Not that bewailing the ills of our civilization is new or particularly commendable—it is the author's faith in the potentiality of mankind and his formula for its ultimate social and cultural fruition that is important. He says: “It is an individual as well as social waste to have eyes and not see, ears and not hear; to destroy the endowment of instincts and not create. The result is an atrophy of capabilities, a step-by-step deterioration. . . . Everyone has a creative nature. Everyone is naturally equipped to receive and assimilate sensory experiences; to think and feel. . . . The sincere expression of the layman in any medium can be the start for ‘art’. This is why the amateur is one of the hopeful promises of a future society. He is an authentic testimonial of the manifold abilities of the human being to act and react purposefully if emotionally stimulated. . . . Today, lacking the patterning and refinement of emotional impulses through the arts, uncontrolled, intricate and brutally destructive ways of release have become commonplace. Unused energies, subconscious frustration create the psychopathic borderline cases of neurosis. Artistic expression of the individual can be a remedy by sublimation of aggressive impulses. Art educates the receptive facilities and it revitalizes the creative abilities. In this way art is rehabilitation therapy through which confidence in one's own creative power can be restored.”

This emphasis on individual expression may seem no more than a spark in infinity when related to the ultimate integration and perfection of the human intellect. However, Moholy's educational concept is a basic way of thinking which cannot help but penetrate and effect all phases of life and human relationships. Because it is primarily a sensory education, it is drawn forth and nurtured rather than applied like the static imprint of academic learning and, for this reason, envisages a limitless scope. But, while recognizing an innate creative urge in every human, Moholy is completely objective in his evaluation of individual limitations. As he puts it, “only the person who is able to rise beyond private sensation and translate his intuitive grasp of the unadulterated problems of his time into imagery. . . . that is, into visible, audible and tactile forms can be ‘best’”—or an artist of consequence. Even in the “poor,” “good” and “better” the creative impulse is not to be ignored since the keystone to Moholy's philosophy is his belief that design is not a profession but an attitude that exists in all human endeavor requiring nothing more than education and release to emerge as a tangible quality. In explanation he says: “There is design in organization of emotional experiences, in family life, in labor relations, in city planning, in working together as civilized human beings. Ultimately, all problems of design merge into one great problem: ‘design for life.’ In a healthy society this design for life will encourage every profession and vocation to play its part since the degree of relatedness in all their work gives to a civilization its quality. This implies that it is desirable that everyone should solve his special task with the wide scope of a true ‘designer,’ with the new urge to integrated relationships. It further implies that there is no hierarchy of the arts, painting, photography, music, poetry, sculpture, architecture, or any other fields such as industrial design. They are equal valid departures toward the fusion of function and ‘design’

(Continued on page 1)

As seen  
in Color in...

THE SATURDAY EVENING  
**POST**

● ANOTHER ad in the Gold Bond Campaign. Designed to rekindle the desire that should be first in the hearts of every American family... to own their own home. Judging from previous ads, hundreds of folks will request plans of this house and as usual the answer will be "Consult your local architect!" National Gypsum Company, Buffalo 2, New York.



You can start building sooner if you start planning now. See your local Gold Bond Dealer!

## We call it "Outside Inn"

What! Build an open ranch house in cold Vermont? It sounded crazy until our architect suggested this clever idea. Now we just slide a panel and presto! We have a living room open to the summer breezes. Yet in winter we have a house as snug and easy to heat as any home in all New England...

There are a lot of good ideas for you here if you're planning to build or remodel. But some of the best ones aren't visible in this picture. For example, under the outside finish are wide panels of fireproof Gold Bond Gypsum Sheathing. They give the house greater structural strength and weather-protection because there are fewer joints. And thanks to modern building research, this better Gold Bond

sheathing costs even less than old-style inflammable sheathing!

Inside the sheathing, in between the wall studs, is another big idea for you. It's fireproof Gold Bond Rock Wool insulation that keeps the house warmer in winter and cooler in summer. Cuts heating bills by as much as 40%. Can be "blown" right into the walls and top ceiling of the house you're living in now.

Whether you're building a ranch house or a Cape Cod cottage, the inside walls will be stronger and better-looking if they're built of Gold Bond Gypsum Lath and Plaster, and painted with Gold Bond Sunflex. This wonderful new one-hour wall

paint comes in eleven fresh new colors that help to make any home bright and gay all year round.

Your Gold Bond lumber and building material dealer can now offer you over 150 Gold Bond building products all designed and engineered to help you build or remodel better. Each product is the best you can buy... and it will cost you no more than other materials. The surest way to have these finer, long-lasting materials used in your new home is to ask your architect to specify Gold Bond by name. Your local Gold Bond dealer will be glad to discuss your plans with you. See him first!

**NATIONAL GYPSUM COMPANY**  
BUFFALO 2, NEW YORK

Over 150 tested Gold Bond Building Products for new construction or remodeling add greater permanency, beauty and fire protection. These include wallboard, lath, plaster, lime, sheathing, wall paint, insulation, metal and sound control products.

**DEMAND  
THESE SIX  
GOLD BOND  
FEATURES  
IN YOUR  
NEW HOUSE**

**GOLD BOND FIREPROOF  
GYPSUM SHEATHING**



Big, weatherproofed panels of Gold Bond Storm Sealed Gypsum Sheathing add structural strength and built-in fire protection. Costs less than old-style sheathing.

**GOLD BOND FIREPROOF  
GYPSUM LATH**



Gold Bond Gypsum Lath is the perfect plaster base. Can't warp, expand or contract. Adds fire protection and structural strength for better wall and ceiling construction.

**GOLD BOND FIREPROOF  
GYPSUM PLASTER**



Gold Bond Gypsum Plaster is especially processed to bond perfectly with gypsum lath. Builds fire-safe, rock-like walls and ceilings with greater durability and beauty.

**GOLD BOND FIREPROOF  
FINISH LIME**



Over the plaster, goes a coat of Gold Bond Finish Lime. This is the smooth white finish that you see in a new house before the wallpaper or paint is applied.

**GOLD BOND FIREPROOF  
ROCK WOOL INSULATION**



Builds a fireproof blanket of insulation around the house for greater year round comfort, family health, and fuel savings up to 40%. Available for new or old homes.

**GOLD BOND - SUNFLEX  
1-HOUR WALL PAINTS**



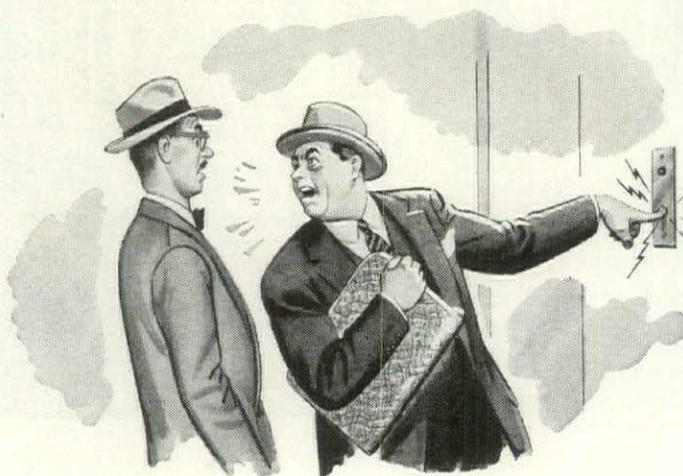
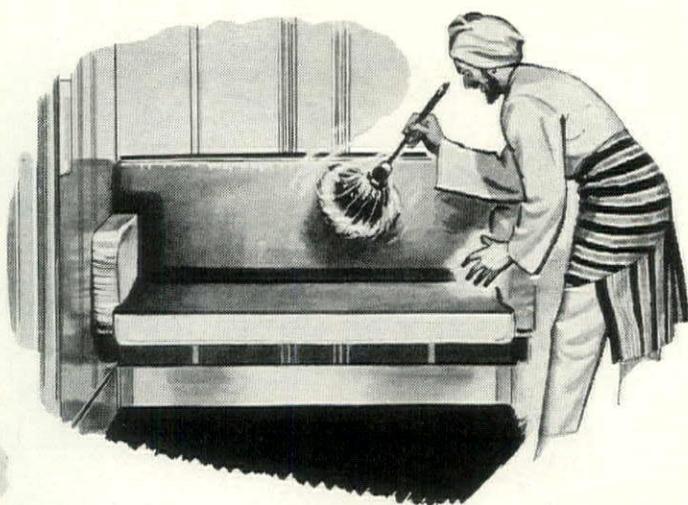
Dries in one hour with no objectional painty, after-odor. Easier to apply. This modern decoration is now available at your dealer's in a full range of colorful tones.



# skylines... by Otis

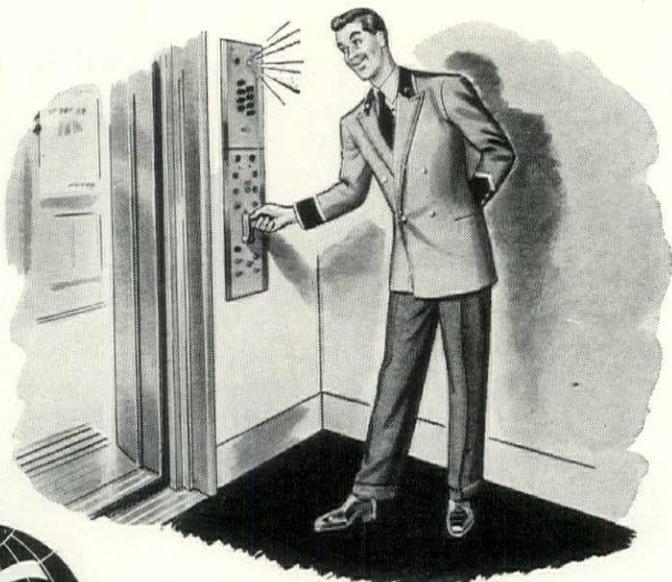
In metropolitan New York, for example, there are 26,188 Otis elevators—more than all other makes combined. So it goes in all the cities of America, and many abroad. Creator of skylines? It would certainly seem so!

**FITTED FOR KINGS** — East meets West and new meets old in an unusual elevator recently delivered to a Middle East potentate. As oriental in its satin and silk appointments as it is modern in its smooth operation and automatic control, this job is just another example of Otis ability to supply vertical transportation for *any* requirement.



**LONG WAITS AND SHORT TEMPER** — How long do *you* wait after pressing the "down" button before you hit it again? Seventeen seconds is average, according to Otis experts. Yes, cutting down waiting time is a big concern of Otis design engineers. They've been responsible for every major step in the development of safe and speedy elevator operation.

**THE LIGHT TELLS HIM WHEN** — Did you know that modern big-building elevators have a light which automatically signals the operator when to start? It's the visible part of an ingenious system developed by Otis to dispatch cars on a scientific basis, timed to the needs of the building and the hour. During rush hours it helps get heavy one-way traffic up or down without annoying delays. During off-peak hours it eliminates excessive waits caused by car movements getting out of balance due to hit-or-miss scheduling.



*Have you a vertical transportation problem* — in an office building, a factory, an apartment house, a store? If so, there is an Otis man in your city who will be glad to give you the benefit of our 94 years' experience.



**ELEVATOR COMPANY**

*Offices in all principal cities*

# INSTALLATION TIME REDUCED 50% to 80%

With Douglas Fir

## PRE-FIT

## Stock Doors

Save Time—Save Labor—and  
Get a Better Job . . . with  
These Improved Fir Doors!

**O**NE BUILDER reports as many as seven installations in the time previously required for a single door! Savings of from 50% to 80% are common.

That's because Douglas fir stock doors are *pre-fit* to exact size at the factory. They reach the job trimmed and squared, ready to hang. No sawing or planing is required. Precious time is saved—and there's far less danger of on-the-job marring, "butchering" and poor alignment due to unskilled help or improper tools. Corners are clean, trim, true—scuff-stripped for protection. The result: a better, as well as a faster, job!

and **PRE-SEALED, too,**  
for Protection and Better Finish

Douglas fir stock doors—featured in definite, plainly marked grades and a wide range of designs, including modern 3-panel layouts adaptable to all types of building—are also *pre-sealed* at the factory. They reach the job fully prepared for a better finish. They're protected against moisture and checking, with resulting improvement in dimensional stability.

**MORE FIR DOORS SOON!**

It is a fact that Douglas fir doors may continue in short supply for a number of months. Two factors make this true: the present overwhelming demand—and the shortage of essential raw materials. But production IS stepping up. Warehouse and dealer stock should soon reflect this increased production. We suggest that you keep in touch with your regular source of supply.



For Even Greater On-the-Job  
Economies, Specify Fir Doors

### "FACTRI-FIT"

Durable, attractive Douglas fir doors may also be ordered completely precision-machined—not only pre-fit and pre-sealed, but gained for hinges and mortised or bored for locks as well. Here again, cleaner, trimmer jobs are assured, because all work is done at the factory by high-speed precision tools. Time savings more than offset the slight additional cost.



No on-the-job  
mortising or boring  
required!



For Better, Faster Installations, Specify:

## Douglas Fir DOORS

FIR DOOR INSTITUTE

Tacoma 2, Washington

The National  
Association  
of Fir Door  
Manufacturers

To the average person, the most baffling facets of Moholy-Nagy's career were his own "non-objective" works—paintings, photographs, etc. An important clue to his personal standards of design, and one which is too seldom emphasized, is the enormous value he set upon intuition. However, *Vision in Motion* attempts to clarify this element: "The truth is that in spite of the best of these elements [a thorough knowledge of technique, scientific, psychological and sociological developments] there remain imponderables which cannot be easily defined.

"After the execution of a design, we may rationalize many of these imponderables since some of them may be traced back to facts which are the subject of conscious argument. The real difficulty arises *before* the design is made . . . Practice proves that there is always a possibility of alternative

design solutions with greater or less 'objective' quality . . . Among the multitude of scientific and technological alternatives, the answer concerning trends as well as the matter of basic visual and plastic shapes, and their essential psycho-physical role, mainly comes from intuition. The choice is not based upon considerations of the single element per se but upon the relationships with the whole life . . . The vividness of inner visualization is a measure of the designer's ingenuity. Intuitive assurances are often infinitely better expressed by him directly in the work than in verbalization. The intuitive process has a speed and certainty that the conscious cannot match . . . Conscious insight tends to be hampered by the verbal limitation, tends to be too conformist to the syllogistic world of cause and effect. The intuitive is the fluid world of all the senses whose movements throw up ever new forms and meanings."

By far the greatest portion of the book is taken up with the application of Moholy-Nagy's philosophy to a specific educational program which includes painting, photography, sculpture, space-time problems, motion pictures, literature and group poetry. It ends with a proposal for an international parliament on social design to "restore the basic unity of human experience" and to prepare new, collective forms of cultural and social life for a coming generation. Whether or not such a proposal is feasible one cannot doubt the author's utter sincerity and profound feeling in the human struggle. The word "visionary" has often been applied to Moholy-Nagy. It may be a shade too strong. However, as his book testifies he was one of the deepest thinkers of the twentieth century artistic world and probably a greater philosopher than painter. Unlike most of his eminent contemporaries, he never considered himself The Master but remained always the scholar and researcher, feeling new humility when confronted by the terrific potential of mankind's creative power. Unfortunately, the influence of his own compositions can be seen in gruesome travesty in ateliers and art galleries the world over simply because the philosophical basis of his artistic concept has not been fully understood. Facile doodling was not what Moholy-Nagy had to give to the world. It can only be hoped that this book will have a wide enough readership to offset more cheap mimicry.—M.S.

**THE GRASS ROOTS OF ART** (No. 2 in the series, *Problems of Contemporary Art*). Herbert Read. Wittenborn and Company, New York City. 92 pp. 7½ x 10¼ in. Illustrated. \$1.75.

Bothered by western civilization as he sees it today, Herbert Read is still no Spenglerian—although having been bitten at one point by Burckhardt. In a series of lectures delivered last year at Yale University and now printed in this paper-back book, gloom is interspersed with hope: "Our particular trouble," he laments, "in this air-conditioned nightmare which we call a civilization, is that we have lost the very notion of cultivating the senses, until butter-fingered and tongue-tied, half-blind and deaf to all nervous vibrations, we stumble through life unaware of its most appealing aspects, lost to its intensest joys and communions. Frustrated and brutalized, we drift between the boredom of peace and the self-inflicted wounds of war, and dismiss as lunatic those few quiet voices that speak of love and beauty and of the renunciations we must accept, of power, wealth and pride, if we would have the influence of beauty and love prevail in our lives."

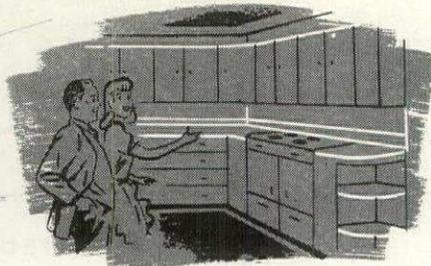
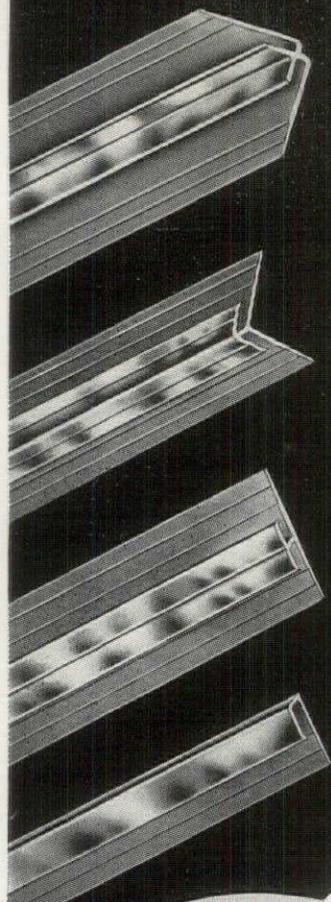
"Personally," says Author Read, "I would like to be a purist in art, just as I would like to be an individualist in ethics or an idealist in philosophy; but common sense compels me to a relativist or pragmatist attitude in these matters. In art

(Continued on page 144)

Win Praise and Higher Appraisal  
**SPECIFY KINTRIM**  
FOR MORE

*Visible Value*

ESSENTIAL INTERIOR MOULDINGS  
RESIDENTIAL • COMMERCIAL



The graceful and lustrous beauty of KINTRIM catches your client's eye—accents features of interior design that, *otherwise*, might go unappreciated. And KINTRIM affords you greater freedom along modern, sweeping lines . . . For these metal mouldings also have the structural precision you need and want for more attractive, practical use of: (1) Wallboards, and (2) Linoleums for walls, counters, and floors.

For "visible value"—to fit covering materials snugly—KINTRIM is precision-made in a complete range of gauges. And every section of KINTRIM Stainless Steel embodies Kinkead's refinement—the *Rolled Edge*—to protect hands and clothes from snagging.

KINTRIM beauty and utility can add to the recognition you already enjoy. *Specify it—as the finishing touch for more "visible value!"*

Detailed data on KINTRIM  
Stainless and Aluminum designs  
may be had promptly.  
Write our "Architects' Dept."

**kintrim**  
Reg. U. S. Pat. Off.



**KINKEAD INDUSTRIES**

INCORPORATED

440-450 W. SUPERIOR ST., CHICAGO 10, ILL.

HERE'S NO PLACE LIKE HOME

# Better Homes

## and Gardens

READ BY MORE THAN 3,000,000 FAMILIES  
SEPTEMBER 1947 • 25¢

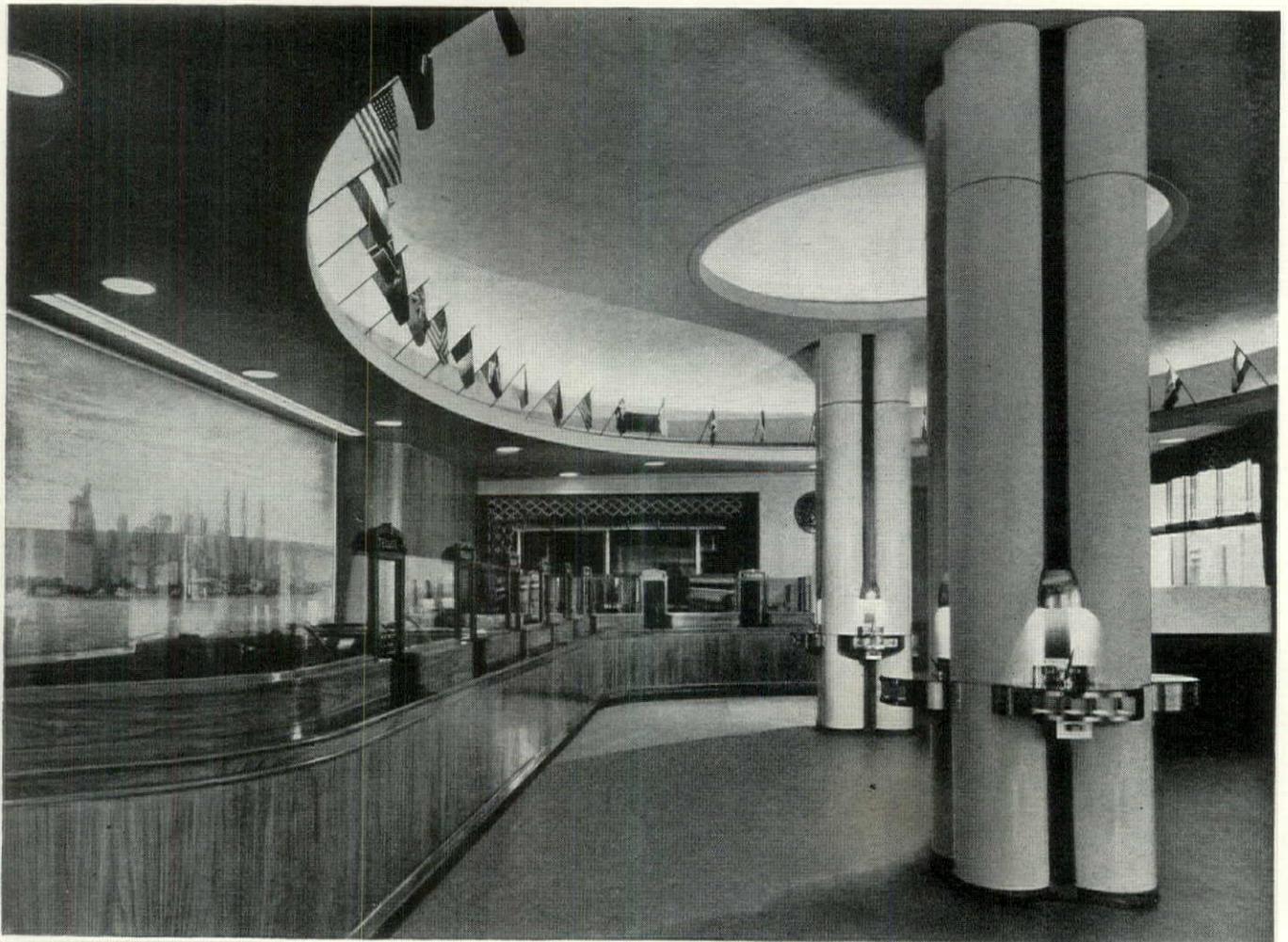
BETTER HOMES & GARDENS  
BACKS THE BEST IN HOME BUILDING

Our Manufacturers' File—an up-to-the-minute collection of illustrated booklets published by manufacturers—is directly available to the public through Better Homes & Gardens' 52 Home Planning Centers, located in 52 leading stores across the country.

Making information like this accessible and easily usable, and helping people adapt it to their own uses, is just one aspect of Better Homes & Gardens' job—to help put across, in the volume market, the best and soundest of new trends in planning and equipping homes.

*America's First Service Magazine*

*Circulation Over 3,000,000*



Architectural porcelain enamel lends color and glistening beauty to round columns in the Bank of The Manhattan Company, Rockefeller Plaza, New York. Reinhard & Hofmeister were the architects.

## Beauty turns a corner

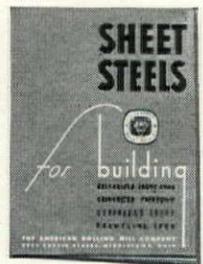
The gleaming beauty of porcelain enamel is ideally suited to the demands of imaginative modern design. Outdoors or in, it is readily adapted to curves, angles, broad, flat surfaces . . . any treatment that gives a modern building distinction.

A wide range of attractive colors, a variety of surface finishes, and strength with light weight explain why porcelain enamel is so often specified as facing material for shop and theater exteriors, bank and restaurant interiors, and for many other types of commercial buildings.

Porcelain enamel stays bright and appealing for years. The hard, durable surface

resists denting, scratching and weather staining. Simple cleaning quickly restores its luster.

As soon as the supply of building products more nearly equals demand, you will want to investigate the many possibilities of porcelain enamel. When you do, remember to specify ARMCO Enameling Iron as the metal base. This is the original enameling iron and the most widely used for this exacting purpose. Other special-purpose steels for building construction are described in the Sweet's File re-print pictured at the right. Ask for a copy. The American Rolling Mill Company, 11221 Curtis Street, Middletown, Ohio. Export: The Armco International Corporation.



SEE SWEET'S FILE for uses, advantages and specifications of these and other Armco special-purpose steels:

Galvanized ARMCO Ingot Iron

ARMCO Galvanized PAINTGRIP Steel (also available with ARMCO Ingot Iron or Copper Steel base).

ARMCO Stainless Steel

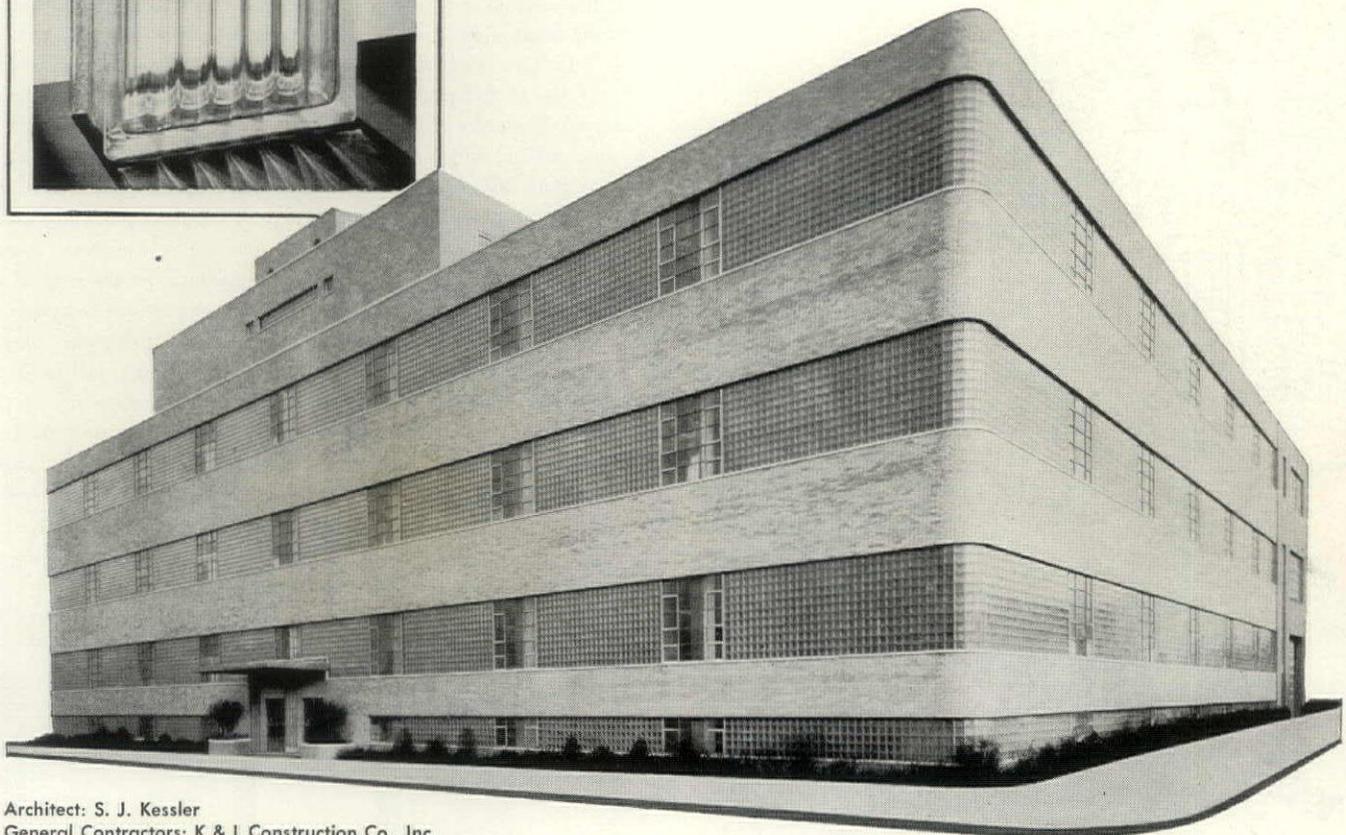
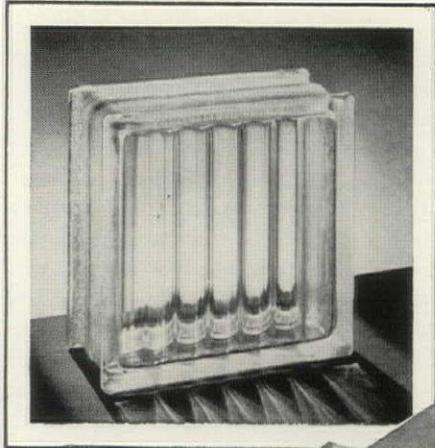


**THE AMERICAN ROLLING MILL COMPANY**

• SPECIAL-PURPOSE SHEET STEELS • STAINLESS STEEL SHEETS, STRIP, BARS AND WIRE

The modern material for modern buildings

# PC GLASS BLOCKS



Architect: S. J. Kessler  
General Contractors: K & L Construction Co., Inc.

