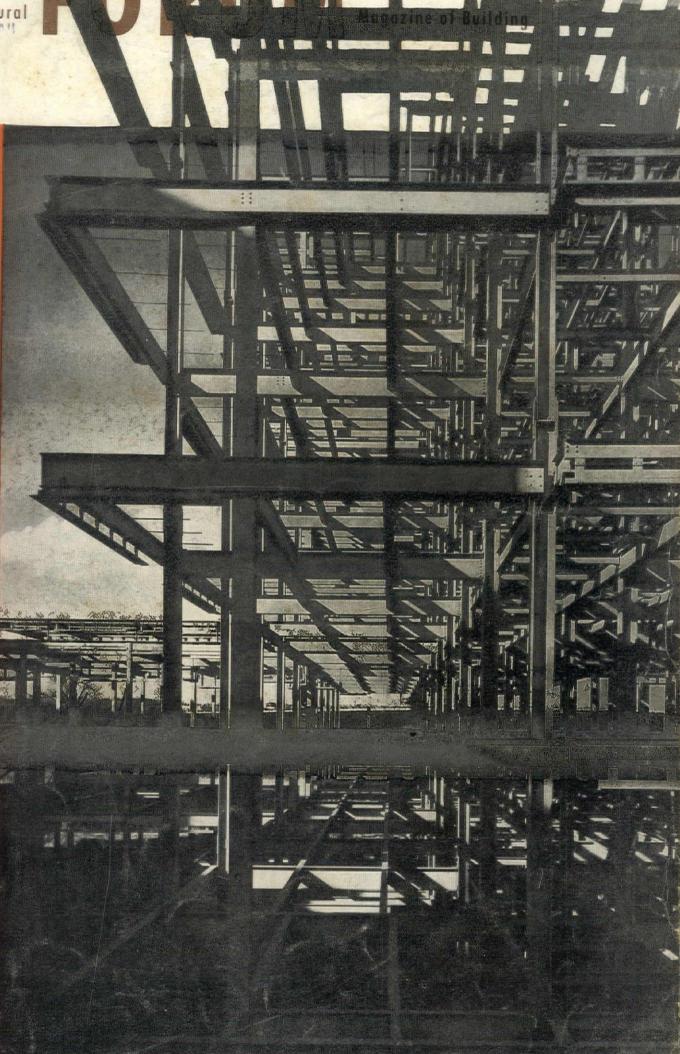
The Architectural

APR 27 1948 -

LIBRARY



# WESEARCH Points the way to:

Continuous research is one good reason your Suntile job wins approval.

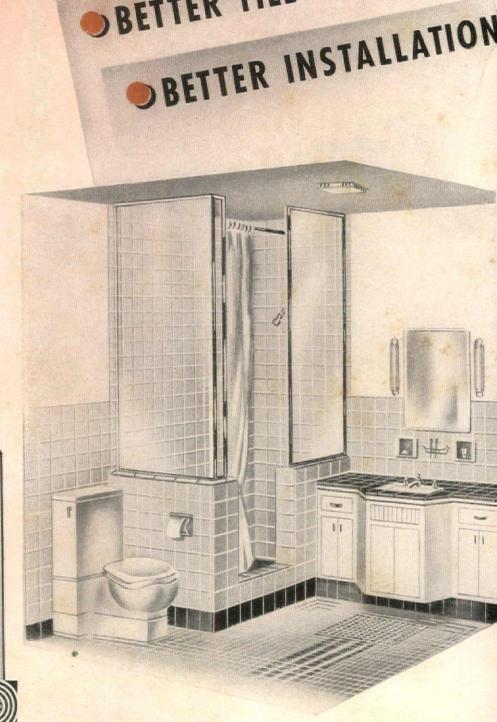
Continuous research is behind the making of Suntile. Together with rigid manufacturing control, it is responsible for Suntile's extra quality in form and finish-for Suntile's color-balance which makes harmonious blends so easy to achieve.

Continuous research is behind every Suntile installation. It leads to better methods of application and to the selection and the training of the man who does the job for you. His work is skilled, safeguarding the excellence of the product he represents.

For better tile-better installation, let us send you the name of an Authorized Suntile Dealer. He can show you real clay Suntile in 16 wall colors. In addition, he can show you impervious unglazed ceramic mosaic Suntile in 15 colors—and Suntile Camargos in 10 colors-both in modular sizes.

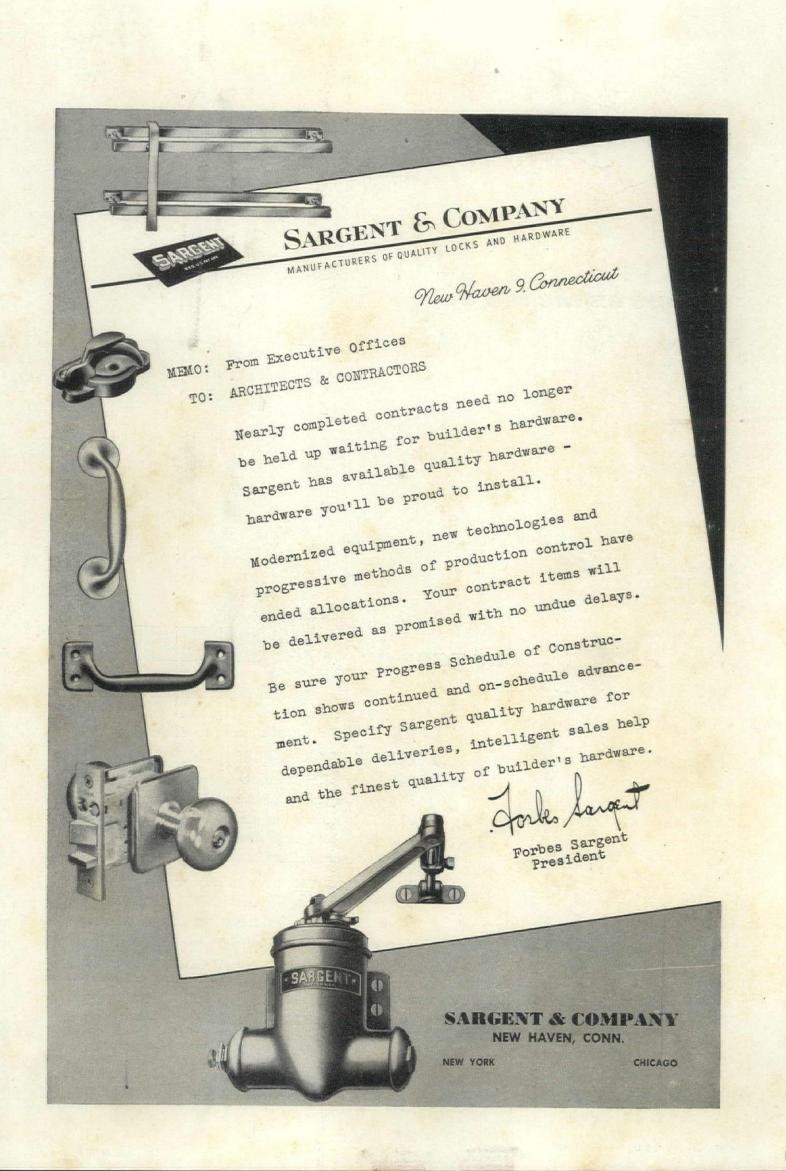
See Sweet's Catalog for more complete information. The Cambridge Tile Manufacturing Company, Cincinnati 15, Ohio.

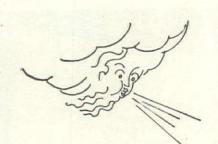




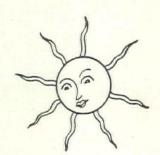
BETTER TILE

OFFERS YOU BOTH-Better Tile.... Better Installation





it goes on the ROOF...



### but pays off in the BASEMENT.

One thing this winter has demonstrated in thousands of buildings across the country, is the outstanding fuel-saving efficiency of a great new Celotex product—

#### CELOTEX PRE-SEAL ROOF INSULATION

This improved, rigid cane board material... pre-coated at the factory with asphalt on both surfaces and all edges... provides a uniform, high thermal insulation plus protection against all moisture conditions—before, during, and after installation.

YOU ARE INVITED to ask for comparative costs and thermal values on Celotex Pre-Seal Roof Insulation products. Please write direct to our Chicago office...

#### THE CELOTEX CORPORATION, CHICAGO 3, ILLINOIS

In the meantime, you'll find detailed specifications on all Celotex products listed in Sweet's file.

### CELOTEX 7he Greatest Name in Insulation

BUILDING BOARD . . . INSULATING SHEATHING AND LATH . . . CELO-ROK ANCHOR LATH AND PLASTER CEMESTO . . . CELO-ROK WALLBOARD . . . INTERIOR FINISH BOARDS . . . TRIPLE-SEALED SHINGLES . . . FLEXCELL

### The Architectural FORUM MAGAZINE OF BUILDING

#### MARCH 1948

ublished	by	TIME	Incorpora	ted
EDITOR-IN-CH	EF		Henry R. Luc	e
			Roy E. Larse	
			John Shaw Billing	
	21.9			

#### MANAGING EDITOR

Architectural FORUM

Henry Wright

ASSOCIATES: Eleanor Bittermann (Research), Louise Cooper, James M. Fitch, Jr., Walter McQuade, Mary Mix. Mary Sanders, Richard Saunders (Washington), Madelaine Thatcher, Chloethiel Woodard (South America), Lawrence W. Mary (Production) W. Mester (Production).

ASSISTANTS: Doris Hoffer, Sighle Kennedy, Rosalind Klein, Mary Jane Lightbown, Jerome A. Moss, Alice O'Connor, 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

The Architectural FORUM is published monthly by TIME Inc., 350 Fifth Ave., N. Y. 1, N. Y. Subscriptions may be sent 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 employees and design staffs, engaged in Building—design, construction, real estate ownership or management, finance, materials manufacture or distribution and professional students and instructors: USA, Possessions and Canada, \$5.50; Pan American Union and the Philippines, \$9.00; Overseas countries, \$12.00. To those not connected with the Building Industry: USA and Foreign, \$12.00. Single copies, if available, (except Reference Numbers), \$1.00. Reference Numbers, \$2.00. 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 1948 by TIME Inc.

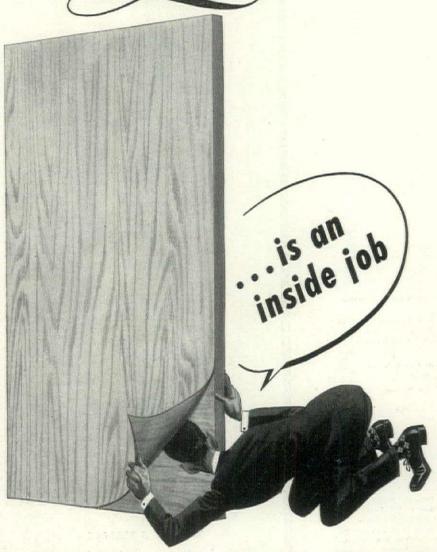
TIME Inc., Time and Life Bldg., Rockefeller Center, New York 20, N. Y., also publishes TIME, LIFE and FORTUNE, Chairman, Maurice T. Moore; President, Roy E. Larsen; Vice President & Treasurer, Charles L. Stillman; Vice President & Secretary, D. W. Brumbaugh; Vice President & Sales Director, Howard Black;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

VOLUME 88. NUMBER 3

NEWS	9
LETTERS	20
FORUM	54
ANNOUNCEMENTS	60
HOUSES	81
New Hampshire farmhouse remodeled by Dan Kiley, Architect Pennsylvania house is remodeled by Hugh Moore, Jr., Architect Architect Joseph P. Marlow designs two low-cost developers houses in Denver.	01
HOTEL PIERRE	90
One of New York's sleeker hotels livens up a luncheon room. Marx, Flint & Schonne, Architects.	70
PRIDE OF THE PRAIRIE	94
Bruce Goff, Oklahoma architect, is designing in a strikingly regional idiom for his grass roots clients.	,,
SHOWROOMS	102
Jewelry showroom in Los Angeles by Gruen & Krummeck, Architects Pilot model of showrooms for shirt manufacturer by Robert Heller, Designer Carpet showroom in New York by Zareh Sourian, Architect Furniture showroom in New York by Van Doren, Nowland & Schladermundt, Designers Fabric showroom in New York by Alfons Bach, Architect.	
SUMMER RESORTS	110
Recent work by Architects Robin & Vogel illustrate a century's change in both the resorts and the people who visit them.	
PRODUCTS & PRACTICE	121
Automatic merchandising evolves as a changing force in the nation's stores increasing office efficiency by sight, light and color engineering British laminated plastic partitions.	
REVIEWS	134
American Building—The Forces That Shape It The Constructive Idea in Art.	
BUILDING REPORTER	156
Hot water system water heater vertical discharge unit heater air diffuser.	
TECHNICAL LITERATURE	176
Engineering safety . fabrication methods doors.	.,,,

Cover photo, Lionel Freedman, Pictorial Services

# nality Roddiscraf



You know that the faces of Roddiscraft Doors and Hardwood Plywood are smooth as satin - that edges are clean and true — but the quality that gives Roddiscraft Doors and Plywood long life and lasting beauty is an inside job. It's the inside materials - core blocks, glue, crossbandings, plus the care and craftsmanship used in fabrication that makes it possible for Roddis to unqualifiedly guarantee materials and workmanship.

Yes, - Roddiscraft backs its Doors and Plywood with a guarantee bond. That's your assurance that Roddiscraft beauty is more than veneer-deep.

### NATIONWIDE Roddiscraft WAREHOUSE SERVICE

NATIONWIDE Adjusted WAREHOUSE SERVICE

Combridge 39, Mass. 229 Vassar St.
Chicago 8, Ill. 1440 W. Cermak Rd.
Chicago 8, Ill. 1440 W. Cermak Rd.
Chicago 8, Ill. 1440 W. Cermak Rd.
Cincinnati 2, Ohio. 457 E. Sixth St.
Cincinnati 2, 2000 Medill St.
Dallas 10, Texas. 2800 Medill St.
Dallas 10, Texas. 2800 Medill St.
Marshfield, Wis. 115 S. Palmetto St.
Milwaukee 8, Wis. 4601 W. State St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.
New York City, N. Y., 920 E. 149th St.

### Roddiscraft

Roddis Lumber & Veneer Co.

MARSHFIELD, WISCONSIN

#### WHAT IS THE

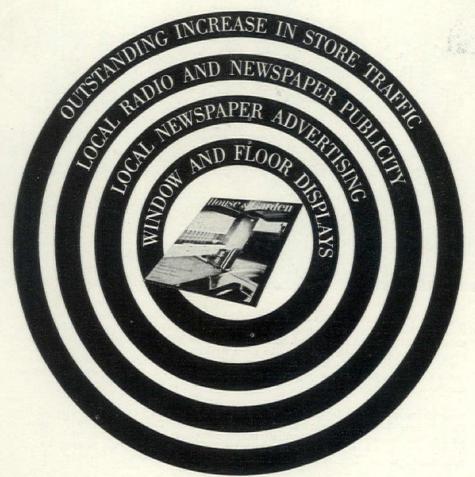
# golden touch?

Some people create trends—influence others.

Some stores create trends—influence others.

When the people and stores of influence join forces something important happens, trends are set...sales are made.

House & Garden
brings together the people and stores of influence...
motivates their buying...
starts the action that multiples influence in ever widening circles,
resulting in store displays and local advertising...
and creates the key buying that leads to multiple sales.

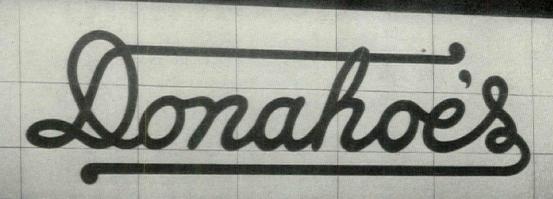


## HOUSE & GARDEN

The lowest initial cost in the home service field

6 1948 THE CONDÉ NAST PUBLICATIONS INC.

## Construction ideas for "the modern look"



PASTRIE CANDIE



AN OPEN VISION FRONT draws attention to an attractive store interior and the merchandise displayed there . . . makes the inside of a store part of the window display. Up-to-date merchants want this added sales appeal. Sell them a "Pittsburgh" job. "Pittsburgh" is well known to your customers as the leader in the store modernization field. With Pittsburgh Glass Products, Pittco Store Front Metal, and an experienced crew of "Pittsburgh" workmen to handle the installations, you can easily provide modern store fronts and interiors to meet modern demands.

NEW SETTINGS specially designed for Twindow, have been added to the Pittco line of Store Front Metal. These settings are insulated, thereby increasing the effectiveness of Twindow in cutting heat losses, minimizing downdrafts near window areas and eliminating window fogging. Twindow settings may be used with Pittco De Luxe frame mouldings, making Twindow available for a wide range of store front and residential installations.

PITTSBURGH PLATE GLASS COMPAN

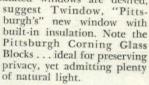
# and that means lots of Glass



EVERY HOME NEEDS at least one full length door mirror of Pittsburgh Plate Glass. Most homes need more than one. A full length door mirror is a convenience that is appreciated by every member of the family. Other likely spots in the home for Pittsburgh Mirrors: over the living room mantel to reflect color and movement and make the room seem larger; in entrance hall and kitchen for a quick check-up before answering the door-bell.



A LIVING ROOM WITH A PICTURE WINDOW combines interior comfort with outdoor A LIVING ROOM WITH A PICTURE WINDOW combines interior comfort with outdoor beauty. It's smart, attractive, up-to-date. Pittsburgh Polished Plate Glass fits ordinary window requirements perfectly. If insulated windows are desired, suggest Twindow, "Pittsburgh's" new window with built-in insulation. Note the





←A SPLASH PANEL of Carrara Structural Glass behind kitchen stove or bathroom lavatory saves work for many a housewife because it's easily cleaned with a damp cloth. Carrara is available in ten attractive colors to blend with practically any color scheme. Walls or wainscots of Carrara Structural Glass keep bathrooms and kitchens bright and cheerful indefinitely. Other uses: fireplace surrounds, shelves, window sills.

We will gladly send you free our special "Builders Kit" which includes illustrated litering how you can use glass effectively on all types of jobs in which you are interested,

Build it better with

## Pittsburgh Glass

Builders	Kit" c	of illustrated	obligation literature.	your
Name				

TTSBURGH COMPANY

### Here's how I put big kitchen advantages ... into small kitchens!

### SAVES SPACE!

New 6 cu. ft. Kelvinator only 24" wide ... takes no more floor area than previous 4's!

Without changing floor-plans, builders and planwithout changing noor-plans, builders and plan-ners can now make small kitchens work like big 

It's a family-size refrigerator! Kelvinator's beautiful, new 6 cu. ft. "Space-Saver" holds 50% more than previous models . . . but takes no greater floorman previous models . . . but takes no greater floor-space! Big, stainless steel freezer, ample room for space: Dig, stainless steel freezer, ample room for tall bottles, shelf space galore for daily food storage! Precision built to Kelvinator quality standards.

### 2. SAVES SPACE!

New Kelvinator Range only 21 inches wide . . . stars full-sized oven . . . modern features!

A real workaday Electric Range! . . . this compact new Kelvinator is only 21" wide—and its new design permits installation flush against wall. Features a full-size, 2-unit oven for baking and broiling. Automatic oven temperature control. 7-heat surface units for electric-fast, safe, cooler cooking. Three units in all—one 8", two 6". Beautiful porcelain exterior . . . Kelvinator quality throughout!



### NEWS

#### WASHINGTON

Congressional leaders agree on more credit aid for houses p. 9

President renews requests for general housing bill p. 9

Title I house for \$3,000 p. 10

#### PEOPLE

Prize-winner Saarinen p. 10

New man of distinction p. 10

#### PREFABRICATION

Precision-Built ready p. 10

First 609 loan granted p. 10

FHA stalls Lescaze prefab on "unesthetic" flat roof p. 11

#### DESIGN

Museum session thinks functionalism is here to stay p. 12

Hotel Ten Eyck remodeling p. 13 St. Louis winners p. 14 BUILDING MONTH. The contrariwise price movements of February had not yet had time to affect the building price index. But the chances were that they were not going to. As commodity prices moved down and steel prices moved up, the wholesale building material price index hung steadily throughout the month at about 192.1 (1926-100). The contrary price changes were bound to exert contrary pressures on Building: on the one hand, commodity producers were re-examining their plans for plant expansion, labor unions their plans for wage boosts; on the other, major producers of structural shapes had already hiked prices some. Building prices would be likely to stay rigid in the middle—unless the commodity price break gathered the sock of a real bust. By month's end, few thought it would do so. Economists pointed to the supporting effect of high-level exports, greatly expanded military appropriations.

More immediately threatening than the commodity price break was the continued tightening of mortgage credit. Banks and insurance companies were simply not buying 4 per cent loans; industrial bonds and other investments promised a return nearly as high without the expense of servicing. The big lenders were making it clear that they thought it was time for interest rates to rise on housebuilding money. They said that a rise of 1/2 of one per cent would be enough to meet the changed attitude of the market. But interest rates on housebuilding money were firmly pegged at 4 and 41/2 per cent by government insurance and guarantees.

There was no prospect that either Congress or the Administration would back a hike in FHA or VA interest rates in an election year. There was, however, a growing agreement that some increased government credit aids should be made available. The President's message on housing (see right) had suggested a number of these. Senator Flanders had already proposed extension and amplification of FHA's Title VI. Senator McCarthy, Republican sparkplug of the Congressional Housing Committee, in an interim report, had also urged extension and amendment of Title VI to put "emphasis upon rental housing and efficient low-cost construction."

Although the Congressional Housing Committee hoped to go to work in March on some kind of comprehensive housing legislation, it was not likely that such a bill would be ready for action before Title VI's expiration date of March 31. In the meantime, Congress would probably act to 1) extend Title VI in its present form, with the likely addition of insurance to cover working capital loans to large-scale housebuilders and 2) provide a secondary market in the RFC for VA guaranteed home loans. (A bill re-creating the RFC secondary market passed the Senate last spring, but was pigeon-holed in the House Banking Committee by Chairman Wolcott, who contended that it was not needed. Wolcott had changed his mind, and promised to take the bill up in mid-March.) Political considerations also made it plain that there would be continued rent control, but some dopesters guessed that Congress might vote a series of 30-day extensions, leaving the way open for dumping rent control quickly if deflation really arrives.

#### WASHINGTON

#### PRESIDENT'S MESSAGE

Credit aids, low-rent housing, slum clearance asked of Congress.

President Truman's housing message made at least one thing clear. Despite the feeling of some economists that it might be a good idea to brake the housebuilding boom a little, the Administration, at least, is convinced that nothing but expanded production of houses will cure housing inflation and end the need for rent control. To boost housebuilding production, the President asked for amplified government credit aids. To meet all our national housing and slum clearance needs over the next decade, the President urged Congress to do many of the things he had asked before. His message would have made bigger news had there been some prospect that Congress would listen to it. But not even the bi-partisan sponsorship back of the T-E-W general housing bill had so far been enough to persuade Congress to enact the kind of housing legislation for which the President hoped. Nevertheless, his message optimistically included an imposing set of recommendations:

- ▶ One year "transitional" extension of FHA's Title VI, with an increase of \$2 billion in insurance authorization, one-half to be earmarked for rental housing.
- Establishment of a secondary market for FHA and VA-guaranteed loans, to be administered by the Housing and Home Finance Agency instead of by RFC.
- ▶ Government insurance for "working capital" loans to large-scale housebuilders (as recommended by FORUM, see Feb. '48).
- Yield insurance for rental housing.
- Special provisions for insuring loans to housing cooperatives.
- ▶ Government allocation power to channel scarce materials into housing.
- ▶ Federal funds for construction of 100,000 units of low-rent housing every year for the next five years.
- ▶ Federal aid, to be combined with local funds, to start the job of assembling and clearing slum land as preparation for a program of urban rebuilding.

#### PEOPLE

#### DISTINCTION

A medal, a prize, a refusal.

Eero Saarlnen, winner of the St. Louis Jefferson Memorial Competition (see pp. 14-18) was no novice at successful competing. His record in the last 37 years (since birth): 1934 Post Office Building, Helsinki, third place; 1938 Wheaton Art Center, fifth place; 1939 Goucher College (with Eliel Saarinen, Ralph Rapson and Fred James), first prize; 1939 Smithsonian Gallery of Arts (with Eliel Saarinen and Robert F. Swanson), first prize; 1940 Museum of Modern Arts Furniture Competition (with Charles Eames), two first prizes; 1944 Arts & Architecture Small House Competition (with Oliver L. Lundquist), first prize.

Wallace Harrison was awarded the New York A.I.A. chapter's annual Medal of Honor "for distinguished architectural work and the highest professional standing." Director of Planning for the UN, and co-designer of Rockefeller Center and the Trylon and



Perisphere theme of the New York World's Fair, Harrison follows these other recent recipients of the medal: Robert B. O'Connor in 1947; Stephen F. Voorhees in 1944; Clarence Stein in 1941; Raymond Hood in 1940.

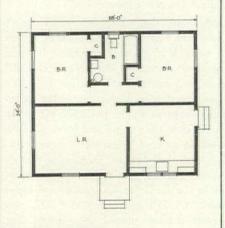
William Lescaze, Architect of Distinction and deeply involved in prefabs (see page 11) was forthcoming (April) Calvert Man of Distinction, poised pipe in hand behind the model of a building group.

Walter Coutu, sociology professor at Pennsylvania State College, gave architects and architectural training a long unblinking stare. Lectured Coutu, to a housing forum: "The space in which people live most of their lives has something to do with the frustrations that they build up . . . That indicates pretty clearly to me that people do not know what they want or what they ought to have. What people think they want (in a house) is obviously, from our statistics, what they should not have for their health and well-being . . . The architect ought to be so trained that when I go to him he will tell me what I need. A man goes to a physician and he gives the physician a fee. What for? For the physician to tell him what he wants. And you go to an architect and you give him a fee to have the architect ask you what you want. Now is architecture a profession or what is it? I should like to see the day when architects are educated the way physicians are. A physician never bats an eye when he says

you need an operation. Does an architect say that? No... because he's not educated to say that." Professor Coutu did not include instructions on how the architect-physician should go about convincing a client that he has an ache in his master bedroom.

Oscar Niemeyer still was not in the U. S. and as time passed, his entry - barred under an absolute interpretation of an immigration law of the A. Mitchell Palmer era forbidding communists from these shores-looked less and less probable. Yale, who had engaged him for a lecture series, said little. The A.I.A., cabled by the B.A.A. (Brazilian Association of Architects) with the request that they intervene with the U.S. State Department in the great architect's behalf, did not. Niemever's one big U.S. client, a New England manufacturer, said nothing. The Architectural League of New York took no concerted action. Those who did raise voices were most of the onlookers and participants at the recent Museum of Modern Art Symposium (see page 12) who signed a petition to the State Department, Columbia University's Talbot Hamlin, and others who wrote or signed protesting letters to Washington.





#### \$3,000 HOUSE

Proof that it is still possible to build a house for around \$3,000, this photo and plan are a sample of the minimum "bread and butter" house now possible under FHA insurance. The Five Point Lumber Yard of Jackson, Tenn. expects to build 200 of these houses this year. Buyer must own land, make a cash payment of \$250, pay \$27 a month. House has shower stall, lavatory, toilet, sink. Floor furnace, water heater cost extra. Mortgage loans made by Jackson's First National Bank are insured under FHA's Title I, which covers a blanket 10 per cent of loans made by any one lender.

Franklin D. Roosevelt, Jr. was trying to keep his shirt on. In a Syracuse speech, veterans' politico Roosevelt accused House Banking Chairman Jesse P. Wolcott of putting a "pocket veto" on the T-E-W bill, provoked a time-table on housing legislation. Said Wolcott: "We will go to work on a longrange housing program after the special Housing Committee makes its report (due March 15). If F.D.R., Jr., keeps his shirt on there will be legislation this session."

#### PREFABRICATION

#### PRECISION-BUILT BACK Wilson makes good his promise.

In 1945, prefaber F. Vaux Wilson took space in the New York Times to tell all those interested that Precision-Built Houses would be nobody's bargain at current production costs. A great many were interested: Macy's department store had already advertised the house. When he had licked the price problem, Wilson promised, he would be back on the market. Last month Precision-Built Houses were back. Their new distributor: Previews, Inc., a national real estate brokerage service specializing in high-brow residential property. Previews says the houses will be sold by local real estate brokers.

Wilson's first step into the postwar market (he helped produce the Homasote prefabs which mushroomed into huge war towns) will be from a licensed fabricating plant in Newburgh, N. Y., which will ship houses within a 25-mile radius. Houses will be priced from \$9,000 up. Macy's, possibly recalling the shrieks of its Herald Square neighbor—"Gimbel's Has Houses," had no plans to take orders for Precision-Built.

#### PREFAB HEAD

#### Ohio firm qualifies for first governmentinsured prefab loan.

While the Reliance steel house stalled on its flat roof (see page 11), a frame prefab of more conventional appearance became the first to qualify for an FHA-insured production loan. With the benefit of a 609-insured loan for \$423,000 from the Trust Co. of New Jersey, Housemart, Inc. of Cleveland will produce an initial 194 houses, aim at



**Housemart Prefab** 

a 1,000 output this year. Housemart's president, architect Benton Lefton, set up his firm as a building supply company nine years ago, branched into volume house-building during the war, designed his prefab house in 1946.

#### PREFAB STALLED

#### FHA's Philadelphia office does not ilke architect Lescaze's flat roof.

When New York architect William Lescaze's new prefabricated steel house clipped together in 80 minutes in a blinding snow storm in a field near Philadelphia last month (see cuts, right), any well-informed spectator could have predicted trouble ahead. An FHA inspector had stood by registering enthusiasm. The sectional steel house had already clinched a 600-unit order from a Philadelphia real estate firm. It had been produced with the fabricating knowhow of the Reliance Steel Products Co. But it had a flat roof.

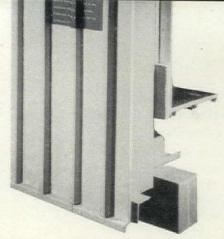
An easily predictable series of events followed rapidly: 1) The national FHA office said tentatively that it liked the Lescaze plans and would approve insurance under the new Title VI, Sec. 609, which provides federal insurance for production loans to prefabricators. 2) The Philadelphia FHA office turned down an application for Sec. 603 mortgage insurance on the houses ordered by the real estate firm on the grounds that they "lack to a substantial degree those essential esthetic qualities and visual appeal which are necessary to assure continued marketability." 3) A city councilman introduced an ordinance barring "dwellings built of metals."

At month's end, the battle was still pitched. The Philadelphia FHA office had drawn the styling modifications (see cut) it believed would bolster the steel house's marketability. Lescaze was wryly considering these changes. He proposed a compromise: divide an initial group of 20 houses between his unmodified design and FHA's Cape Coddled version—let market appeal decide styling of the rest. Engineer Harry Nagin, president of Reliance Homes, sweated wearily over the plant shifts that might be required. Since he had started thinking about a steel prefab in 1935, he said, he had put up \$750,000 for research.

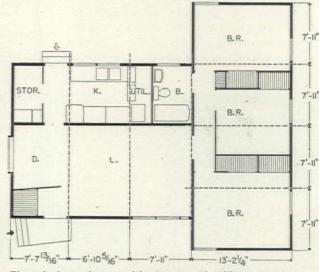
The production loan which this new firm needs to get plant operations underway must wait upon a design nod from the Philadelphia FHA office. Nor can Washington FHA overrule the local FHA decision. A prefab house may pass Washington's technical standards for 609 clearance, but the local FHA is considered the best judge of "market acceptability" for 603 approval.

The way the federal government talks in Washington and the different way it talks from local FHA offices has already proved expensive. Under the guaranteed market program set up to assist prefabers by the Housing Expediter, the government was finally obliged to buy up \$3,250,000 worth of houses. The majority of these were produced by a single company: American Fabricators, Pine Bluff, Ark. These houses had been approved in Washington for a guaranteed market contract, but they were kept off the private market by the refusal of the local FHA office to approve their modern design for mortgage insurance.

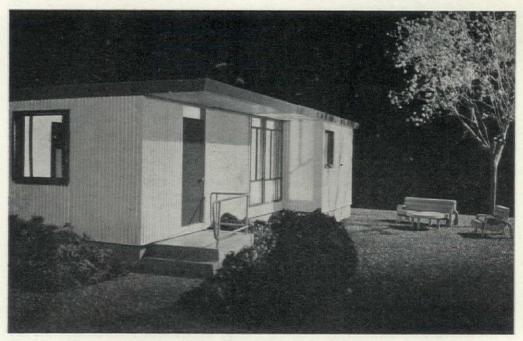




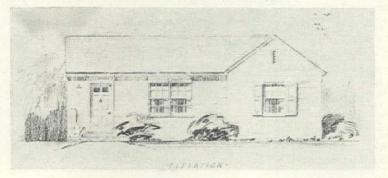
Section of wall and floor shows system designed by Lescaze and engineer Paul Weidlinger, which enables a fourman crew to erect structure in 80 minutes. Sectional units are like TVA's plywood prefab.



Three-bedroom house, with storage and utility space, is expected to sell at \$8,000 not counting land. It takes about a day and a half to finish house and make all connections.



Steel house is faced with white-painted aluminum. Model (above) shows Lescaze's flat-roofed design. Drawing (below) shows what FHA's Philadelphia office thinks should be added for market appeal.



#### DESIGN

#### COZINESS IS ALL RIGHT

But architects think functionalism has quite a future ahead.

The penguins, Ralph Walker said, had all got warts on their feet. They seemed generally unhappy about Tecton's pool in the London zoo, with concrete banks designed to look like ice floes. "None of the architects interested in the pool had ever tried to find out what a penguin would like," Walker summed up.

The penguins, with warts on their feet, marched steadily through the rest of the evening. Of the galaxy assembled at the Museum of Modern Art, there was scarcely an architect who did not resort to the penguins as a way out of one of the myriad

the feelings, the sentiments, and the interests of the person who was to occupy it . . . The good young architects today are familiar enough with the machine and its products and processes to take them for granted, and so they are ready to relax and enjoy themselves a little." Mumford pointed to his "Bay Region style" as an example (Maybeck, Wurster, Harris, etc.)

Although everybody present seemed willing to entertain the notion that something was indeed happening, no two participants agreed as to just what it was. "Is humanity to be considered identical with redwood all over the place?" inquired Marcel Breuer. "Intricacy, richness splendor . . ." murmured British architect G. W. Kallman. "I represent a point of view sometimes referred to as the 'gold-plated plumbing' school," ventured Chris Tunnard. Said Serge Chermayeff:

Roy Stevens



MUSEUM SYMPOSIUM participants were (I. to r.): Ralph Walker, Christopher Tunnard, Edgar J. Kaufmann, Jr., Mario Torres, Frederick Gutheim, Edward D. Stone, Vincent Scully, Marcel Breuer, Eero Saarinen. Peter Blake, George Nelson, Henry-Russell Hitchcock, Matthew Nowicki, Alfred H. Barr, Jr., Walter P. McQuade, Philip C. Johnson, John McAndrew, Lewis Mumford, Albert Mangones. At rostrum: Walter Gropius.

blind alleys into which the discussion steadily propelled itself. Although chairman Lewis Mumford smartly spanked the talk along, although the assembly had all been exposed to the seeding conducted by the British Architectural Review, although Mumford's phrase, "the Bay Region style," provided an irresistable target—the gifted participants sputtered hopefully, but never quite went off.

#### NEGLECTED FEELINGS

The Modern Museum's architectural specialist, Philip Johnson had invited several hundred architects (20 of them were singled out as main speakers and sat on the platform, see photo) to discuss "What's Happening in Modern Architecture?" Johnson's conviction that something was happening had been reinforced by Mumford's remarks in a recent issue of the New Yorker magazine: "What was called functionalism was a one-sided interpretation of function . . . The rigorists placed the mechanical functions of a building above its human functions; they neglected

"We are compelled to make that tangible man-made order which stands in direct contrast to nature . . ." Said Henry Russell-Hitchcock: "I am not a penguin."

Confusion mounted when the meeting addressed itself directly to the question on the floor, but some clarifying statements were made as to just what the meeting was not talking about.

Said Walter Gropius: "Does the coining of styles help us? Don't we talk too much about styles and 'isms'? What we have to look for in architecture today is a new approach, not yet a style. A style is a successive repetition of an expression which has become settled as a common denominator. Intellectual interpretations of present movements as styles obscure the creative men behind the new doings."

The intellectual ferment that the Museum meeting had hoped (and failed) to focus had been stirred up initially by the Architectural Review, the scholarly and sophisticated mentor of the British architectural profession. The Review, whose owner H. de C. Hastings plots new directions from a

farm in Sussex, thinks of itself as a kind of inspired balance-wheel, dedicated to keeping the profession on the most progressive course that the editors can discern. The Review's brilliant nucleus of editors and contributors includes serious, social realist J. M. Richards, famed historian Nikolaus Pevsner, cartoonist Osbert Lancaster. These men and others have attracted a following far wider than the profession: unlike the American architectural press, the Review is read by almost all those who consider themselves part of Britain's intellectual elite.

At least five years ago, the Review noted and deplored a tendency among the younger architects to worship in the grammar rather than in the spirit of the International Style. In its combined role of critic and evangelist, the Review began to talk about one more dimension of function—the effect of the building on the people who use it or see it. This involved the visual aspect of design—or seeing for its own sake.

The Review's feeling that it was high time to call attention to the fact that men are, after all, not machine-made led to such excesses as its suggestion that architects emulate surrealist Paul Nash's "feeling for the strangeness of things." But it also led to a productive new element in city planning: the view of the city (when all sociological considerations have been satisfied) as man-made landscape. Few American architects could say what Sharawaggi\* means, but every British reader of the Review would use this term to describe a free-handed picture-making in relating new building to existing urban scenery. Highbrow as this may sound to U. S. city planners locked in struggle with the real estate interests, it has in Britain inspired extremely imaginative proposals for handling such urban focal points as the Westminster precinct and other centers of city life.

#### NEW EMPIRICISM

In postwar Sweden, the Review found the best evidence that contemporary architects were letting themselves be guided by the human functions of a building. Describing this work as the "New Empiricism," the Review presented an unselfconscious group of houses by Sven Markelius, Sture Frolen, and Ralph Erskine. In these houses, the Review saw a "tendency . . . both to humanize the theory [of functionalism] on its esthetic side and to get back to the earlier rationalism on the technical side."

In a later and more detailed analysis of what seems to be happening in Sweden, the Review called it a "reaction against a too rigid formalism. The first excitement of structural experiment has gone and there is a return to workaday common sense. There is a feeling that buildings are made for the sake of human beings rather than for the cold logic of theory. The word, spontaneity, so often on the lips of the

<sup>\*</sup>Origin of this term is an etymological mystery. Sir William Temple, 17th century statesman and landscape gardener, said the Chinese used it to mean the "beauty of studied irregularity", but Chinese scholars deny this.

young Swedish architect today, perhaps gives the key to the new approach . . . Why, they ask, make windows larger than necessary just to show that we can create a wall entirely of glass? Why flat roofs when they always start to leak in the spring? Why avoid traditional materials when they do their job well and provide pleasant texture and color at the same time? Why eschew fantasy and decoration for which, in our hearts, we long?"

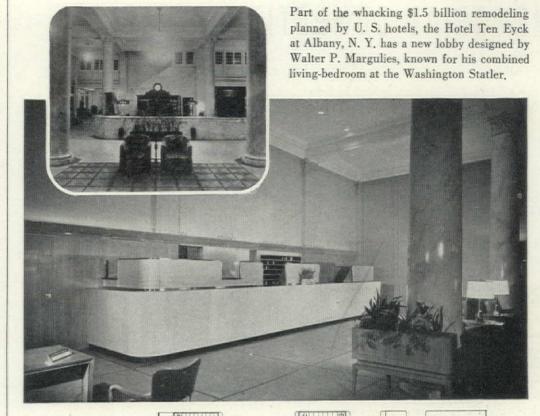
Few American architects would be as delighted as the Review to find that Swedish architects are "not afraid to use traditional materials . . . even shingles to clothe reinforced concrete structures." But the principles of the New Empiricism would not be entirely new. American architects could point to their own great humanist, Frank Lloyd Wright, and scarcely a speaker at the Museum session had failed to genuflect in the direction of Taliesin. (Said Henry Russell-Hitchcock: "Wright is the Michelangelo of the Twentieth Century.") Just what was the difference between the aim of Sweden's New Empiricists and the achievement of Frank Lloyd Wright?