► Modern appearance, modern efficiency, modern economy—those are the main advantages your clients get when you specify PC Glass Blocks.

Panels of gleaming glass blocks make any plant a thing of beauty. Spacious interiors, with plenty of cheery clear daylight, are pleasant places to turn out good work. And the light can be directed to where it is needed most, even to areas remote from light openings.

PC Glass Blocks are hollow, have definite insulating properties. Heat losses through light

transmitting areas are reduced to the minimum. Desired temperatures are easier to maintain and condensation is minimized. Infiltration of destructive dust and grit is prevented.

These are some of the reasons why many architects are specifying PC Glass Blocks for new construction and for modernizing projects. You will want to know all the advantages your clients get with PC Glass Blocks. Send the convenient coupon today for our authoritative booklet. The Pittsburgh Corning Corporation also makes PC Foamglas Insulation.

**PC GLASS BLOCKS . . . the mark of a modern building**



T. M. REG. U.S. PAT. OFF.

## GLASS BLOCKS

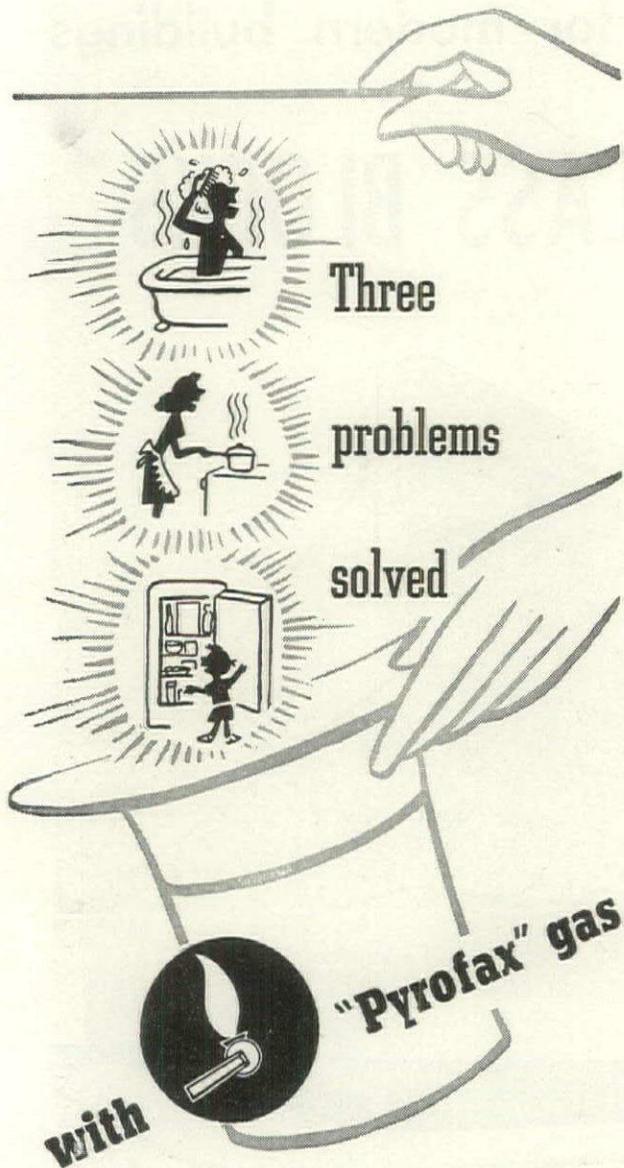
Distributed by PITTSBURGH PLATE GLASS COMPANY  
by W. P. Fuller & Co. on the Pacific Coast and  
by Hobbs Glass Ltd. in Canada

FOR ADDITIONAL INFORMATION SEE OUR INSERTS IN SWEET'S CATALOGS

Pittsburgh Corning Corporation  
Room 663, 632 Duquesne Way  
Pittsburgh 22, Pa.

Please send along my free copy of your new book on the use of PC Glass Blocks for Industrial Buildings. It is understood that I incur no obligation.

Name.....  
Address.....  
City..... State.....



with

Three  
problems  
solved

"Pyrofax" gas

WHEN you specify "Pyrofax" gas you solve three important appliance problems for homes beyond the gas mains. Your clients will enjoy the city conveniences of a Magic Chef range, a silent Servel refrigerator, and an automatic water heater—all operated by this economical and dependable gas.

"Pyrofax" gas gives instantaneous heat. The automatic above-ground system provides uninterrupted service. For complete information, see our catalog in Sweet's File, or write to "Pyrofax" Gas Division, Dept. A-2, Carbide and Carbon Chemicals Corporation, 30 East 42nd Street, New York 17, N. Y.

**Pyrofax**  
TRADE-MARK

SUPERIOR BOTTLED GAS SERVICE

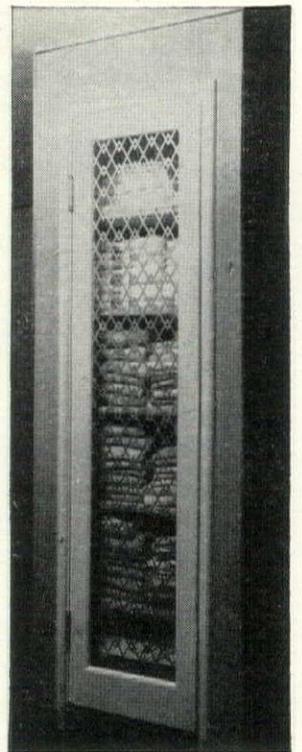
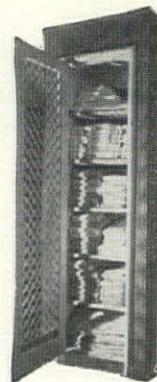


Product of a Unit of Union Carbide and Carbon Corporation.

I am frankly a pluralist. Somewhere in the complex strand of human development there is a pure strain of aesthetic sensibility; perhaps, under laboratory conditions, it can be isolated. But usually it is intertwined with other threads, of magic, religion, science or politics; and according to the number and twist of these threads, the aesthetic sense is distorted and transfigured . . . The question artists must therefore ask themselves is whether, recognizing the transitional nature of our period, they should wait for a cultural pattern to be determined by economic factors, and then more or less consciously conform to it, or whether they should adopt the only alternative policy and be content to make their art an expression of their separate and unique personalities."

In four lectures: Society and Culture; the Social Basis of Great Architecture; the Aesthetic Method of Education; and Towards a Duplex Civilization (of appeal to students, professors and the public as well)—Read "accepts the theses of both Marx and Ruskin and attempts to reconcile them." Culture he holds to be spontaneous: "A great period of artistic creation is never planned; it grows out of the grass roots of a civilization and is largely unconscious in its origins and development. For that reason any grandiose schemes for rebuilding our monstrous cities, for replanning the countryside, redistributing populations and industries—all these will have but a negative effect on the general standard of taste unless accompanied by the rebirth of a basic or native aesthetic sensibility." And to develop that sensibility, education is needed, "based on the acquisition of physical skills—skills which may be either practical and utilitarian, or ritualistic and recreational, but which always involve, as the price of efficiency, the cultivation of harmony and grace . . .

(Continued on page 148)



**Hendrick  
Grille**  
in linen closet door

In the Futura House, Portchester, N. Y., the architect used Hendrick Grilles (without glass) in doors of linen closets to permit full circulation of air to prevent mildew. Note attractive decorative effect.



Perforated Metals  
Perforated Metal Screens  
Architectural Grilles  
Mitco Open Steel Flooring,  
"Shur-Site" Treads and  
Armogrids

**HENDRICK**  
Manufacturing Company  
35 DUNDAFF STREET, CARBONDALE, PA.  
Sales Offices in Principal Cities



## ***Living Room Goes Outdoors***

United by a wall of glass, living room and terrace seem to be one big room.

This close relation between outdoors and indoors expresses the way American families want to live . . . in houses planned for all of the family's activities. Large areas of glass make rooms seem as "big as all outdoors". For example, the outdoor terrace above becomes an integral part of the living quarters.

When glazed with *Thermopane*, a wall of glass is more practical. This glass insulating unit keeps rooms warmer in winter and more comfortable the rest of the year. Actual use from Iceland to Mexico has proved



*Thermopane's* insulating efficiency in all climates.

Over 60 standard sizes of *Thermopane* units meet most architectural requirements . . . for Picture Windows, window walls, double-hung wood windows and residential steel casements. For data on sizes and installation, see your nearest L·O·F Glass Distributor. Write for our *Thermopane* books. Libbey-Owens-Ford Glass Company, 2197 Nicholas Building, Toledo 3, Ohio.

\*Reg. U.S. Pat. Off.

ONLY LIBBEY·OWENS·FORD  
MAKES *Thermopane*



**LIBBEY·OWENS·FORD**  
*a Great Name in* **GLASS**

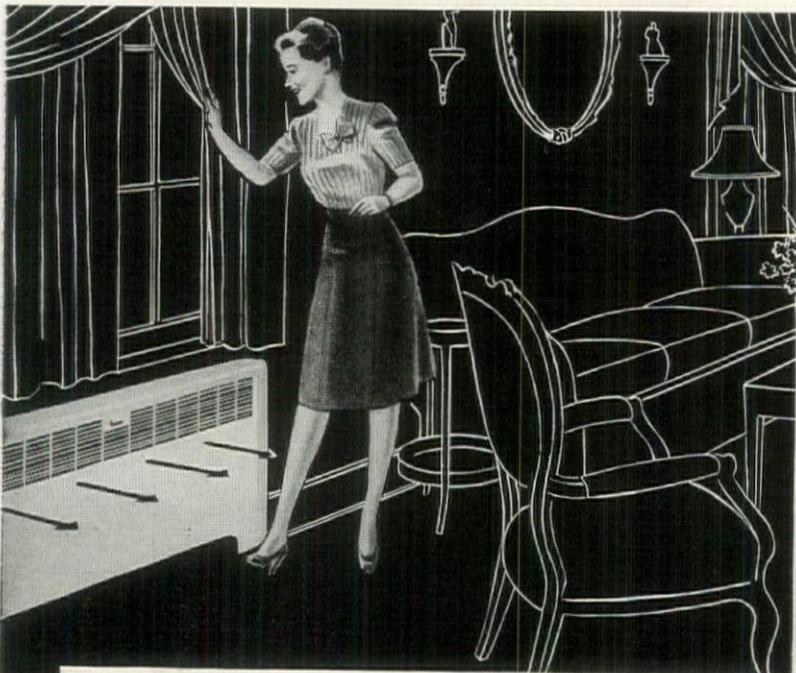
Radiant heat  
gets my vote!



Convection heat  
gets my vote!



**Modine gives you BOTH of these great heating principles blended into one!**



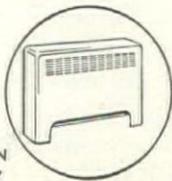
## 1 RADIANT HEATING

Notice those arrows? That's radiant heat . . . mild radiant heat coming from that Modine Convactor Panel in just enough quantity to offset heat loss from window areas. But we don't stop with just *radiant* heating. To it we add—

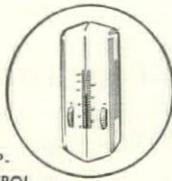
## 2 CONVECTION HEATING

Convection heating. The hot water or steam circulates through the copper heating unit, draws the cooler, floor-line air into the bottom of the convactor where it's warmed, rises, and is then gently circulated throughout the room.

**Result:** Dependable new heating comfort for moderate cost homes and apartments . . . distinctive room charm and cleanliness without unsightly radiators! Yes, Modine Convactor Radiation provides a modern, blended heating system for modern living — a heating system that makes possible individual room control — that responds almost instantly to sensitive automatic controls — that gives you gentle air circulation without the use of moving parts that wear out. If you're planning to build or modernize, think of Modine Convactor Radiation . . . look for Modine's representative in the "Where-to-Buy-it" section of your phone book . . . or send in coupon below for new, free Convactor Booklet! MODINE MANUFACTURING CO., 1736 Dekoven Street, Racine, Wisconsin.



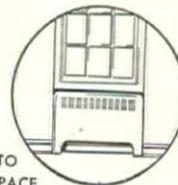
MODERN  
BEAUTY



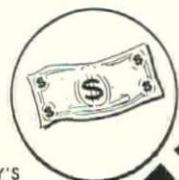
CLOSE TEMP-  
ERATURE CONTROL



EASY TO  
INSTALL



ADDS TO  
LIVING SPACE



PRICED  
FOR TODAY'S  
HOMES AND  
APARTMENTS

# Modine

## CONVECTOR RADIATION

The Modern "proved by use" heating method

Modine Mfg. Co., 1736 Dekoven St., Racine, Wis.  
Yes! I want your new free booklet containing com-  
facts on Convactor Radiation. Please send it to:  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_  
STATE \_\_\_\_\_

It's sooner than you think...

When you may step out of an aluminum house... to commute on an aluminum bus... to work in an aluminum office building... then home to relax on aluminum furniture... or work in the yard with aluminum tools!

More and better aluminum products—*today*... with

# Kaiser Aluminum

a Permanente Metals product

THESE ALUMINUM PRODUCTS are not just idle factories—manufacturers are making them right now. They're better products—better looking, longer lasting—because of light, strong, weather-resistant aluminum. And helping to speed them your way is Permanente Metals' integrated aluminum operation... which controls the production of quality aluminum through huge processing plants at Baton Rouge, Louisiana, and Spokane and Tacoma, Washington. In but a single year of operation these plants have accounted for 175 million pounds of plate, sheet, and strip aluminum. Almost as much as the entire industry produced in the most productive year before the war! Under the spur of such vast production—and a management which welcomes challenges and invites "the jobs that can't be done"—the aluminum products you see here, plus hundreds of others, will come to you in greater volume, better made!

Get the Manufacturers' names for the names of manufacturers nearest you who make the aluminum products shown above, write: Permanente Products Company, 1224 Broadway, New York 19, N. Y.

## What things do you think of when we say "aluminum"?

When asked that question in a recent survey, 2% of the people interviewed replied: "Pots and pans."

On the other hand, *less than 4%* mentioned such aluminum "naturals" as roofing and siding, heating and ventilating equipment, gutters and down-spouts, busses, garage doors, garden tools, home-trailers.

What does this mean?

Simply that while aluminum has proved itself the successor of other metals in hundreds of applications... public awareness has largely remained at the pot-and-pan level.

And without awareness, how can there be demand?

To increase consumer awareness of aluminum

products... to interpret them in terms of *better living* and thus create demand... is the objective of the above advertisement and the many that will follow.

They will appear, in full color, in such top-read magazines as Saturday Evening Post, Newsweek,

Collier's, Time, Sunset, and will reach a total audience of over 30 million every month! Such advertising, we believe, is bound to influence the buying habits of a big share of this audience.

Which will mean a lot more business for the makers of aluminum products.

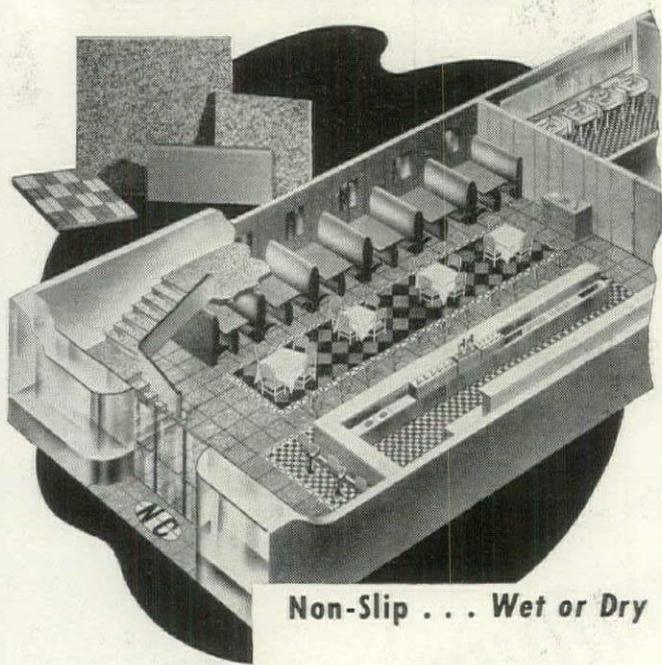
Ready to serve you—*today*...

# Kaiser Aluminum

a Permanente Metals product

DISTRIBUTED BY PERMANENTE PRODUCTS COMPANY, KAISER BLDG., OAKLAND, CALIFORNIA... WITH OFFICES IN: Seattle, Wash. • Oakland, Calif. • Los Angeles, Calif. • Dallas, Texas • Wichita, Kan. • Kansas City, Mo. • St. Louis, Mo. • Atlanta, Ga. • Minneapolis, Minn. • Milwaukee, Wis. • Chicago, Ill. • Cincinnati, Ohio • Cleveland, Ohio • Detroit, Mich. • Boston, Mass. • Hartford, Conn. • Buffalo, N. Y. • New York City, N. Y. • Philadelphia, Pa. • Washington, D. C.

# Walk with *Safety* ON NORTON FLOORS



**Non-Slip . . . Wet or Dry**

**T**HE same characteristics of hardness and toughness which make Alundum abrasive so useful in grinding wheels, also give it valuable properties as a wear-resistant and non-slip flooring material.

- STORES
- RESTAURANTS
- OFFICE BUILDINGS
- INDUSTRIAL PLANTS
- HOSPITALS
- SCHOOLS
- RAILROAD AND BUS STATIONS
- AIRPORT TERMINALS

Alundum Stair and Floor Tiles, for example, provide a flat, smooth surface that is non-slip even when wet. And they will not wear slippery from foot traffic. There are also Alundum Mosaics for use where small tiles are desired and Alundum Aggregates to add safety and durability to terrazzo and cement floors and stairs.

You will find NORTON FLOORS providing safe walk-ways in thousands of buildings the country over. Catalog 1935-C gives the full story including sizes and colors. Write for a copy—no obligation.

**NORTON COMPANY**  
**WORCESTER 6, MASS.**

*Behr-Manning, Troy, N. Y., is a Norton Division*

*See this catalog in Sweet's.*



"The greatness of great architecture is not to be explained by national greatness: its secret is not to be found in race, not in blood, not in soil, not even in religion, but in a certain social structure animated by a spirit which may be religious or may be political, but which essentially owes its efficacy to its integrity—its wholeness and smallness, its all-over-ness and intimacy . . .

"The most we can venture to assert is that when the individual will is in unison with the general will, when the personal consciousness merges into group consciousness, then a transformation takes place . . . We must create the social structure which will ensure the interplay of individual freedom and mutual aid."—E.B.

**THE PRACTICE OF DESIGN.** Edited by Herbert Read. Percy Lund, Humphries & Co. Ltd., London. 227 pp., illustrated, 8 x 10 in., 25 shillings.

Eleven English industrial designers have written a chapter each, dealing with their special fields of textiles, pottery, architecture, product design, etc., to produce this very handsome report on what is being done to create new design standards. Herbert Read has written an excellent introduction, while Hans Schleger, designer of the book, was allowed the last word on the manner in which the volume was put together. Despite its pale, vegetable-colored exterior, the book's contents are rather meaty. The writers of *The Practice of Design* obviously know what they are talking about, and, more important, seem to know as much about the manufacture as about the design of their products.

In a book produced in the years of British "austerity," it is interesting to note a trend away from the nakedly functional  
*(Continued on page 152)*

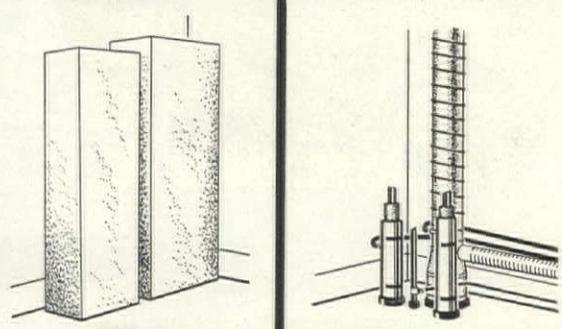
**...the logical specification**

In office buildings in major cities throughout the country, in the nation's important hospitals, in public and parochial schools from coast to coast . . . and in thousands of industrial plants, too . . . you'll find Halsey Taylor Drinking Fountains the logical installations.

Patented health-promoting, trouble-proof features make them easily the most hygienic fountains you can specify! Get our latest catalog.

**THE HALSEY W. TAYLOR CO.**  
WARREN, O.

**Halsey-Taylor**  
**DRINKING FOUNTAINS**



How Conduit System saves space. One small-diameter conduit for air and pipes for refrigerated or heated water take only 25 per cent as much space as ordinary supply and return ducts. Elimination of ceiling ducts saves still more space.

## It's always fair weather for all tenants

A particular office may get cool morning shade, hot afternoon sun. But tenants in the Durham Life Insurance Building, Raleigh, N. C., can be comfortable all day long every day in the year. Carrier's remarkable Conduit Weathermaster System of air conditioning permits any office to have the kind of "weather" the occupants like.

This year-round Carrier system has proved its worth in many leading office buildings, hotels, hospitals and

other multi-story structures. Using small-diameter vertical conduit instead of bulky ducts, it often saves enough space on a floor for an *extra rentable room*. And, since normally no ceiling ducts are needed, it is sometimes possible to plan an *extra floor* without increasing the new building's over-all height.

The Conduit Weathermaster System can be applied to both old and new building installations. Its many

other advantages are described in the booklet, "Carrier Conduit Weathermaster System." Write for your *free* copy today.

Carrier engineers—who created the Conduit Weathermaster System—have worked closely with architects and their consulting engineers for years. Their world-wide experience is your assurance of efficient, dependable air conditioning. Carrier Corporation, Syracuse, New York.



air conditioning

refrigeration

industrial heating

➔ For more Privacy, Economy, Convenience . . .



# TWIN DUTY

## Bathrooms

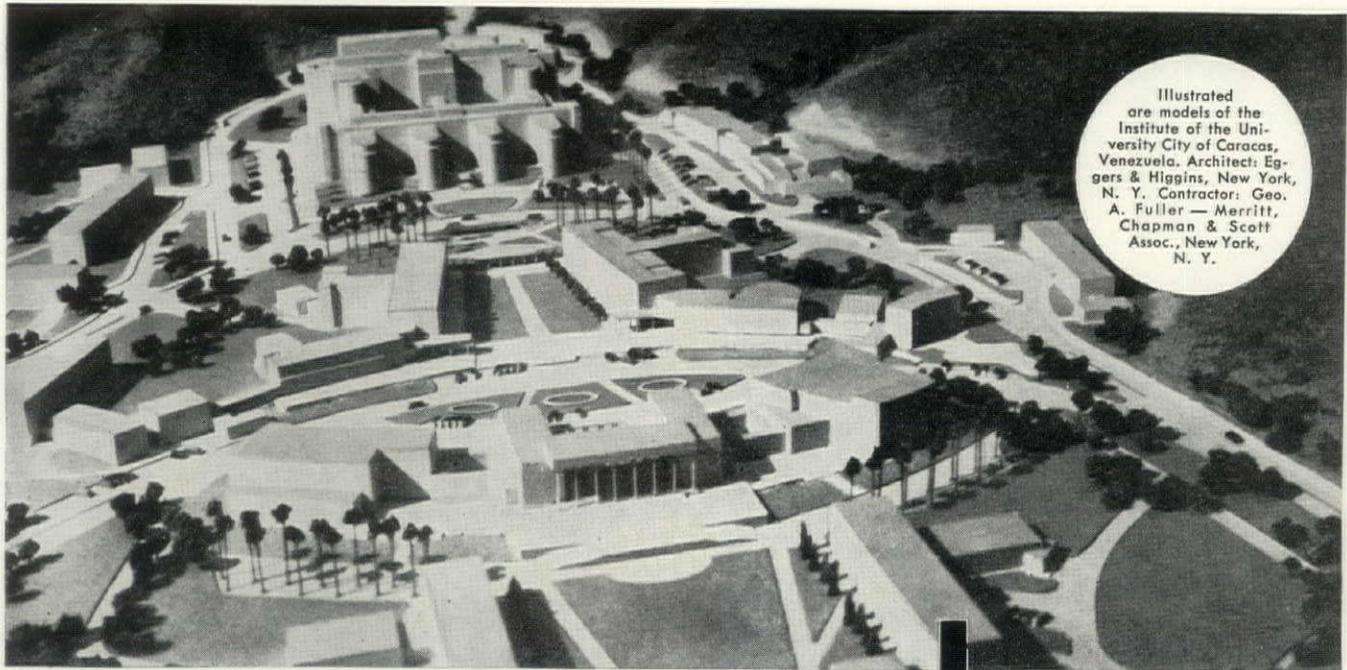
With "Twin-Duty" bathrooms, Case helps you answer the demand that every foot of space be made to *count*. These smart new bathrooms add livability and salability to a home. They provide the convenience and privacy of *two* bathrooms at approximately the economy in space and installation cost of *one*. The sketch shows the famous one-piece Case T/N\* water-closet, a quiet, free-standing fixture with positive *non-overflow*, and the Winston, one of the most popular Case vitreous china lavatories. Case plumbing fixtures are distributed nationally—see your Classified Telephone Directory.

W. A. Case & Son Mfg. Co., Buffalo 3, N. Y. Founded 1853.

# Case

*Vitreous China Plumbing Fixtures*

\*PATENTED



Illustrated are models of the Institute of the University City of Caracas, Venezuela. Architect: Eggers & Higgins, New York, N. Y. Contractor: Geo. A. Fuller — Merritt, Chapman & Scott Assoc., New York, N. Y.

*In the Institute of the University City of Caracas, Venezuela*

## Milcor Steel Building Products

**help protect plaster beauty . . . contribute to ease and economy of maintenance . . .**

For plaster surfaces that are permanently beautiful — and for practical utility — it pays to incorporate Milcor Steel Building Products in your designs and specifications.

The Milcor organization has the experience and "know how" to help you attain especially satisfactory results with fireproof construction — on large projects like the one illustrated or on smaller structures.

In metal lath, corner beads, metal trim, casings, and window stools, Milcor leads the field.

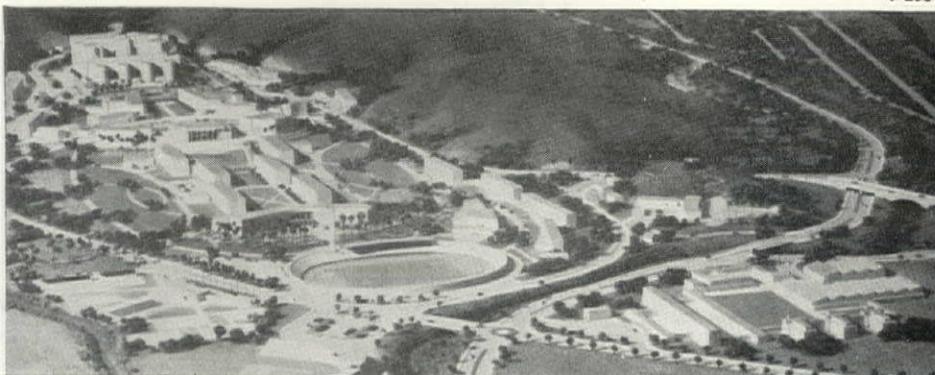
Consult the catalog of Milcor Steel Building Products in Sweet's, or write today for the Milcor Manual.

### MILCOR STEEL COMPANY

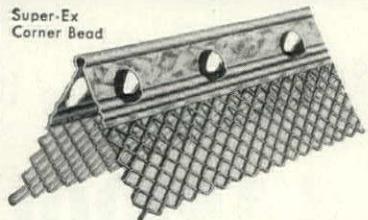
*Inland Steel Products*  
MILWAUKEE 1, WISCONSIN

Baltimore 24, Md. Buffalo 11, N. Y.  
Chicago 9, Ill.  
Cincinnati 25, Ohio Cleveland 14, Ohio  
Detroit 2, Mich.  
Kansas City 8, Mo. Los Angeles 23, Calif.  
Rochester 9, N. Y.

F-290



Super-Ex  
Corner Bead



#### Milcor Expansion Corner Beads

Give plaster corners the double reinforcement of a metal bead and expanded metal wings; vulnerable points are protected against unsightly cracks, chipping, or cleavage.

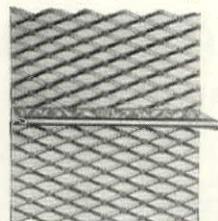
Style K — with  
expansion wings



#### Milcor Metal Access Doors

Ready to install flush with finished wall or ceiling surface. Require no special framing. Permit key points in plumbing, heating, electrical, and refrigeration systems to be reached conveniently. Styles are available for use with all modern materials, such as plaster, masonry, brick, stone, tile, acoustical material, wallboard, etc.

No. 3  
Expansion  
Base  
Screed



#### Milcor Expansion Base Screeds —

Provide permanent separation between plaster and flush cement base. Expansion wings of strong mesh lath reinforce against cracks at juncture.



No, he's not washing the floor . . .  
he's hardening it with

# LAPIDOLITH

to save it from concrete  
dusting and disintegration

LAPIDOLITH Liquid (patented) thoroughly hardens concrete floors for heavy-duty service without interrupting work schedules . . . saves the cost and inconvenience of patching and retopping.

**10 TIMES HARDER**

LAPIDOLITH penetrates quickly and deeply, reacting with the lime in the cement to form a close-grained, granite-like surface 10 times harder than untreated concrete. Dusting is eliminated, danger from alternate freezing and thawing minimized; floor protected against action of oils and many chemicals. Excellent for terrazzo floors, too

**EASY TO APPLY**

Lapidolizing is just as easy as washing a floor. The first treatment is the only treatment—the first cost is the only cost. In fact, the results gained with LAPIDOLITH cost less than any other known method of dust proofing and wearproofing floors!

More facts in SWEET'S, or write Dept. A9, for illustrated brochure packed with floor-saving information.



You can do this to many untreated concrete floors, but not to a Lapidolized floor!

## SONNEBORN

"BUILDING SAVERS"

- Floor Treatments • Waxes • Paints and Protective Coatings • Concrete and Mortar Admixtures • Waterproofing and Dampproofing • Caulking Compounds
- Roof Coatings

IF IT'S  
WORTH BUILDING  
IT'S  
WORTH SAVING

Building Products Division, L. SONNEBORN SONS, INC., New York 16, N. Y.  
In the Southwest: Sonneborn Bros., Dallas 1, Texas

toward a new consciousness of "beauty" and "style"—two very real and human needs. This trend is most noticeable in the gay patterns that illustrate Alastair Morton's article on textiles and Victor Skellern's expert piece on pottery. Mr. Read says, in part: ". . . the man in the bus . . . (is) not interested in . . . Museum or Art Gallery . . . beauty . . ." Instead, Mr. Read thinks, he needs a new aesthetic more closely related to the realities of his life. Of this he says, later on: ". . . simplicity is, after all, an aesthetic prejudice. It appeals to some sensibilities, but not necessarily to all . . . there must be some less obvious quality involved—some appeal to our senses as well as to our reason . . ."

That this appeal to our senses must not again take the form of "the latest antiques" goes without saying. But in the U. S., unlike England, where the demand for consumer goods is virtually filled, industrial designers are called in, more often than not, to *merchandise* a drug on the market, rather than *design* it for use. For such U. S. designers this book should be a useful propaganda weapon to point out that the potential consumer's sense of beauty will lead him to a really well-designed product and may make him bypass the shoddy, the pretentious and the chromium-frilled. Although this rather prosaic lesson is occasionally nullified by poor illustrations that fail to add "punch" to a good contention—and is also occasionally confused by the current political prejudices of a few of the writers—this book might well serve as a textbook for a detailed and competent course on contemporary design.

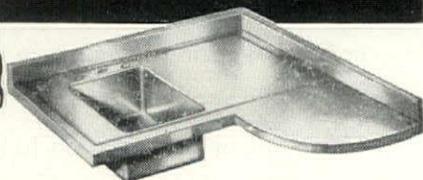
Incidentally, eight and a half symbolic drawings of a cross-sectioned and slightly hyperthyroid human eye will haunt you across the pages of *The Practice of Design* and, unless you happen to be an ophthalmologist, you may find yourself able to do without them.—P.B.



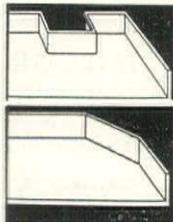
Built to fit  
YOUR DESIGN  
...any size  
...any shape

Stainless Steel

## SINKS AND CABINET TOPS



JUST LINE Custom-Fabricated Stainless Steel Sinks and Cabinet Tops have gained prestige that will be maintained. Standard "Package Kitchen" work has never been allowed to interfere with our custom-built business. We take a great deal of pride in the quality of our custom fabrication and the exclusive advantages of . . .



## Radiiluxe

DESIGN AND CONSTRUCTION

Radiiluxe Stainless Steel sinks and cabinet tops give you two important advantages:

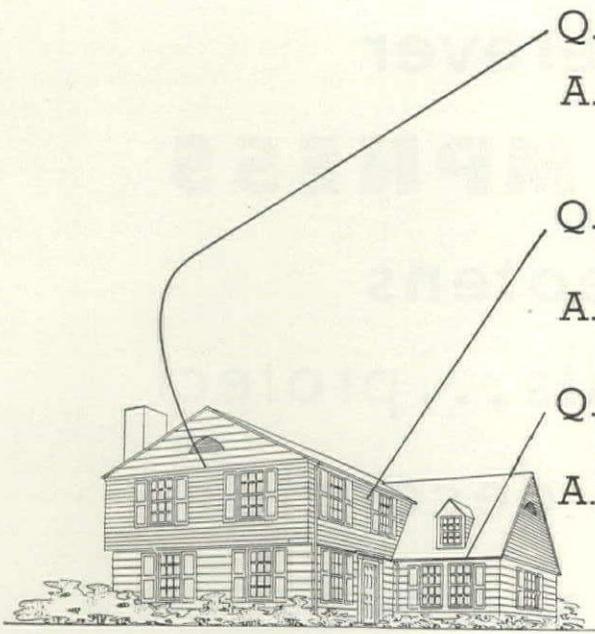
**IN-BUILT ANTI-SPLASH RIM ON BOWLS, DOUBLE-PITCH DRAIN-BOARDS** with no channels to clean, no grooves to endanger fine glassware.

ALL WELDED, seamless construction polished to a beautiful satin finish . . . radius corners in bowls . . . vertically and horizontally . . . fully sound deadened and many other quality features.

Other JUST LINE products are Cabineteer "Package Unit" Stainless Steel Sinks, Stainless Steel Scullery Sinks, and Galvanized Scullery Sinks that are hot-dip galvanized after fabrication.

Write today for bulletins and details.

**Just Manufacturing Co.**  
4610-20 W. 21st Street, Chicago 50, Illinois



Q. What is an effective way of preventing heat loss through the stairway to an attic?

A. See Balsam-Wool Application Data Sheet, Section D, No. 3.

Q. Which is the more practical of the two ways of calculating heat transmission coefficient in wall construction?

A. See Balsam-Wool Application Data Sheet, Section A, No. 3.

Q. How does one calculate the amount of insulation needed to prevent condensation moisture on inside surface of walls and roofs?

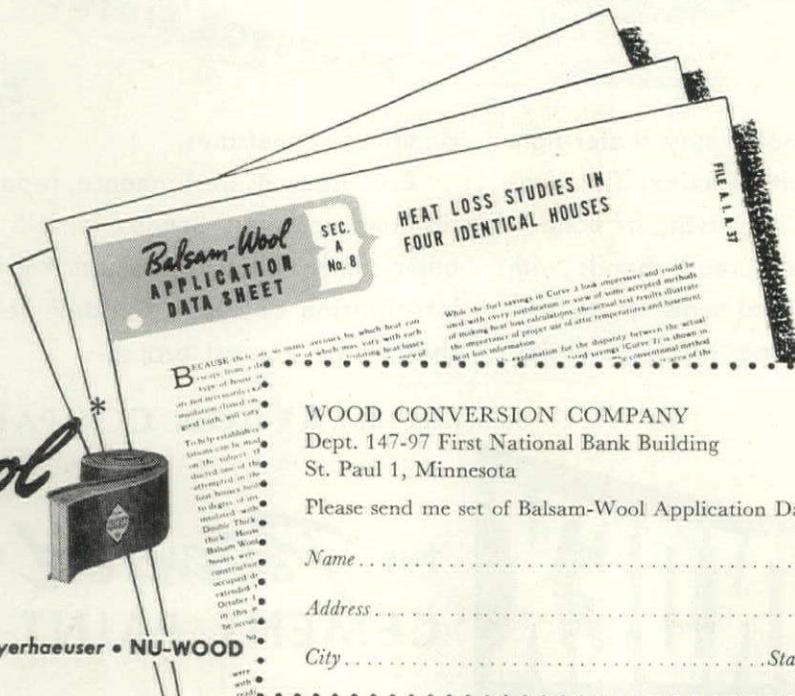
A. See Balsam-Wool Application Data Sheet, Section A, No. 7.

## HARD-TO-GET FACTS

... now easily available

## Balsam-Wool Data Sheets

Quick, easy, authoritative answers to tough insulation application problems—you'll find them in Balsam-Wool Application Data Sheets! These sheets combine the results of laboratory and field research—place hard-to-get facts at your finger tips. Sheets are conveniently assembled in an A.I.A. file folder. Mail the coupon today for your set of Balsam-Wool Data Sheets—they are yours for the asking without obligation.



**Balsam-Wool**

SEALED INSULATION

\*REG. U. S. PAT. OFF.

BALSAM-WOOL • Products of Weyerhaeuser • NU-WOOD

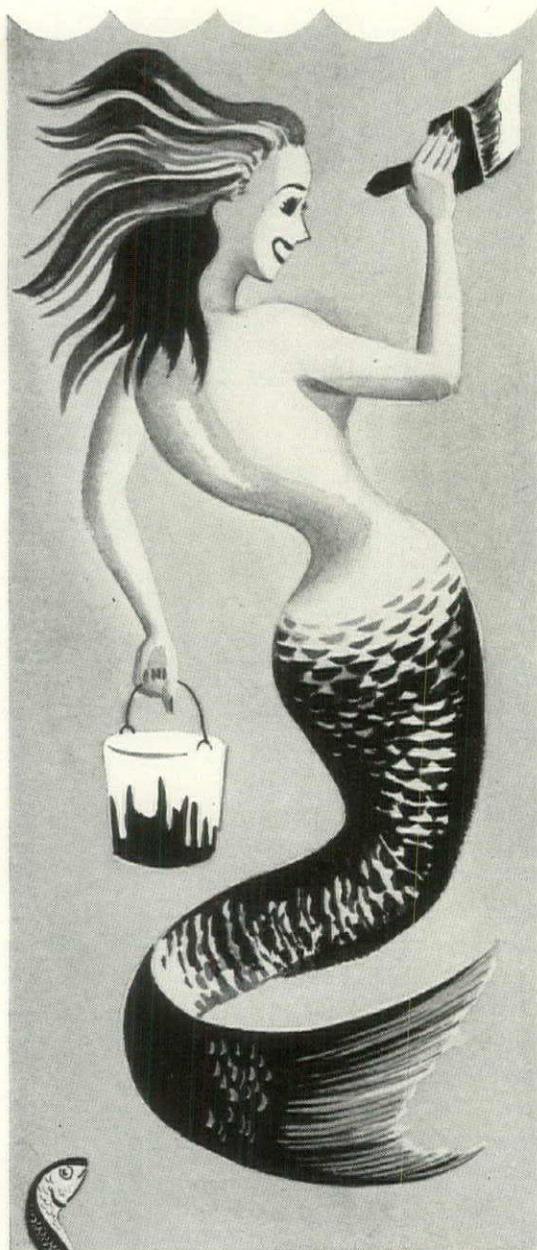
WOOD CONVERSION COMPANY  
Dept. 147-97 First National Bank Building  
St. Paul 1, Minnesota

Please send me set of Balsam-Wool Application Data Sheets.

Name .....

Address .....

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



**S**wimming pools stay water-tight when painted with Bondex. This dramatically proves the ability of Bondex to cope with moisture. It bonds with the wall surface and seals up the tiny cracks and pores through which

Wherever  
**DAMPNESS**  
 threatens  
 walls...protect  
 and decorate  
 the surface  
 with

**BONDEX**

FOR EXTERIORS  
 FOR BASEMENTS  
 FOR FOUNDATIONS

STUCCO

BUILDING TILE

CONCRETE BLOCK

BRICK AND MASONRY

ASBESTOS SIDING

STONE

CINDER BLOCK

dampness penetrates.

Because of its performance, reputation and economy, Bondex outsells all other cement paints combined. For full information and new Bondex color chart, write nearest branch.

THE REARDON COMPANY ST. LOUIS 6  
 CHICAGO 9, NEW YORK 6, LOS ANGELES 21, MONTREAL 1

**BONDEX**

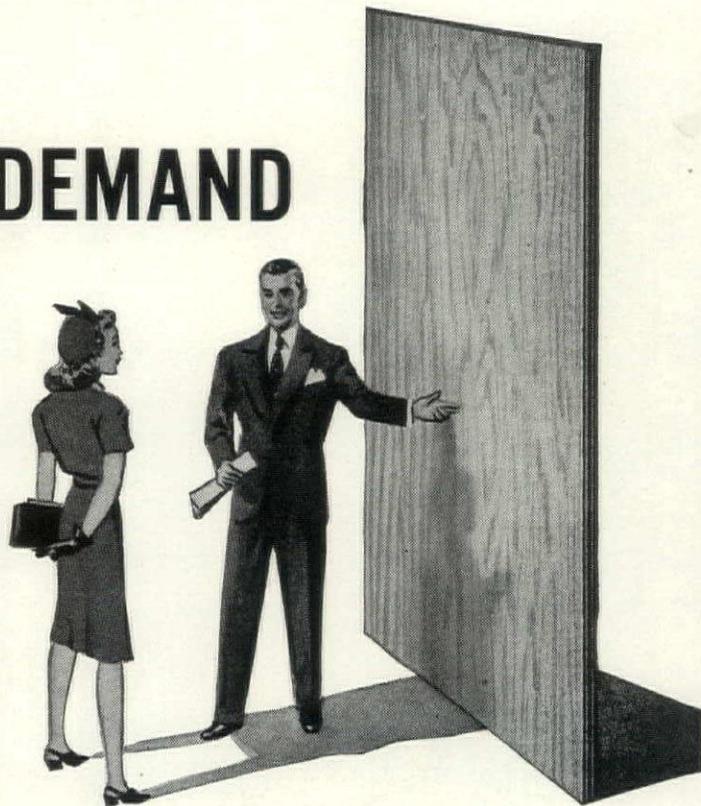
THE *Patented*  
 CEMENT PAINT

Now we can

## MEET THE HUGE DEMAND

for

## FINE WELDWOOD HARDWOOD PLYWOODS



*For the first time since before the war, Weldwood Plywood is available in large supply . . . in a wide variety of fine cabinet hardwoods!*

And you'll find eager acceptance for Weldwood all through your clientele.

Why? Because . . . even in the face of serious shortages . . . we've carried on a vigorous national advertising campaign to sell Weldwood to home-minded Americans. As a direct result of this advertising, almost half-a-million prospective users have written for more complete information.

We've told them all the entire Weldwood story. They know, for instance, that Weldwood has striking decorative beauty plus high structural

strength. They know, too, that Weldwood can be installed easily and economically . . . either for remodeling or new construction.

And your clients know this: Weldwood's first cost is the last. It's guaranteed against splitting, cracking or warping for the life of the building in which it's installed.

Take advantage of this knowledge . . . and the acceptance that comes with it. Specify Weldwood. It's a modern material of *proved* quality and demand.

You can get detailed information on the wide variety of sizes and veneers now available from your nearest USP office or representative.

### WELDWOOD Plywood

*Weldwood Plywood and Mengel Flush Doors are products of*

UNITED STATES PLYWOOD CORPORATION

THE MENGEL COMPANY

New York 18, N. Y.

Louisville 1, Ky.

*Distributing units in* Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, Fresno, High Point, Los Angeles, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle. Also U.S.-Mengel Plywoods, Inc. distributing units in Atlanta, Dallas, Jacksonville, Louisville, New Orleans, Houston, St. Louis. *In Canada:* United States Plywood of Canada, Limited, Toronto. *Send inquiries to nearest point.*

Weldwood\* Hardwood Plywood  
Douglas Fir Weldwood  
Mengel Flush Doors  
Douglas Fir Doors  
Overhead Garage Doors  
Molded Plywood  
Armormply\* (metal-faced plywood)

Tekwood\* (paper-faced plywood)  
Flexmerl\*  
Weldwood Glue\* and other adhesives  
Weldtex\* (striated plywood)  
Decorative Micarta  
Flexwood\*  
Flexglass\*  
Firzite

\*Reg. U.S. Pat. Off.



Plastics and Wood  
Welded for Good

*Waterproof Weldwood for exterior use is bonded with phenol formaldehyde synthetic resin. Other types of water-resistant Weldwood for interior applications are manufactured with extended urea resins and other approved bonding agents.*

**ANDERSEN**

*Window Walls*

... LOOKOUT POINT FOR BEAUTY

These windows that are walls . . . these walls that are windows . . . are a perfect expression of a design trend that has been accepted universally by progressive architects and designers.

Here ANDERSEN Wood Casement Units are arranged on either side of an expansive picture window—and, beyond, a corner installation is formed by a combination of the same out-swinging casements.

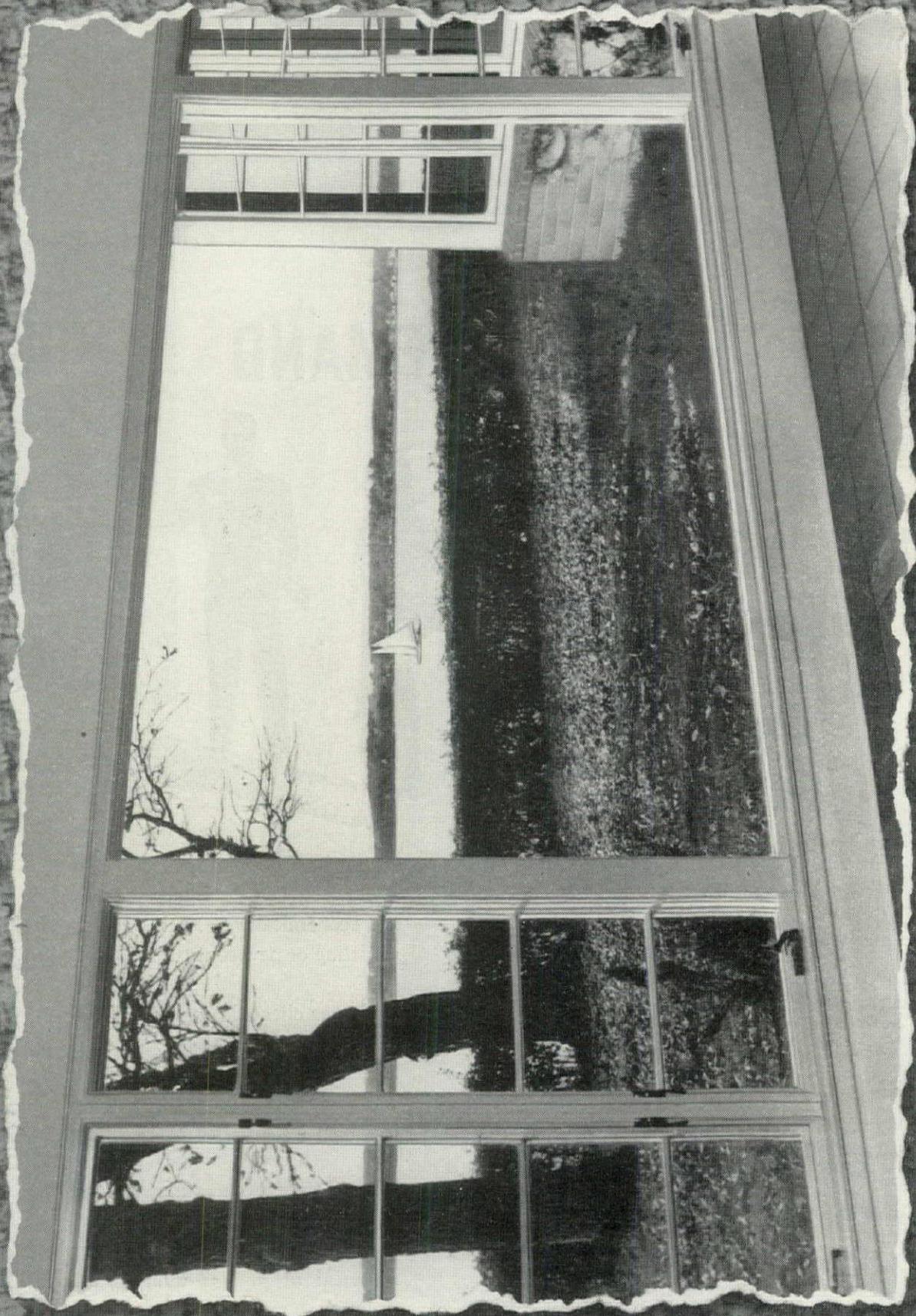
Note the emphasis placed on operating sash—providing ample ventilation for this lakeside home. This is the way to combine view, sunshine, ventilation and weather-tight comfort. It's the ANDERSEN WINDOWWALL way.

McEnary and Kraft, architects, designed this installation, and specified ANDERSEN Complete Window Units to bring their inspiration into reality.

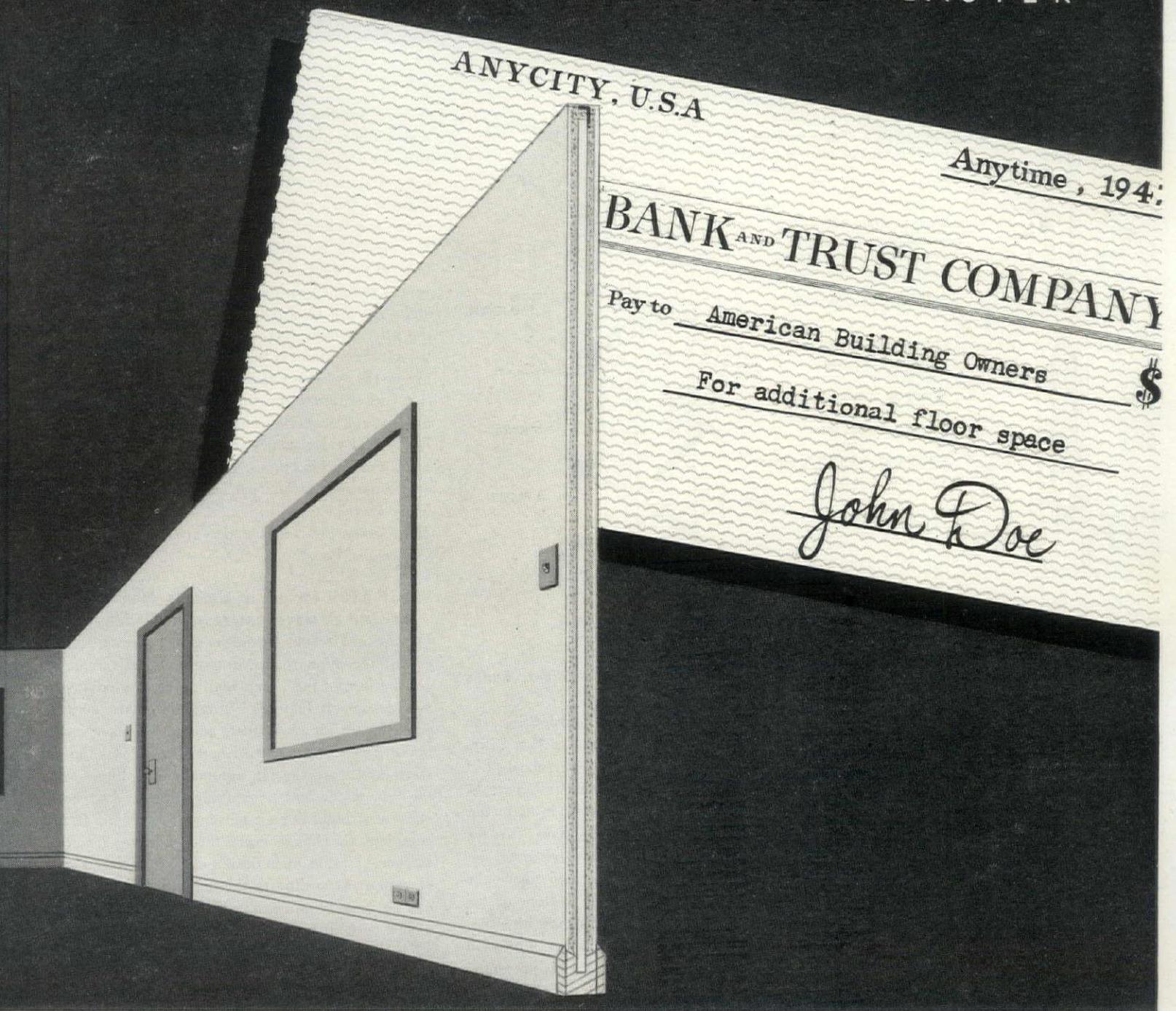
See details in Sweet's—or write Andersen directly.

*Andersen Corporation*

BAYPORT • MINNESOTA



FOR MODERN INTERIORS USE PLASTER



## MORE ROOM—MORE RENT WITH 2-INCH SOLID ROCKLATH AND PLASTER PARTITIONS

Planning buildings that produce more rentable space—that's the way today. This can be done with 2-Inch Solid Partitions of ROCKLATH\* plaster base and RED TOP Plaster.

With 2-Inch Solid ROCKLATH and RED TOP\* Plaster partitions, an additional three inches of space is obtained along the full length of the partition, compared to a four inch masonry non-bearing partition approximately five inches in thickness when plastered. In an average 20 ft. by 20 ft. office this means 5 square feet of additional office

space. Thus your clients obtain a greater rentable floor space. Truly, 2-Inch Solid ROCKLATH and RED TOP Plaster partitions result in More Room—More Rent.

This advantage, plus a saving in weight, accounts for the modern trend toward this new method of partition construction. Write United States Gypsum, Dept. 122, Chicago 6, for your copy of the new technical information booklet "2-Inch Solid ROCKLATH and Plaster Partitions, AIA File No. 20-B-3."

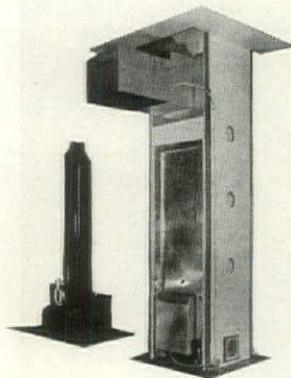
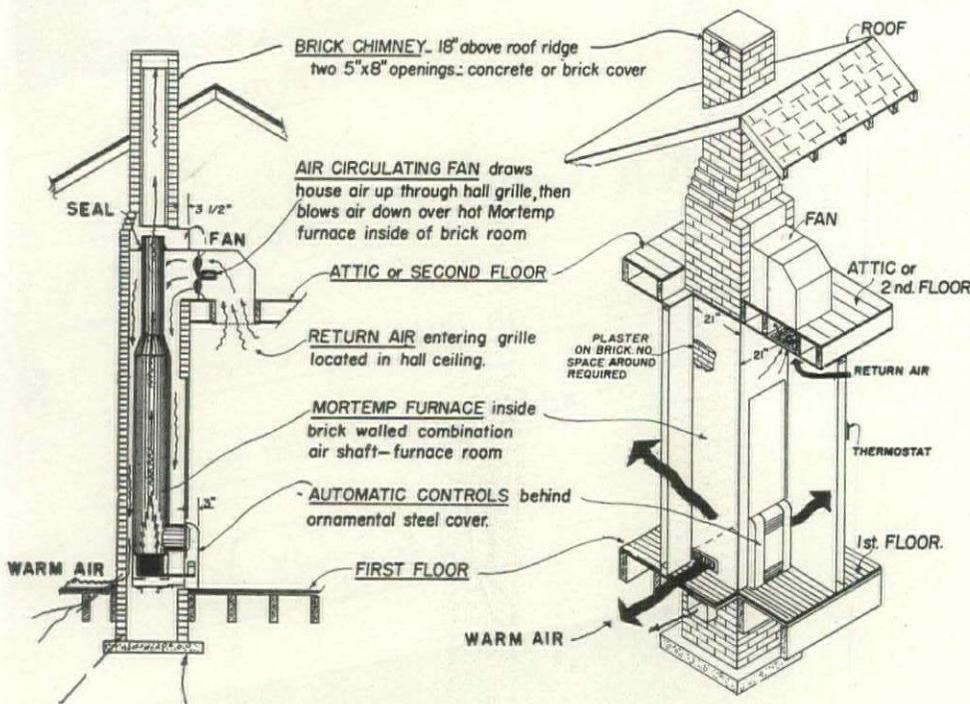
\*Trade Marks Reg. U. S. Pat. Off.