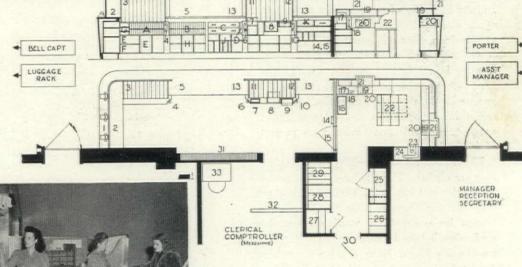
#### HEIGHTENED HUMANISM

The Review thought that little of Wright's electric influence had been felt in Sweden. but guessed that a "Wright vogue" might be on the way. "Before long the modern architect in Sweden may add the adjective 'organic' to his noun 'spontaneity'." There was, however, an important distinction to be made between the Swedish search for spontaneity and the work of the great American architect. Hitchcock came closest to making it: "I do not see anybody in the world who has the capacity for expression Mr. Wright has. But I think he is aimed way beyond any humanization which may be desirable in the nearly immediate present." Although architects might quarrel with Hitchcock's "desirable", they would all concede that Wright's kind of building is not now "possible" on any large scale. Just as Michelangelo failed to influence his students, so Wright has been unable to transfer his heightened sense of life to any of his contemporaries. Like Michelangelo, Wright would likely have his maximum effect, not on his own time, but on the future, when other men catch up.

While the Museum meeting did not provoke any ringing new credo of American architectural theory, it was useful as a platform for reflecting the trend of European architectural thinking. It would undoubtedly give some extra confidence to the large number of American architects who have never considered coziness the equivalent of original sin. It possibly offered some secondary conclusions: One thing the architect participants took away from the meeting was the unshakable conviction that nobody knows anything about architecture but architects. Others walked out muttering that architects are good architects, confused talkers. One thing Mumford took away was a badly bruised Bay Region.

#### HOTEL RE-DO: new front desk by Margulies houses all service operations.





Carefully studied front desk is operational hub for manager, cashier, clerks, room service, bell captain, porter, each with his own space.



Cashier's booth, although enclosed, appears as integral part of desk. Each cashier has own cash drawer, eliminating counting at shift change.



Room racks tilted at 60° angle provide maximum visibility, make it possible for two clerks to work at same time, and reduce

- House phones
  Mail sorting counter
  Information racks (alphabetic)
  Telephone
  Mail, key and information
  Dial phone
  IBM time stamp
  Transmitting Tel-Autograph
  Receiving Tel-Autograph

- Telephon Room racks (numerical)
- Advance reservations

- 12. Advance reservations
  13. Rooming counters
  14. Return key slide
  15. Self-closing connecting door
  16. Account card file
  17. IBM time stamp
  18. Telephone
  19. Voucher slip pigeon holes
  20. Cash drawer spaces
  21. Cashiers' counters
  22. Cash register posting machine
  23. Pneumatic tube transmission
  24. Pneumatic tube reception
  25. Cashiers' closet
  26. Safe deposit boxes

- Safe deposit boxes
- Guest histories
- Stored supplies
  Lock door with sliding window
- 29. Safe deposit boxes for guesta
  31. Mail and key rack
  32. Walnut door shield
  A. "Hold" mail racks
  B. "Hold" telegram racks

- Extra key drawers in metal racks "Hold" packages Hotel Redbook
- F. Extra information rack Unfiled voucher
- Telephone books, telegraph blanks
- J. Telephone books, H. Current supplies K. Clerks' supplies

# JEFFERSON NATIONAL EXPANSION MEMORIAL COMPETITION

When a five-man design team headed by Eero Saarinen of Bloomfield Hills, Mich. last month won the \$40,000 first prize in the Jefferson National Expansion Memorial Competition, a milestone in architectural history had been passed. This two-stage competition, written and directed by Architect George Howe, was a precedent-breaker in many respects:

▶ In the size of its prize—\$125,000 for the two stages.

▶ In its liberal eligibility clause—the competition was open to anyone who, by "education or experience" was entitled to call himself architect.

In its wide-open program—competitors in the first stage were told to "give their imaginations free rein, leaving the examination of what can really be done to a less exuberant moment."

▶ In its emphasis upon collaborative design. ▶ In its integration with city planning.

In view of the sweeping scope of the project and the liberality of the program, the designs of the five finalists, with the single exception of Saarinen, seem somewhat disappointing. If one assumes that the chosen finalists represent the best efforts of the first stage contestants—a reasonable assumption in view of the gentlemen on the jury—then the conclusion seems inescapable that American architects are uncomfortable and unsteady on projects of this scale.

The reasons for such timidity are as ample as they are obvious. There has not been a competition of anything like a similar scale since that for the Oregon State Capital in '36. Except for some of the wartime towns, few professionals have faced a larger project since the World's Fairs. Many of the younger men (and the winners were predominately young) have never had an opportunity to design anything larger than a single house.

To judge the winning designs fairly, however, it is necessary to consider the two stages of the program in greater detail.

Basically the problem was one of misleading simplicity. The site, already bought by the U. S. Department of Interior, was an 88-acre sloping tract along the midtown St. Louis waterfront. The Department had swept it clear of a century's accumulated building, leaving only three historic structures—the Old Courthouse (where the Dred Scott Case was tried), Old St. Louis Cathedral and the Manuel Lisa warehouse on the levee. Competitors were thus presented with a clean slate.

The first stage of the program, however, was not limited to the site described above. Also part of the problem were surrounding urban areas, a proposed Interstate Highway, railroad rights of way and the opposite bank of the Mississippi which would form a land-scape background for the site. The assignment (Continued opp. page 17)

EERO SAARINEN



WILLIAM W. WURSTER, chairman S. HERBERT HARE FISKE KIMBALL LOUIS LABEAUME CHARLES NAGEL, JR. RICHARD J. NEUTRA ROLAND A. WANK

J. HENDERSON BARR associate architect

DAN KILEY landscape architect



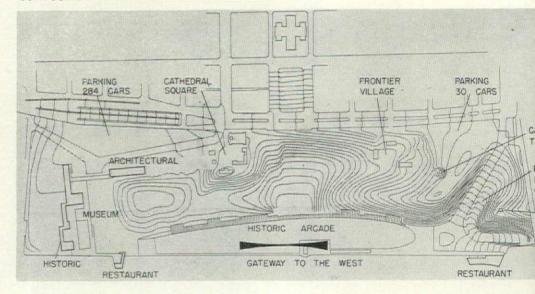
SAARI



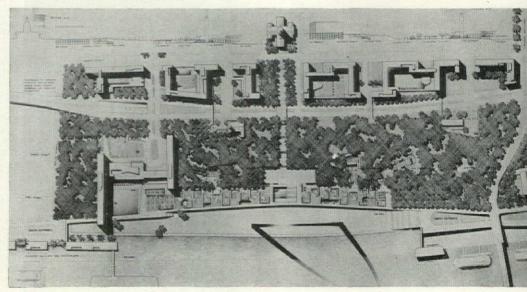
FIRST PRIZE, \$40,000.

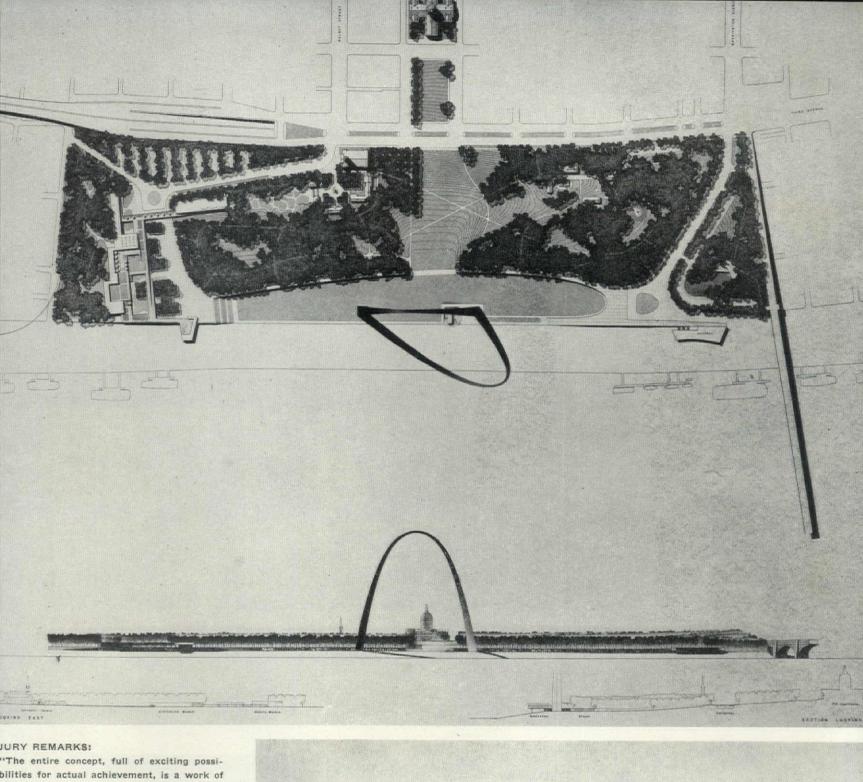
ALEXANDER H. GIRARD

CONTOUR DRAWING OF SECOND STAGE PLAN



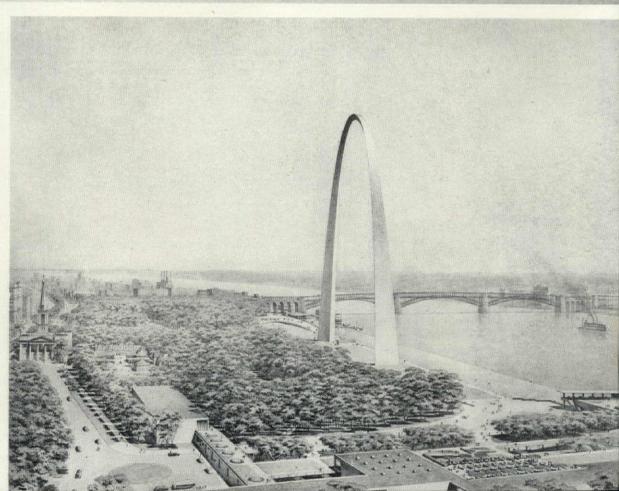
PLAN OF FIRST STAGE DESIGN





"The entire concept, full of exciting possibilities for actual achievement, is a work of genius, and the memorial structure is of that high order which will rank it among the nation's greatest monuments.

"This entry placed in the First Stage, for it contains intrinsically the very features aspired to by the program . . . a memorial, a park, balanced harmony, and a fine grouping of buildings. The success of the plan does not depend on the carrying out of a suggested collaboration of communities on the eastern bank of the Mississippi though it suggests to the full the advantages of such a possibility. The second stage resulted in an enriched and improved plan with no diminution of any of its initial excellencies. It tends to have the inevitable quality of a right solution. The Monument suggests the historic past of St. Louis as the Gateway to the West. It is large in scale, yet does not dwarf other structures, and by its very form is sympathetic with the Courthouse dome . . . The park gives promise of shade in the warm season. The treatment of roadways is an effective guard against traffic intrusion. Feature by feature a masterful plan reaches desired fulfillment."





GORDON A. PHILLIPS architect

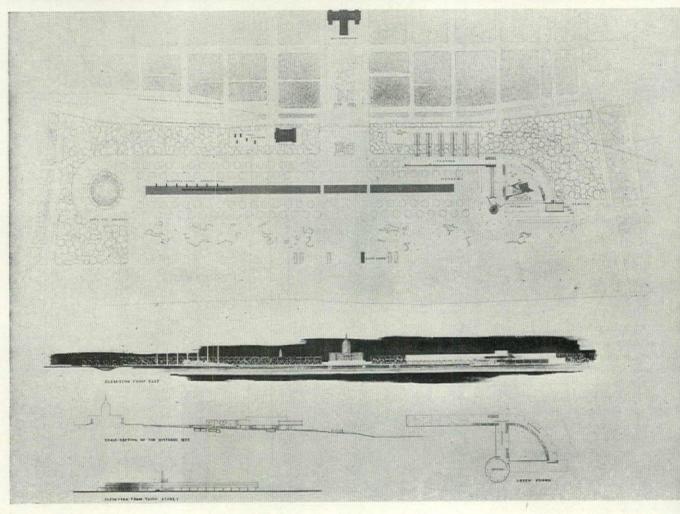


WILLIAM ENG architect



GEORGE N. FOSTER painter





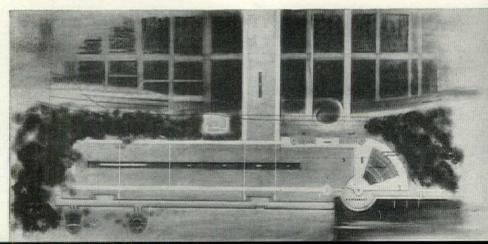
#### SECOND PRIZE, \$20,000.

JURY REMARKS:

"Breadth of treatment and an uncluttered quality, with excellent placing of individual elements brought this scheme into the Second Stage.

"The final drawing re-affirms the virtues of the design which endeavors to emphasize the natural fall of the site by placing the long museum building and the restaurant with its panoramic view on the highest ground immediately accessible from the city center . . . This scheme makes a notable contribution when it places a thick and unbroken tree belt between the tensions of city traffic and the repose of the Mall."

PLAN OF FIRST STAGE DESIGN





WILLIAM N. BREGER architect



CALEB HORNBOSTEL architect



GEORGE S. LEWIS
architect



DONALD L. KLINE landscape architect



CHRIS. TUNNARD
landscape architect

ALLAN GOULD

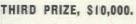
painter

ANDRE SCHWOB

painter

RALPH J. MENCONI

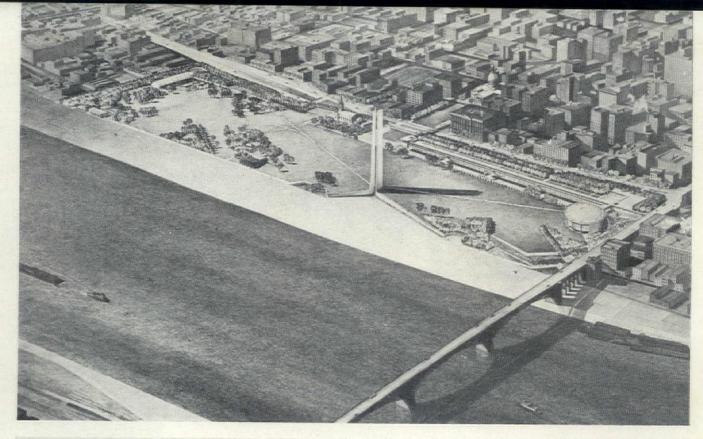
sculptor

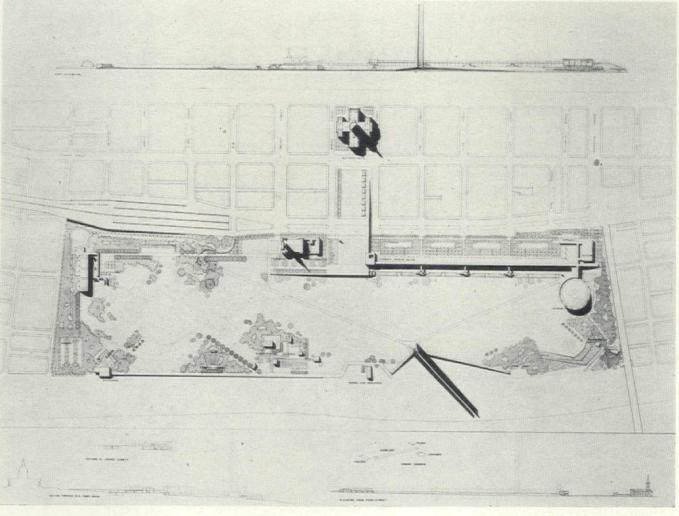


JURY REMARKS:

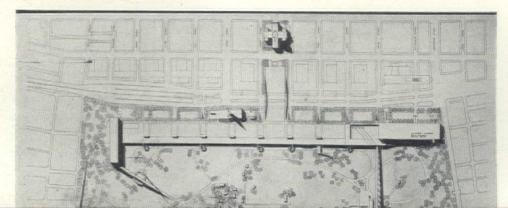
"A single great idea carried through with conviction in the form of a terrace earned a place in the first group of five.

"In the development of the Second Stage a monument was introduced which has beauty and a stated symbolism. This symbolism is to emphasize that through this one city were funneled the countless settlers to spread through the West. The terrace museum is retained on the high ground and an intimate grouping of the old buildings developed at the levee. The picnic and restaurant areas at each end all contribute to the human scale which would make it a pleasant place in which to relax."





PLAN OF FIRST STAGE DESIGN



was thus basically one of city planning, a project unprecedented in recent competitions.

The second stage of the program was much more limited in scope. Most significant change was the restriction of the project to the Historic Site-the 88-acre tract of cleared land. It was now to be treated as a tree-shaded park and emphasis was placed on developing the design in successive stages which could be built piece-meal and would stand as complete compositions at any stage of construction. A living memorial, a helicopter field, railroad terminal facilities, underground parking etc. were eliminated. A monument, played down in the first stage, was now stressed as a "striking element, not only to be seen from a distance in the landscape but also as a notable structure to be remembered and commented on as one of the conspicuous monuments of the country." An open air theater was retained, as were a restaurant and museum, but it was suggested hat these features be located at the periphery, both for easy access by pedestrians and motorists and to free the interior. Such was the reference frame within which the five prizewinners worked.

The site itself, a fairly even slope toward the river, is not particularly interesting. Yet only the Saarinen solution manipulates the contours in any sculptural way to give it added drama. The Breger-Hornbostel-Lewis design, distinguished by a wide expanse of open lawn, achieves dramatic impact with its use of terraces, especially the one atop the museum roof which is entered at street level. The museum itself thus forms a drop to the lawn, and its front windows provide a sweeping view of the harbor, uninterrupted by the mass of planting used in competing schemes. Harris Armstrong has solved the site problem with a strong, clean-cut bi-axial design which avoids the curse of Beaux Arts symmetry while giving unity to the site. The Phillips-Eng-Foster solution uses a peculiar combination of cliches, coupling the formal plot plan of a grandiose traition with architecture of World's Fair vintage. There seems little excuse for awarding it second prize.

But it is in handling the monument itself that the architects apparently met their greatest difficulties. The team headed by T. Marshall Rainey solved the problem by almost ignoring it. Armstrong's slab looks more like an office building than a tribute to the Pioneer Spirit. The Breger-Hornbostel-Lewis design is an ambitious attempt which somehow misses real impact. Again, only Saarinen has taken full advantage of the possibilities, achieving a truly impressive structure, a meaningful symbolism.

The generally diffident approach to monumentality apparent in these designs is too obvious to be ignored. It should perhaps be traced farther back than the contemporary architect's lack of experience with large-scale problems. The real memorials of our age have been, not temples to the spirit, but monuments to utility. The TVA inspires Twentieth Century designers more than does General Grant on Horseback. It is difficult to recapture the past, even when it is put determinedly into modern trappings.



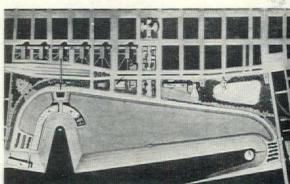
#### **RUNNER-UP, \$2,500.**

HARRIS ARMSTRONG, architect

JURY REMARKS:

"The first submission raised high the symbolism of the levees although in doing so it violated possibility. A broad conception which by its very austerity would mark it as a monument amidst the natural turmoil of commerce.

"Real study of the site brought, in the second stage, a memorial structure which in its great simple mass would stand clear of the existing structures on either river bank. Great sensitivity brought the need of presenting the view from the city which is day by day truth."



PLAN OF FIRST STAGE DESIGN



RUNNER-UP, \$2,500.

JURY REMARKS:

"An orderly but informal park with welcome open space, surrounded by the structures required, brought this scheme up for further consideration.