# United States Gypsum

**For Building • For Industry**

Gypsum • Lime • Steel • Insulation • Roofing • Paint



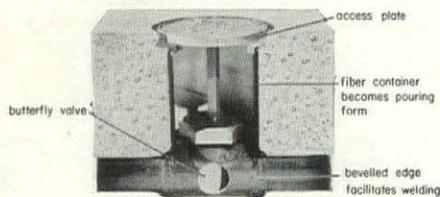
### WARM AIR FURNACE, lightweight and efficient, builds directly into chimney.

A fully-automatic warm air furnace weighing only 98 lbs., the new Mortemp is designed to build directly into a 25 x 25 in. square flue in the chimney. The furnace proper consists of 30-in. high firebox, with oil- or gas-fired burner and controls. This is topped by a porcelain steel stack, 14 in. in diameter, and of variable height. Centered in the 25-in. square "furnace room," this stack acts as a heat exchanger to returned air forced down and around it by a blower located above the ceiling line. Heated air is delivered at the bottom of the unit to either ducts or grilles. These takeoffs may be either above or below the floor line and on any or all sides. Pollution of circulating air by combustion fumes of furnace is prevented by a steel collar around top of heat exchanger which seals off plenum chamber below from upper part of flue. The Mortemp, which delivers 60,000 BTU, is now available in oil-fired version; gas-fired model is scheduled for production shortly. The unit may be completely installed by two trained men in half a day, after chimney is completed. Costs are estimated at \$350 to \$400, exclusive of masonry.

*Manufacturer:* Mortemp Company, 3601 Cumberland St., N.W., Washington, D. C.

### COMBINATION BALANCING VALVE AND AIR VENT for radiant heating systems reduces installation costs.

Radiantrol valve is a unique combination balancing valve and air vent conveniently packaged for use in radiant heating installations. Fitting into wrought iron hot water pipe coils



buried up to a depth of 8 in. below the concrete surface, the entire valve is always accessible. The valve-air vent unit consists of a butterfly valve built into a wrought iron tee, beveled

for easy welding into coils; a brass floor plate; control stem and a fiber, cylinder-shaped container. Extending from valve to a 3 5/8 in. diameter, brass floor plate is a hollow control stem which can be cut to appropriate length. The plate fits flush with the concrete floor, is marked to indicate open and closed position. The fiber shipping container becomes the concrete pouring form. It fits snugly over pipe so the concrete will not flow around the valve itself. In a radiant heating system with this valve, the floor and stem are removed and a small cap screw on the top of the valve bonnet, factory-drilled to permit escape of air from the piping system, is turned. According to the manufacturer, use of the valve is expected to reduce materially the installation cost of radiant heating systems because additional pipe fittings and welding required for air vents are eliminated. Radiantrol comes in 1 1/4 in. size, is adaptable to 1 in. and 1 1/4 in. pipes. Another model, designed for operation and installation in a valve pit or cupboard, is now being manufactured.

*Manufacturer:* Homestead Valve Manufacturing Co., Coraopolis, Pa.

### VENTILATOR for use in kitchens, laundries, etc., features efficient air movement, easy installation and maintenance.

For use in kitchens, laundries and bathrooms of homes, offices, reception rooms, dressing and rest rooms of commercial buildings, the Fasco ventilator is an exhaust-type unit of new design. It features a single automatic control, new efficiency in air movement, and quick, easy installation and maintenance. One control opens and closes the outside door, starts and stops the fan automatically. Engineered design of the fan, motor and telescoping tubular stack makes possible efficient straight line air movement of 405 cu. ft. per min., complete air change every three minutes in an average kitchen. Simple, open design of both duct and grille facilitates cleaning. According to the manufacturer, the new ventilator can be quickly and easily installed in new or existing homes at low cost. It fits walls from 5 in. to 9 1/2 in. thick, and up to 1 3/8 in. thick with an extra sleeve. Powered by a long-shaded pole motor with self-aligning bearings and extra reservoir for a minimum of care, standard unit operates on 115 v., 60 cycle, A.C. Units for operation on 230 v., 60 cycle AC will also be available. Fasco ventilator is approved by Underwriters' Laboratories, retails for \$24.95, including excise tax.

*Manufacturer:* F. A. Smith Manufacturing Co., Inc., 25 Union St., Rochester, N. Y.

### HOME FREEZER of 7.5 cu. ft. capacity incorporates saving features.

The Orley Super-Seven Home Freezer, with a capacity of 7.5 cu. ft. for storing up to 300 lbs. of food, is said to require less floor space than any freezer of its capacity. Compared with the Orley 5 cu. ft. model it measures only 1 in. wider (33 in.), retaining the same 36 in. height and 28 in. depth, yet provides 50 per cent more freezing and storing area. This is due, according to the manufacturer, to the use of Monsanto Chemical's Santocel insulation in freezer construction. The Super-Seven incorporates Orley's "Speed Flo" principal of coolant action for freezing and storing in a single unit and the patented "Handeez-Tray," which swings into position as the lid is raised, is suitable for freezing and storing desserts. (Continued on page



**4800**  
**Oak Forest Homes**  
 to be equipped with  
**BENDIX**  
 America's most-wanted washer!



**Another smart builder who knows "BENDIX" means sales!**

Texas is a *big* state—they do things in a *big* way. Proof? The Frank W. Sharp Construction Company and its subsidiary, Oak Forest Corporation, of Houston, under big-thinking President Frank W. Sharp, is engaged in building 4800 homes—no two alike—on 1132 wooded acres—and at a cost of \$32,000,000—America's largest privately-financed home development project!

*Every home will be equipped—from the start—with a Bendix automatic Washer!*

Mr. Sharp knows that the day of the automatic home is here: that the more complete the home, the easier to sell—even in a coming buyer's market! He knows that Bendix Washers—America's most-wanted washers—add tremendously to the desirability of his homes. For whether the housewife is present or not, the Bendix automatically does the wash! It occupies only four square feet of precious space—uses only half the soap, lots less hot water than ordinary washers require. Unquestionably Bendix makes one home, or 4800, more desirable.



**"The sign of a smart builder" tells women what they want to know!**

Let people know your project is Bendix-equipped! Display this sign, available thru your local Bendix dealer or distributor. It means to the housewife, that the house is planned for her convenience, planned for electrical easy living, worth a premium price!

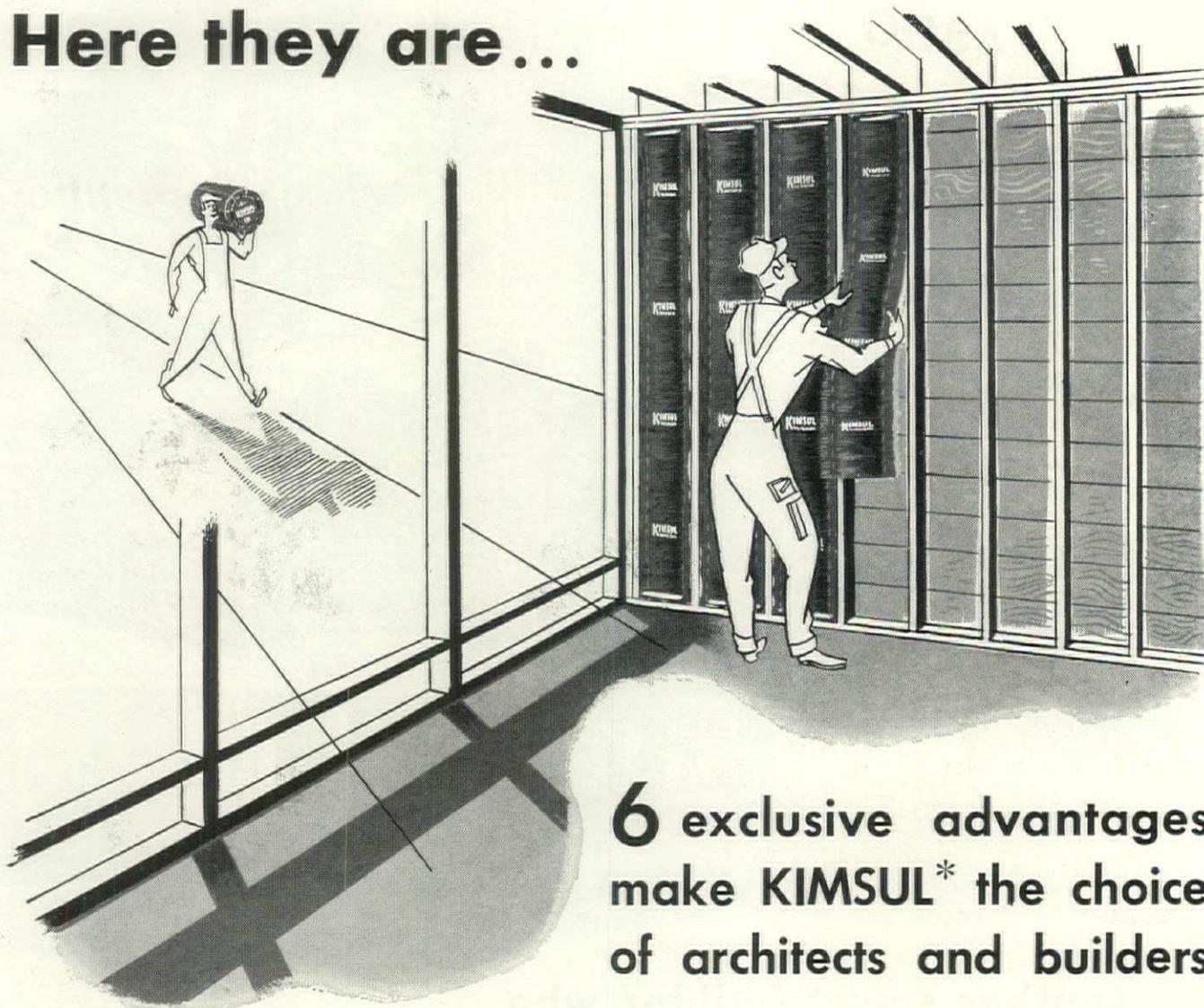
In most states, the Bendix washer may be bought with the house on a packaged FHA mortgage. See your Bendix dealer.



**BENDIX**  
 automatic  
**Washer**

**BENDIX HOME APPLIANCES, INC., SOUTH BEND 24, INDIANA**

# Here they are...



KIMSUL insulation resists fire, moisture, fungi and vermin — is termite-proof. Packaged in easily handled rolls and cut to fit standard stud and rafter widths, it can be installed without expensive machinery or skilled labor. It's light in weight, clean, and odorless . . . no irritating dust or sharp particles to injure workmen's skin.



For complete details on how to insulate with easy-to-use KIMSUL, send for this informative Application Data File. Simply forward the request on your letterhead.

**KIMBERLY-CLARK CORPORATION**  
KIMSUL DIVISION • Neenah, Wisconsin



\*KIMSUL T. M. Reg. U. S. & Can. Pat. Off.  
†PYROGARD trademark

## 6 exclusive advantages make KIMSUL\* the choice of architects and builders

- ① **Many-Layer Construction.** KIMSUL\* insulation is a prefabricated blanket made on the many-layer principle. The many layers create millions of tiny air-cells to give KIMSUL its remarkable insulating efficiency ("k" factor 0.27). And many-layer construction provides dependable, uniform thickness over every square inch of insulated area.
- ② **PYROGARD† Cover.** Only KIMSUL insulation has the PYROGARD cover — chemically treated, just as the inner layers of KIMSUL are treated, to resist fire.
- ③ **Compressed Package.** Delivered compressed to 1/5th installed length, KIMSUL saves labor, space, and time.
- ④ **Extra Width.** The KIMSUL blanket is made extra wide to provide *fully insulated* fastening edges . . . and to fill extra wide framing spaces.
- ⑤ **Use For Caulking.** Trimmed pieces of KIMSUL are efficient for caulking around windows and door frames.
- ⑥ **Flexible Blanket.** *Many-layer* KIMSUL insulation can be easily tucked around obstructions, fitted into non-standard openings, pulled around corners.

*As members of the Producers' Council, Inc., we are cooperating in the Industry-Engineered Housing Program sponsored by the Producers' Council and the National Retail Lumber Dealers' Association.*

# DARE: To 10,000 "Confirmed Skeptics"

to write on, walk on, smear beautiful Stainproof VARLAR

— and prove it's the most amazing wall covering ever known!

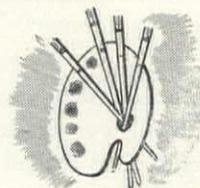
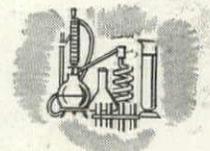


Varlar is so enduring it can be washed 25,000 times—and still look new! Not a claim—but fact, proved by critical tests in the laboratory and actual usage. Proved, too, that oil, ink, grease, mercuriochrome, jam, crayon, syrup, candy, vinegar, pencil, lipstick, hot kitchen grease, dirt accumulation—STAINS OF ALL KINDS—easily, quickly wash off Varlar with ordinary soap and water.

Not a plastic-coated paper, Varlar has no coatings to crack, peel or discolor. Its stainproofness goes clear through, lasts for life... resists water, fire, vermin, bacteria, too!

Skeptical? Then send handy coupon for FREE Varlar sample. Make your own tests with any of the staining agents above, watch Varlar come clean with soap and water. 90 breathtakingly beautiful styles... plaids, florals, weaves, stripes, pictorials, solid tones... go up easily as wallpaper. Send coupon today.

A scientific triumph after 9 years research! Now ready to begin a new era of low-cost wall beauty and maintenance in hospitals, schools, theaters, hotels, restaurants, buildings of all kinds.



World-famed artists and wallpaper designers styled Varlar. New use of plastics achieves dramatic, full-dimensional designs... true-to-life colors never before possible.

*Never Before Such Enduring Beauty*

## VARLAR

*Stainproof Wall Covering*

VARLAR, Inc., Division of UNITED WALLPAPER Chicago

Available in Canada through Trimz Co., of Canada, Ltd., Toronto

**MAKE THIS FREE TEST NOW!**

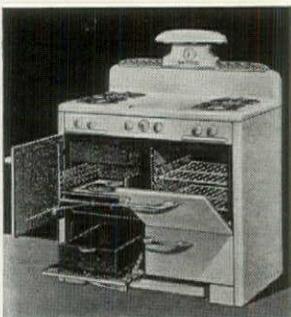
VARLAR, INC., Dept. B-97  
Merchandise Mart, Chicago 54, Illinois

I'm skeptical, but willing to be shown. So send my FREE Varlar sample and I'll make my own tests.

Name.....

Address.....

City..... Zone..... State.....



jellos or ice cubes, makes frequently used foods readily available. The 29 in. wide horizontal, quick-freezing shelves for freezing and storing foods automatically maintain a temperature between 15 and 20 degrees below zero. Other features of the freezer include an all-aluminum evaporator, completely automatic operation, "Moisture-Miser" to prevent accumulation of moisture in the freezing system and a 1/5 h.p. hermetically sealed condensing unit. Defrosting is said to be unnecessary. Price of freezer is about \$259.50.

*Manufacturer:* Orley Freezers, Inc., 680 East Fort St., Detroit, Mich.

**GAS RANGE incorporates features for easier, better, cleaner and cooler cooking.**

The new automatic Glenwood gas range, designed to give a built-in appearance with standard kitchen cabinets, incorpor-

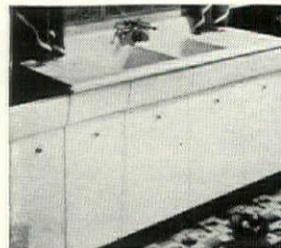
ates five major improvements to make cooking easier, better, cleaner and cooler. These include: air cooled construction on sides and top; Focused-Heat top burners; full size, high automatic roll-out broiler; 20-in. deep Even Heat Flow oven and convenience features to facilitate cleaning. The new range fits flush against the wall, against cabinets on both sides and in line with top and front of cabinets. According to the manufacturer, this is possible because the range incorporates an "air curtain" around each burner and a double wall insulation with "air wash" around oven to keep the range top and side panels cool. Set into the one-piece, air-cooled top are four Focused-Heat burners with removable chrome reflector bowls. These sit close to the utensil, provide even heat distribution on full flame or simmer. The full-size, automatic, waist-high broiler is equipped with a roll-out mat device. Thus it slides out easily, eliminates stooping and bending. It is reported to provide more even heat distribution over a larger effective broiling area and to eliminate broiling smoke. Broiler runners, broiling pan and grid, oven rack and bottom are easily removable for cleaning. The Even-Heat Flow oven provides uniform heat distribution at all temperatures, is equipped with an Automatic cook control. Oven broiler and burners automatically light with a turn of the dial switch. Glenwood's new line is comprised of 6 models. Among the more popular are two, 4-burner, divided top ranges and a 6-burner model. This 6-burner unit has 2 ovens and 2 completely separate broilers, is designed to take up no more kitchen space than a standard 4-burner range.

*Manufacturer:* Glenwood Range Co., Taunton, Mass.

**SINK has two bowls, two drainboards, 4 drawers, 3 storage compartments.**

American Central's new double-bowl, double-drainboard, 48 in. wide sink, complete with 4 drawers and 3 storage compartments, is said to include many engineering and work saving features. The two large bowls and the drainboards are made of acid-resisting porcelain enamel. A chrome-plated brass faucet assembly mounted on the back splashboard includes a built-in, fingertip controlled, spray attachment. One drawer is linoleum lined and divided to accommodate cutlery. To simplify cleaning, slotted pull beneath the front drawer panel replace conventional handles. The storage compartments may be equipped with regular shelves or, if desired, with additional concealed drawers. Patented double-action hinges on the doors of the storage compartments hold them firmly in place. Recessed front and offset base provide ample toe and knee room.

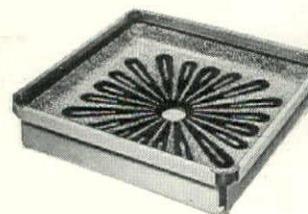
*Manufacturer:* American Central Division, The Aviation Corp., Connersville, Ind.



**ONE-PIECE RECEPTOR for tile showers features non-slip safety floor design.**

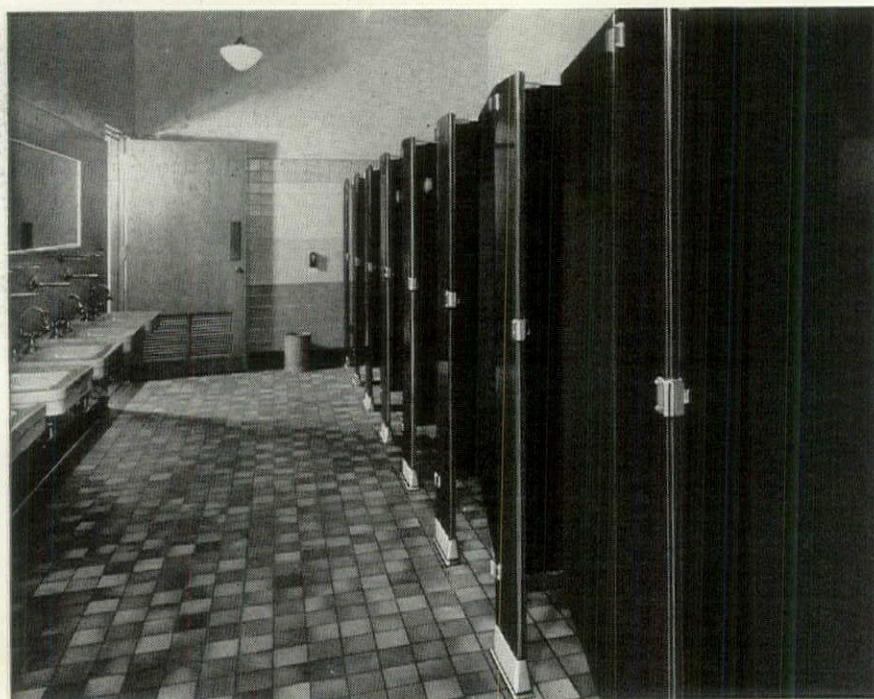
Designed to facilitate construction and installation of built-in shower stalls, the new patented Adapto Receptor carries the Underwriters' Laboratory approval for its non-slip safety floor design.

This safety factor, according to the manufacturer, is not only important to home owners, but is (Continued on page 16)



# WEISART

## Compartments for Fine Buildings



Typical WEISART installation in offices of the Liberty Mutual Insurance Co., Boston, Mass.  
Architect—Chester Lindsay Churchill, Boston

Designed and engineered to harmonize with new trends in finest buildings, WEISART Flush Compartments are thoroughly field tested, and have won wide acceptance. The rigid, flush stile construction eliminates posts and head rails. Weis cut-out type top gravity hinge permits doors and stiles to line up at top.

Doors, stiles and partitions are of highest class flush construction

of bonderized, zinc-coated steel, with edges locked and sealed. Synthetic baked enamel finish is easily cleaned, available in any solid colors selected for desired color treatment. Partitions and stiles are supported clear of walls, eliminating dirt-catching corners.

Write today for your copy of Catalog No. 19 containing detailed information on WEISART and WEISTEEL compartments.

**Henry Weis Mfg. Co., Inc., 621 Weisway Bldg., Elkhart, Ind.**



The "Dutch Boy"  
is Stepping Out  
with his  
**New Blended Paint**

*In Colors or White...It's Blended Just Right...To Stay Beauty-Bright*

The "Dutch Boy" takes a step in the bright direction ... with his new *Blended Paint*.

And a colorful step it is ... bringing the famous "Dutch Boy" quality in lovely, sparkling *Tints* and gay, glossy *Trim Colors*, as well as dazzling *Bright White*.

Each is specially *blended* by the Boy in the Blue Overalls to *stay beauty-bright* ... to *keep* homes looking right.

**Blended to Protect Beauty 3 Ways . . .**

As every architect knows, house paint has 3 different jobs to do. So, the new "Dutch Boy" Paint comes in 3 different blends. Each blend does a special job especially well. (1) *Blended White* stays *White*. (2) *Blended Tints* stay *Right*. (3) *Blended Trim Colors* stay *Bright*.

The "Dutch Boy" has never dipped his brush into higher quality paint. It is the result of over 30 years of continuous, outdoor paint tests ... the longest research project of its kind.

So remember, when it's a question of *weather*, it isn't a question of *which*. Now as always ... in the new blended colors and white ... "Dutch Boy" is *Good Paint's Other Name*.

MADE BY THE MAKERS OF THE FAMOUS "DUTCH BOY" WHITE LEAD



**1. Bright White, Blended to STAY White:**

It goes on white and it goes *on* staying white, because "Dutch Boy" Bright White is *self-cleaning!* It permits rain to wash away dirt. Covers exceptionally well, and gives a dazzling, durable exterior finish.



**2. Lovely Tints, Blended to STAY Right:**

If you are going in for color, you'll go for these "Dutch Boy" Tints! They keep their crisp petal-freshness ... because they're specially blended to assure lasting color and uniformity.



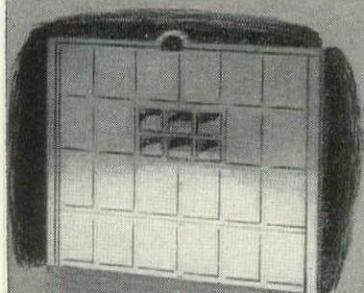
**3. Smart Trim Colors, Blended to STAY Bright:**

It's a bright idea to add cheery, long-lasting brightness with "Dutch Boy" Sash and Trim Colors. They're blended to keep their gloss and color! Just the thing for doors, shutters, fences, decorative metal work and many other purposes.

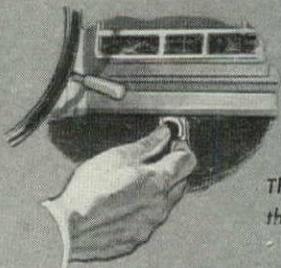
**Special "Dutch Boy" Blended Primer:** An undercoat of great sealing and hiding power that hugs tight. When used under a topcoat of "Dutch Boy" Bright White or Tints the result is a perfect 2-coat job, even on unpainted wood!

**NATIONAL LEAD COMPANY:** New York 6; Buffalo 3; Chicago 8; Cincinnati 3; Cleveland 13; St. Louis 1; San Francisco 10; Boston 6 (National Lead Co. of Mass.); Philadelphia 7 (John T. Lewis & Bros. Co.); Pittsburgh 30 (National Lead Co. of Pa.)

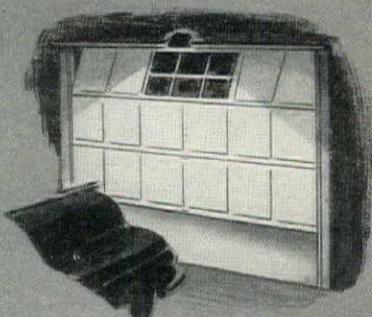
*New Magic*  
FOR  
HOME OWNERS



As you drive up, your garage door is closed and locked.



To unlock and open the door, touch a button in your car.



The magic of electronics does the work—you stay in the car.

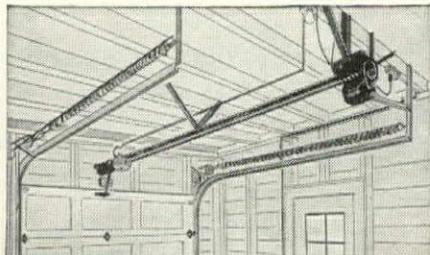


Inside your home another button closes and locks the garage doors.

WITH THE **AVCO AUTOMATIC DOOR OPENER!**

Today's home is tops in architectural refinements . . . tops because of advanced design and new conveniences like the AVCO Automatic Garage Door Operator. No home will be really new without the AVCO "Doorman." This efficient, electronic device opens or closes any standard-type garage doors, turns house

and garage lights on or off, if desired—all by touch of a button inside the car, garage or home. Already installed on thousands of garage doors, the AVCO "Doorman" is setting records for trouble-free operation, and adding value, safety and comfort to the home. The cost is nominal. Available for immediate delivery.



Easily installed, the AVCO Automatic door operator fits sectional overhead, one-piece overhead, tilting or canopy, and two-piece outward swing doors.

**HORTON**

Division—*AVCO*—Manufacturing Corp.

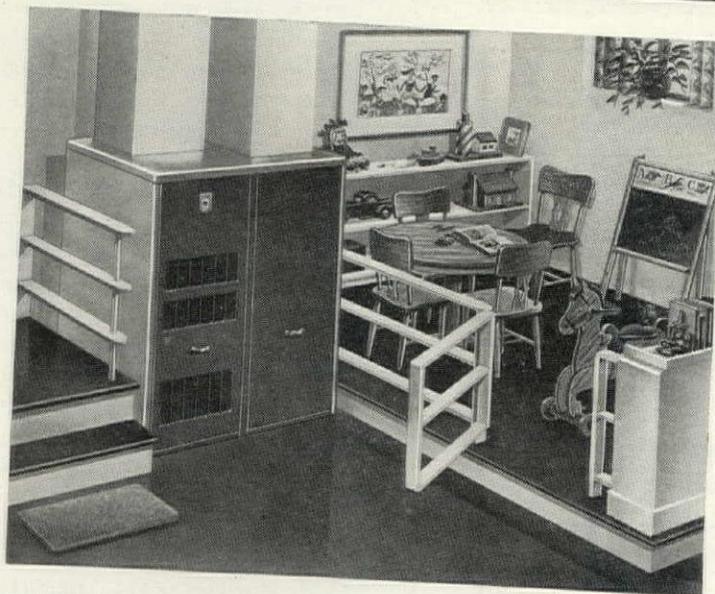
Dept. AA-12 • Circleville, Ohio

WRITE TODAY FOR COMPLETE DETAILS ON THE AVCO AUTOMATIC DOOR OPERATOR

# With AMERICAN-Standard

*— more room  
for work*

A trim trio of American-Standard products makes this combination kitchen and utility room for small homes unusually convenient, attractive, and sanitary. The **ROYAL HOSTESS Sink** is of rigid cast iron with a heavy coating of acid-resisting enamel. The **ALDEN Laundry Tray**, also made of sturdy cast iron enamelware, is of one-piece construction. The gas fired **BUDGET Water Heater** in its gleaming white enameled jacket completes the picture and provides plenty of hot water.



*— more room  
for play*

The streamlined Placid Two-Tone Blue jacket of the **SENECA Winter Air Conditioner** harmonizes perfectly with the attractive setting of this basement playroom and protects valves and controls. The Seneca, with its durable copper bearing steel heating element, provides the dual benefits of clean, conditioned air, and carefree, automatic heating. Burns natural, manufactured, mixed, or liquefied petroleum gas. In five sizes for small to medium sized homes.