"These qualities were retained in the Second Stage, with the monument developed as a minor structure in relation to the museum buildings."

T. MARSHALL RAINEY

architect

JOHN F. KIRKPATRICK landscape architect

ROBERT A. DESHON

planner

JOHN B. SHEBLESSY

JOHN F. BECHTOLD

ROBERT S. ROBISON

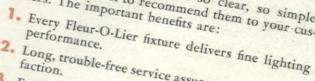
painte

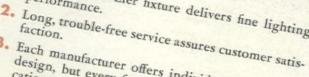
sculptor

engineer planner



Fleur-O-Lier's advantages are so clear, so simple, that you will want to recommend them to your customers. The important benefits are:





- 3. Each manufacturer offers individual styling and design, but every fixture meets exacting specifications for lighting, constructional and electrical excellence.
- 4. Conformance to these rigid specifications is safeguarded by impartial Electrical Testing Laboratories, Inc., which checks and tests Fleur-O-Lier
- 5. Fleur-O-Lier offers a Product and a Program. The Fleur-O-Lier offers a Product and a Program. The product is tops. The program promotes and develops commercial fluorescent lighting—elevates lighting standards to higher levels.

Everybody benefits from Fleur-O-Lier-you and your customers.

\* Every Fleur-O-Lier fixture uses Certified Ballasts and Certified Starters.



Manufacturers 2116 Keith Building .

Fleur-O-Lier is not the name of an individual manufacturer, but of a group of fixtures made by leading manufacturers. Participation in the Fleur-O-Lier groups Fleur-O-Lier is not the name of an individual manufacturer, but of a group of fixtures made by leading manufacturers. Participation in the Fleur-O-Lier program is open to any manufacturer who complies with Fleur-O-Lier requirements. Cleveland 15, Ohio





OUR Revere Distributor can supply Revere Copper Water Tube now in the large sizes needed for soil, waste and vent stacks in home or commercial

Revere Copper Water Tube is the ideal material for drainage and vent systems because:

- 1 It is highly resistant to corrosion, which assures a longer life for the system.
- 2. Its permanently smooth interior surfaces provide free, unobstructed flow.
- 3. Joints made with solder fittings save time and thus lower the cost of installation.

In drainage systems-just as in heating, water supply and air conditioning-trouble always costs more than Revere Copper Water Tube. Each length of this tube is stamped at regular intervals with the Revere name and the type. These marks are more than identificationthey are your assurance of full wall thickness and the close gauge tolerances so essential for tight soldered joints.

You can specify or install, in addition to Revere Copper Water Tube, such other long-lived materials as Red-Brass Pipe; Sheet Copper and Herculoy for tanks, ducts, pans and trays; Dryseal Copper and Aluminum Refrigeration Tube (dehydrated and sealed); Copper oil burner, heat control and capillary tubes. The Revere Technical Advisory Service is always ready to serve you. Call your Revere Distributor.

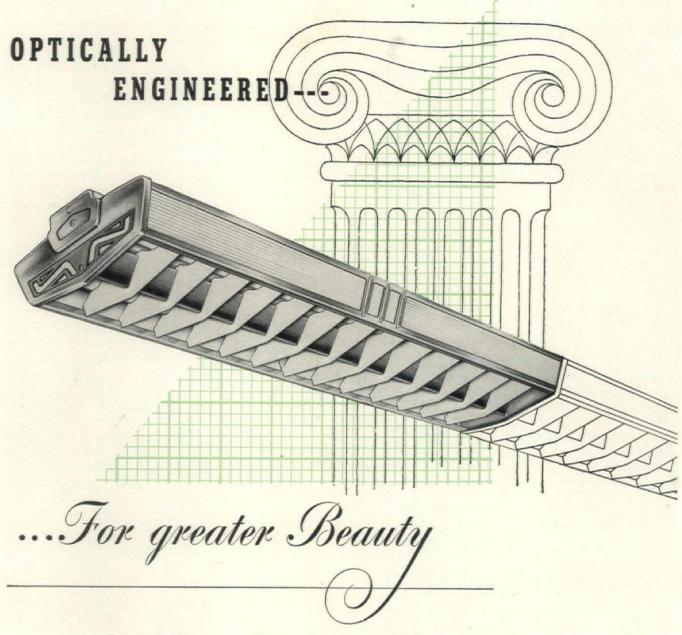


#### COPPER AND BRASS INCORPORATED

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.



Day-Brite Fluorescent Fixtures have been designed to meet the trend of modern architecture. They combine functional lighting efficiency with artistic simplicity. Our engineering service will be glad to suggest lighting layouts best suited to deliver the desired maintained intensity and harmonize with your architectural treatment.

Your near-by Day-Brite representative will be glad to assist you with your needs.

The VIZ-AID for surface or suspension mounting . . . unit or continuous installation. Designed for two 40- or two 100-watt lamps, U. S. Patent Nos. D-138990, D-143641 and 2411952.

Day-Brite Lighting, Inc., 5471 Bulwer Avenue, St. Louis 7, Mo. Nationally distributed through leading electrical supply houses. In Canada:

address all inquiries to Amalgamated Electric Corp., Ltd., Toronto 6, Ontario.



Frank Lloyd Wright Issue . . . German Rebuilding . . . In Defense of Stock Plans . . . Le Corbusier's Name . . . The Niemeyer Case . . . Levitt's Sparring Partner Strikes Back . . . Architectural Poetry . . . Letter from Africa.

#### WRIGHT DECADE

Forum:

Congratulations on your January issue. There are two kinds of artists, and Frank Lloyd Wright is the third. Some must drag forth the relics of the past and drop the weight of history upon us like a load of rubble. Others must plague us with eccentricities that are as insignificant but as provoking as a cinder in the eye.

But the consistency of Wright's greatness during 50 years reads and looks more like the story of a unique civilization than the record of one man. The pile of him is. in itself, an era in architecture.

FABER BIRREN

New York, N. Y.

Forum:

... What a lift it would give American architecture if we could all, by induction as in an electric transformer, without imitation achieve a like measure of the imaginative quality which distinguishes architecture from engineering and building, and which the public expects from us as artists.

Walter A. Taylor, Director Dept. of Education and Research American Institute of Architects

Washington, D. C.

Forum:

Staff of The Architectural FORUM, I salute you!—for each issue of the magazine, to which I look forward with anticipation. But most of all for the January issue, which filled me with such awe and admiration that I was prompted to expression.

Words, however eloquent, fail to express the exaltation and inspiration one feels when contemplating the works of Frank Lloyd Wright. Those who have eyes which see find in his buildings a reverence for Nature and Man. Nature as a source of inspiration . . . Man as a noble creature imbued with integrity. Wright is the beacon in the night illuminating the path to serenity for minds in distress. I feel a sense of pity for those apathetics who—in this Twentieth Century—refuse to awaken from their lethargy and brush away the cobwebs of the past to view with clear minds the wondrous creations of this genius in our midst.

That we cannot have this architecture growing from our valleys and hills over the entire country—replacing the decadence which abounds—now, today, is a saddening reality. But the inevitability of Organic Architecture and the realization

that many architects see something of Frank Lloyd Wright's vision is an oasis to be encouraged across the desert.

Especially to us—the young men in architecture—it is gratifying to receive a publication which shares our enthusiasm and hope. A magazine young in mind and spirit.

George C. Higgins, Student

San Francisco, Calif.

Forum:

. . . The January number is magnificent and the whole staff is certainly to be congratulated on the work you have done. . . . Henry L. Kamphoefner

Norman, Okla.

Forum:

Every time when I receive Forum, it seems to me that I have got the greatest present. Especially in the January issue, I do learn a lot from it. And I think the success of every honest architect must be, if it is possible, to see his dream always concerning the idea of getting better of our life. The works done by Mr. Frank Lloyd Wright are not merely an architectural success, but are the works of erecting the foundation stones for the peaceful world, which shall be built by our own hands in our age. For selecting and publishing these works, Forum has done the invaluable job.

Erie, Pa.

SUN-CHIEN HSIAO

Forum:

. . . an excellent tribute to a man who is the world's greatest architect today, yesterday and perhaps forever.

BRADLEY STORRER

Dearborn, Mich.

PERSISTENT VOICE

Forum:

... How about giving us a few strung out Cape Cods for a change?

RUSSELL H. SOWERS

Arlington, Va.

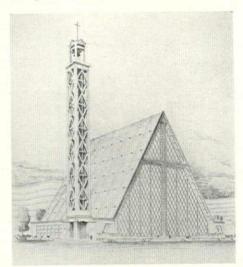
PROJECT FROM BERLIN

Forum:

As a one-time member of Mr. William Lescaze's office and, later, of the staff of Mr. W. F. Ruck & Zara Witkin, Los Angeles, I am mailing you some photographs of recent designs which I think might be of interest for your readers.

In Germany actual reconstruction has not started yet. Only partly destroyed houses are being restored but in the meantime a fight seems to be starting among professionals about the future aspects of the destroyed cities. Many competitions are keeping architects busy. In open competitions 100 to 800 designs have been submitted. But since the judges seem to be almost always over 58, conservatism is ahead. However I think reconstruction would only be justified if we are planning to meet future necessities and possibilities even if they cannot be completed in our lifetime.

The moment does not allow any extravagances, nor does the present material shortage allow the construction of a new church or any other building. But the general plan has to provide for them all.



PROPOSED CHURCH of concrete, steel and glass roofed with copper. Triangular design needs no interior bracing.

I wonder how your architects would criticize this design? I certainly would enjoy hearing from them.

C. HERMAN WITTIG

Berlin, Germany

COMPETENT STOCK PLANS

Forum:

I notice that you are being severely censured in the Jan. '48 issue for soiling your pages with mention of "stock" plans.

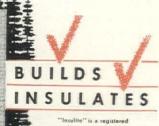
Let's take a realistic look at the situation. Stock plans are going to exist. They cannot be looked upon as a plague which must be stamped out. Why fight them? Let's see that they reach their full potentialities.

Agreed that the best investment a home (Continued on page 22)

# POOUBLEE POUTY INSULITE

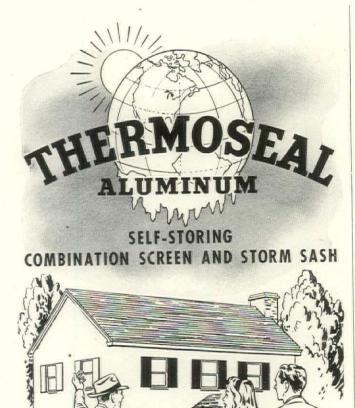


The GENUINE



MINNESOTA & ONTARIO PAPER MINNEAPOLIS

#### LETTERS



... makes a home completely modern IN COMFORT... CONVENIENCE ... SAFETY

"Thermoseal Windows" is one specification that you can make that will receive enthusiastic approval. Tell your clients this... "Thermoseal gives all the advantages of screens, all the advantages of storm sash, all the advantages of weatherstripping ... in one permanently installed unit ... with NOTHING TO CHANGE, NOTHING TO STORE". Literature is available to back up your specifications—gives figures on fuel savings—tells all Thermoseal's year 'round benefits.

For information YOU will want, consult Sweet's Architectural and Builders Files or write direct . . .

#### THERMOSEAL Division

THE F. C. RUSSELL COMPANY

6406-AFA Herman Avenue . Cleveland 2, Ohio

Also manufacturers of the famous Thermoseal Three-In-One Wood Window

builder can make is to hire an architect. But many home builders . . . people who deserve the best house they can get for their money . . . cannot or will not afford the fee of an architect or competent designer whether it be 15 per cent, 6 per cent, or even 2 per cent. As an alternative they . . . draw a plan themselves, have their builder (who may or may not be qualified) draw one, or buy a stock plan. In most cases the stock plan brings the best results.

In my opinion stock plans designed by competent architects and offered by leading consumer magazines or other organizations are a step forward. The best way for the architectural profession to increase its prestige in the eyes of the public is to get more well designed buildings built. While stock plans are far from ideal, they look to be the best method yet devised to fill that gap between group housing projects and individual architect's services.

JOHN BLAYNEY, Student, U.S.C. Los Angeles, Calif.

#### THE CROW

Forum:

If letter writer Roger Allen (FORUM, Aug. '47) really wants to know a little something about how and why Le Corbusier took his nickname, you might refer him to the first page of G. T. Hellman's excellent profile in the New Yorker.

ELIZABETH FITTON

Princeton, N. J.

Which says: "... he began to attract a good deal of attention with a series of magazine articles on architecture that he wrote under the nom de plume Le Corbusier. Before he wrote his articles, he had been, as he still is, a painter. Becoming an impassioned exponent of the evils of urbanisme ... he had taken the name of Le Corbusier to keep his two careers separate and distinct. .. Amédée Ozenfant, a French painter ... decided to write under his mother's maiden name ... and, he says, suggested to Le Corbusier that he resort to the same dodge. ... 'I have a cousin called Lecorbesier,' he (Corbu) said. 'Well, you have the face of a crow,' I (Ozenfant) told him. 'Why not call yourself Le Corbusier?' According to Corbusier ... the idea of assuming a nom de plume was his, not Ozenfant's: the name was that of his maternal grandmother; and he does not have the face of a crow."—ED.

#### BRAZILIAN APPRECIATION

Forum:

On behalf of the Brazilian architects, we wish to convey to you the deep appreciation with which the November 1947 issue of The FORUM was received. Such magnificent and understanding presentation of the latest Brazilian work is just what Brazilian architects need in their unrelenting fight for a worthwhile architecture in our day.

This issue is a truly splendid job, on which The Forum deserves the warmest congratulations. It is a pity that Howard Myers, who had become such a personal friend of all the Brazilian architects who visited the U. S. could not see this issue.

F. F. Saldanha, President Henrique E. Mindlin, Sec'y Instituto De Arquitetos Do Brasil Rio de Janeiro, Brazil

#### AMERICAN HOSPITALITY

Forum:

Honorable Sir:

Enclosed is a copy of a letter sent to Secretary of State Marshall by the undersigned architects concerning the exclusion of Brazilian Architect Oscar Niemeyer from the U.S.

The Honorable George C. Marshall Secretary of State Washington, D. C.

We, the undersigned architects, have read of the Department of State's decision preventing Oscar Niemeyer from entering the U. S. and giving a series of lectures at Yale University. Señor Niemeyer has demonstrated an unusually high professional standard in all his work. His prestige as a Brazilian architect is unparalleled. His contributions to the building plans for the United Nations are outstanding. His position as one of the world's great architects has been widely acknowledged.

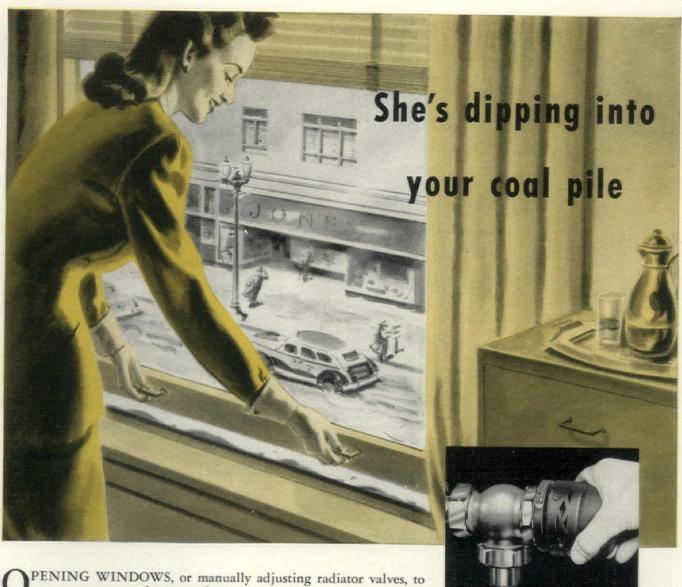
We feel his exclusion from the U. S. is a set-back to the desirable exchange of information among members of our profession, and an implied insult to the remarkable architectural work being produced in Brazil.

We respectfully request that his application for a visa be reconsidered in order that cultural relations with our neighbors to the south can be strengthened, and that our profession can benefit from the contact with an architect of Señor Niemeyer's stature.

Prof. Talbot Hamlin, A.I.A.
Simon Breines, A.I.A.
Henry Churchill, A.I.A.
Thomas H. Creighton, A.I.A.
Jules Korchein, A.I.A.
Jacob Moscowitz, A.I.A.
Isadore Rosenfield, A.I.A.
Walter Sanders, A.I.A.
Richard Stein, A.I.A.
Julian Whittlesey, A.I.A.

Señor Niemeyer, according to a State department spokesman "an open and avowed member of the Communist Party of Brazil," was denied U. S. entry under the 1918 law excluding "aliens believing in, advising etc., overthrow by force or violence of U. S. Government. . . "No proof was offered that the respected Señor Niemeyer, coming to speak in a respected institution on a respected subject, was actually looking forward to a plotter's holiday.—ED.

(Continued on page 26)

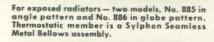


OPENING WINDOWS, or manually adjusting radiator valves, to restore room comfort must be a popular indoor sport—so many people do it. But what a terrific amount of money it costs building owners in wasted fuel! It's almost as bad as if each tenant carried home a shovelful of coal every night.

To discourage this expensive habit, and at the same time provide constant, healthful temperature, Fulton Sylphon has developed a line of radiator valves that work automatically. You can recommend them with complete confidence.

Two typical examples of these valves are shown. Adaptable to old buildings as well as new, they require no complicated piping, wiring, or auxiliary equipment. Small, trim, neat . . . they are self-contained, self-operated, fully modulating. They pay for themselves with the fuel they save.

Complete information and installation pictures in Bulletin EB-255. Send for your copy today.





For enclosed radiators — Angle type, No. 895; globe type, No. 896. Similar to No. 885 in operating principle. Equipped with two bulbs . . . provides balanced heat control from inlet and outlet air.



Temperature Controls . Bellows Devices . Bellows Assemblies

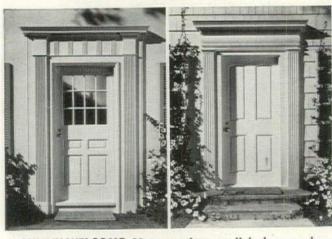
FULTON SYLPHON

FIRST WITH BELLOWS

ROBERTSHAW FULTON CONTROLS CO. KNOXVILLE 4, TENN.

Canadian Representatives, Darling Brothers, Montreal

# All over the house Curtis makes it... Curtis makes it...

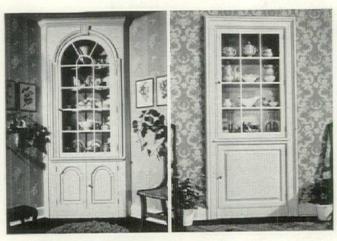


**SUNNY WELCOME:** No matter how small the home or how modest the building budget, you can add the charm of a Curtis entrance. Always in good taste, built to precision standards, Curtis entrances are made in a wide variety of styles. Entrance at left is Curtis No. C-1731, a design by Willis

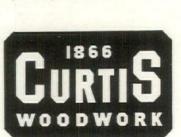




Irvin, architect. Second from the left is C-1730, the work of H. Roy Kelley, architect. Entrance in the stone wall is C-1701, designed for Curtis by architect George W. Stoddard. The fourth design, C-1724, is by Cameron Clark. All Curtis entrances are toxic, water repellent treated.



**STORAGE PLUS CHARM!** For books, prized china and *objets d' art*, Curtis china cabinets provide ideal storage. Shown here are only two of eighteen styles made by Curtis. Useful for dining rooms, living rooms and bedrooms. At the left is Curtis design C-6505, by Cameron Clark, architect; at right, C-6526, a design by architect H. Roy Kelley.



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

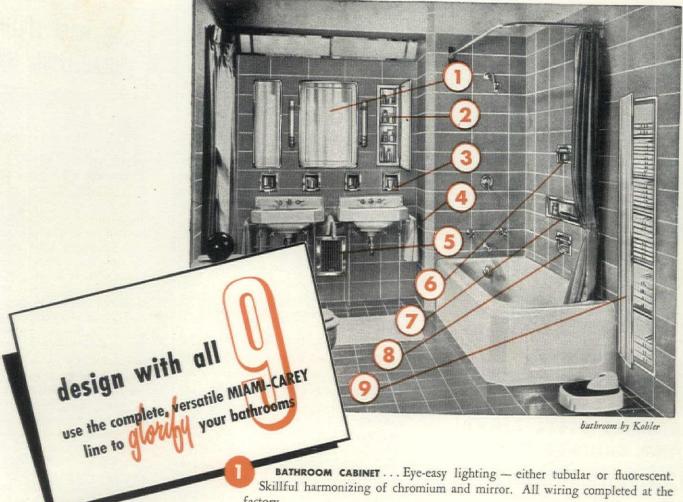




**WARM HOSPITALITY!** In today's homes, there's a trend away from the stark and bleak—a trend toward warmth and cheer. A Curtis mantel makes the utility of a fireplace beautiful. Curtis mantels "wear well" because they were soundly designed by leading architects, and have correct proportions and fine detail. At left is mantel C-6059, at right C-6049.

#### SEND FOR THE CURTIS WOODWORK BOOK!

-	
	Curtis Companies Service Bureau AF3W Curtis Building Clinton, Iowa
	Gentlemen: Please send me your book on the new Curtis Woodwork line.
	Name
	Address
	City



factory.

EXTRA CABINETS . . . May be installed alongside large cabinet over lavatory or on adjacent walls. Door mirror set in chromium-plated frame. Crystal Snow inside finish.

RECESSED TUMBLER HOLDERS AND SOAP DISHES . . . Chromium plated over brass for everlasting lustre. Add unmistakable touch of luxury to any bathroom.

TOWEL BARS ... Smooth, sparkling chromium finished ... complete selection ... both detachable and permanently fixed models.

MIAMI ELECTRIC BATHROOM HEATER . . . Compact, safe, efficient, this fan-driven heater fits snugly into any wall and is easy to install. Carries approval of Underwriters' Laboratories, Incorporated.

SHOWER GRAB BAR AND SOAP DISH . . . Eliminates bending under shower while searching for soap. Grab bar lends a safety factor, too.

RECESSED SHELF ... Another modern Miami-Carey idea! This smart accessory is mirror-lined and available in either the regular silver or rose (flesh) colored mirror.

TUB SOAP HOLDER AND GRAB BAR . . . All Miami-Carey accessories are easy to install. Their design eliminates open joints. They will not crack or craze.

RECESSED TOWEL SUPPLY AND UTILITY CABINET . . . The perfect convenience extra for any bathroom. Features a full-length mirror set in chromium-plated frame . . . and five plate glass shelves.

#### institutions. A postcard will bring your copy by return mail. Address Dept. AF-3

ARCHITECTS, **DESIGNERS:** 

write for your FREE copy

trated, this complete cata-

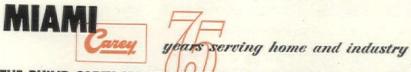
log describes the exclusive Miami-Carey lines . . . brings

you many modern ideas in designing bathrooms for the

home, hotels, hospitals and

.. of "Glorifying the American Bathroom." Fully illus-

Miami-Carey Bathroom Cabinets and Accessories Asbestos Shingles & Sidings . Asphalt Shingles & Roofings Asphalt Roll Brick Siding • Rock-Wool Insulation Waterproofing Materials • Roof Coatings and Cements Asbestos Coverall Wallboard



THE PHILIP CAREY MANUFACTURING CO., CINCINNATI 15, OHIO

THE MIAMI CABINET DIVISION, MIDDLETOWN, OHIO 1557 MacKay St., Montreal 25, P. Q.



# Just Line

### STAINLESS STEEL SINKS AND CABINET TOPS

They give you the beauty, permanence and sanitary excellence of Stainless Steel, plus the skill and experience of Just's specialized craftsmen. Important among the differences is our

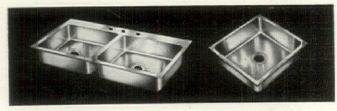
#### EXCLUSIVE Radiiluxe DESIGN

... IN-BUILT SPLASH RIM on bowls prevents water from splashing on floor and clothing... DOUBLE-PITCH DRAINBOARDS give fast, perfect drainage, with no channels to clean... no grooves to endanger fine glassware. All joints are welded and polished; bowls have radius corners vertically and horizontally. These are just a few of the qualities that add extra value and distinction to Just Line products.

#### Custom-built or Standard Sizes

For home kitchens, hospitals, schools, hotels, restaurants, institutions, office buildings, as well as for marine and industrial installations... including SCULLERY SINKS in stainless steel, or hot-dip galvanized after fabrication.

WRITE TODAY FOR BULLETINS AND DETAILS



Stainless steel sink bowls-flat rim or ledge back



#### IN DEFENSE OF DEALERS

Forum:

The article entitled "I Can't Get It Wholesale" (FORUM, Nov. '47) came as a shock and a surprise. Not because of the line of reasoning attributed to Building Contractor Bill Levitt. That's old stuffvery old! Sometimes we think it must have been the plaintive wail of America's first contractor.

No indeed. Our amazement stems directly from the fact that FORUM was willing to lend dignity to a superficial generalization by describing it as "the powerhouse wallop of a champ waltzing easily toward a nervous opponent." If Mr. Levitt omits as much from his houses as he does from his argument, the present plight of the building industry is fully explained.

Let's take a look at Mr. Levitt and his 3,000 washing machines and see what he really said.

Mr. Levitt was called upon by factory and local representatives of a washing machine company with a proposal that he install automatic washing machines as standard equipment in their houses. "Finally the deal is closed. Price, delivery, everything is all agreed upon."

We weren't there, but we will bet our bottom dollar that the price he "agreed upon" liberally reflected the importance of the quantity of machines he proposed to buy... So what was his complaint?

The billing was handled by the local "Authorized Dealer" and, to him, that meant he was just another retail purchaser. What seems to have hurt him even more was his suspicion that several individuals beside Bill Levitt made a profit on the deal. We are a little puzzled about this angle, for he said the price was satisfactory at the time the deal was closed. What possible difference can it make to him whether the available profit was split or not?

From all of this he draws the conclusion that the dealer and the distributor are economic parasites, industrial Petrillos and useless—at least as far as his company is concerned.

. . . And right there Bill Levitt demonstrates beyond any hope of contradiction his extreme ignorance. He doesn't even know the difference between quantity purchasing and the functions for which a manufacturer is willing to pay a distributor and a retailer a continuing profit.

A washing machine distributor, among other things, is responsible for seeing that the producer has adequate retail coverage in the distributor's territory. To do this, he has salesmen who call upon merchants and persuade them to carry the line. He sees that retail stocks are adequate. He trains

(Continued on page 30)

## GRACIOUS LIVING IN PHILADELPHIA MANNER



Wynnewood Plaza Apartments, Wynnewood, Pa. Completed early in 1947. Equipped with Webster Moderator System of Steam Heating. E. J. Frankel, Owner. J. E. Fieldstein, Architect. William T. Fowden, Chester, Pa., Heating Contractor.

Built during 1945-46, when prices and shortages kept most builders out of the market, Wynnewood Plaza is now bringing a substantial return on the investment of more than one million dollars.

E. J. Frankel, enterprising Philadel-phian and owner, apparently knows the kind of deluxe living accommodations that Philadelphians require. Take heating. A Webster Moderator System of Steam Heating gives Wynnewood Plaza "controlled-bythe-weather" comfort. Comfortable temperatures are maintained automatically by a control which varies steam supply with changes in outdoor weather conditions.

While comfort is the prime objective, economy results from the reduction in overheating. Fuel oil consumption for heat and hot water for the first year was 75,000 gallons in an installation of approximately 14,000 sq. ft. of radiation. Mr. Frankel expects to better this with more experience in operation.

Mr. Frankel is now building two new apartment houses, Pelham Park, a 9-story building in Germantown, and Latches Lane, a 6-story building in Merion. He has selected Webster Moderator Systems for these buildings.

Let us tell you what Webster has to offer for your projected new apartment developments.

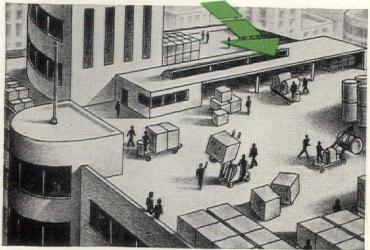
WARREN WEBSTER & CO., Camden, N.J. Representatives in principal U. S. Cities: : Est. 1888 In Canada: Darling Brothers, Limited, Montreal

### MODERATOR SYSTEM

"Controlled by the weather"
For Multi-Story Apartments

GARDEN APARTMENT PROJECTS For one- and two-story garden apartment projects use Webster Baseboard Heating.





### AVAILABLE NOW! NEW WAYS TO MORE EFFICIENT ROOFS!

Here's extra shipping, packing and storage space...one sample of the more productive use of roof areas made possible now by new Ruberoid specifications!

ROOFS LIKE THIS are typical of the modern, functional utilization of an area that formerly went to waste. The factory roof illustrated here has a husky concrete surface for heavy traffic and storage. Other related possibilities are hospitals with outdoor decks for convalescents, apartment houses with gardened roofs, department stores with recreational roofs for employees.

These are "roofs of the future," but recently evolved Ruberoid specifications make them completely possible *today!* As worked out by Ruberoid engineers, these new roofs are not impractical dreams, but thoroughly tested, down-to-earth cer-

tainties! Full details of these and other developments are available from the Ruberoid Company or from your local Ruberoid Approved Roofer. Call on your Ruberoid Roofer for help in the solution of any roof problem. His "know-how" is backed by Ruberoid's years of experience and complete line of all types of roofing materials!

#### The RUBEROID Co.

Executive Offices: 500 Fifth Ave., N. Y. 18, N. Y. Asphalt and Asbestos Building Materials

### The RIGHT roof for any job-from one source!



Remember that Ruberoid makes every type of built-up roof— Smooth Surfaced Asbestos, Coal Tar Pitch with gravel or slag surfacing, or smooth or gravel-and-slag surfaced Asphalt in specifications to meet any need. Hence a Ruberoid Approved Roofer is not prejudiced in favor of any one type. His services assure you of one source for all materials, centralized responsibility, smoother operation, uniform quality!

# skylines ... by On



In Boston, 3,839 Otis elevators have helped create an ever-growing skyline. Good example is the new 26-story addition to the home office of the John Hancock Mutual Life Insurance Co., which will have the fastest vertical transport in all New England.

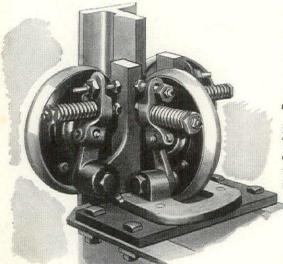
#### TIPS ON TIPPING.

When the fair sex enter an elevator should we men tip our hats? If you've puzzled that one too, here's your answer: in clubs, hotels, apartments, yes; in stores and offices, no. Our authority? Emily Post.



#### AIR BORNE

is the way you feel in elevators that ride on Otis Roller Guides. The individual knee action of each rubber-tired roller permits the car to literally float on the rails. It's a simple matter to install these guides on existing elevators - and no elevator is modern without them.



#### LOCAL COLOR.

Even blindfolded, it's easy to find one of the 256 local Otis offices. For we're represented in all but seven U. S. cities (or their suburbs) of more than 50,000 persons - and in 88 cities of less than 50,000.\* Which means that where there are elevators, there are Otis offices, at your service and close by.

\*Based on latest U. S. census figures.



#### ATOR COMPAI

Offices in All Principal Cities

YES I am interested in the Otis "32" - the brand new Escalator that takes less space, less time to install and has a rated capacity of 5000 persons an hour.

Name			
Address			_
City	Zone	State	

# Floor layer's favorite for over 30 years

### Bruce Flooring is first choice of men who specialize in beautiful hardwood floors

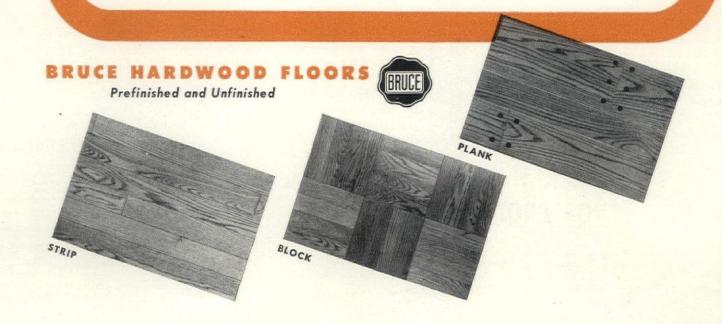


• A floor layer *knows* his hardwood floors. Through years of experience he can judge the quality of the flooring as soon as he breaks open a bundle and lays a few strips. He knows whether it is made from good lumber, whether it is properly kiln dried, whether it is accurately machined, and whether it is graded right.

It has always meant a lot to us at Bruce that so many floor layers have expressed their preference for Bruce Hardwood Flooring. They've been using it and boosting it for the past 20,25, and even 30 years!

And here's added proof that floor layers *know* their hardwood floors: Survey after survey has shown that architects, dealers, contractors and home owners also prefer Bruce Flooring to all other brands . . . by a wide margin!

E. L. BRUCE CO., MEMPHIS, TENN. . WORLD'S LARGEST MAKER OF HARDWOOD FLOORS



### DEVOE 87 SPAR VARNISH has demonstrable superiority



DRIES IN 4 HOURS

check on hardness is the Sward Rocker Hardness Tester. Devoe 87 Spar Varnish comes through this test with definite proof of its exceptional hardness and mar resistance.

Thanks to Devran\*, the unique synthetic resin created in the Devoe Laboratories, Devoe 87 Spar has

the unusual combination of hardness and resilience. It not only resists physical damage, but retains its glossy, protective film despite substantial expansion and contraction of the substance to which it is applied. It is also remarkably immune to damage from liquids, including alcohol and hot, soapy solutions.

Specify Devoe 87 Spar wherever a superbly durable and beautiful finish is called for-on floors, woodwork, furniture and boats.

\*Patent Applied for

#### ANOTHER DEVOE PRODUCT

Peaslee-Gaulbert Paint & Varnish Company Truscon Laboratories Wadsworth, Howland & Company Devoe & Raynolds Company, Inc. 787 First Avenue, New York 17, N. Y.

the dealer salesmen and handles the cooperative advertising in local papers. He carries a large stock of repair parts so that dealers can give quick repair service without a heavy investment in parts inventory. Last, but not least, he fully relieves the producer of any credit responsibility as far as the retail dealer is concerned. Do you imagine that Levitt & Sons could "perform these functions efficiently?" Or that they would if they could?

And what about this other parasite, the retailer? He goes out in the highways and byways and digs up customers. He probably unearthed Bill Levitt. Of course, the deal was too big for him and he called for help. But is that any reason why he shouldn't get paid for it?

... Somehow, we do not see Bill Levitt, or any other building contractor, performing anybody's function but his own. Nor can we escape the conviction that Bill would gain a great deal more stature in the eyes of the business world if he concentrated his activities on his own job and stopped broadcasting quasi-libel against businesses about which he knows so little.

B. E. BABBITT, Managing Director National Plywood Distributors Ass'n. Chicago, Ill.

William Levitt, who feels that he knows more than a little about Reader Babbitt's business, points out:

1) That Babbitt is not concerned with the cost cutting essential to mass housing.

2) He is therefore arguing on the basis of personal sales-fighting a straw man since:

3) Levitt has never advocated the elimination of the dealer where he performs a function. 4) Levitt did not buy his washing machines

because a dealer sold him on the idea. 5) Nor could he buy from a dealer since retail stocks are not adequate.

Nor does he call a dealer for repair parts.
 For quick service he keeps his own stock on hand.—ED.

#### ENGLISH TIMBER

It is with surprise I note that the majority of houses illustrated in your magazine are of timber construction or timber clad. In England people do not care for such houses. Brick is the chief material used, occasionally stone. Timber is very scarce now and, as you have to have a license to buy it, each house is allowed only a certain quantity.

There are quite a number of different types of prefabricated bungalows and several types of houses but these methods have not brought costs down. Most of them cost as much and sometimes more than a traditional brick built house . . . Conditions of living, food, etc., are not quite as bad as some Amercan correspondents state, neither are workers slacking a lot as some

(Continued on page 34)

### IN-SINK-ERATOR

AUTOMATIC GARBAGE DISPOSER



REVERSIBLE ACTING ROTOR SHREDDER

**FEATURES** 



- TWO DIRECTIONAL SHREDDING **ELEMENTS**
- · GLEAMING WHITE FINISH
- STREAMLINED, COMPACT DESIGN

Add to all these a distribution set-up that pleases the man who makes the installation—the plumber—and you've got a garbage grinder you will own with pride, specify with confidence.

FOR FURTHER INFORMATION-WRITE DEPT.

#### IN-SINK-ERATOR MANUFACTURING CO. RACINE, WIS.

Specializing Exclusively in the Manufacture Automatic Garbage Disposers Since 1938

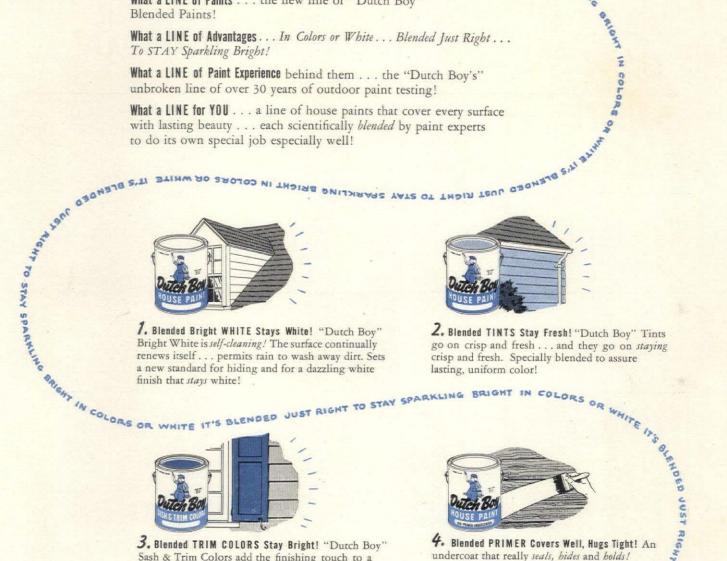
### What a LIN

WHITE IT'S GLENDED JUST RICHT TO STAY SPARKLING

What a LINE of Paints . . . the new line of "Dutch Boy" Blended Paints!







3. Blended TRIM COLORS Stay Bright! "Dutch Boy" Sash & Trim Colors add the finishing touch to a home's protection. They're blended to hold their brilliant gloss . . . to stay bright and gay!



4. Blended PRIMER Covers Well, Hugs Tight! An undercoat that really seals, hides and holds! Used under "Dutch Boy" Bright White or Tints, it gives a superior 2-coat job, even on unpainted wood!



5. Blended PORCH & DECK PAINT Stands Wear!
"Dutch Boy" Porch & Deck Paint is blended to
stand up longer under the kicking around this type of
paint gets from foot traffic and bad weather!