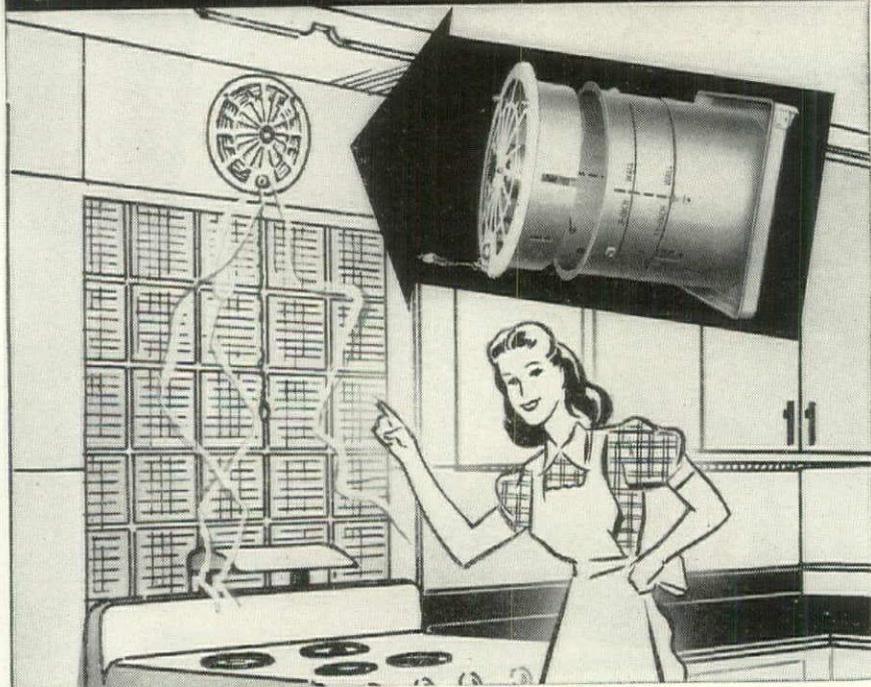


■ You have the widest latitude in room arrangement when you use American-Standard products. Designed, engineered and styled to meet practically any need, they permit you to make the most of whatever space is available . . . enhancing any setting with their trim, smart lines and eye-catching beauty. And their efficient, economical operation over the years assures lasting customer satisfaction. For complete information, contact your Heating and Plumbing Contractor. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

*Serving the Nations' Health and Comfort*

**LOOK FOR THIS MARK OF MERIT**—It identifies the world's largest line of Heating and Plumbing Products for every use . . . including Boilers, Warm Air Furnaces, Winter Air Conditioners, Water Heaters, for all fuels—Radiators, Convectors, Enclosures—Gas and Oil Burners—Heating Accessories—Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim—and specialized products for Hospitals, Hotels, Schools, Ships, and Railroads.

# EMERSON Kitchen Ventilator



## Easy to Install..

AND HOW IT PLEASURES CLIENTS!

You're bound to be pleased, and your clients, too, when you specify Emerson-Electric Kitchen Ventilating Fans in your home-building or modernization plans.

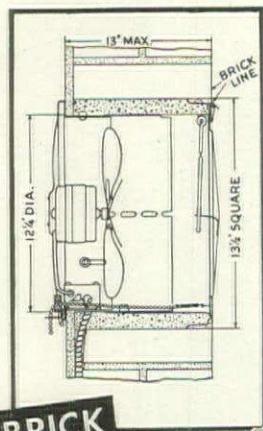
Priced surprisingly low, these sturdy fans whisk out kitchen cooking heat and odors, prevent spread of greasy vapors to living room furnishings, woodwork, walls and curtains.

Square, weather-tight outer door frame is easy to brick or frame around. Telescoping sleeve is adjustable to any wall thickness up to 13 inches. Ten-inch quiet-type fan blades move 570 CFM in free air.

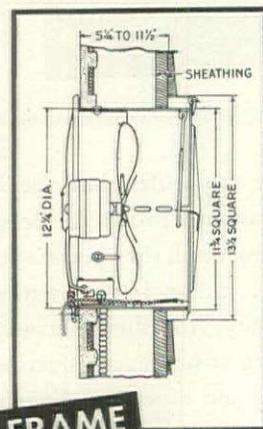
For installation data, refer to the Emerson-Electric Catalog in 1947 Sweets Architectural File, or write for free Folder No. 204 today!

**THE EMERSON ELECTRIC MFG. CO.**

St. Louis 21, Missouri



**BRICK**



**FRAME**

**EMERSON ELECTRIC**  
MOTORS · FANS · APPLIANCES

even more appreciated for hotel, institution and public building installation because of its effect on insurability and insurance rates. Adpto Receptor is of sturdy, one-piece construction. It is made of wear-resisting porcelain enamel on hot steel and is embossed to prevent slippage. Strongly reinforced it will withstand many times the weight of ordinary bathtub without cracking, crazing or "oil-canning." It is light and easy to handle, is engineered for time- and labor-saving installation in combination with ceramic and metal tile, structural glass and composition wall materials. No lead paint or other extra floor preparation is required for installation. Adpto Receptor will be available shortly in two sizes: 32 in. and 36 x 36 in.

Manufacturer: Bathe-Rite Division, Milwaukee Stamping Co., 824 South 72nd St., Milwaukee, Wis.

### PATHWAY LIGHT for use along paths, walks, driveways,

The Cannon Pathfinder Light is designed to illuminate driveways, pathways in gardens or grounds, steps, and other places where illumination is required in moderate volume for safety, convenience or decoration. Consisting of a lighting unit, riser conduit and canopy base with outlet box and 7 in. spike, it is furnished for low voltage or standard 100 v. circuits. The lamp section, cylindrical in shape and measuring 3 x 3 in., consists of an aluminum cap, lens socket, and yoke section over a socket tube. Crystal polystyrene lens of 7 prisms is standard although various combinations may be made with amber, green, red and blue for directional lighting. The lamp section mounts on the conduit pipe which has a canopy base meeting the ground level. Under this base is the outlet box and a spike for anchoring into the ground. Knockouts are provided in the outlet box for conduit.

Manufacturer: Cannon Electric Development Co., 3209 Fenwick Blvd St., Los Angeles 31, Calif.

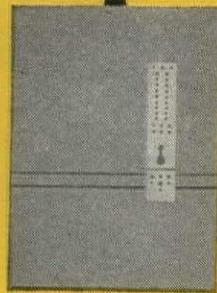
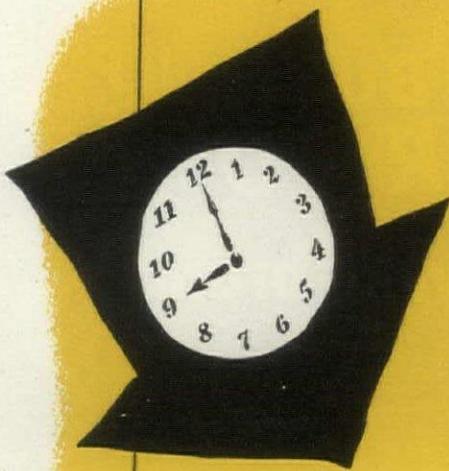
### STAINLESS STEEL AWNINGS for commercial establishments combine appearance, weather protection and service

Perma-Steel Lifetime Awnings provide commercial buildings and establishments with colorful, year-round, all weather protection. Fabricated of stainless steel, permanently welded and trimmed in a choice of ten colors, they are said to represent a popular priced, lifelong investment in appearance and comfort. Construction is of tubular-strut type which provides ample rigidity to withstand wind drag or heavy loading of ice or snow. Hanger strip is permanently anchored and caulked to the building; each hanger strip acts as a miniature rainspout. The new awnings are weather proof, impervious to salt spray, acid fumes, coal dust and most severe climatic conditions. They give ample rain protection with plenty of ventilation and no trapping of static heat against the windows. Perma Steel Awnings safely remain on the building the year around, or if desired may be easily folded away for storage. They will be available in size increments of 6 in., length and width.

Manufacturer: Perma-Steel Corp., 2025 Fenkell Ave., Detroit, Mich.

### DOOR LOCK functions as door chain and safety bolt.

This all-steel precision Automatic Safe-T-Lock provides instant household protection. (Continued on page



ELIMINATE "SUBWAY RUSH" IN THE LOBBY  
WITH... WESTINGHOUSE

# Selectomatic

The only supervisory system that matches  
elevator service with demand... *automatically!*

When the early morning rush to work begins, or during similar periods of the day when large numbers of people all want "up" at once... elevator service is often taxed to the limit. Building lobbies become congested and elevator passenger traffic slows to a sluggish crawl... just when fast service is needed most.

Westinghouse Selectomatic eliminates this "subway rush" condition... replaces it with efficient elevator control that keeps lobbies clear and speeds passengers to their destination.

Selectomatic is the only supervisory control that actually coordinates the right kind of elevator service to each of many widely fluctuating types of demand. At the push of a button, it establishes fully automatic patterns of operation that solve the three major types of elevator demand—up peak, down peak, and off peak traffic.

Another original Westinghouse development, Selectomatic increases passenger carrying capacity in office buildings, stores, hotels and hospitals by as much as 30%!



Ask to see the new 16 mm. sound motion picture  
"Speeding Vertical Transportation with Selectomatic"  
... 17 minute story of Selectomatic in action.



# Westinghouse

ELEVATOR



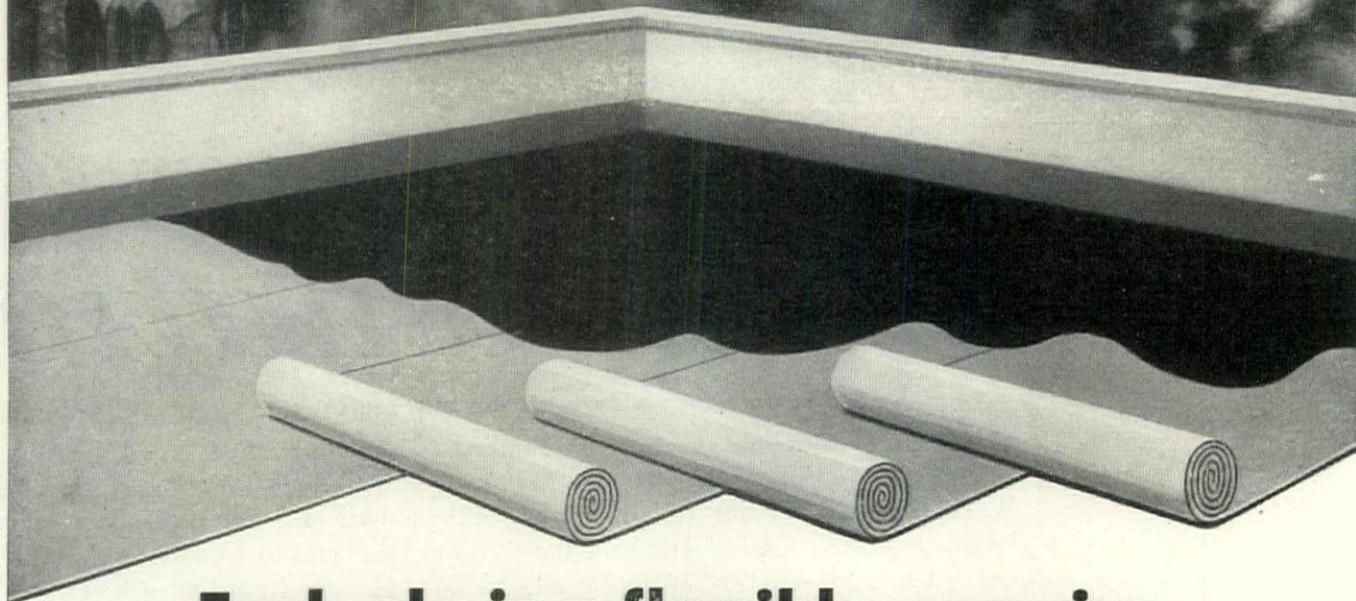
DIVISION

Write to Westinghouse for your copy of "Selectomatic Makes Elevators Work As A Team." Address the Westinghouse Electric Corp., Elevator Division, 150 Pacific Avenue, Jersey City 4, N. J., on your letterhead please.

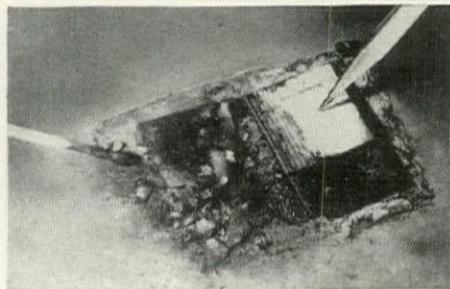
J-98503

# FLEXSTONE BUILT-UP ROOFS

... guard against flying brands



**Each ply is a flexible covering  
of stone—made of asbestos**



**Make this Fire Test!** The ordinary roofing felt, on the left side, was reduced to ashes by the consuming flame. But the J-M Asbestos Felt, on the right, remained unharmed . . . proving its fire resistance. We'll gladly send you the materials to make this convincing test yourself.

Protect your building from the hazard of flying sparks and burning embers. Insist on a Johns-Manville Flexstone Roof. *It will not support combustion.* That's because the felts in a J-M Flexstone Built-Up Roof are made of the magic mineral *asbestos*—fireproof, rotproof, long-lasting.

Flexstone Roofs are *smooth-surfaced*, too—permitting thorough drainage, eliminating the weight of slag or gravel, and making any damage easy to locate and repair. Need no periodic coating. Felts are perforated to insure smooth application.

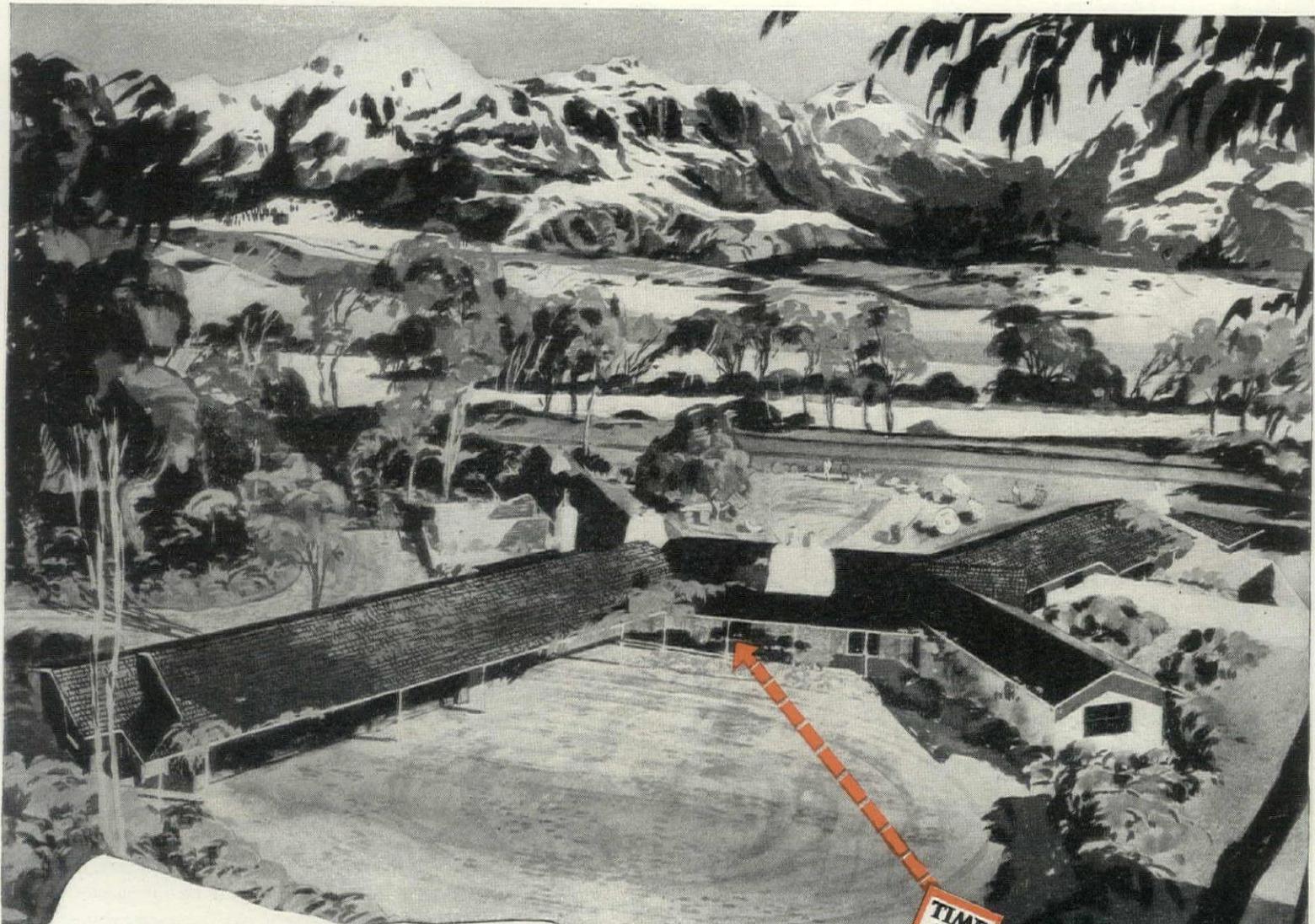
All Flexstone Roofs are engineered to the particular requirements of your building—whether it's new construction or re-roofing. To insure skilled application, they are applied only by J-M Approved Roofers.

Three types available: Flexstone *Super "A," Standard,* and *Service*—each the finest that can be specified for its purpose. Write for brochure BU-51A, containing complete specifications. Johns-Manville, Box 290, N. Y. 16, N. Y.

Because of unprecedented demand, there may be times when we cannot make immediate delivery. Please anticipate your needs.



**Johns-Manville FLEXSTONE BUILT-UP ROOFS**

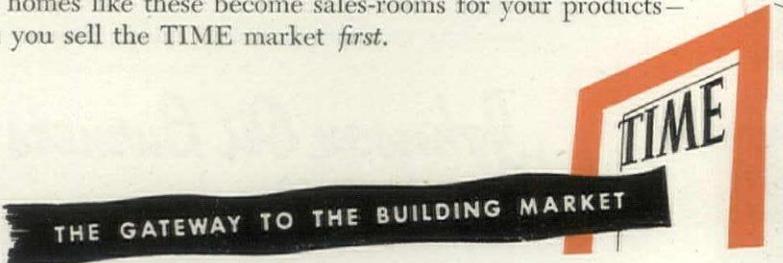


Presenting  
**THE SHOW-ROOM HOMES**  
*of the Nation*

Ranch style or Georgian, Colonial or modern — the kind of well-designed, well-built homes *you want your materials used in* are owned by the kind of people who read TIME.

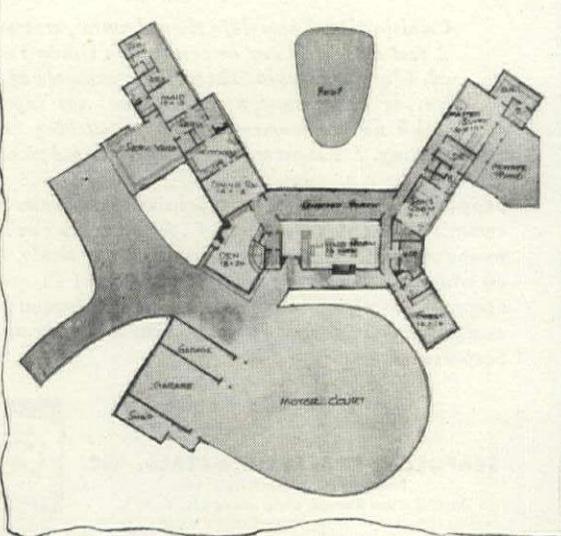
The million and a half families who read TIME from coast to coast belong in the nation's over \$6500 income bracket: they have the salaries and savings people who are building or remodeling these days must have if they want the best.

But "there's always an *extra* reason for advertising in TIME," and one such extra reason is this: what TIME-reading families buy, millions of other families admire, ask about, resolve to buy for themselves. Show-room homes like these become sales-rooms for your products — when you sell the TIME market *first*.



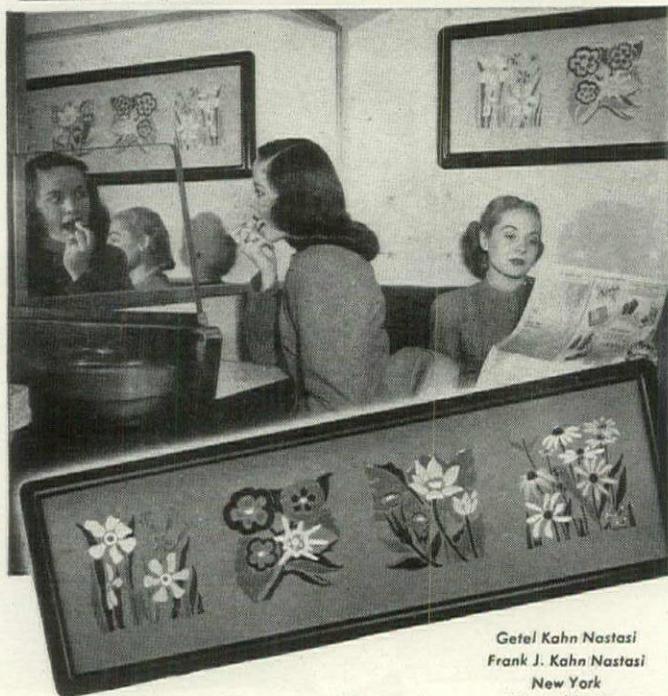
Cliff May, Architect

There'll be a change of address for TIME subscription #13-50-ZDDH-1046-004 when Dr. and Mrs. R. G. Frey of Red Bluff, California, move into this new ranch house.



- ADVERTISING OFFICES • NEW YORK • CHICAGO • BOSTON  
 PHILADELPHIA • CLEVELAND • DETROIT • ST. LOUIS  
 SAN FRANCISCO • TORONTO • MONTREAL • LONDON

## It's SEAPORCEL for AMERICA'S CRACK TRAINS!



Getel Kahn Nastasi  
Frank J. Kahn Nastasi  
New York  
\*ists and Designers

The Pennsylvania Railroad insists on the best in travel comfort and attractive surroundings for its passengers. So when Raymond Loewy Associates, consultant stylists to the Pennsylvania Railroad, suggested floral prints for the lounge cars of the postwar "Trail Blazer" and "Jeffersonian," naturally Seaporcel\* was selected.

Of course, there are many uses for which Seaporcel is ideal. It is equally effective architecturally for dramatic sweep on building facades, store fronts, interiors of public buildings, restaurants, banks, schools, hospitals and hotels.

*A multi-colored porcelain enamel mural, measuring 72 feet by 28 feet can be seen in the Union Terminal, Cleveland, Ohio. There, is an example of vast size...of picturesque ornamentation...art supreme...with no requirement ever of retouching or re-painting. It's as permanent as the walls and pilasters.*

Seaporcel is beautiful, yet inexpensive to maintain. Sparkling ceramic fused to steel at 1550° F., Seaporcel can be fabricated to any shape, form, section—finished in any shade, from purest white and pastels to deepest black. Best of all, Seaporcel is fireproof, corrosion-resistant and will withstand moderate mishandling. It always remains clean and lustrous. Specify Seaporcel on your next plans.

Write today for catalogue showing applications and current jobs

**SEAPORCEL PORCELAIN METALS, INC.**  
Formerly Porcelain Metals, Inc.  
28-02 Borden Avenue, Long Island City 1, N. Y.



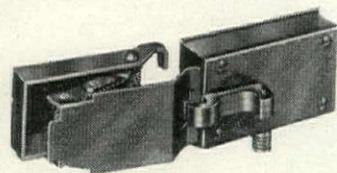
\*Registered U.S. Pat. Off.

Photo Courtesy of Pennsylvania R.R.

# Seaporcel

Member: Porcelain Enamel Institute, Inc.

Incorporating a patented automatic safety latch which snaps into place when the door is opened, it functions as an old style door chain to prevent the entrance of persons not desired inside. The safety latch, when set in this extended position, also allows the door to be opened for ventilation with complete security. An all-steel bolt with spring tension button control keeps door securely closed when desired. Safe-T-Lock automatically engages whenever the door is closed, can be released by a flick of the finger from inside the room. Both safety latch and bolt may be opened from the outside with a key.



Manufacturer: Automatic Safe-T-Lock Co., 4600 So. Kedzie Ave., Chicago, Ill.

### MEASURING INSTRUMENT aids in taking off quantities.

The Minerva Curvimeter is a new, high-precision measuring instrument for taking quantities off plans, scaling curved or irregularly shaped areas, estimating, etc. It is simple to operate and gives immediate readings, functioning on the same principle as a speedometer. Three scales are shown on the dial:  $\frac{1}{8}$  in.,  $\frac{1}{4}$  in. and  $\frac{1}{2}$  in. A large and small hand register footage, with one turn of the long hand being equivalent to 100 ft. In operation, the small hand moves forward one division for each turn of the long hand, thus registers the number of turns of the long hand. Totals of various distances can be registered without the necessity of taking intermediary readings and, if a certain distance has been erroneously measured, the mistake can be rectified by reversing the same distance. A slight pressure on the (Continued on page 174)

# JOHNSON Oil BURNERS

are your best bet  
when you're looking  
for  
**LOW-COST  
heat!**

There's a Johnson Burner for every heating job... whether it's for a 5-room house, a 50-story skyscraper or a 500-room hotel. For 44 years, "Johnson" has been one of the great names in the Oil Burner Industry.

...Johnson Oil Burners...

S. T. JOHNSON CO.  
940 Arlington Ave., Oakland 8, Calif.  
401 No. Broad St., Philadelphia 8, Pa.

Meet the  
**Adlake Window**  
Maintenance Man



THAT'S RIGHT — he hasn't a thing to do but loll in the sun—because NO MAINTENANCE IS REQUIRED with an Adlake Aluminum Window. You install it—you forget it.

ONLY ADLAKE combines non-metallic weather stripping and serrated guides to stop excessive air infiltration and give you finger-tip control. What's more, its lustrous aluminum sash requires no painting or maintenance. No warp, rot, swell, stick or rattle—ever.

TRULY, the Adlake Aluminum Window fulfills your every architectural requirement! Complete information and data will be mailed you on request. Drop us a postcard today . . . there's no obligation, naturally. Address: The Adams & Westlake Company, 1101 N. Michigan, Elkhart, Ind.

THE  
**Adams & Westlake**  
COMPANY

Established 1857 • ELKHART, INDIANA • New York • Chicago



FURNISHERS OF WINDOWS TO THE TRANSPORTATION INDUSTRY FOR OVER 30 YEARS

# Again



*This time in the gigantic*  
**BROWNSVILLE**  
**STATE FINANCED HOUSING PROJECT**

Time and again MA·TI·CO Mastic Tile gets the "call" when "quality-controlled" asphalt flooring is required for large installations. Now 1,000,000 sq. ft. of MA·TI·CO Mastic Tile throughout all the buildings—all the apartments—in the Brownsville Houses, Brooklyn—one of New York's most gigantic State-financed Housing Projects!

Proof again that MA·TI·CO's reputation for beauty, uniform high quality, and rugged durability is deserved! Proof again MA·TI·CO Mastic Tile is delivered on schedule *as promised!*

The next time you specify asphalt flooring tile, be sure it's MA·TI·CO — "quality-controlled" through continuous PRECISION INSPECTION!

Send for Our New Price List and Samples

# MASTIC TILE Corporation

OF AMERICA

*Foot of North Montgomery Street • Newburgh, N. Y.*

DISTRICT SALES OFFICES:

WASHINGTON, D. C.  
Bernard Cantor  
410 Bond Building  
District 2801

PHILADELPHIA, PA.  
Sigmund S. Chester  
4201 Chestnut St.  
Baring 2-9294

ATLANTA, GA.  
Thomas M. Harrington  
1734 Candler Bldg.  
Lamar 1936

FT. LAUDERDALE, FLA.  
Reginald G. Jackson  
11 Wall Street  
Ft. Lauderdale 1583

CHICAGO, ILL.  
Frank D. Hayes  
6215 Wayne Avenue  
Rogers Park 4177

BOSTON, MASS.  
Charles A. Barrett  
49 Hancock Street  
Bedford, Mass.  
Lexington 1293-M

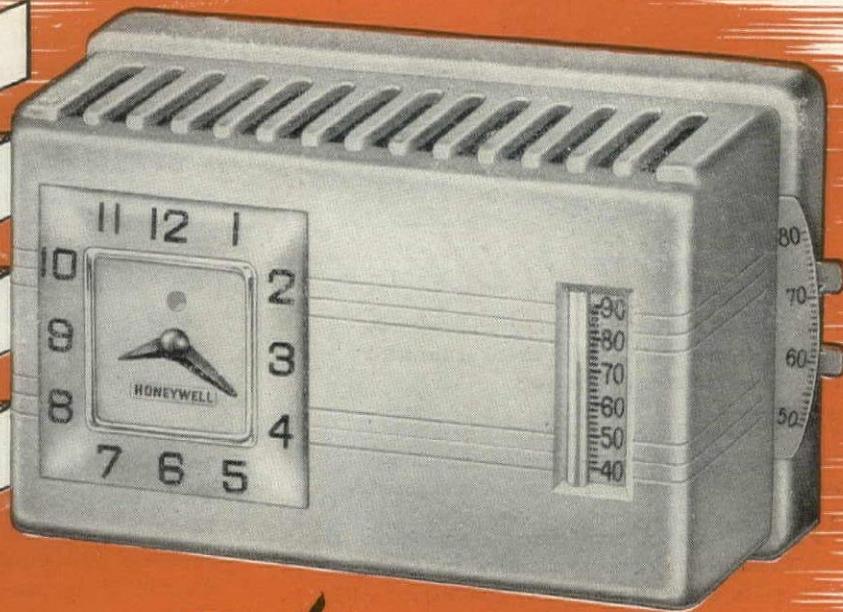
DETROIT, MICH.  
Kolman Z. Sachse  
3250 Burlingame  
Townsend 7-1328

BUFFALO, N. Y.  
Harry D. VanBrunt, Jr.  
70 Burwell Ave., P.O. Box 121  
Lancaster, N. Y.  
Lancaster 405-M

# HONEYWELL CLOCK THERMOSTATS

.....are here again!

- NEW DESIGN
- NEW APPEARANCE
- NEW FEATURES
- NEW PERFORMANCE



## THE NEW *Chronotherm*

### Check these ten outstanding DESIGN FEATURES

- 1 Simplicity of overall design. No troublesome intricate mechanisms. Exceptionally compact.
- 2 New bimetal element . . . assures more accurate temperature control, yet sturdy and dependable.
- 3 Fingertip external adjustment for day-night temperature settings.
- 4 Gradual morning pickup insures accurate temperature being restored to the daytime setting without overshooting.
- 5 Ease of time settings for day and night operation.
- 6 External fingertip wheel for setting clock . . . hands may be set as easily as a watch.
- 7 Low speed clock motor . . . the ultimate in quiet, accurate clock operation.
- 8 Clock motor provides 30 times more power than required.
- 9 Easily removable clock assures ready means of replacement.
- 10 Separable wall plate for easy mounting.

Here's *BIG* news and it's *opportune*.

Once again Honeywell leads the way—this time with the entirely new Chronotherm, the finest electric clock thermostat ever built.

Coming at this time in the face of a possible fuel shortage, the Chronotherm has special, added significance because it saves fuel. This feature alone creates an immediate demand. Your clients will be quick to appreciate the advantage of extended fuel supplies, lower heating costs.

You'll want to specify this control as a mark of the newest and most modern improvements in the homes you're designing. And don't overlook the Chronotherm as part of every home remodeling and modernizing project. When you explain how the new Chronotherm saves fuel by automatically lowering temperatures during the night and providing more accurate control at all times, it's a matter of timely interest to every home owner. And they'll recognize the advantages of increased comfort and convenience. Call the Honeywell branch in or near your city or write for complete information at once. Minneapolis-Honeywell, Minneapolis 8, Minnesota. In Canada: Toronto 12, Ontario.

MINNEAPOLIS  
**Honeywell**  
CONTROL SYSTEMS

**OLSONITE**  
\*Plastic Seats\*

Always  
Specify



Olsonite

**COSTS LESS** Latest electronic manufacturing methods plus high volume production put Olsonite ahead of the field both in low unit cost and in speed of delivery.

**LOOKS BETTER** Olsonite will not chip or mar and resists acid or cigarette burns. Non-corrosive brass hinges are covered with Olsonite so that no metal is exposed.

**LASTS LONGER** Solid homogeneous plastic construction has no core to split or warp. There are no joints, seams or crevices to give way.

WRITE DEPT. AF 6 FOR INFORMATION

**Swedish CRUCIBLE STEEL COMPANY**  
PLASTICS DIVISION  
8561 BUTLER AVENUE • DETROIT 11, MICHIGAN

Demand still exceeds  
supply, despite production  
at maximum capacity

**THE FIRST USERS  
OF PABCO  
MASTIPAVE**

...are continuing to order more  
and more yardage to solve more  
and more of their floor problems.  
For 23 years, **MASTIPAVE** has  
led as Americas No.1 long-life  
low-cost floor.

Also Grip-Tread MASTIPAVE Non-Slip Wet or Dry

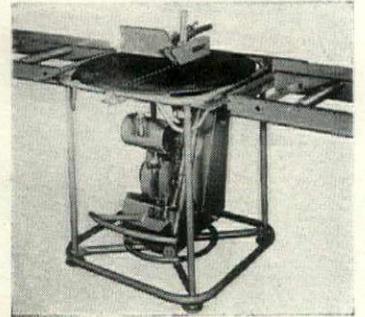
**THE PARAFFINE COMPANIES • INC.**  
NEW YORK 16 • CHICAGO 54 • SAN FRANCISCO 19  
Makers, also, of Pabco Linoleums, Grip-Dek Floor Coverings; Pabco Paint,  
Roofing and Building Materials

lateral push button returns the hands to zero. Curvimeter's contact wheel is mounted on 2 jewels which, according to the manufacturer, assures long wear and accurate service. Price of the instrument is about \$19.75.

Manufacturer: M. Ducommun Co., 580 Fifth Ave., New York, N. Y.

**POWER SAW WITH ROTATING TABLE provides convenience, increases production.**

In the lightweight, gasoline powered Nordberg-Buday Portable Power Saw the table, saw arbor and driving mechanism are combined in a single rotating unit. This permits the operator to cut any miter without changing the position of the lumber, or shutting off the power. To obtain the desired cutting angle for ripping, cross-cutting or mitering, the table is merely rotated and locked in place. Lumber remains lengthwise on two standard 10-ft. long, 18-in. wide roller work tables. The 10-in. or 12-in. saw blade is operated by a convenient foot treadle. Safety is assured by the counter-balanced blade that falls away from the operator in any emergency. Saw has a cross-cut capacity of 4 x 4 in. or 3 x 12 in. and can rip 4 in. deep and 40 in. wide. It weighs 340 lbs., may be used in narrow, confined spaces or against the wall. Electric motors can be furnished if desired.



Manufacturer: Nordberg Mfg. Co., 3073 So. Chase Ave., Milwaukee, Wis.

(Technical Literature, page 178)

## The University of Sydney

### Chair of Town and Country Planning

The Senate of the University of Sydney invites applications for the Chair of Town and Country Planning which has recently been established. The tenure of the Chair will be for a period of five years, extension of tenure may be made under conditions to be determined before the expiry of that period. The Professor will be required to conduct post-graduate courses leading to a Diploma in Town and Country Planning and such other special courses in the University as may be established. He will also be required to undertake duties of an advisory character for the Department of Local Government and the Sydney Technical College and to discharge such teaching duties in addition at the Sydney Technical College as may be determined. He will be permitted to engage in consultative practice under conditions approved by the University. The salary will be at the rate of £2,000 (Australian) per annum. Applicants for the Chair are requested to send one application to the Secretary, Universities Bureau of the British Empire, 8 Park Street, London, W.1, and one copy to the undersigned not later than 30th September, 1947, in each case.

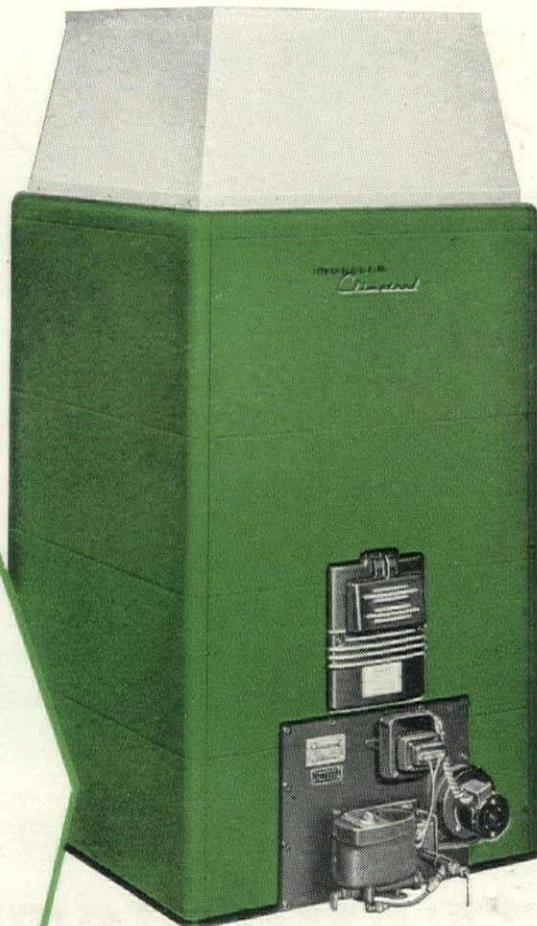
G. DALE, REGISTRAR

University of Sydney, Sydney, Australia. July, 1947.

Whether the shortage in your community is gas or oil — here is your answer to present restrictions. The Mueller Climatrol 201 Convertible Furnace is engineered for equal efficiency with OIL or GAS — converts to either fuel later, at a moderate cost. ➔

## The Mueller Climatrol 201 Convertible Furnace

*solves your problem  
of temporary  
fuel restrictions*



If it's a gas shortage in your community, you can sell an oil furnace to people who want gas and can't get it — converting with a gas burner when the shortage is over. If it's a fuel-oil shortage, reverse the process. The complete, versatile Mueller Climatrol line brings you out on top again!

With the Convertible 201, your customer will be getting automatic heat *all the time* . . . with the efficiency of an oil-designed job when he burns oil — and the efficiency of an AGA-listed gas-designed job when he burns gas for home-heating.



The Mueller Climatrol 202 Winter Air Conditioner consists of the 201 Convertible Furnace shown above, plus a blower package. The blower is a reversible unit and can be arranged on either the right- or left-hand side.

The Mueller Climatrol Convertible Furnace is the answer to your inventory problem too! With various combinations of these 4 standard packages—

A — The Heater Package      C — The Gas Burner Package  
B — The Oil Burner Package    D — The Blower Package

you can install: (1) an oil-fired gravity furnace — A+B; (2) a gas-fired gravity furnace—A+C; (3) an oil-fired winter air conditioner—A+B+D; (4) a gas-fired winter air conditioner—A+C+D. You can work with a minimum inventory, varying your stock of (B) and (C) according to changing demand.

It's easy to see why the Mueller Climatrol dealer is always on top. Sell Mueller Climatrol for every new home and replacement job — it pays!

*Write for bulletins.*

**L. J. Mueller Furnace Company**

2010 W. Oklahoma Avenue • Milwaukee 7, Wisconsin

**M U E L L E R**  
*Climatrol*  
REG. U. S. PAT. OFF.

D-76



St. Francis Hospital, Lynwood, California. George J. Adams, architect; Hillman & Nowell, structural engineers; Thomas & Beyer, general contractors.

# ARCHITECTURAL CONCRETE

**puts longer legs on your building dollars**

**A** RCHITECTURAL concrete permits casting both the structural and ornamental parts of your building in one operation. That promotes economy. It's a fact to remember in planning hospitals, hotels, schools, apartment houses and industrial plants. Architectural concrete is adaptable to a wide range of decorative treatments.

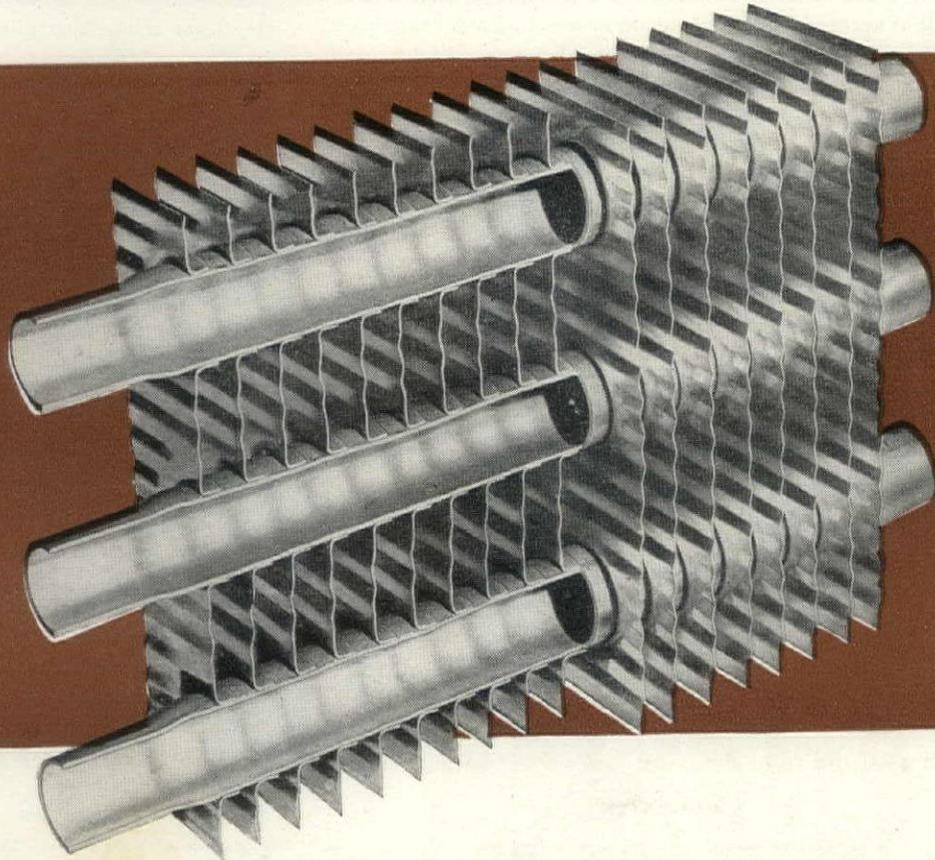
Moderate first cost, low maintenance expense, long life, fire-safety and **low annual cost** are advantages of architectural concrete to remember in planning any new building. Architects and engineers are invited to make full use of our services to secure maximum advantages of architectural concrete. See our catalog in Sweet's.

## PORTLAND CEMENT ASSOCIATION

Dept. A9-7, 33 W. Grand Ave., Chicago 10, Illinois

A national organization to improve and extend the uses of concrete . . .  
through scientific research and engineering field work

# PRESSURE BONDED TESTED



## RIPPLE FIN construction means greater blast coil efficiency

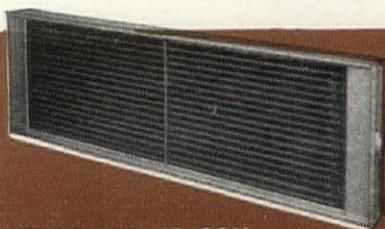
Ripple Fin coils prove their ability to "take it" right from the start through McQuay's unique method of construction. The 3,000 lbs./sq. inch hydrostatic pressure that expands tubes permanently into fins also provides a rigid test of material strength.

Hydraulic expansion methods of coil construction, pioneered by McQuay, assure positive contact between primary and secondary surfaces under all operating temperatures. Wide fin collars increase area of heat transfer. Spun collar surfaces give extra high quality of contact... actually put

more metal on metal for real heat transfer efficiency.

Ripple Fin coils feature elliptical copper headers to compensate for unequal expansion during the warm-up period, copper tubes and aluminum fins for fast heat—lighter weight, continuous plate type construction for a rigid, vibration free core.

McQuay blast coils are available in practically limitless combinations to fit your application. Consult the McQuay representative in your area or write, McQuay Inc. 1609 Broadway Street Northeast, Minneapolis 13, Minnesota.



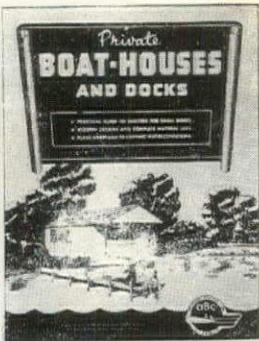
STEAM BLAST COIL

# McQuay INC.

Heating • Air Conditioning • Commercial Refrigeration



# TECHNICAL LITERATURE



**BOATHOUSES & DOCKS.** Private Boat-Houses and Docks. Outboard Boating Club of America, 307 N. Michigan Ave., Chicago, Ill. 14 pp. 8½ in. x 11 in. Price \$35.

Featuring 21 plans for private, modern boathouses and docks by Chicago architects Leonard Wayman and Ray Stuermer, this publication contains sketches, elevations and detailed floor plans of each. In addition, it includes a check list and bill of necessary materials to aid in selecting and constructing a boathouse suitable to local water, bottom and bank conditions. Sizes and arrangements of boathouses and docks are based upon findings of a comprehensive national survey of existing waterside facilities and needs by the Outboard Boating Club of America. Architects Wayman and Stuermer have provided modern architectural treatments for the shelters, and a maximum of flexibility in the plans to permit easy altera-

tion for wet or dry storage, and for placing the boathouse shore or in the water.

**HEAT PUMPS.** by Philip Sporn, E. R. Ambrose and Theodore Baumeister. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N. Y. 188 pp. 5 x 8 in. Price \$3.75.

This pioneer volume on heat pumps offers a clear technical treatment of the heat pump. It discusses the progress made in adapting it not only to building heating and cooling service but also to such industrial processes as the evaporation and purification of liquids, the drying of solids, and the simultaneous chilling and heating of process fuels.

The book is organized into successive considerations of the thermodynamic principles involved; equipment design, specification and selection; maintenance, operating, economic and installation problems. The discussion is thoroughly practical, designed for those concerned with the development and use of this important new tool. The book is not a detailed discussion of all the theory, performance and design of the multitude of equipment and apparatus which make up an efficient heat pump. The authors include only the aspects of performance and design of those parts which are essential to the assembly of a good installation.

**RADIANT HEATING.** Rayduct The Pipe for Radiant Heating. Bethlehem Steel Co., Inc., Bethlehem, Pa. 41 pp. 8½ in. x 11 in.

This informative semi-technical manual deals with the principal problems encountered in the design of a radiant heating system. In addition, it points out how "Rayduct", Bethlehem's tough ductile pipe, offers advantages in the fabrication of complete assemblies. The manual, beginning with a brief discussion of Rayduct, goes on to explain what radiant heating is. It then analyzes the principal features in the design of a radiant heating installation. Detailed information is given for designing and installing a workable system in a one-story structure with concrete slab on the ground, a one-story building with wood-joint construction and a two-story wood frame structure with basement. Heat-loss tables, charts of pipe sizing and spacing, typical installation layouts, construction details, etc., amplify the text. Following sections are devoted to interesting discussions of the basic design of radiant heating and general considerations in planning such a system. A few of the considerations include: possible methods of installing pipe, grading and venting, testing, boiler equipment, control operation of the system, installation costs, lag, etc. Many plans and construction photographs of radiant heating installations, information on special radiant heating and applications, specific data on Rayduct are also contained in the booklet.

**SEWAGE DISPOSAL.** Individual Sewage Disposal System Recommendations of Joint Committee on Rural Sanitation. Office of Housing Expediter, National Housing Agency, Washington, D. C. 33 pp. 5½ in. x 9½ in.

This guide giving recommendations for the design, location and installation of individual sewage systems, is designed to help those who are building beyond the immediate reach of municipal sewage systems. Contents are divided into two parts, are presented under the headings of water carriage and nonwater carriage methods. Under the first heading are included: the septic tank, subsurface disposal field, seepage pit, dry well and cesspool. Under the second heading are the earth pit privy, masonry vault privy, chemical toilet, pour or can type privy, and cremating latrine or incinerator privy.

(Continued on page 18)

## DECORATIVE FLEXGLASS captures the Delicate Beauty of "MIMOSA" . . . in crystal and color



Here's something you're always looking for . . . really *new* decorative material with almost endless possibilities.

This new Decorative line is *real* Flexglass . . . rectangles of genuine glass firmly mounted on a flexible fabric backing. It fits snugly and easily on curved surfaces, around corners, on pillars . . . anywhere at all.

Yes, there's all that versatility and more. Much more. Decorative Flexglass features striking designs fired on the underside of

the glass in brilliant ceramic colors (where it can't ever wear off).

Use Decorative Flexglass for entire walls, striking panel effects, compelling emphasis . . . any way your ingenuity dictates.

Available *now* in various color combinations, are 3 standard patterns . . . "Clusters," "Vintage," and "Mimosa" (illustrated)\*. And you can order custom patterns to your own design.

Interesting? It's enchanting! Write today for full information to:

**UNITED STATES PLYWOOD CORPORATION**

Dept. F, 55 West 44th Street,  
New York 18, N. Y.

\*Designed by Muller-Barringer

*Compare The Cost*

This consumer advertising faces the challenge squarely—appearing in the September 13th "Saturday Evening Post" and September "Better Homes & Gardens." Remember, the base price of aluminum is 30% below pre-war!



**"Better Homes & Gardens" popular house No. 705**

...with brick siding and wood shingles, as originally presented. This Five Star Home has 7 rooms, 4 bedrooms. Design copyrighted. Reynolds has available a limited quantity of a special "BETTER HOMES & GARDENS" folder, showing floor plans and featuring aluminum in the list of materials. Write today to address below.



**NOW... build it better at less cost with REYNOLDS *Lifetime* ALUMINUM CLAPBOARD SIDING AND SHINGLES**

Get these advantages for no more money:  
**Fire-Proof ... Rust-Proof ... Rot-Proof ... Termite-Proof**  
 ... plus Radiant Heat Insulation

According to national averages compiled by a recognized authority,\* it would actually cost you less to build this house with Reynolds Lifetime Aluminum Shingles and painted Clapboard Siding than it would with stained wood shingles and the original brick siding. And look at all the advantages you get with aluminum!

Lifetime permanence... protection against fire, rust, rot and termites. And greater comfort... because aluminum reflects radiant

heat. In summer this roofing and siding throws off the sun load... won't store up heat... so your house stays cooler. In winter it reflects interior heat back from the roof and walls... so you keep warmer, with less fuel.

Note that the cost comparison made here includes painting your aluminum clapboard... cleaning, then primer coat and second coat. But you can eliminate this if you like... and save more money. Aluminum needs no paint. It weathers naturally to an attractive

grey-white... looks better year after year without any maintenance.

This modern roofing and siding is immediately available, in any quantity you need. So talk to your architect, your builder. They will like the way both clapboards and shingles fit together, self-aligning, weathertight, handsome. Show them this ad. Write for your booklet on House No. 705, as well as for detailed product literature. Address: Reynolds Metals Company, Building Products Division, Louisville 1, Kentucky.

\*Construction Survey Co., Architects Building, New York, N. Y.



**CONSULT YOUR LOCAL BUILDING SUPPLIES DEALER FOR IMMEDIATE DELIVERY**  
*Hundreds of millions of square feet already delivered*

ALUMINUM SHINGLES • CLAPBOARD SIDING • SHEET ROOFING AND SIDING • STUDS • TRUSSES • WINDOWS • GARAGE DOORS • REFLECTIVE INSULATION • UTILITY BUILDINGS • ALUMINUM HOUSES

*Compare The Advantages!*

**REYNOLDS *Lifetime* ALUMINUM BUILDING PRODUCTS**

For 100% performance use only the nails recommended by the manufacturer

# MIRACLE *in Peoria*

A HOUSING REALITY—  
NOT A HOUSING PLAN!

HUNDREDS OF MOR-SUN U-4-G GAS-FIRED FORCED  
AIR FURNACES SUPPLY HUNDREDS OF G. I. HOMES  
WITH YEAR ROUND INDOOR COMFORT!

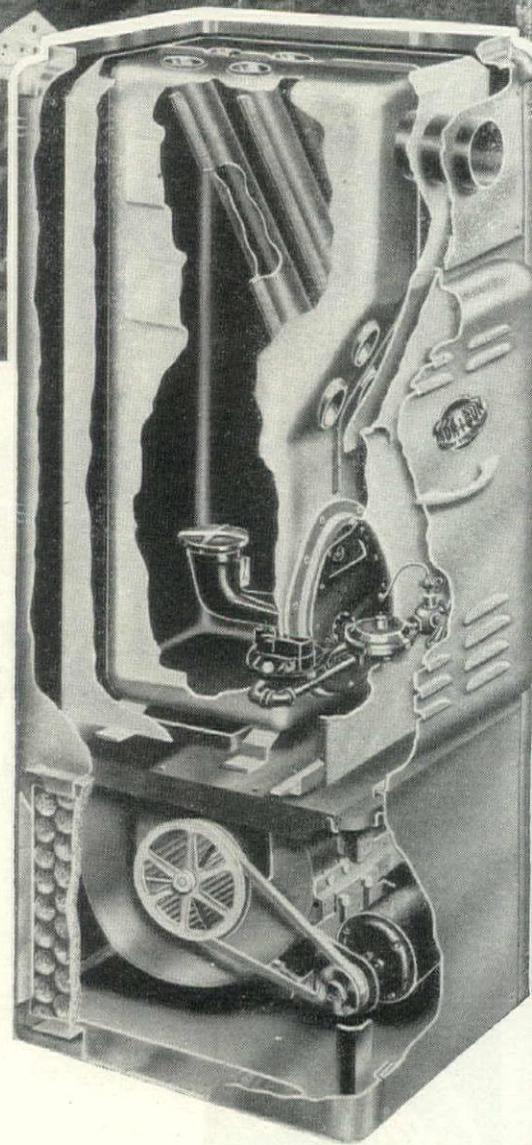


Hundreds of G.I. families are living in prefabs\* in Peoria—  
and every one is equipped with a MOR-SUN Heating System!

And what a system! With a house heat loss of 45,000 BTU's, the  
MOR-SUN packaged gas-fired blower furnace—with a capacity of  
72,000 BTU's—in a centrally located service room—took only three hours  
of two men's time\*\* to install (including the runs to the  
various rooms)!

Each of these hundreds of G.I. families has more than a heating plant—  
each has a MOR-SUN U-4-G\*\*\* that supplies year-round indoor comfort!

You Get MORE with a MOR-SUN!



\*General Contractors — Best Construction Co., Peoria

\*\*Heating Contractors — Lee Wagener Co., Peoria

\*\*\*MOR-SUN Midwest Sales Representative —

F. C. Evans, St. Louis



**MORRISON STEEL PRODUCTS, INC., BUFFALO 7, N. Y.**

"The Sun Never Sets with MOR-SUN"

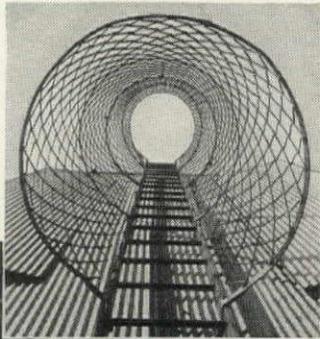
# SAFER every step of the way with

## WHEELING EXPANDED METAL

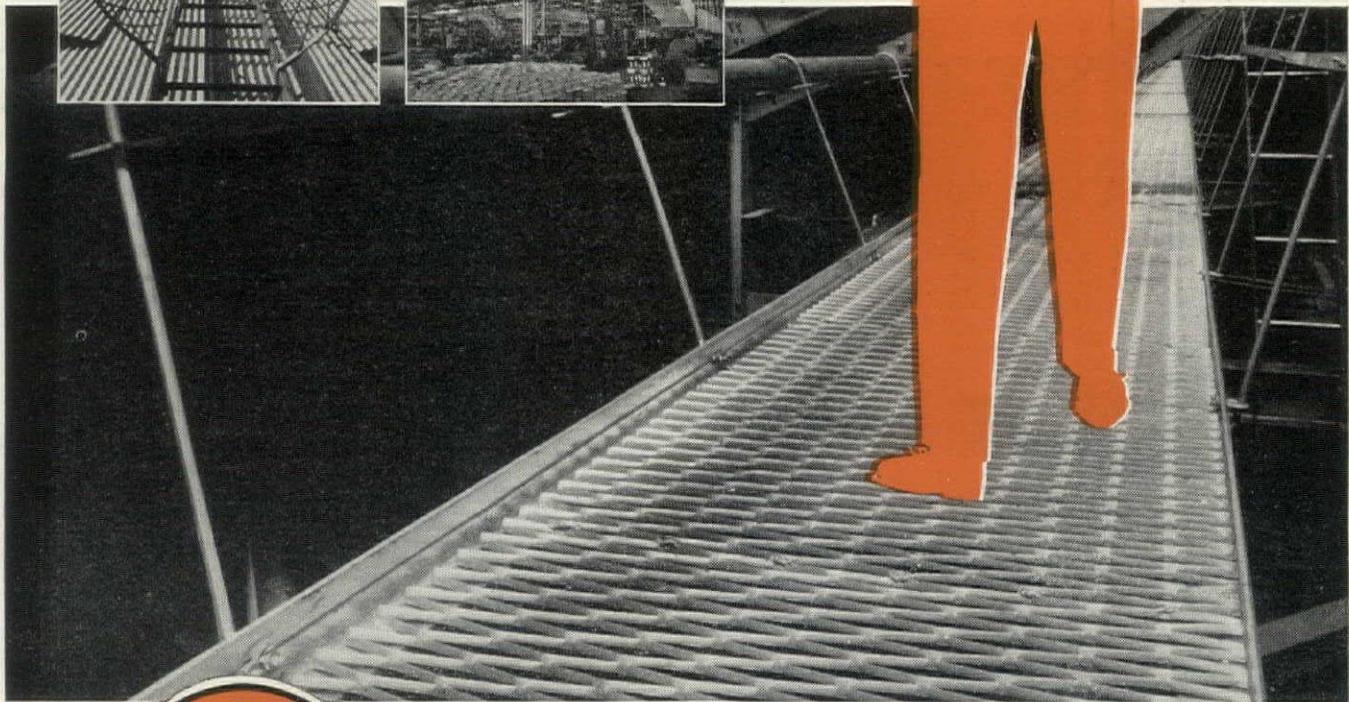
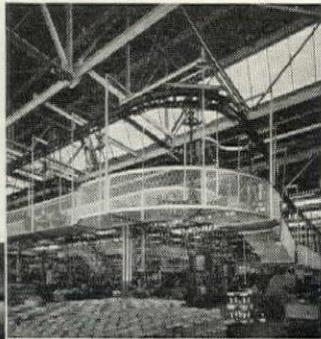
**T**HE criss-cross, non-slip design of Wheeling Expanded Metal is an important safety factor in walks and platforms. And the strength of this modern construction metal . . . *stronger than sheet metal of the same weight* . . . makes it perfect for hundreds of other around-the-plant uses.