"DUTCH BOY"

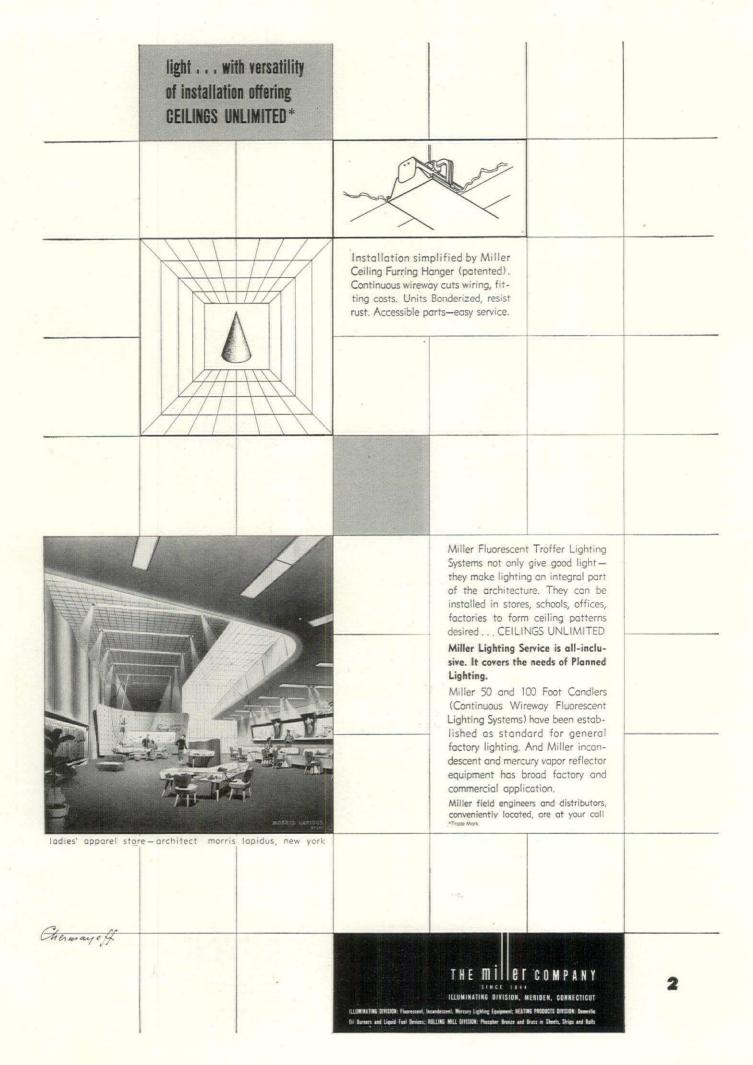
BUENDED PAINT

NATIONAL LEAD COMPANY: New York 6; Buffalo 3; Chicago 8;

NATIONAL LEAD COMPANY: New York 6; Buffalo 3; Chicago 8;

Made by the Makers of
the Famous "Dutch Boy" White Lead

**DUTCH BOY"** 





SHARON STEEL CORPORATION

Full details upon request to

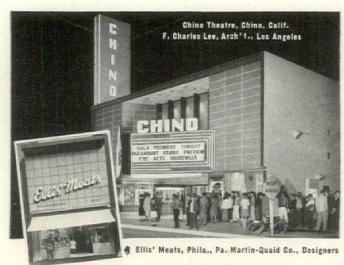
Sharon, Pennsylvania

PRODUCTS OF SHARON STEEL CORPORATION AND SUBSIDIARIES: THE NILES ROLLING MILL COMPANY, NILES, OHIO; DETROIT TUBE AND STEEL COMPANY, DETROIT, MICHIGAN; BRAINARD STEEL DIVISION, WARREN, OHIO; SHARONSTEEL PRODUCTS COMPANY, DETROIT, MICHIGAN, AND FARRELL, PENNSYLVANIA. Hot and Cold Rolled Stainless Strip Steel—Alloy Strip Steel—High Carbon Strip Steel—Galvanite Special Coated Products—Cooperage Hoop—Detroit Seamless Steel Tubing—Seamless Steel Tubing in Alloy and Carbon Grades for Mechanical, Pressure and Aircraft Applications—Electrical Steel Sheets—Hot Rolled Annealed and Deoxidized Sheets—Galvanized Sheets—Enameling Grade Steel—Welded Tubing—Galvanized and Fabricated Steel Strip—Steel Strapping, Tools and Accessories.

DISTRICT SALES OFFICES: Chicago, Ill., Cincinnati, O., Cleveland, O., Dayton, O., Detroit, Mich., Indianapolis, Ind., Milwaukee, Wis., New York, N.Y., Philadelphia, Pa., Rochester, N.Y., Los Angeles, Calif., San Francisco, Calif., St. Lauis, Ma., Montreal, Que., Toronto, Ont.

**HARONSTEE** 

### LETTERS



### Butcher, Baker Candle-Stick Maker!

For a theatre . . . gas station or any TRADE

SEAPORCEL PORCELAIN ENAMEL IS YOUR ANSWER FOR FUNCTIONAL DESIGN

Seaporcel architectural porcelain enamel has gained such rapid acceptance in the commercial building field that its widespread applications are too numerous to mention or designate individually.



Sun Oil Station, Chester, Pa.

Seaporcel's Catalogue illustrates through photographs and erection details, exterior and interior jobs fabricated in our plant. It is worth your while to send for a copy... whether you plan now or in the future... the new design of a store front, a complete building facade or almost any type of exterior or interior.

Seaporcel Porcelain Enamel is obtainable in glowing color combinations and varied surface textures. The versatility of the material and its flexible characteristics give the architect and designer freedom of planning ... the choice of shape and form.

Seaporcel\* is unaffected by weather, it is fire-proof, corrosive-resistant and maintenance cost is negligible. It is porcelain enamel deluxe... fused to steel for lasting newness.

Again we say . . . send for our Catalogue

### SEAPORCEL PORCELAIN METALS, INC.

Formerly Porcelain Metals, Inc. 28-24: Borden Avenue, Long Island City 1, N. Y.

Complete American Federation of Labor Metal Fabricating and Enameling Shop

Also manufactured on the West Coast by SEAPORCEL CORPORATION OF CALIFORNIA represented by: DOUGLAS McFARLAND & CO. 1491 Canal Street, Long Beach, California



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



Americans believe. But the tempo of production is not rising as quickly as is necessary to adjust our economy and needs.

I would be pleased to correspond occasionally with any architect who may be interested in England. I would like to receive any planning data available, especially of schools and housing. My address is 44 Rock Road, Olton.

W. L. Lawson, Architect Birmingham, England

#### A CHURCH OF GOD

Forum

Maybe philosophical architects are to be seen and not heard, but perhaps this attempt at preaching will help honest building to be realized . . .

#### CREED

We call this building a church

with spires pinching clouds above the expression of humility with fluted columns supporting nothing the harbor of honesty with frigid surfaces reflecting darkness the house of light

a church

We say the styles of the past . . .

Romanesque

Byzantine

Provincial

Gothic

Renaissance

Baroque

are our forms for the future

We suggest that church design never change . . .

grotesque pillars of stone

ill-formed wooden benches

multi-crystaled chandeliers

cold marble pulpits

and statues

never change

We have closed our church doors to the sun

moon

stars

stream

river

ocean

grass plant

tree

skv

elements of nature

We believe that God endowed us with senses...

taste

touch

smell

sight

hearing

religion is all of these

(Continued on page 38)



1. Smart, streamlined styling blends harmoniously into all surroundings.
2. Effortless finger-tip pressure produces a steady stream of perfect-temperature drinking water. 3. No spouting, no splashing, no annoying fluctuations in water flow. 4. Bubbler design gives maximum sanitary protection.

User Protected by Temprite's 5-Year Warranty Plan

All models meet requirements of the National Bureau of Standards and Underwriters Laboratories, Inc.

Write for name of distributor in your neighborhood,

Manufacturers
of water cooling equipment
since 1929.

EMPRITE PRODUCTS CORP.

39 PIQUETTE AVE.

DETROIT 2, MICH.

QUALITY CONTROLLED\*

FLOORING

JAMES WELDON JOHNSON HOUSES NEW YORK CITY

We'll let the record speak for itself

with this impressive array of just a few of many typical MA·TI·CO installations!

"HOUSES AT HARUNDALE" (Asphalt Tile Flooring MA . TI . CO Approved Contractor)

Hyattsville, Md. MA. TI . CO Approved Contractor)

METROPOLITAN LIFE INSURANCE BUILDING PROJECTS STUYVESANT TOWN . PETER COOPER VILLAGE

NEW YORK CITY

AMSTERDAM HOUSES

MARCY HOUSES

BROWNS VILLE HOUSES

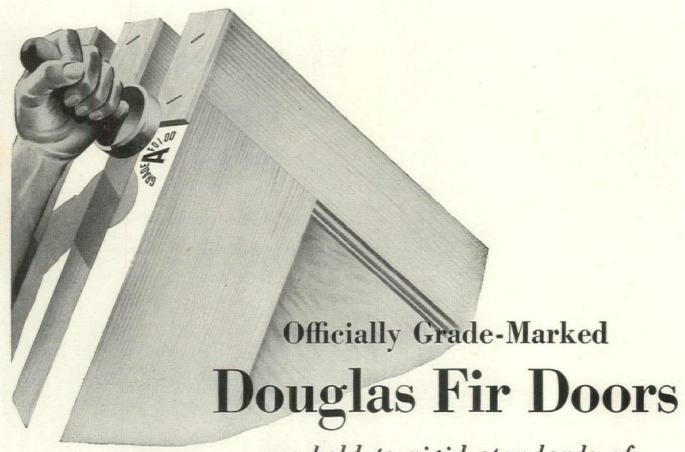
Write for MA • TI • CO Tile Samples and Literature to our New York Sales Office.

Time and again within the past months MA . TI . CO Asphalt Tile Flooring has been the unhesitating choice of architects and contractors the nation over. Proof you cannot afford to overlook the unexcelled quality and durability of MA · TI · CO.

ASTIC TILE Corporation FACTORY NEWBURGH, NEW YORK

Sold by: MASTIC TILE SALES CORPORATION 153 WEST 57th STREET, NEW YORK 19, N. Y.

District Offices: DETROIT . CHICAGO . BUFFALO . PHILADELPHIA . ATLANTA . WASHINGTON . FT. LAUDERDALE, FLA. . LONG ISLAND, N. Y.



are held to rigid standards of quality and uniformity through Fir Door Institute inspection service

NOW in effect are new quality standards for all Douglas fir doors, and new dimension specifications for stock interior doors—both backed by official Fir Door Institute inspection.

Stock interior doors are prefit to ½-inch less than previous catalog height and 3/16-inch less than catalog width, which permits on-the-job installation without sawing or trimming. Stock doors are also resin presealed for better finishing and improved dimensional stability.

On order, Douglas fir interior doors are available Factri-fit as well—pre-fit, pre-sealed and completely machined for locks and hinges.

All these features come under official inspection—as does workmanship and grade. The F.D.I. "grade trade-mark" is your assurance of a high-quality, uniform product.



FIR DOOR INSTITUTE

TACOMA BUILDING

THE NATIONAL ASSOCIATION OF

TACOMA 2, WASHINGTON

DOUGLAS FIR DOOR MANUFACTURERS

One of these distinctive F.D.I. "grade trade-marks" appears on the bottom of every officially inspected Douglas fir door—and only on doors so inspected. Look for the F.D.I. seal. It is your symbol of fine craftsmanship, backed by rigid inspection.



### LETTERS

### Success Formula

FOR BUILDERS, DEALERS,



### I. WINDOWS THAT

Men and women everywhere want windows that open wide at the slightest touch of the hand ... smoothly ... silently.

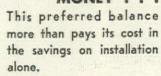
### + Plus 2.

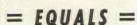
### INVIZIBLE SASH BALANCES

The "Grand Rapids Invizible" Sash Balance is always at your service... never in your sight. It is completely concealed in and moves with the sash itself.



### SAVINGS IN MONEY . . .





etter Homes

### ייווווווי



### SATISFIED HOME OWNERS

Tested in the laboratory and proved in thousands of homes, these preferred spiral sash balances will give you a lifetime of dependable service.

ADVERTISED TO

### 134,445,000 READERSHIP IN NATIONAL MAGAZINES

concealed in the sash . . . no tapes . . . no cables . . . no corrosion.

EASY TO INSTALL
... just drive in two fasteners ...
screw in one screw.

of all new and old windows . . . completely interchangeable.



bearing type, and Nos. 175, 109, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements.



GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS 2, MICHIGAN
Quality Leaders in Sash Hardware for over 50 Years

Specifications and Instructions

But we in our church . . .
taste only the food of thought
touch grotesque pillars of stone
smell stagnant air
feel ill-formed wooden benches
hear echoes on cold marble pulpits
and statues

lose religion

As he creates—so must we—and he has

If we pursue a new spirit of usage .
wood—with stone and brick
organic harmony
Glass expanses—integrating
outdoors and in

sun

moon

star

stream

river

ocean

grass

plant

sky

Altar gardens of vegetation and plant life

Steel—in thin bands that eliminate shadow and dimension

If we find deception in the

vertical line of pride and ego . . .

If we find integrity in the oblique line of obeisance and the

horizontal line of domesticity
We will find our heritage—the earth—
our sanctuary
spreading like some giant body with
legs entrenched in sin and

hands extended skyward

We will see a structure
in the armchair of the universe

with nature as its footstool the expression of humility the harbor of honesty the house of light

a church of God

Walter Thomas Brooks
Lake Forest, Ill.

#### SALVATION ARMY WINDFALL

Forum:

For months I have perused your publication in the hope of finding one useable idea. I found houses that look like garbage incinerators, grain elevators, privies and hotbeds, apartments that look like cell blocks.

Kindly have all remaining issues delivered direct to the Salvation Army's paper salvage division in your city.

W. M. PERKINS City Planning Commission

Memphis, Tenn.
(Continued on page 42)

### Protected wood CAN be

CLEAN

### ODORLESS

### PAINTABLE

Building lumber can be clean and easy to handle, yet have thorough protection against decay and termites . . . Wood treated with Chapman Penta Preservative has no stickiness, no odor, no discoloration, and, when suitably treated, can be painted.

Specify wood impregnated with Chapman Penta Preservative for inside as well as outside use. You'll find the economical treating cost is more than repaid by longer wood service, lower maintenance expense.

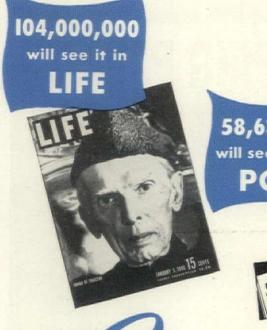
Ask us to tell you where and how you can obtain lumber treated with Chapman Penta Preservative, and for the facts on this versatile, clean wood preservative.



### PENTA PRESERVATIVE

containing pentachlorophenol, product of The Dow Chemical Company

CHAPMAN CHEMICAL COMPANY Suite 1231, 333 N. Michigan Ave., Chicago 1, III.





58,630,348
will see it in the
POST



110,644,990

will see it in BETTER HOMES and GARDENS AMERICAN HOME



### Termaglas

### WATER HEATERS

are a necessity in the completely satisfactory house!

TRADE MARK REG. U. S. PAT. OFF.

BECAUSE Permaglas Water Heaters CANNOT rust or corrode! Because they have the tank of glass-fused-to-steel! Because Permaglas Water Heaters assure clean hot water under any water condition!

Millions of people...hundreds of your own community...know about "Permaglas." The most sustained, and one of the most-read advertising programs is giving them the facts month after month.

Rust-free hot water is, of course, only one reason why Permaglas Water Heaters permit you to specify a truly superior, truly modern hot-water system. It will pay you in completely satisfied clients to know all of them!

USE THE COUPON—now—to get complete specifications on *Permaglas* Water Heaters. Gas, LP gas, or electric.

Glass-fused-to-steel! No Rusting! No Corroding!



Corporation



A. O. SMITH CORP. Dept. AF-348 Kankakee Works Kankakee, Illinois

Without obligation, send specifications on these SMITHway Water

Heaters:

Gas Water Heaters
Electric Water Heaters
Both

Name\_\_\_\_

Street\_\_\_\_\_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 better zinc-lined Duraclad and Milwaukee Water Heaters

### Suffering from "SHIPPING PAINS?"



THE AMERICAN TRUCKING INDUSTRY





### You see two sides of a roof at once . . . . in this book!

Above all, a roof must be practical. But it doesn't have to be dull about it. Along with taking the weather, a roof has time to be gay.

The above book, prepared with the help of architects for the home owner, talks both good sense and good taste in roofs. On the practical side, it talks values in weather protection, fire safety, economy. Then, it urges attention to the "fair weather" side where the roof keynotes the mood or color scheme of the entire exterior. The use of color in mass, in accent . . . in harmony, in contrast . . . is discussed by color experts.

With the unmatched values offered today by Asphalt Strip Shingles (wholesale prices at 96.8%\*, production at 287%, compared with 1926=100%), it will pay to examine fully their possibilities in terms of current plans.

\*U.S. Bureau of Labor Statistics, July, 1947.

CONSTRUCTION'S BIGGEST DOLLARS WORTH

### ASPHALI

SHINGLES

ASPHALT ROOFING INDUSTRY BUREAU

Room 1742 . 2 W. 45th St. . New York 19, N. Y.

Sponsored by 28 Leading Manufacturers of Asphalt Shingles • Roll Roofings • Sidings and Built-Up Roofings

COLORFULLY BRIGHT....FUNCTIONALLY RIGHT

### **IFTIFRS**



### **WEIR-MEYER** equipment wins complete acceptance

### architects specify ...



WEIR-MEYER heating equip-ment is preferred for dependability and efficiency. Equip-ment for any fuel, from one manufacturer, simplifies esti-mates and specifications.

### contractors prefer . . .



WEIR-MEYER heating equipment typifies quality that as-sures quick, profitable turnover of houses built for sale. Simple, practical and economical installation.

### customers demand . . .



WEIR-MEYER's 80-year reputation for quality and long life is known from coast to coast: buyers want this dependable carefree heating comfort and fuel economy.

### FOR ALL FUELS ... FOR EVERY INSTALLATION

There is modern, easily-installed WEIR-MEYER equipment designed and built for gas, oil, or coal... for homes with or without basements... for commercial applications. Write for descriptive literature and specifications.

WEIR-MEYER means modern heat



THE MEYER FURNACE COMPANY Weir-Meyer Furnaces & Air Conditioners for GAS, OIL, COAL Offices: Peoria 2, III. . Factories: Peoria 2, III. and Peru, III.

#### CULTURE COMES TO KAMPALA

Kampala, capital of Uganda in East Africa owes its specific town planning character to the topography of the country: a succession of rounded hills with undulating valleys between. The town, including the latest extensions, is spreading over nine hills. The town center covers Naka-



sero Hill, the business area stretching along the southern slopes of this elevation. An industrial area has been laid out to the Southeast of Nakasero along the main railway to Nairobi and Mombasa and its branch line to Kampala's little harbor of Port Bell, on the borders of Lake Victoria.

The built-up areas are interspersed with banana groves which produce the staple food of the Waganda, trees and flowering shrubs. The town is a garden city in every sense of the word. Life in the suburbs resembles the sort of paradisian existence of which we dreamt as school children, after being told of happy aboriginal tribes in tropical countries, living an easy life in their huts, surrounded by fruit trees and flowers, with gracious women and gay children playing under an eternally blue sky.

But this rather romantic picture would not be anything like a true description of life in one of the most intelligent tribes of Africa, if one omitted the decided trend among the population to raise its standard of living. The Uganda Government is supporting such endeavours, systematically spreading education gradually to the remotest corners of the Protectorate. Makerere Hill in Kampala is developing into an interterritorial center for African higher

But housing of the African part of the population is the essence of every town planning scheme in this part of the world. One reason is that East Africa is faced with the serious problem of how to prevent a continuous coming and going of African labor. Housing accommodation is not available to allow the African laborer to

(Continued on page 46)

Cabot's 24 attractive shades give you freedom in Color Selection



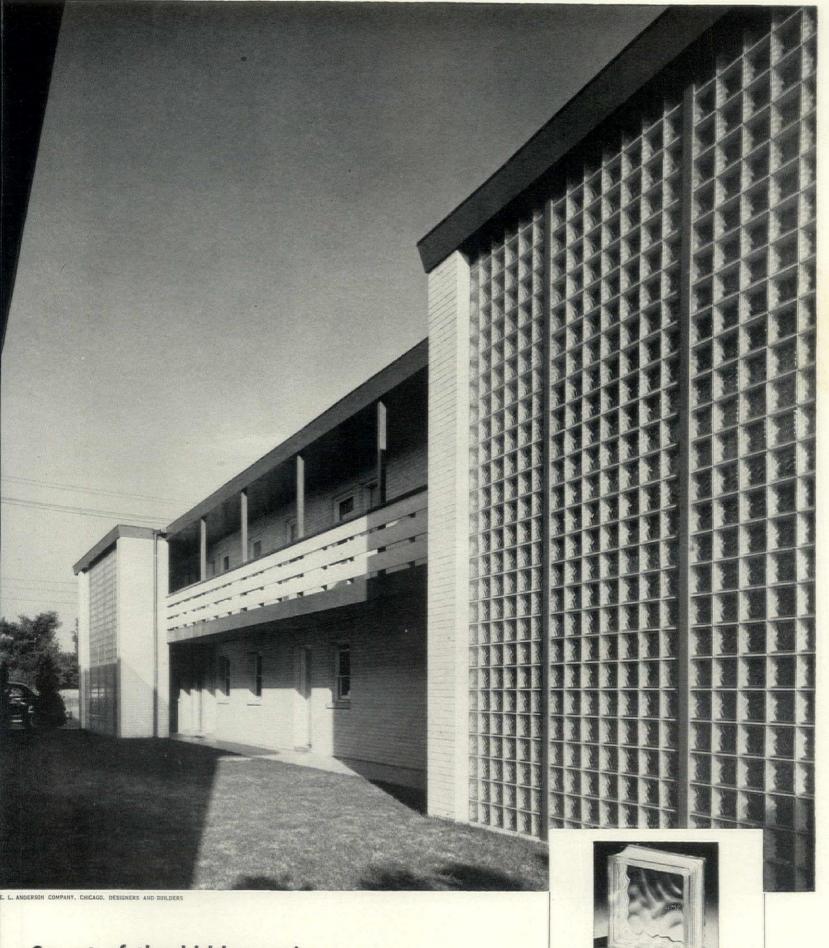
Cabot's House Paints offer you this wide variety of colors.