Wheeling Expanded Metal contributes to plant safety, cleanliness and ventilation. Use it for machine guards, tool room enclosures, lockers, storage bins, sanitary shelving, drying racks, etc. Write us for information on the many weights and sizes available.

There's an added sense of security in a safety ladder guard using sturdy Wheeling ExM.



Wheeling ExM forms two sides and bottom of this inexpensive assembly line conveyor guard.

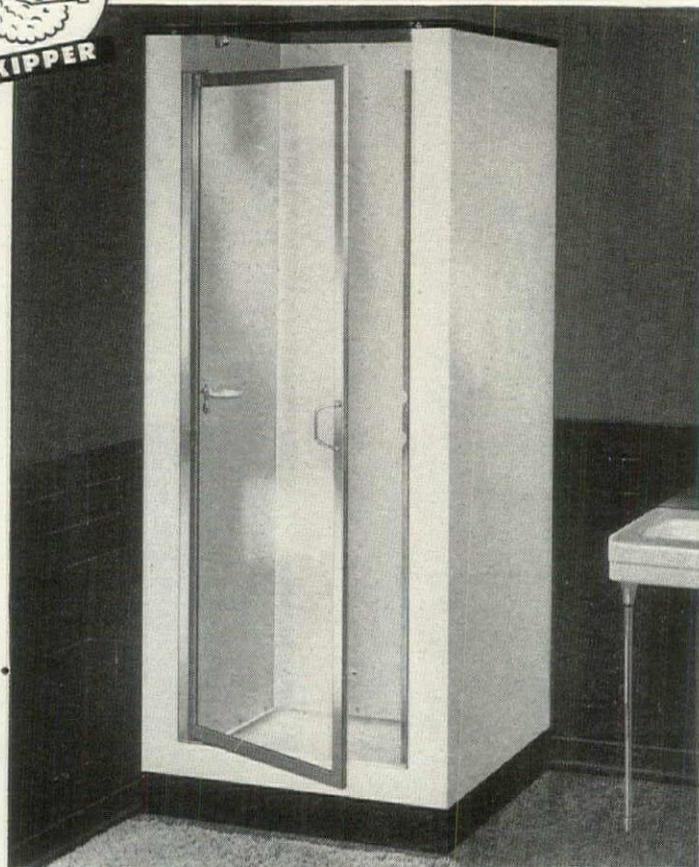


**WHEELING CORRUGATING COMPANY**  
**WHEELING, WEST VIRGINIA**

Atlanta • Boston • Buffalo • Chicago • Cleveland • Columbus • Detroit • Kansas City  
Louisville • Minneapolis • New Orleans • New York • Philadelphia • Pittsburgh • Richmond • St. Louis

# Skipper **SHOWER**

**WITH Fiat Low Door** Two popular low cost items combined to fill the demand for a quality glass door shower priced within a modest budget. A good glass door shower typifies a quality installation to most users and is a much-wanted feature by home owners. By installing this Skipper-Low Door combination, smart builders can add value and desirability to bathrooms far in excess of the small added cost over a shower with curtain.



## Specifications

### FIAT SKIPPER SHOWER

SIZE—32 x 32 x 76.

WALLS—BONDERIZED GALVANIZED STEEL. Finished inside and out with baked-on-synthetic enamel.

RECEPTOR—Semi-flat Stonetex; slip-proof, leak-proof, non-absorbent. Brass drain for 2" waste connection cast integral with receptor.

VALVES—Combination hot and cold compression valves with shower head and arm.

### FIAT LOW DOOR

FRAME—One-piece heavy aluminum alloy.

JAMB—Heavy aluminum alloy.

HINGE—Reversible. Can be installed right or left without special drilling.

CATCH—Bullet type.

HANDLE—Offset design on both sides.

FINISH—Satin.

SIZE—24" x 64" for opening 24" wide.

In Canada—Fiat showers are made in Canada by The Porcelain and Metal Products, Ltd., Orillia, Ontario

**Fiat** Metal Manufacturing Company

Long Island City 7, N. Y.

Chicago 13, Illinois

Los Angeles 33, California

**PREFABRICATED INSULATED PIPE.** Specification Data Engineers and Architects Ric-WiL Prefabricated Insulated Pipe Units. The Ric-WiL Co., 1572 Union Commerce Building, Cleveland, Ohio. 16 pp. 8½ in. x 11½ in.

Designed for practical use, this booklet of specifications on underground pipe distribution systems employing prefabricated insulated pipe conduit is a comprehensive compilation of data arranged in convenient tabular form. Typical information includes tables of dimensions for one or more conduits in one trench, tables of maximum conduit capacities for wrought iron and steel pipe sizes, and standard prefabricated expansion loop details. Loop dimensions expansion charts for both steel and wrought iron pipe are shown in convenient usable form. Construction details of Ric-WiL insulated pipe units and available accessories are also given.

**VOLTAGE CONTROL.** Superior Voltage Control, Bulletin #547. The Superior Electric Co., Bristol, Conn. 12 pp. 8½ in. x 11 in. Bulletin #547 on voltage control features the latest developments in Powerstat variable transformers and Stabiline automatic voltage regulators. It serves as a guide in selecting the correct Powerstat variable transformer to obtain continuous adjustable voltage from a.c. power lines, a Stabiline voltage regulator to maintain a constant output voltage from fluctuating lines, and test instruments for variable voltage testing. All information on the voltage control equipment is presented in concise, easily read form, is complete with ratings, performance and engineering data, drawings and photographs.

**ELEVATORS, ESCALATORS.** Analysis of Reported Accidents on Passenger and Freight Elevators and Moving Stairways. U. S. A. 1946. Otis Elevator Co., 260 11th Ave., New York. 12 pp. 8½ in. x 11 in.

This analysis, based on reports of passenger and freight elevator and moving stairway accidents in 1946, analyzes the accidents according to type of conveyance, degree of seriousness, location of injured at time of accident and probable cause. Statistical tables and comments adequately present the information. Results indicate that a large percentage of the accidents could have been materially reduced had the elevators been equipped with proper safety devices.

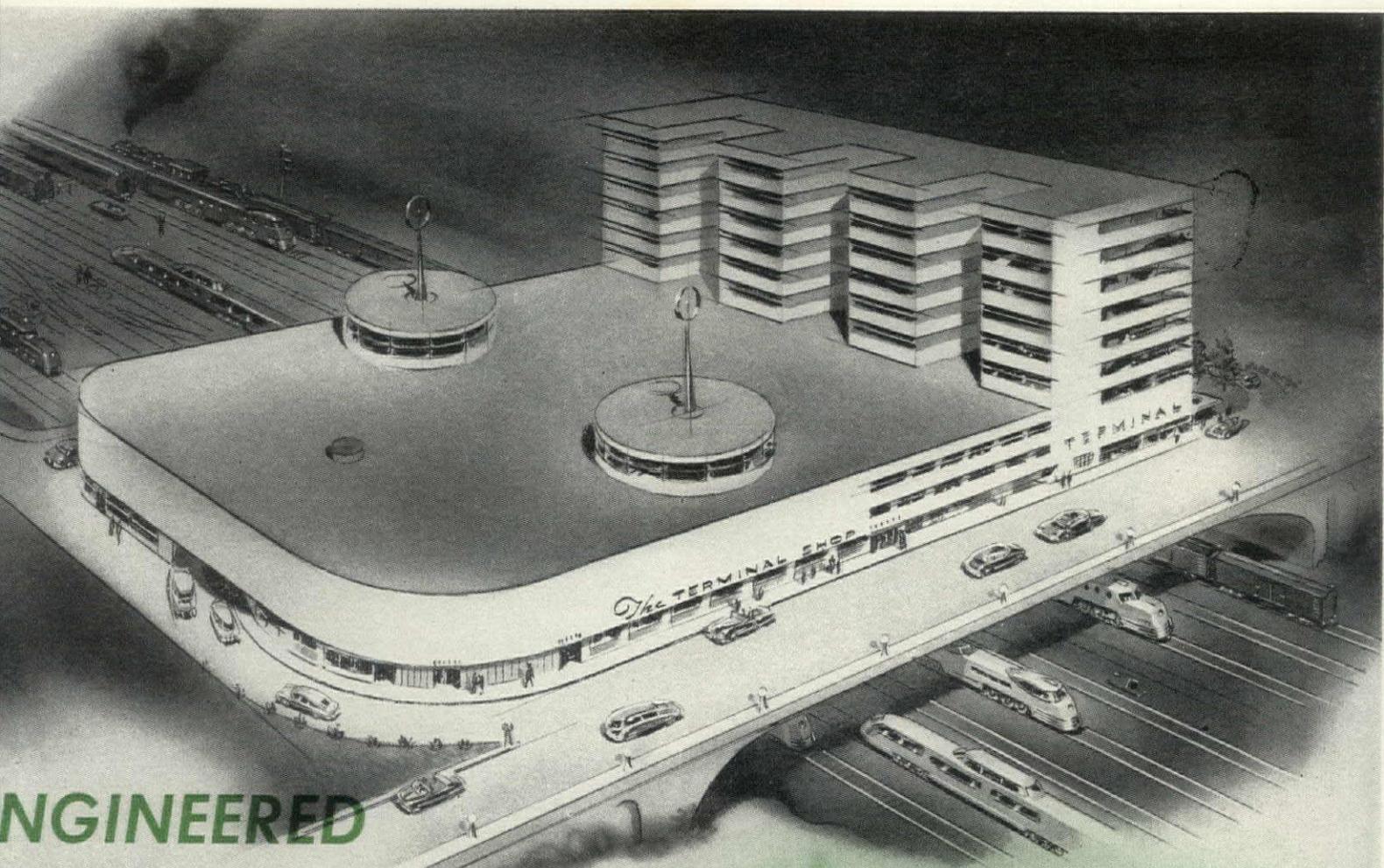
**METALS.** Rigidized Metals. Rigid-Tex Corp., 658 Ohio St., Buffalo, N. Y. 12 pp. 8½ in. x 11 in.

Rigidized Metal, a product of an exclusive design-strengthening and texturizing process that is applicable to both ferrous and non-ferrous sheet and strip, is described in this bulletin. The advantages, wide range of applications, mechanical properties, etc. are fully elaborated upon and illustrated.

**METAL TRIMS.** Builder's Guide For All Wallboard Materials. The B & T Metals Co., 425 W. Town St., Columbus, Ohio. 18 pp. 8½ in. x 11 in.

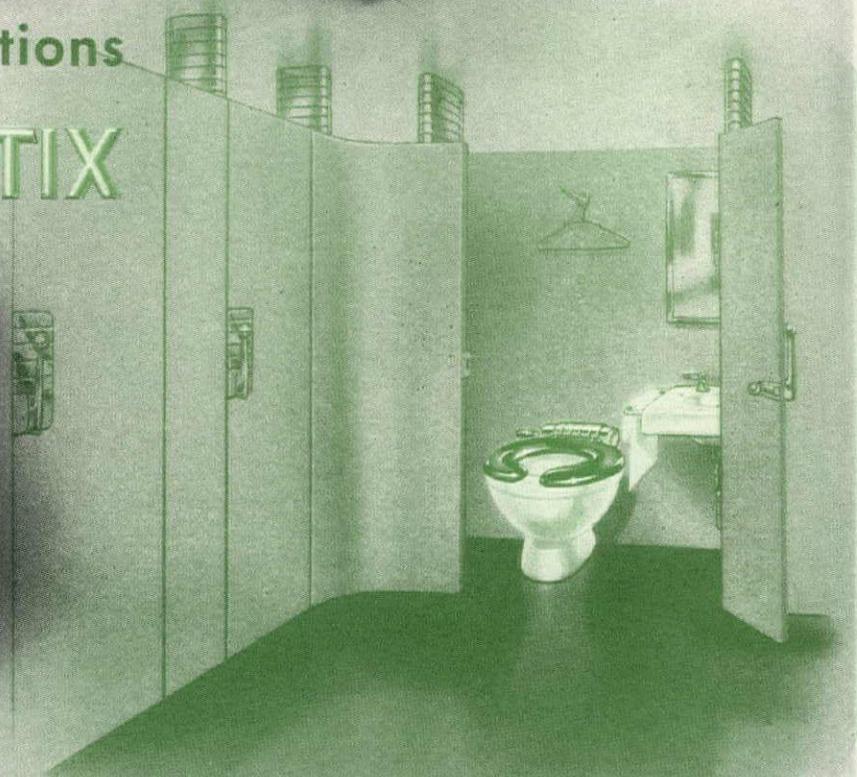
This Builder's Guide on Chromedge Metal Trims illustrates and describes a wide selection of decorative, extruded aluminum alloy and stainless steel trims for use with all types of wallboard materials. Beginning with a brief discussion of the advantages of Chromedge Metal Trims, the following pages are devoted to dimensioned details of various types of trim. A few of these include: binders; cap, corner and cove trim; divider bars; edgings; fittings; nosing; etc. Special sections cover matched sets of trims; sing-well frames; linoleum-inset trims; accessories, etc. Installation details showing use of Chromedge with wall and floor materials are also included.

(Continued on page 18)



**ENGINEERED**  
for Highest Sanitary Conditions  
**BENEKE PLASTIX**

Illustrated below  
Style 523-B Beneke Plastix Seat



**BENEKE CORPORATION**

Columbus, Mississippi, U.S.A. • Offices in Principal Cities



Sixth of a Series: The Crane Sunnyday Kitchen

a **Sunnyday**  
for home buyers

Home buyers brighten up at first sight of this new Crane Sunnyday Sink. Here is *beauty*—sparkling vitreous enamel that wipes clean in a flash. Here is *convenience*—an extra deep basin . . . two generous drainboards. And here is *Dial-ese*, the amazing Crane faucet that harnesses water pressure to aid in closing, yet opens at the barest touch of a finger!

Features like these carry through a wide range of Crane sinks, embracing a style for every taste

and a price for every building budget. And the quality that goes with them—always associated with this best-known name in plumbing—you'll find *that* kind of quality in beautiful Crane bathrooms, too. You'll see it again in heating, whether for hot water, steam, or warm air . . . for coal, coke, oil, or gas.

See the Crane line in the 1947 Sweet's Builders' File—or write us for a copy. For information on products and delivery, call your Crane Branch.



Approx. Size: 11' x 7' 6"

At left is the floor plan of the kitchen shown. Of course, the Crane Sunnyday Sink lends itself to smaller arrangements, too, as suggested in the two kitchens on the right.



Approx. Size: 8' x 10' 6"



Approx. Size: 9' x 8' 7 1/2"

# CRANE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

CRANE CO., GENERAL OFFICES:  
836 S. MICHIGAN AVE., CHICAGO 5

PLUMBING AND HEATING  
VALVES • FITTINGS • PIPE

# When your plans include an ORGAN INSTALLATION...

*You'll find this Reference Manual most helpful and informative. A copy is yours for the asking!*

A 16-page brochure covering features you must look for in any organ you specify; organ nomenclature; American Guild of Organists' playing specifications; relationship of tone, space and cost; acoustics; pipe organ vs. electronic organ; essential and auxiliary equipment; installation requirements and techniques.



consider the **TONE FACTOR** as majestically portrayed by the

**WURLITZER ORGAN**

*Series 20 Two Manual*

● For many centuries, profound music has found its highest expression in the organ. Yet for reasons involving space and cost the widespread installation of organs has been greatly limited. It remained for the Wurlitzer Organ, by wedding the science of electronics to principles which are the basis of pipe organ tone production, to bring the majesty of traditional organ music within the reach of all.

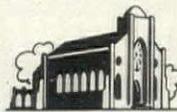
The source of tone in the Wurlitzer Organ is the wind-activated free reed, producing a richly varied wealth of electrical impulses. Electronics then select, modify and translate these impulses into perfectly proportioned organ voices, without the use of space-consuming blowers, organ chambers, relay rooms, huge pipes and the like. Thus, the Wurlitzer Organ performs as a pipe organ but, in keeping with modern engineering standards, it does so with amazing economies in both space and cost.

Architects are learning that with the Wurlitzer Organ they can interpret these economies in terms of extra facilities within the building and faster acceptance of their plans.

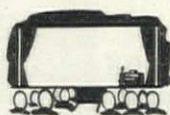
Organ Division

THE RUDOLPH WURLITZER CO.  
North Tonawanda, New York.

SPECIFY WITH CONFIDENCE THE  
WURLITZER ORGAN IN...



churches • chapels • mortuaries



concert halls • homes • universities



schools • hospitals • institutions

THE RUDOLPH WURLITZER CO  
N. Tonawanda N. Y., Dept. FO9.

Gentlemen:

Please send me, without obligation, your 16-page Reference Manual... "Important Facts On Organs And Their Installation."

Name.....

Company.....

Address.....

City..... Zone..... State.....

## TECHNICAL LITERATURE

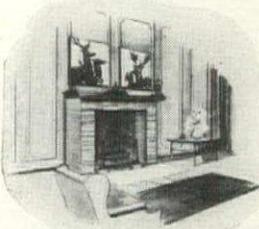
### FINE WLS WOOD CARVINGS

*Again Available!*

- BEAUTIFULLY DECORATIVE
- FOR HOME SETTINGS OR STORE INTERIORS
- A LARGE GROUP OF DESIGNS FOR YOUR SELECTION



This newest series of plaques carries on the world famous WLS tradition for fine wood carvings. Exquisite designs are carved of richly grained solid walnut woods, in deep half relief and mounted onto a 3/4" thick, 14 ply light oak plaque, 24" square with edges beveled and finished in gold. They blend with and enrich any setting. Ageless, like the works of the masters, you will use them with pride as a symbol of quality, in windows, departmental displays and home settings. Order now!



#### CHOICE OF 6 DESIGNS

G-909 MOOSE HEAD (Illustrated) G-908 HORSE HEADS  
G-910 DEER HEADS G-906 WOOD DUCKS  
G-905 FLYING DUCKS G-907 ARABIAN HORSE HEADS  
Complete with fittings and wire for hanging. Each, Only \$57.50  
Savings on purchase of four or more.

FREE! Giant size catalog illustrating 250 designs and props, 100 "How to Use" Suggestions, for store window and interior decoration. Send for your copy today.



**W. L. STENSGAARD AND ASSOCIATES, INC.**

371 N. JUSTINE ST., CHICAGO 7, ILL.

America's Largest Organization Specializing in Merchandising Presentation

## Low-cost Garbage and Rubbish Disposal FOR EVERY HOME

### Taps to Flue in BASEMENT or UTILITY ROOM

"Self-burning action" and low cost win quick approval for this easy-to-install incinerator—especially where automatic heating prevents rubbish-burning in the furnace! Burns wet or dry garbage and rubbish; down-draft action dries the waste constantly. Contents need be ignited only when unit is filled (approx. 3 bu.); ashes removed only a few times each year. Unit is only 2 feet in diameter, less than 3 feet high! Uses any 8-inch flue; will not affect heating-plant efficiency if tapped to furnace flue. Silver-and-blue duotone finish! Write for details!

**The Majestic Co.**  
833 Erie Street  
HUNTINGTON, INDIANA

### Majestic No. 30 FUELLESS HOME INCINERATOR



Nationally Advertised Home Necessities for Over 40 Years.

#### REQUESTS FOR INFORMATION

ALEX M. BARCLAY, architectural student, 27 Barnes Ave., Dundee, Scotland, requests information on store fittings.

R. L. HORINE, architectural student, 201 16th Ave., Columbus 1, Ohio, requests information on materials and equipment applicable to modern homes, particularly lighting.

CLAUDE SENNEVILLE, civil engineer, 3074 Lacombe Ave., Montreal 26, Quebec, Canada, requests information and literature on log-cabin construction.

#### REQUESTS FOR LITERATURE

DAVID A. CASTRO, 8a. Calle Poniente #6, San Salvador, El Salvador, Central America.

RAY C. CLAYTON, architectural student, 544 Harrison St., Fresno, California.

DIRECCIÓN GENERAL DE OBRAS PÚBLICAS, (Architectural Dept.) San Salvador, El Salvador, Central America.

FUGARD, OLSEN, URBAIN & NEILER, architects, engineers and appraisers, 19 South La Salle St., Chicago, Ill.

JOHN H. LARSON, architectural student, 5820 Fordham St., Houston 5, Tex.

OFFICE OF THE DIRECTOR, University of Minnesota, The University Gallery, Minneapolis 14, Minn.

WALTER L. ROBERTS AND ASSOCIATES, architectural and engineering construction, 207 Florida Ave., N.W., Washington, D. C.

C. J. RYLAND, architect, Monterey, Calif.

ROY M. SCHOENBROD, architect & engineer, 8 S. Dearborn St., Chicago, Ill.

How an important new "tool" can be applied to your heating, cooling and drying problems

## HEAT PUMPS

By PHILIP SPORN, Executive Vice-President and Chief Engineer, American Gas and Electric Service Corporation; E. R. AMBROSE, Air Conditioning Engineer, American Gas and Electric Service Corporation; and THEODORE BAUMEISTER, Consulting Engineer, American Gas and Electric Service Corporation, and Professor of Mechanical Engineering, Columbia University.

Here is a complete, authoritative volume which offers an easily understood technical treatment of the development of the heat pump, and the progress made in adapting it not only to building heating and cooling service, but also to such industrial processes as the evaporation and purification of liquids, the drying of solids, and the simultaneous chilling and heating of process fuels. The book contains practical questions and data which those concerned with the development and use of this important new tool want to know now.

1947 188 Pages \$3.75



FREE EXAMINATION COUPON

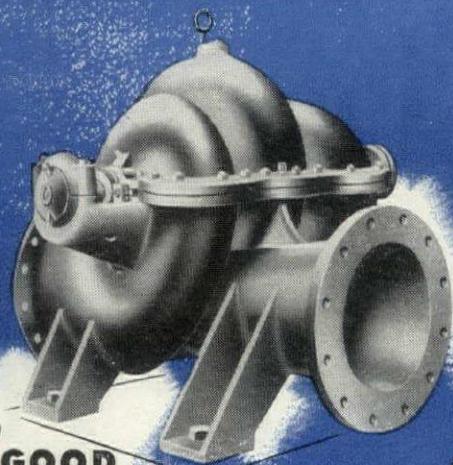
AF-9-47

JOHN WILEY & SONS, INC.  
440 Fourth Ave., New York 16, N. Y.

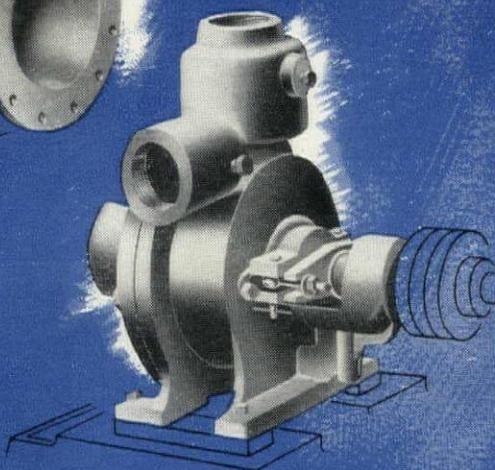
Please send me, for ten days' free examination, a copy of Sporn-Ambrose-Baumeister's HEAT PUMPS. If I desire to keep the book, I will remit \$3.75 plus postage; otherwise I will return the book postpaid.

Name .....  
Address .....  
City ..... State .....  
Employed by .....

(Offer not valid outside U.S.)



**F-M Centrifugal Pumps:** Double-suction, side-suction, multi-stage, angle-flow, vertical—all types, modifications and sizes



**Westco Turbine Pumps:** Precision-built, with renewable liners: for high head pumping of wide variety of liquids

## WHAT MAKES A GOOD PUMP DEALER?

A pump dealer is as good as the line he sells, and the facilities he maintains for servicing his customers' pumps.

You look to a good dealer for a broad line of pumps—with so many types and sizes that he can give you unprejudiced advice...

You look to a good dealer for the benefits of a service organization that's ready and able to solve your pumping problems at the drop of a hat...

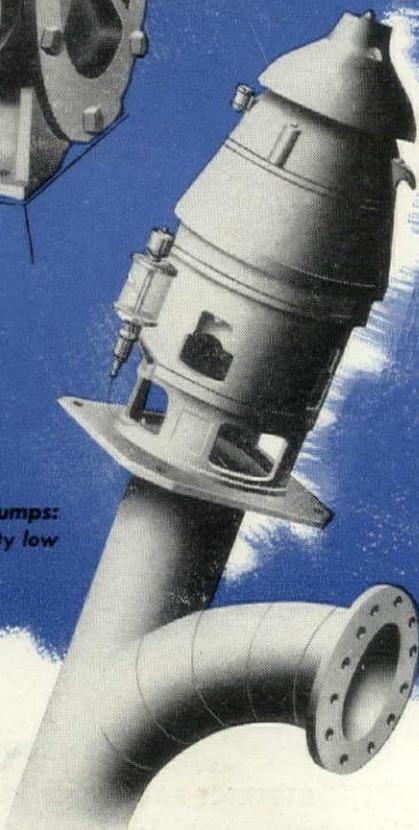
That's why so many pump buyers think of their Fairbanks-Morse dealers as the best in the business.



**F-M Rotary Pumps:** Simple, low cost units for general, wide application. Sizes from 3/8" to 5"



**F-M Pomona Deepwell Turbines:** Oil or water-lubricated: with open or closed impellers, as your job requires



**F-M Propeller Pumps:** For large capacity low head service

# FAIRBANKS-MORSE



**A name worth remembering**

DIESEL LOCOMOTIVES • DIESEL ENGINES • PUMPS • SCALES • MOTORS • GENERATORS • STOKERS • RAILROAD MOTOR CARS and STANDPIPES • FARM EQUIPMENT • MAGNETOS

# DO YOUR ROOFS HELP YOU SELL HOMES?



"Ruffled" shingles on a finished house are an eyesore and headache to all concerned. No danger of this disfiguring, sales-spoiling incident when Tite-On Shingles are used. These windproof shingles go on flat—stay that way because they're *locked down!*

Tite-Ons' basket-weave pattern, versatility of colors and blends, are valuable added factors in giving varied charm and eye-appeal to multi-home developments. Tite-On Shingles make roofs that are selling features—not liabilities!