5 Greens, 9 Reds and Browns, 4 Blues, 2 Creams, 2 Grays, Old Virginia White and Cabot's Famous Double

Cabot's Paints have tremendous hiding power and lasting brilliance because they are made by our pat-ented Collopaking process. Pure pigments are broken down into particles of submicroscopic size and colloidally combined with wear-resistant oils. No fillers or adulterants are used. As a result, Cabot's Paints produce a porcelain-smooth finish which shows no brush marks . . . hold their color, and resist the elements for

WRITE TODAY for color cards and complete information. Samuel Cabot, Inc., 2121 Oliver Bldg., Boston 9, Mass.

Cabot's Collopakes



Secret of the hidden stairs: Twin screens of Insulux Glass Block rise in plane surfaces from ground to roof, concealing the otherwise unsightly outside stairways of these new Chicago apartments.

Privacy is assured without a sacrifice of daylight.

American Structural Products Company is a wholly owned subsidiary of the Owens-Illinois Glass Company. It has taken over the manufacture and sale of Insulux Glass Block and other Owens-Illinois structural products. For information, address Dept. E-175, P.O. Box 1035, Toledo 1, Ohio.

INSULUX

AMERICAN STRUCTURAL PRODUCTS COMPANY Subsidiary of

OWENS-ILLINOIS GLASS COMPANY



The new KENSTYLER\*. Ideal way to plan an original floor design -you work it out yourself with actual tiles, then you, your client or prospect can see how it will really look.

This attractive seafood restaurant by architect Francis Keally shows skillful blending of the old and new. The pine panelling, captain's chairs, etc. are anything but modern-yet there is something new and original . . . the Kentile floor.

Again this modular building form provides unusual opportunity to inject a smart note of originality into any decor. Note particularly the ingenious use of ThemeTile\* in the floor above. The gay fish design is carried over to Arthur Crisp's mural on the wall-an excellent example of a basic motif beginning with a Kentile floor.

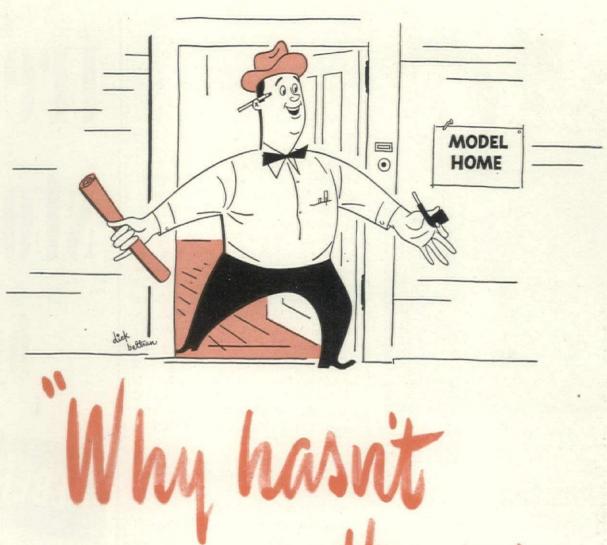
To you, Kentile offers equal design opportunities. For instance, have you the complete chart of available ThemeTile? They're now made on special order in any combination of the entire 22 Kentile colors.

And do you know about the KENSTYLER? This architectural aid makes it possible to work out unusual floor patterns in miniature. You are cordially invited to make use of it at your Kentile Dealer's. Look for his name and address in the yellow pages of your telephone directory. If you experience any difficulty in finding him, write your nearest Kennedy office.

### DAVID E. KENNEDY, INC.

58 Second Ave., Brooklyn 15, N. Y. • 350 Fifth Ave., New York 1, N. Y. • Ring Building, 1200 18th St. N.W., Washington 6, D. C. • 1211 N.B.C. Building, Cleveland 14, Ohio • 108 Bona Allen Building, Atlanta 3, Ga. • Merchandise Mart, 222 West North Bank Drive, Chicago 54, III. • Kansas City Merchandise Mart Inc., 2201-5 Grand Ave., Kansas City 8, Mo. • Western Merchandise Mart, 1355 Market St., San Francisco 3, Calif.





Why hasn't amyone thought of this before?"

Wait till you see the new sales promotion plan Rheem has in store for small-home builders.



### **READ ALL ABOUT IT NEXT MONTH!**



570 Lexington Avenue, New York 22, N. Y.

WATER HEATERS

SOFT WATER APPLIANCES

HEATING APPLIANCES

COOLING APPLIANCES

### **IETTERS**



The tilt of the sash tells you that Gate City Awning Windows are definitely above the ordinary. They add a "come-hither" look that invites inspection—leads to rentals and sales.

Thousands of homes, offices, hotels, apartments and commercial establishments are more attractive, more comfortable, more profitable because they are equipped with Gate City Awning Windows.

No other structural feature you can specify has so many easily demonstrated advantages:

- Distinctive architectural design.
- · Draft free, safe ventilation in any weather.
- No danger of rain damaging interior.
- Sash invite fresh air indoors.
- Indoor installation of screens and storm sash for safety and convenience. No rainstreaks under windows.
- Easy, safe cleaning of sash without ladders or stools.
- · Children can't fall out.
- Positive worm and gear operation by small handle.
   Nothing to lift or move aside.

Gate City Awning Windows are delivered complete, with hardware and glazing installed and including screens. When their extra advantages are considered, Gate City Awning Windows cost little if any more than conventional sash.

See Sweet's, or write for sizes (including modular dimensions) specifications and blueprints. Gate City Sash & Door Co., Dept. F., Fort Lauderdale, Florida.



Export Sales Representative, Frazar & Company, 50 Church St., New York 7, N. Y., U. S. A. Cable address: Frazar, N. Y. Agents in principal cities throughout the world.

bring his family. This not only results in widespread prostitution and alcoholism, but quite naturally causes the African to abandon his job from time to time in order to return to his native village to enjoy family life.

African housing in Kampala is rapidly developing from the primitive daub and wattle hut into small holdings on lines customary in European countries. The problem, however, is how to supply housing accommodation for low paid Africans on an economic basis. Show-settlements have been erected in various African towns with considerable public subsidies. They cannot represent a solution of the problem, because no funds are available for subsidies on a larger scale. If mass production of African houses is to be started, building methods will have to be used which are based on locally available raw materials. Clay concrete Pisee may be one answer.

Another problem which so far appears not to have been generally appreciated is the absence of any distraction which would make the life of the African laborer richer beyond just working to provide the bare necessities of life.

Because of these problems this report concentrates on the replanning of an African residential section of Greater Kampala: Naguru Community.

Naguru was laid out among the slopes of Naguru Hill, the top being too steep for housing development. With tropical downpours, anything like 1½ to 2 million gallons of rainwater may come down within half an hour, producing a flood which would cause damaging erosion if not tamed. The scheme for Naguru thus provides for a channel, surrounding the summit of the hill top and draining the precipitation into a dam on the northwest slopes of the mountain. This dam is part of a scheme for the irrigation of allotment gardens which are lined up along the valley between Kololo and Naguru.

Naguru Community is a dormitory town with only a small section of the inhabitants working within its precincts, while the majority will be employed either in the industrial area or in the business district south and southeast of Nakasero.

The scheme endeavours to provide for such administrative, social and cultural institutions as will enable even the primitive type of African gradually to make himself acquainted with the rights and duties of citizenship on a democratic basis.

The neighborhood has been clearly defined and each unit usually comprises a primary school and health center adjoin-

(Continued on page 50)

# tread stock by

### FOR SAFETY

ALBERENE

Alberene stone's highly-toothed surface is always safe — wet or dry.

#### FOR WALKING COMFORT

Slip-proof, but never excessively so, Alberene stone treads retard your feet, but never bring them to a dead stop.

#### FOR DURABILITY

Dollar for dollar, Alberene gives you higher abrasion resistance than other stone. It's pit-proof, too.

### FOR BEAUTY

Alberene stone's fine, finished appearance... its neutral blue-gray color... harmonizes with any wall treatment.

For full data about the many advantages of Alberene tread stock, write —

### OF VIRGINIA

419 - 4th Ave., New York 16, N. Y.



### Make Houses Into Homes.. .. Offer Choice of



Colors

People crave personal importance. They want to be individuals. Make their homes distinctive and you make them happy.

You'll want to paint with Bondex because it seals out moisture and preserves exterior walls. At no extra cost you can give the home buyer a choice of 12 Bondex colors—a goodwill gesture that pays off.

- · For outside walls, for basements
- · For swimming pools
- · For foundations

### New Bondex Color Chart Shows 12 Shades

Old Spanish White Oyster Shell Antique Ivory Carthage Cream Adobe

Monastery Gray Grotto Blue Ivy Green

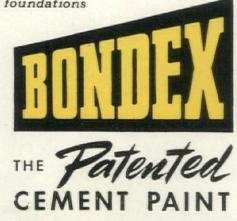
Brick Red

Spanish Buff Also, Pure White

Tropical Coral

Write nearest Reardon office for your copy.





that outsells all other cement paints combined



### in heating and plumbing

## because American-Standard quality is second to none!

■ The high quality of American-Standard Heating Equipment and Plumbing Fixtures is a wellproved fact. Your clients see it in the smart styling...you recognize it in the sturdy construction and advanced engineering of these famous products... home owners enjoy it through the years in fine performance.

Yes, American-Standard products are first in quality! They always have been. That's why more American homes have heating and plumbing by American-Standard than by any other single company. For details of the complete line, contact your Heating and Plumbing Contractor.

American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.



The EMPIRE Gas Boiler with its colorful Canyon Two-Tone Red Jacket adds to the appearance of this modern basement utility room. Offering all the sound construction features essential to carefree, automatic performance, it is as efficient as it is attractive. The gleaming white BUDGET Gas Fired Automatic Storage Water Heater provides an abundance of instant hot water for the laundry and other household needs.



First in Heating and Plumbing



This novel bath-dressing room arrangement owes much of its functional value to the installation of an additional lavatory—the MARLEDGE—with built-in dressing table and storage space. In the bathroom area, separated by a door, are the popular recess model MASTER PEMBROKE Bath, shelf-back COMRADE Lavatory, and quiet COMPACT Water Closet. Fixtures are available in white and a wide variety of lustrous colors.

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, for all fuels—Water Heaters—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.



Saving dollars every year on maintenance is mighty important for any home owner or building management operator.

And that's one of the reasons why ALWINTITE double-hung aluminum windows were selected for the 789 apartment homes in Hancock Village, Brookline and West Roxbury, Mass. ALWINTITE windows never need painting — and that means money saved on maintenance for many years to come.

Low initial cost, easy installation that reduces construction time, long life and sturdy, trouble-free construction are but a few of the many other dollars-and cents reasons that make ALWINTITE popular with building men everywhere.

These good-looking, easy operating windows are made by the world's largest manufacturer of aluminum windows. They're available at leading building materials dealers everywhere, in good supply and without delay. You can select from 12 stock sizes and four styles. The complete line of ALWINTITE products includes screens and storm sash to fit the double-hung windows. Panorama and basement windows, as well as mullions for multiple window arrangements are also available.

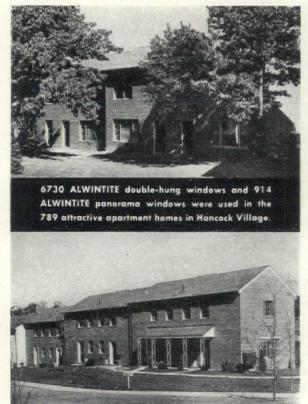
See Sweet's or write us for complete information. Address Dept. AF-3.

### THE ALUMINUM WINDOW CORPORATION

A Subsidiary of General Bronze Corp.

1003 Stewart Avenue

Garden City, N.Y.





DOUBLE HUNG

aluminum WINDOWS

"BUILD RIGHT WITH ALWINTITE"

### LETTERS



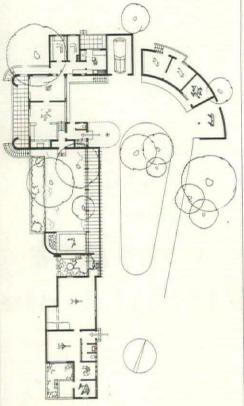
NORGE WATER HEATERS ARE: Fumeless, flameless, smokeless, sootless, automatic. No flue, no vent. Plenty of hot water all the time. Low cost. Modern in every detail. Eight sizes from 12- to 82-gal.

NORGE WATER HEATERS HAVE: Thermostatic control. Sealed "Nichrome" element projected directly into water. Heat trap in outlet. Coldwater baffle at inlet. Three-inch spun glass insulation. Steel jacket finished in baked white enamel. Norge Division, Borg-Warner Corporation, Detroit 26.

A BORG-WARNER INDUSTRY

REFRIGERATORS
ELECTRIC RANGES
WATER COOLERS
WASHERS
ELECTRIC WATER HEATERS
HOME HEATERS
GAS RANGES
HOME FREEZERS

NORGE BEFORE YOU BUY ing the radial green zones plus a local center for shopping and craftsmen's workshops. The school assembly hall will be used for public meetings, lectures, theaters and musical performances. The school sports grounds will also serve adults.



Sports and education area

In connection with the extension scheme, a park will be laid out at the Southeast slopes of Kololo. One-third of the site is to be leveled, providing a suitable ground for various sports. Here a stadium, cricket, hockey ground and tennis courts are accommodated. A hook-shaped promenade connecting the southern main entrance with the northern entrance is flanked with buildings catering to refreshments and fun. Puppet shows, shooting galleries and merry-gorounds are lined up along this promenade. A cinema, restaurant and shops, surrounding the southern entrance gate, may be used from outside as well. An open-air theater will offer an opportunity to develop the inherent talent of the African for stage acting.

Besides recreation and amusement, provision is made for some sort of education.

Town planning must, for success, be accompanied by intensive propaganda, based on the African's psychology. Film and stage may contribute to the preparing of African masses for their future development.

E. MAY Architect and Town Planner

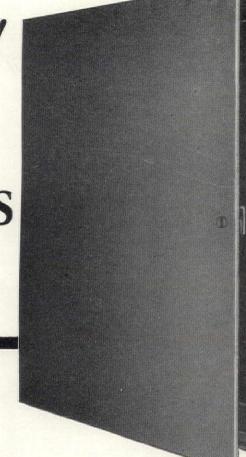
Nairobi, South Africa

"Bingle, bangle bungle I'm so happy in the jungle"-En.





### Available Now! Milcor Metal Access Doors





### Lower in cost than less durable types

-yet give your client the permanence and long-run economy of steel

Here are three styles of Milcor "Flush Type" Metal Access doors: 1. Style "K" - with expanded metal wing - for plastered walls. 2. Style "L" - without expanded metal wing - for plastered walls. 3. Style "M" for non-plastered walls: masonry, brick, stone, tile, wallboard, acoustical construction, etc.

Building supply dealers carry Milcor Metal Access Doors in stock now - and sell them for less.

No special framing is required, where these doors are used to reach key points in plumbing, heating, electrical, and refrigeration systems in homes and public buildings.

Milcor Metal Access Doors are delivered to the job ready to install flush with the wall surface.

Panels are furnished with either concealed hinges or clip fasteners. Locking device is depressed level with the smooth surface of the panel.

Milcor Metal Access Doors are available to fit a number of wall openings from 83/8" x 123/8" to 243/8" x 243/8". The *complete* Milcor line of steel

building products is illustrated in the Milcor Manual in Sweet's Architectural File. Consult it, for help in planning.

Write for detailed bulletin on Milcor Metal Access Doors.



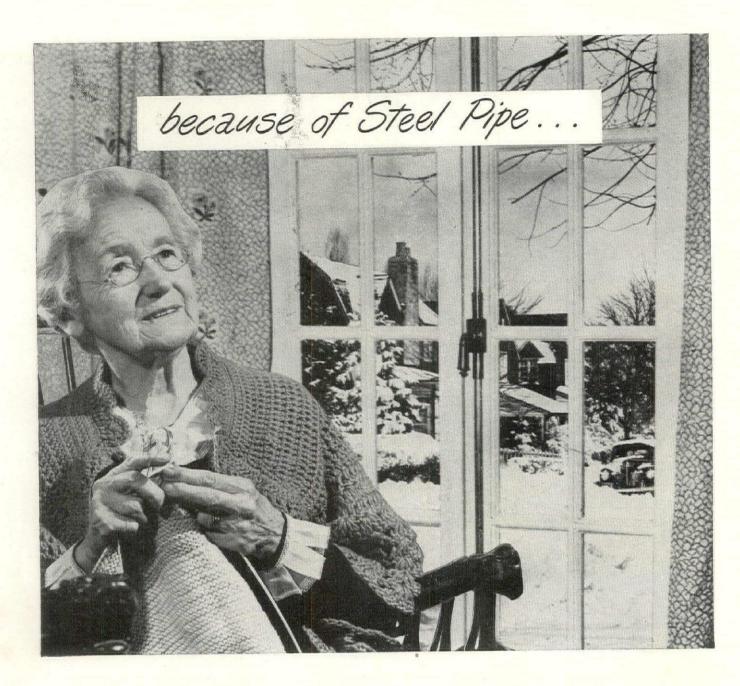
### INLAND STEEL PRODUCTS COMPANY

FORMERLY MILCOR STEEL COMPANY MILWAUKEE 1, WISCONSIN

Baltimore 24, Maryland

Buffalo 11, New York
Cincinnati 25, Ohio
Cleveland 14, Ohio
Cleveland 15, Ohio
Cleveland 16, Ohio
Cleveland 17, New York
Chicago 9, Illinois

Chicago 9, Illinois



### it's springtime inside!

Now grandma rocks gently through the twilight years . . . warm, comfortable and secure. For to the very old and the very young, year-round warmth is almost as essential to health and peace-of-mind as food or clothing.

Outside the elements may rage but inside it's springtime.

Yes, steel pipe makes it possible!

Uniform, dependable heat in every room in any home is a reality largely because of the economical and plentiful production of steel pipe. Whether for conventional hot water or steam heating systems or today's counterpart, the radiant panel method, steel pipe provides a combination of advantages that makes modern heating available to more people than ever before. Likewise, the heating systems of our great office buildings and industrial plants rely on steel pipe to function smoothly and efficiently ... to furnish the warmth and comfort so necessary in our daily tasks.

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.

#### POSSIBLE! MAKES

... better living through pipes of steel for plumbing and heating purposes.

to bring your shopping center out in the open





Unity in design—yet with all the individuality required by owners' desires or merchandising requirements.

The open principle of the Visual Front can be used, as above, to unite several individual stores into an integrated group, yet makes each store easy to identify.

Glass makes the modern shopping center outstanding. It provides smartness... maintenance economy... and good merchandising based on the principle that buying starts with seeing.

Through its advertising program directed to store owners, Libbey Owens Ford is selling the Visual Front principle as an important element of sound merchandising. This program emphasizes the need for good architectural design.

Your L·O·F Distributor will answer your questions about glass products for storefronts. For an interesting book of suggested Visual Front designs by leading architects, write to Libbey·Owens·Ford Glass Company, 4438 Nicholas Building, Toledo 3, Ohio. • Five Visual Fronts in a row...each one distinctive, yet each an integral part of this open-front shopping center.

Close-up of Webb's Photo Supply shows how large glass areas put each store interior on display. Architect: Leslie Nichols, Palo Alto, California.