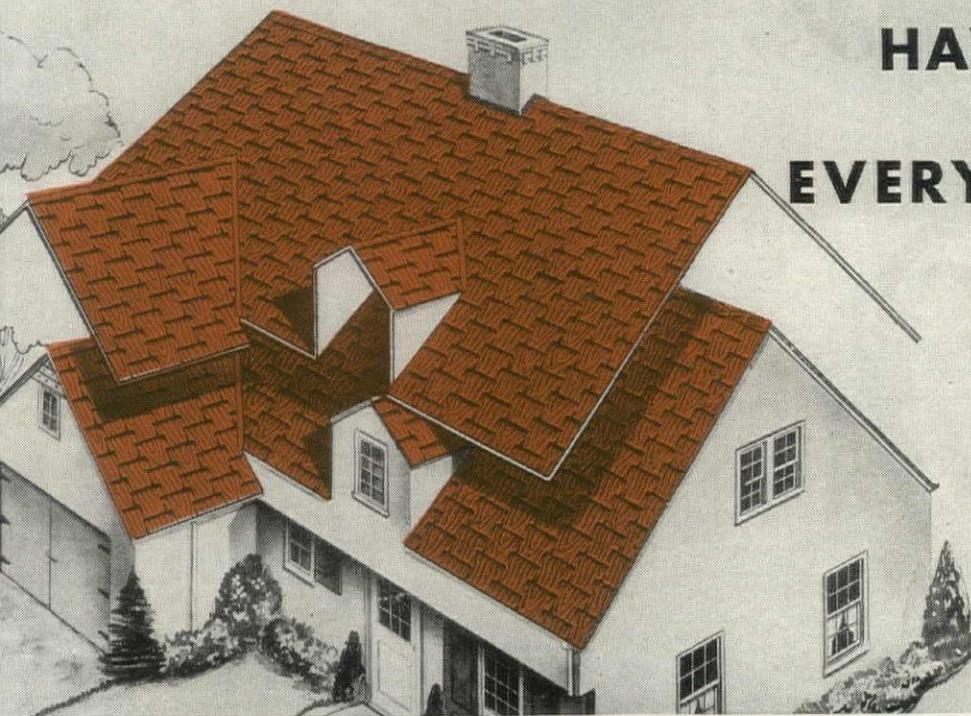
The **RUBEROID** Co.

**Executive Offices: 500 Fifth Ave., New York 18, N. Y.**

**DISTRICT SALES AND PLANT OFFICES:** Baltimore, Md. • Chicago, Ill. • Dallas, Texas • Erie, Pa. • Millis, Minneapolis, Minn. • Mobile, Ala. • New York, N. Y. • Bound Brook, N. J. • Gloucester, N. J. • Joliet, Ill. • St. Lou

# THESE *NEW SHINGLES*

HAVE  
EVERYTHING!



## EXCLUSIVE!

Concealed interlocking firmly links Tite-On Shingles into a "one-piece" roof. Hidden nails at four points securely anchor each shingle. No metal strips, holding gadgets, or exposed nails to rust away!

**Complete Double Coverage • Wind- and Weather-proof Protection**  
**Modified "American" Shadow-lines • Popular Colors and Blends**

List everything desirable in a roof—then check—the new *Dubl-Coverage Tite-On Shingles* have them all!

Ingeniously designed to interlock and interweave, these unique shingles form a roof that's virtually "one-piece." The worst storms don't blow Tite-Ons off or start them flapping! In addition, *Dubl-Coverage Tite-On Shingles* give you complete double coverage—two layers right over the entire roof area. Don't forget, these shingles are fire-resistant, as well. Add it all up—windproof, weatherproof, extra durable, fire-resistant—Tite-Ons mean real freedom from roof worries and expensive maintenance costs!

From an appearance standpoint, *Dubl-Coverage Tite-Ons* are just as outstanding. You have a choice

of rich colors and handsome blends. The smart basket-weave pattern adds to the attractiveness of any building, and the shadow lines have that clean-cut, "American" simplicity that's so popular with everyone.

The exclusive features of *Dubl-Coverage Tite-Ons* . . . made only by Ruberoid . . . cannot be duplicated in any other shingle!

For new construction, these *Dubl-Coverage Tite-Ons* give the maximum in protection, distinctive appearance and trouble-free service.

For re-roofing, Standard Tite-Ons are available. They provide the same interlocking windproof protection, but without full double coverage. They are designed specially for application over old roofs at a savings in cost.

MADE ONLY BY

**RUBEROID**

***DUBL-COVERAGE TITE-ONS***



Permission Peter Arno  
©The New Yorker Magazine, Inc.

**PUZZLE:** *Station Scene, 1957. Find the man who is getting a steady income from U.S. Savings Bonds. He was smart enough to start buying, back in 1947.*

Of all the ways of saving up a tidy sum of money, one of the *easiest* and *safest* ways is to invest your money in U. S. Bonds.

You can buy Bonds either through the Payroll Savings Plan at your place of business—or if the Payroll Plan is not

available to you, but you *do* have a checking account, through the Bond-a-Month Plan at your local bank.

Both ways repay you \$4 for every \$3 you save, by the time your Bonds mature. Choose the sum you can afford from the chart on the right. Start saving today!

Save each week	AND YOU WILL HAVE		
	In 1 Year	in 5 Years	In 10 Years
\$2.50	\$130.00	\$668.97	\$1,440.84
3.75	195.00	1,004.20	2,163.45
7.50	390.00	2,009.02	4,329.02
12.50	650.00	3,348.95	7,217.20
18.75	975.00	5,024.24	10,828.74

**Save the easy, automatic way ... with U.S. Savings Bonds**

Contributed by this magazine

in co-operation with the Magazine Publishers of America as a public service.



# Roddiscraft

*The architect's door and plywood*



## Identified with architects for 50 years

Roddiscraft quality has been recognized by the architectural profession for more than fifty years. The Roddiscraft hardwood doors and plywood installed in buildings from coast to coast in accordance with architects specifications is a testimony to the reputation of Roddiscraft.

Roddiscraft has earned its reputation — by putting quality first — by never permitting production needs to become paramount.

Today's Roddiscraft solid core flush veneer doors and hardwood plywood are still a craftsman's product—a blending of fine workmanship and fine materials.

Remember — Roddiscraft beauty is more than veneer deep.

## Roddiscraft

*Roddis Lumber & Veneer Co.*

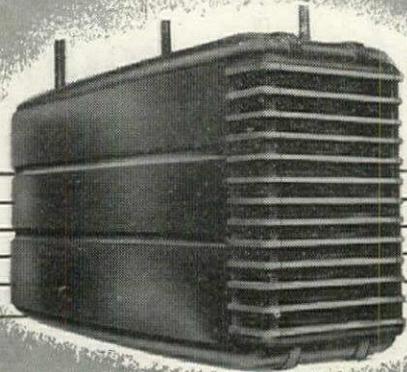
MARSHFIELD, WISCONSIN

### Nationwide Roddiscraft Warehouse Service

Cambridge 39, Mass. . . . . 229 Vassar St.	Long Island City, New York . . . . .
Chicago 8, Ill. . . . . 1440 W. Cermak Road	Review & Greenpoint Ave.
Cincinnati 2, Ohio . . . . . 457 E. Sixth St.	Los Angeles 11, Calif. . . . . 2860 E. 54th St.
Dallas 10, Texas . . . . . 2800 Medill St.	Marshfield, Wis. . . . . 115 S. Palmetto St.
Detroit, Mich. . . . . 11855 E. Jefferson Ave.	Milwaukee 8, Wis. . . . . 4601 W. State St.
Kansas City 8, Mo. . . . . 2729 S. W. Blvd.	New York City, N. Y. . . . . 920 E. 149th St.
Louisville 10, Ky. . . . . 1201-5 S. 15th St.	San Antonio, Texas . . . . . 727 N. Cherry St.

DEALERS IN ALL PRINCIPAL CITIES

# New FUNCTIONAL Beauty



...for Stores, Industrial and Public Buildings...

Modern functional styling is now carried from today's architecture and decoration right into heating equipment. Appropriate in appearance and performance for every type of industrial and commercial gas heating. With fan and controls fully enclosed, the Pacific gas-fired Suspended Heater is completely streamlined.

Embodying the finest materials and the most efficient design yet created, it combines a heavy duty fan with Pacific's exclusive Thermo-flo heating element. The Suspended Heater directs an effective warm-air stream to a surprisingly large area. It requires no pipes, no boilers, no complicated plant nor installation.

Write for catalog (soon off the press) and name of your nearest dealer-contractor for Pacific's Suspended Heater.



**PACIFIC HEATER DIVISION**  
NACO MANUFACTURING CO.

P. O. BOX 310 • HUNTINGTON PARK, CALIF.



# SPECIFICATION A

The advertising pages of FORUM are the recognized market place for those engaged in building. A house or any building could be built, completely of products advertised in THE FORUM. While it is not possible to certify building products, it is possible to open these pages only to those manufacturers whose reputation merits confidence. This FORUM does.

- Adams and Westlake Co., The .....
- Alberene Stone Corp. ....
- Allied Chemical & Dye Corporation (The Barrett Division) .....
- Aluminum Co. of America .....
- American Central America (The Aviation Corp.) .....
- American Lumber & Treating Co. ....
- American Radiator & Standard Sanitary Corp. ....
- American Rolling Mill Co., The .....
- American Stove Co. ....
- American Telephone & Telegraph Co. ....
- Anchor Post Products, Inc. ....
- Andersen Corporation .....
- Aviation Corp., The .....
- B & T Metals Co., The .....
- Barrett Division, The (Allied Chemical & Dye Corporation) .....
- Bathe-Rite Division (Milwaukee Stamping Company) .....
- Bell & Gossett Co. ....
- Bendix Home Appliances, Inc. ....
- Beneke Corp. ....
- Better Homes & Gardens .....
- Borg-Warner Corp. (Ingersoll Steel Division) .....
- Borg-Warner Corp. (Norge Division) .....
- Bradley Washfountain Co. ....
- Briggs Manufacturing Co. ....
- Burnham Boiler Corp. ....
- Cambridge Tile Manufacturing Co., The .....
- Carbide and Carbon Chemicals Corp. (Pyrofax Gas Div.) .....
- Carey, Philip, Co., The .....
- Carr, Adams & Collier Co., Inc. ....
- Carrier Corp. ....
- Case, W. A., & Son Manufacturing Co. ....
- Ceco Steel Products Corp. ....
- Celotex Corp., The .....
- Committee on Steel Pipe Research (Amer. Iron & Steel Institute) .....
- Corry-Jamestown Manufacturing Corp. ....
- Crane Co. ....
- Curtis Companies .....
- Detroit Steel Products Co. ....
- Devoe & Reynolds Co., Inc. ....
- Douglas Fir Plywood Association .....
- Eagle-Picher Lead Co., The .....
- Eljer Co. ....
- Emerson Electric Manufacturing Co., The .....
- Facing Tile Institute .....
- Fairbanks-Morse .....
- Fiat Metal Mfg. Co. ....
- Fir Door Institute .....
- Firestone .....
- Formica Insulation Co., The .....
- Forum, The Architectural .....
- General Electric Co. ....
- Grand Rapids Hardware Co. ....
- Hall-Mack Co. ....
- Hendrick Manufacturing Co. ....
- Hoffman Specialty Co., Inc. ....
- Horton Manufacturing, The (Division—The Aviation Corp.) .....
- Hotpoint, Inc. ....
- Hunter Douglas Corp. ....
- ILG Electric Ventilating Co. ....
- Ingersoll Steel Division (Borg-Warner Corp.) .....
- Insulite Co., The .....
- J. G. Furniture Co., Inc. ....
- Johns-Manville .....
- Johnson, S. T., Co. ....
- Just Manufacturing Co. ....
- Kelvinator .....
- Kennedy, David E., Inc. ....
- Kewanee Boiler Corp. ....
- Kimberly-Clark Corp. ....
- Kinthead Industries .....
- Kohler Co. ....
- Leader Electric Manufacturing Corp. ....
- Libbey-Owens-Ford Glass Co. ....
- Lith-I-Bar Co. ....
- Louisville Cement Co., Inc. ....

# YING INDEX

stic Co., The	186
h Wall Products, Inc.	73
nite Corp.	69
c Tile Corp. of America	172
ay, Inc.	177
sa Portland Cement Co.	62
er Bros.	55
r Furnace Co., The	193
r Steel Co.	151
aukee Stamping Company ( <i>Bathe-Rite Division</i> )	66
neapolis-Honeywell Regulator Co.	173
ne Manufacturing Co.	146
oe, Lederer & Taussig, Inc.	74
ison Steel Products, Inc.	180
er. L. J., Furnace Co.	175
Manufacturing Co.	192
nal Cotton Council of America	74
nal Electrical Manufacturers Assoc.	28, 29
nal Gypsum Co.	137
nal Lead Co.	163
e Division ( <i>Borg-Warner Corp.</i> )	57
n Co.	148
en Varnish Co.	6
Elevator Co.	138
head Door Corp.	Cover IV
as-Corning Fiberglas Corp.	123
as-Illinois Glass Co.	51
e Lumber Co.	130
fine Companies, Inc., The	174
erthy Injector Co.	41
ction Stove Co.	37
anente Products Co.	147
burgh Corning Corp.	143
burgh Plate Glass Co.	38, 39, Opp. 57
and Cement Association	176
& Lambert, Inc.	50
ile Manufacturing Co.	56
ax Gas Div. ( <i>Carbide and Carbon Chemicals Corp.</i> )	144
don Co., The	154
re Copper and Brass, Inc.	76
olds Metals Co.	40, 179
ntson, H. H. Co.	21
is Lumber & Veneer Co.	191
e Manufacturing Co.	121
roid Co., The	188, 189
ell, The F. C., Co.	28
rday Evening Post, The	53
rcel Porcelain Metals, Inc.	170
l, Inc.	Bet. 56, 57
kraft Co., The	49
n Valve Co.	132
n, A. O., Corp.	194
eborn Sons, Inc., L.	152
Manufacturing Co.	24
kler Manufacturing Co.	22
kman Co.	54
sgaard, W. L., and Associates, Inc.	186
atural Clay Products Institute	63
ish Crucible Steel Co.	174
or, Halsey W., Co., The	148
or Manufacturing Co.	124
	169
e Co., The	128
on Steel Co.	67
ed States Gypsum Co.	157
ed States Plywood Corp.	45, 155, 178
ed States Rubber Co.	25
ed States Savings Bonds	190
ed Wallpaper, Inc.	161
ersity of Sydney, Australia	174
en, Kurt	70
or Electric Products, Inc.	32
orth Co.	27
ster, Warren, & Co.	24
, Henry, Mfg. Co., Inc.	162
inghouse Electric Corp.	34, 35, 167
eling Corrugating Co.	181
y, John & Sons, Inc.	186
d Conversion Co.	153
itzer, Rudolph, Co., The	185
Corp.	7
g Radiator Co.	36

**Weir-Meyer  
equipment offers  
all types for  
all fuels**

**GAS**   
**OIL**   
**COAL** 

Specify Weir-Meyer  
confidently for any fuel.  
It's dependable. It's modern.  
New ease of installation. Finer  
performance—lasting  
economy. For residential,  
commercial, industrial use.

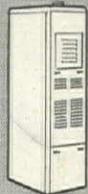
**for homes  
with  or  
 without  
basements**

Weir-Meyer offers  
custom-fitted equipment for  
every need. Gives exclusive  
improvements you'll want  
to utilize.

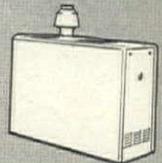
**WRITE**  
Send for descriptive  
literature and performance  
data on the complete  
Weir-Meyer line.

**Weir-Meyer means modern heat**

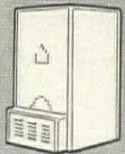
**THE MEYER FURNACE COMPANY**  
Weir-Meyer Furnaces & Air Conditioners for GAS, OIL, COAL  
Offices: Peoria 2, Ill. • Factories: Peoria 2, Ill. and Peru, Ill.



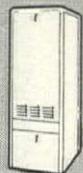
Gas-fired Hi-boy



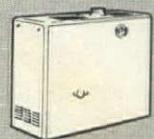
Gas-fired Air Conditioner



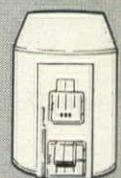
Gas-fired Gravity



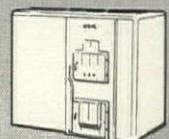
Oil-fired Hi-boy



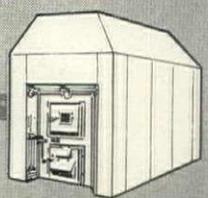
Oil-fired Air Conditioner



Weir Steel furnace



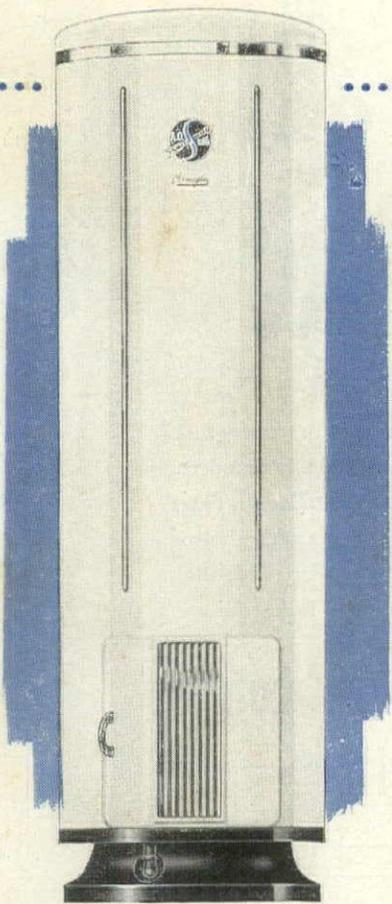
Coal-fired Air Conditioner



Industrial & commercial  
heating equipment



More of your clients make this  
**NEW DISCOVERY**  
 about Hot Water — every day!



Gas, LP Gas, and Electric

**Permaglas** SMITHway  
 WATER HEATERS

TRADE MARK REG. U. S. PAT. OFF.

**CANNOT RUST OR CORRODE**

No wonder *Permaglas* Water Heaters are so popular! Thousands of home owners have discovered that it is actually cheaper to install the right kind of automatic water heater at the first . . . and avoid costly and troublesome replacements.

In your own community, thousands more home planners and home owners are reading and hearing the "*Permaglas*" story every day. In leading popular magazines, in the trade press, and in publications circulated throughout Latin America, the most extensive advertising program in water-heater history is pre-

selling this new kind of hot-water convenience.

Your clients know that the *Permaglas* Water Heater has the long-life tank of glass-fused-to-steel. They know that under *any* water condition it CANNOT rust or corrode . . . that it ends tank rust and corrosion stain . . . that it CAN'T rust out!

Specify the "*Permaglas*" for clean, hot water—for the completely satisfactory house.

Send today for the details your clients will want to know. Use the coupon below.



A. O. Smith Research and Engineering Building, Milwaukee



**A. O. SMITH**  
 Corporation

A. O. SMITH CORP. Name \_\_\_\_\_  
 Dept. AF-947 Firm \_\_\_\_\_  
 Milwaukee 1, Wis. Street \_\_\_\_\_  
 Send me "The Inside Story of Permaglas." No obligation, of course! City \_\_\_\_\_ State \_\_\_\_\_

New York 17 • Atlanta 3 • Chicago 4 • Houston 2 • Seattle 1 • Los Angeles 14 • International Division: Milwaukee 1 • Licensee in Canada: John Inglis Co., Ltd.

Manufacturers also of the famous *Duraclad* Automatic Storage Water Heaters—zinc-lined for economy and dependable service

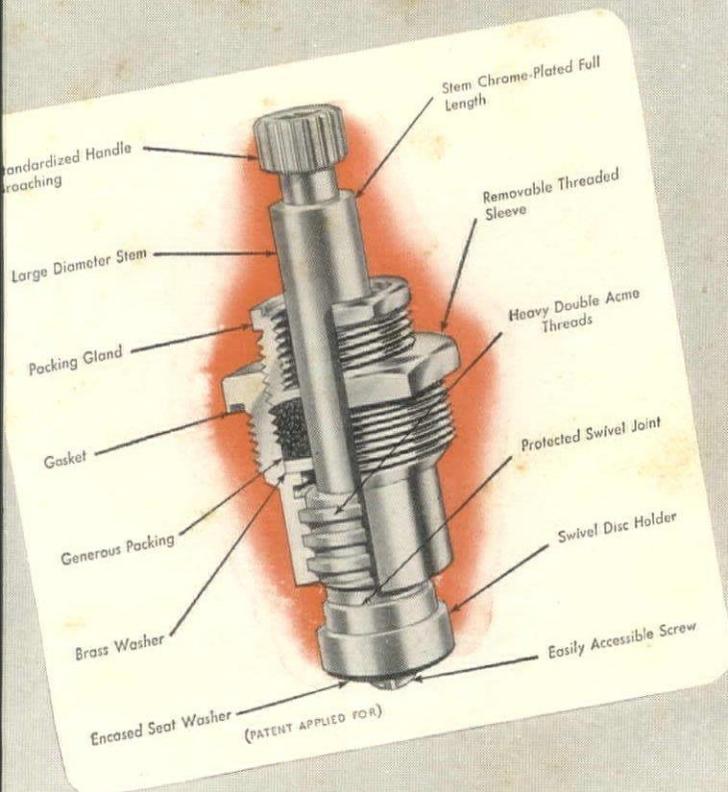
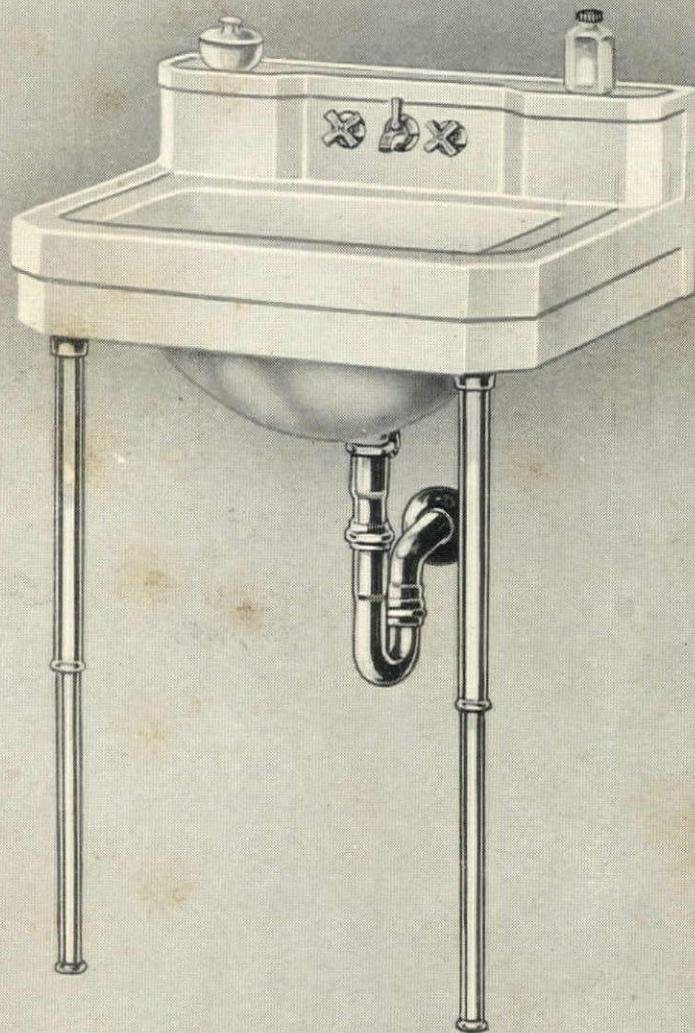
# The Martha Washington

by ELJER

The styling and high-quality features of Eljer vitreous china lavatories enable architects, builders and master plumbers to give customers *extra values* they recognize and appreciate.

Consider, for example, these features of the Martha Washington shelf-back Lavatory (Catalog No. 3150P). . . . real vitreous china . . . a lustrous finish, impervious to stains and not affected by ordinary acids . . . concealed front overflow outlet with a smooth, unbroken back surface . . . anti-splash rim . . . chromium-plated 2-step legs . . . chromium-plated combination supply and pop-up waste fitting . . . ideally adaptable to single or multiple installation . . . long life . . . now being furnished in three colors and white.

**REMEMBER: Adequate Housing Will Eventually Mean At Least Two Bathrooms In Every Home.**



Eljer fixtures are available with quality *renewable brass fittings* . . . featuring the exclusive Eljer Swivel-Disc that virtually eliminates dripping. Faucets operate smoothly at the touch of a finger and wear on moving parts is reduced to a minimum.

Eljer's line of brass goods is a precision line, accurately gauged and can have no variations over the years. This is a standardized and simplified line . . . with a minimum number of interchangeable wearing parts to give long and satisfactory service . . . easily replaceable if ever necessary. *Eljer Co., General Offices, Ford City, Pennsylvania.*

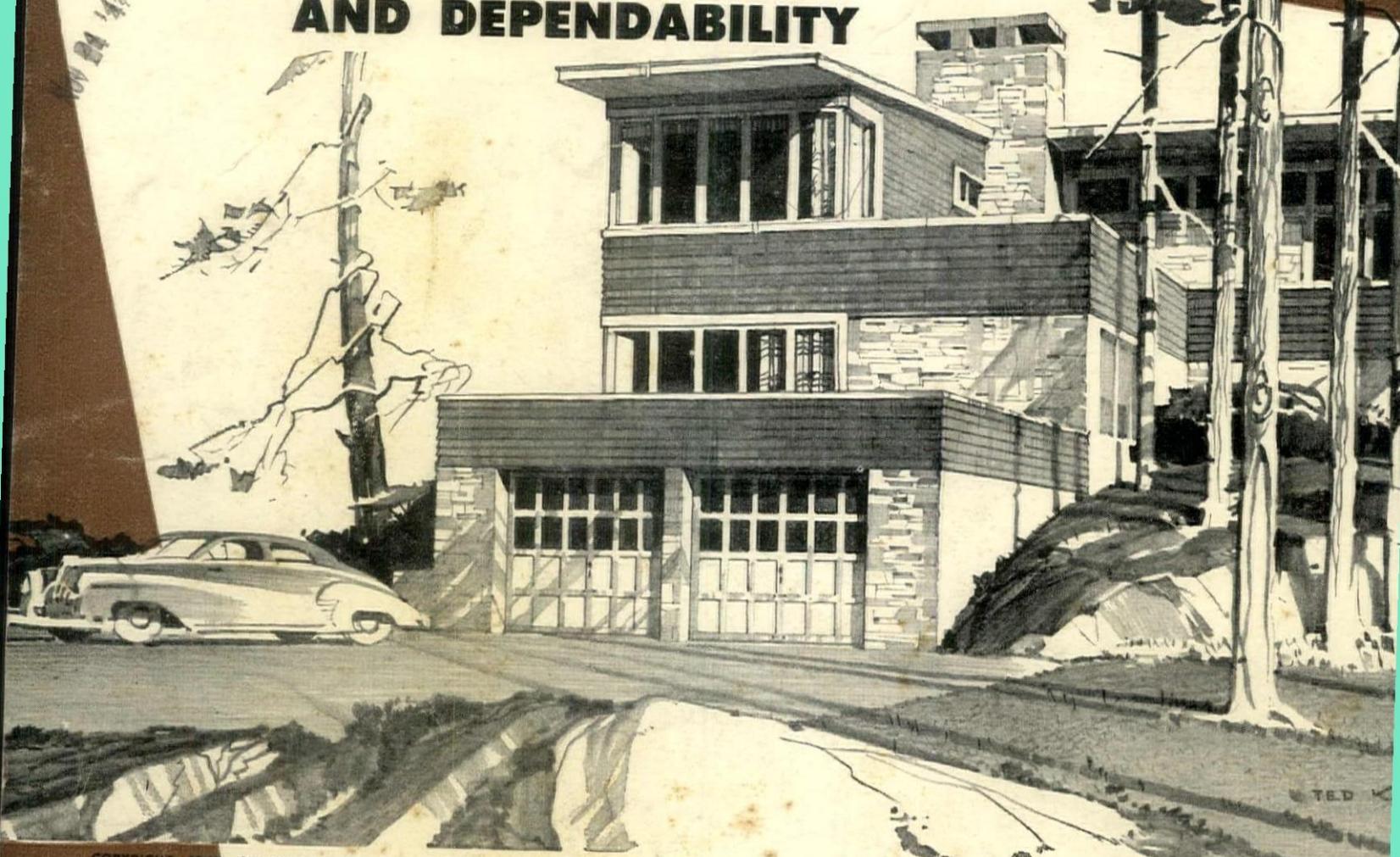
# ELJER CO.

FACTORIES AT FORD CITY, PA.  
SALEM, OHIO · LOS ANGELES, CALIF.

MAKERS OF FINE PLUMBING FIXTURES SINCE 1904

Filed in STARKS

# A *Door* OF CONVENIENCE AND DEPENDABILITY



COPYRIGHT, 1947, OVERHEAD DOOR CORPORATION

● Modern home construction strives to provide homes superior in structural strength, handsome in appearance, and equipped with every convenience for work and leisure. The "OVERHEAD DOOR" with the Miracle Wedge makes a notable contribution to these objectives. It is sturdy in construction, complements any style of architecture, and saves time and expense through its instant, always dependable operation. In remodeling or new construction, specify this quality door, built as a complete unit for commercial, industrial and residential use.

**TRACKS AND HARDWARE OF SALT SPRAY STEEL**

*The*  
**"OVERHEAD DOOR"**  
 TRADE MARK  
 WITH THE  
**MIRACLE WEDGE**

● Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales — Installation — Service.

**OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U.S.**