#### L.O.F GLASS PRODUCTS for shopping centers

POLISHED PLATE GLASS for large windows to display store interiors.

TUF-FLEX\* tempered plate glass for transparent doors that extend the open look.

VITROLITE\* colorful glass facing for solid areas on exterior... for interior walls.

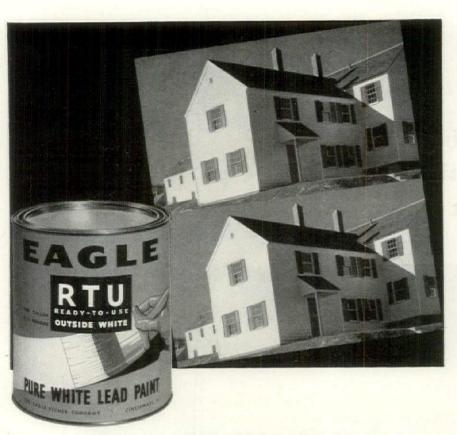
THERMOPANE\* insulating glass to reduce condensation on windows, eliminate drafts.





LIBBEY · OWENS · FORD

a Great Name in GLASS



### 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-andlabor-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.





THE EAGLE-PICHER COMPANY

CINCINNATI (1), OHIO

Member of the Lead Industries Association

### **FORUM**



### Behind the scenes with FORUM contributor



DAN KILEY, who remodeled the New England farmhouse (p. 81), is a native of Boston, a graduate of Harvard's School of Design and, since the war, a practitioner in the village of Franconia, N. H. His postwar practice-landscaping, houses, ski areas, college grounds etc. -is quite a jump from the international scene where, as an army officer, Kiley designed the court room of the War Crimes Tribunal at Nuremberg, Germany. During the war he also did camouflage work and airport design, a natural application of his pre-army experience in planning, land use and housing.



HUGH MOORE, JR., 27-year-old architect who designed the farm annex (p. 86), graduated from the Yale School of Architecture in 1943, just ten days before entering the Army Corps of Engineers. The Army treated him to another degree—that of civil engineering—at Pennsylvania State College before shipping him out to Manila. As a utilities officer there, Moore reports designing "everything from latrines to recreation centers." He is now with the firm of Paul Beidler & Colleagues at Northeon, a rural Pennsylvania office somewhat influenced by Taliesin, where Beidler studied.



JOSEPH P. MARLOW, architect, was called in by FRANKLIN L. BURNS when the prefabs he had ordered for an East Denver development (p. 88) proved unobtainable. Marlow, who holds a Master of Architecture degree from Washington University, set up his own St. Louis practice in 1947 after working for various St. Louis offices and putting in wartime duty in the Navy. Burns started as a real estate salesman for his uncle's Denver firm in 1938. became President in 1942 and has expanded operations to include large rental developments as well as individual houses.



The office of SAMUEL A. MARX, NOEL L. FLINT & CHARLES W. SCHONNE is well known for upper-bracket cafe and residential design in and near Chicago. In the Pierre Grill (p. 90) they apply the Pump Room touch to a famous New York hotel. Marx, who was born in Natchez, Miss. in 1885, studied at M.I.T. and Paris' Ecole des Beaux Arts, in the ateliers



Umbenstock and Duquesne. His private prac tice started in 1909 when he won the Nationa Competition for the Del Gado Museum of Ar in New Orleans. Painting has always been his hobby and the Chicago Art Institute recently accorded him both a one-man show and a specia room at their International Water Color Exhibit Flint, a Britisher by birth, came to this country in 1909, studied at both the Illinois Institute of Technology and M.I.T. and became Marx's partner in 1940 after 12 years with the firm Schonne graduated from Armour Institute of Technology into the Marx office in 1926, has worked there ever since. All three men have chalked up a year apiece of travel and study in Europe, North Africa or the Near East.

(Continued on page 56)

### To Heat Homes with Less Fuel... Team the Burner or Stoker with a



### ROUND "R" STEEL BOILER

 Yes, not only homes but smaller buildings of all kinds may be heated with greater economy by installing a Kewanee Round Type "R."



But let's never forget: It's what's under the jacket that counts for the economical production of heat in dependable supply. A Kewanee not only looks good but acts good.

AND: whether a Kewanee is just loafing along or being pushed to its full rated capacity or more, it continues to operate with full efficiency.





This is ALL it takes

### to switch to coal

Switching from oil or gas to hand-fired coal in an emergency is a simple, inexpensive operation requiring no change in the boiler proper, merely substituting the above base with grates. And it's equally simple to switch back again.

Round Sizes to heat 275 to 900 Sq. Ft. Steam Square Models to heat up to 3000 Sq. Ft.



### KEWANEE BOILER CORPORATION

KEWANEE, ILLINOIS

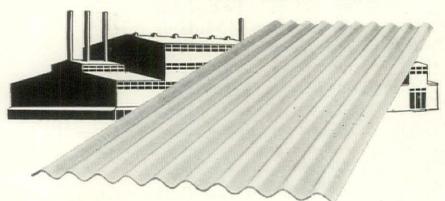
Branches in 60 Cities—Eastern District Office: 40 West 40th Street, New York City 18
Division of American Radiator & Standard Sanitary Corporation



### Planning a

# Chemical Plant Oil Refinery Paper Mill

... or an addition



# You can now get ASBESTONE

### **Asbestos-Cement Corrugated Roofing & Siding**

—the lifetime roofing and siding that's fireproof and corrosion-proof. Asbestone can't be damaged by weather, rats, or termites. No painting. No upkeep.

### Here are a few of the many prominent users:

LONE STAR CEMENT CORP.

CALIFORNIA OIL CO.

CHAMPION PAPER and FIBRE CO.

ETHYL CORPORATION

FREEPORT SULPHUR CO.

NEW ORLEANS PUBLIC SERVICE

MOBILE PAPER MILL CO.

CROSBY CHEMICALS, INC.

STANDARD OIL OF N. J.

UNIVERSAL ATLAS CEMENT CO.

### Why we can assure you early delivery

We are concentrating on production of this single industrial product. Stocks are now ample to make some immediate shipments. Free Engineering Service, available on request, shows how Asbestone can be adapted to your needs.

### ASBESTONE CORPORATION

5300 TCHOUPITOULAS STREET

NEW ORLEANS 15, LA.

Specialists in Asbestos-Cement Building Products for over 25 Years



ROBERT HELLER, whose industrial design firm produced the Arrow Shirt showroom (p. 104), has operated offices in New York and Chicago since 1932. He served in the army for four years, organizing the present firm, Robert Heller Associates Inc., after being discharged in 1945. Current clients include Rolls Razor, Cluett, Peabody & Co., Alexander Smith & Sons Carpet Co., Lightolier, Young Hats, Bird & Son. Heller's postwar work has shifted to include interior architecture in addition to product design with most of his jobs in the store and showroom field. He got his undergraduate education at Princeton, took design training at the Ecole des Beaux Arts and the Sorbonne in Paris, has never worked for any designer but himself.



ZAREH SOURIAN, designer of the Magee Carpet showroom (p. 106), is an American, born in Constantinople, who started out to be a newspaper man. He came to the U. S. to study journalism, but instead discovered architecture and finished his training at M.I.T. One claim to fame is his introduction of the first sidewalk cafe to New York City-the Cafe de la Paix of the St. Moritz Hotel. Sourian has concentrated on restaurant, night club, store and factory design, recently has taken up industrial styling for several manufacturing firms. Although a confirmed modernist, he thinks perhaps "nostalgia, sentiment and romanticism" have as much to offer architecture as the discipline of functionalism. Before opening a New York office he worked for Boston's K. B. Nevin and Coolidge, Shepley Bulfinch & Abbott.



PETER SCHLADERMUNDT, who designed the Valley Upholstery showrcom (p. 107), is the Bronxville-born son of a mural painter, has studied at Yale and in France, Italy, Spain and England. With Raymond Hood from 1929 to 1932 he worked on the Daily News building, McGraw-Hill and Rockefeller Center. Henry Dreyfuss and Norman Bel Geddes shared the next ten years of his career, his work for Drey fuss including the Mercury and Twentieth Century Limited, for Bel Geddes, the General Motors' Futurama at the 1937 World's Fair. Since 1944 he has been a partner in the firm of Van Doren, Nowland & Schladermundt which lists among its clients Pan American Airways, Philco Corp., Sears & Roebuck, Gillette Safety Razor, R. H. Macy, Beech Aircraft Corp.



ALFONS BACH, one of America's well-known industrial designers, was born in Germany and studied architecture in Berlin, Paris, Venice and Milan. Until 1926 when he came to the U. S., he worked as Art Director for one of Germany's largest motion picture companies, also designing interiors and furnishings. In America his work for national manufacturers has included displays, interiors, furniture, rugs, textiles, silverware, perfume bottles, flashlights and baby carriages. The Julliard textile showroom (p. 108) is typical of his merchandising know-how applied to commercial architecture. Bach's designs have been exhibited throughout the country, his most recent success being a one-man water color show at the Babcock Gallery in New York City.



What's more, KIMSUL\* insulation is precut to fit standard spaces between studs and rafters. It's permanent—won't sag or settle. Clean—no sharp particles to irritate workmen's skin. Adds little to structural load. (1,000 sq. ft. of Standard Thick KIMSUL weighs only 115 lbs.) Resists fire, moisture, vermin and fungi—and it's termite-proof. KIMSUL comes in

three thicknesses for the proper balance of efficiency and economy. Specify Commercial Thick (about ½ in.) and Standard Thick (about 1 in.) for walls, attics and floors; Double Thick (about 2 in.) for attics.

KIMBERLY-CLARK CORPORATION
KIMSUL Division, Neenah, Wisconsin, U. S. A.

### FREE INSULATION BOOKLET



A brand new manual filled with technical data you can use. Prepared by the makers of KIMSUL. Write us for your free copy on your business letterhead.

Over-all insulation
means ready salability.





Sloan Flush Valves invariably cut water bills. For instance: installing Sloan Flush Valves in the Liverpool Building, San Francisco, saves \$240.00 a year on water bills. Forty-eight new Sloan valves in the Royal Insurance Building (San Francisco) saves \$216.00 a year. Normandie Apartments (Seattle) cut the water bill \$780.00 a year by installing eighty-five Sloan valves. In the Belleville (Illinois)

Township High School twenty-six Sloan valves save \$1,080.00 annually. By installing twenty-three Sloan urinal flush valves, the Medical and Dental Arts Building, Chicago, saves more than six million gallons of water per year, plus 16,000 k.w.h. of electricity to pump it from the city main to the 24th floor, plus more than 11 tons of coal.

... Small wonder there are more Sloan Flush Valves sold than all other makes combined.





# Save Time and Money with CONCRETE FRAMES and FLOORS

REINFORCED CONCRETE frames and floors effect substantial economies in construction—even in buildings of six stories or less. This method of construction simplifies the work of masons, permits the use of thinner walls, reduces form handling time and expedites completion of the job.

Reinforced concrete construction results in firesafe buildings with the strength and rigid-

ity to resist all static and dynamic loads. Concrete frames and floors are ideally adapted to apartment buildings, hospitals, hotels and schools, for this type of construction permits the reduction of the total height of the structure without reducing ceiling heights, gives the architect unusual freedom in locating columns and cuts building cost.

Architects and engineers are invited to make full use of our services to secure all the advantages of reinforced concrete construction. Write today for copies of two free ref-

erence manuals: "Continuity in Concrete Building Frames" and "Handbook of Frame Constants." Distributed only in the United States and Canada.

Photo shows section of the New York City Housing Authority's Brownsville housing project. Reinforced concrete frame and floors with wide shallow beams were used in the 27 six-story apartment buildings with three-story wings. Project includes 1,338 units to house over 5,000 residents. Frederick G. Frost, architect. Fred N. Severud, engineer.

### PORTLAND CEMENT ASSOCIATION

DEPT. 3-7 . 33 W. GRAND AVENUE . CHICAGO 10, ILLINOIS

A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work

### **ANNOUNCEMENTS**



These new Kitchen Maid Cabinets with flush panel surfaces and gently sweeping contours are years ahead of the field in styling. Built of hardwood and other fine materials, they are friendly, cozy and livable, and harmonize ideally with any make of appliance. Moreover, the kitchen becomes an integral room of the house-inviting and hospitable.

### COMPOSITE CONSTRUCTION

Kitchen Maid Cabinets have all the advantages of composite construction-the quiet, easy action of rust-

less aluminum drawers-the warmth and flexibility of hardwood-the stability and durability of new compositions—the permanence and beauty of factory-applied enamel finishes.

The Kitchen Maid dealer organization, oldest and most experienced in the field, will gladly assist you in your planning and installation

problems. See your dealer or send coupon below for colorful new booklet containing illustrations, plans and

details of 10 model kitchens.

### A FEW TYPICAL ARCHITECTS AND BUILDERS WHOSE PROJECTS HAVE INCLUDED KITCHEN MAID CABINETRY:

Leonard Schultz Associates, New York; Eugene A. Stopper, Wilbur C. Henderson, Philadelphia; Gray & Pauley, St. Louis; Hamilton Brown, Houston; Thompson Starrett Co., New York; Merrick & Kleist Co., Cleveland



ers. Operate smoothly on

#### THE KITCHEN MAID CORPORATION 483 Snowden Street, Andrews, Ind.

Please send free copy of colorful new booklet containing 10 practical kitchens with floor plans and working details. I am an 
Archi-tect 
Builder 
Dealer.

Name	
Street	
City	State

#### BUILDING PREVIEWS



Louis H. Dreye

NEW YORK CITY'S LATEST SUPER-PROJECT, a \$6,000,000 theater, restaurant and office building scheduled for near-future construction, will cover an entire block on Broadway between 50th and 51st Streets, Manhattan. Plans drawn by the offices of John Sloan Associates and Edward Stone Associates, New York architects, specify a facade of aluminum and insulated glass set in marble framing. The roof floor of the 13-story building will accommodate a large restaurant-night club; another restuarant will be located at basement level. The 3,600seat theater will be equipped for stage as well as moving picture showings.

THE MOST MODERN ELEMENTARY SCHOOL in Baltimore's multimillion dollar school construction program-now well under way-is that designed by Paul Kea Associates for Landover Hills. The large site permits a one-story plan where each classroom has direct access to its individual play area. Unanimous teacher demands for greater classroom space per child (to accommodate dramatic and construction activities) and for more generous and more carefully designed storage space were basic factors in room design. Ample cabinet and shelf area is provided on three sides of the room while an expandible, swinging chalkboard provides sufficient writing area at the front with space at each side for student displays and exhibits. Each classroom has its own toilet and lavatory facilities. Lighting is bilateral and makes careful use of clerestory and window-wall sources. Clear glass and directional glass block combine to provide full illumination without glare. The large playroom-auditorium, cafeteria and library will provide for community as well as school needs.

AN ELECTRONIC RESEARCH LABORATORY for Sylvania Electric Co, will be completed this Spring on a 281/2 acre site in Bayside, New York City. The two-story brick structure provides facilities for long term study of electronic and lighting equipment, radio, radar and television. Aymer Embury, II is designer of the Sylvania laboratory; John H. Eisele Co. is (Continued on page 62) contractor.

### TRUSCON PLANNING BOARD



### TRUSCON DOUBLE-HUNG STEEL WINDOWS USED IN NEW ADDITION TO YOUNGSTOWN HOSPITAL

In the new addition to the Youngstown Hospital, Truscon Series 46 Counterweighted Double-Hung Steel Windows with sill vents built integral were used. This well-designed window is an original development by Truscon, to meet the demand for a high quality, custom built, double-hung steel unit.

The Series 46 Double-Hung Window, either spring balanced or counterweighted, is especially recommended for educational buildings, hospitals, hotels and offices. Weatherstripping or spring bronze at head, meeting rail, sill, and jambs, provides constant weathertightness and easy operation. Lever type lift handles are a convenient operation feature.

Maximum window sizes of 6'0" by 10'0" for single units and 10'0" by 10'0" for integral twin units are available. Window members are accurately formed to shape and all joints are securely welded. New billet steel, electrogalvanized, combined with Bonderizing and baked-on paint applied to all exposed interior surfaces insures long life and low

maintenance. Screens, storm sash and window cleaner bolts are available.

Sill ventilators when desired are built integral. They provide convenient draft-free ventilation so essential in hospitals and schools. The range of window sizes provides ample height for normal class room lighting needs. For hotels, double-hung windows are par-ticularly advantageous since they are familiar in appearance and operation to everyone.

### Large Quantities of Truscon Steel Bars Used for Reinforcing Strength

The rigid standards of safety required in a structure such as the new addition Reinforcing Bar to the Youngstown Hospital are adequately protected by Truscon Concrete Reinforcing Bars.

These bars are special rolled sections of high grade steel, with a series of longitudinal and diagonal ribs so designed as to provide the maximum bond with the surrounding concrete. Write for information.

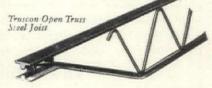
HELP STRUCTURES GO UP FASTER-BETTER Youngstown Hospital, North Side Unit, Youngstown, Ohio, used Truscon "O-T" Open Truss Steel Joists, Concrete Reinforcing Bars and Double-Hung Steel Windows in the new wing recently completed.

Efficient construction progress, with the high standards of safety required for structures of this type, were achieved with the aid of Truscon Steel Building Products in this new addition.

A major factor in the steady construction progress on the building was the use of Truscon "O-T" Open Truss Steel Joists.

In practical use Truscon "O-T" Open Truss Steel Joists are very simple to install, being completely shop fabricated and reaching the job ready for placing. Each joist is marked to correspond with the erection diagram, thus greatly simplifying and speeding construction work. Thorough tests under extreme loadings have demonstrated their all-around dependability.

Fundamentally, 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. Web members are continuous and of the same diameter from end to end. High pressure electric automatic welding is used to make positive connections at all joints.



The underslung design of the bearing permits maximum headroom under the supporting girders. The open web allows the passage of pipes and conduits.

Truscon "O-T" Open Truss Steel Joists are successfully meeting the demands for an economical and fire resistant floor, in all types of building construction. They are designed and manufactured in accordance with the specifications of the Steel Joist Institute and the Simplified Practice Recommendations (S.P.R. 94-30) on Open Web Steel Joists as issued by the U. S. Department of Commerce, Bureau of Standards

Write for illustrated literature.

### LITERATURE

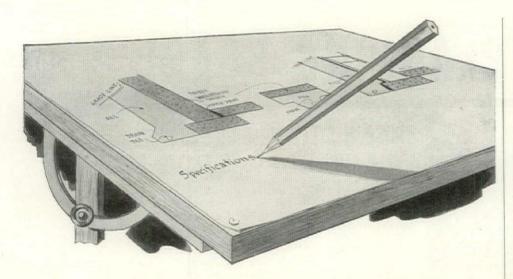
Comprehensive bulletin on new Truscon Formed Steel Sur rounds, showing full size details, specifications and installation instructions. Write for your free copy now.



### TRUSC STEEL COMPANY

YOUNGSTOWN 1. OHIO Subsidiary of Republic Steel Corporation

### **ANNOUNCEMENTS**



### Dry Walls Begin Here



Dry walls begin at the point of your pencil—with the right plans and specs. Here's where you, the architect, can do your best job of preventing interior dampness. Naturally, top design and construction practices are essential, but it takes more than that.

It requires Medusa Waterproofed Gray Portland Cement—the cement that automatically locks a water-repelling material into the concrete or mortar.

### CHECKS DAMPNESS

Medusa Waterproofed Portland Cement stops the capillary action that draws water into concrete by lining the capillaries with a water-repelling material. Thus, water is stopped. And, what's more, this water-repelling material can't chip, peel or crack. It's built in—throughout every inch of the mass.

### EASY TO USE

No unusual construction procedures are necessary. Used exactly as regular cements, Medusa Waterproofed Cements make concrete safe from water damage. That's why you'll find Medusa Waterproofed Cements are specified by leading architects, chosen by modern builders, appreciated by owners of dry interiors.

Specify Medusa Waterproofed Cement for all units where water is, or may be a problem.\* The additional cost is minor -a

small fraction of correcting water troubles. For complete information, send a postcard for "How to Waterproof Concrete, Stucco, and Masonry" and "Integral Waterproofing Explained." You'll find they are handy references . . . have the answers to many of your water problems.

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

"FIFTY-SIX YEARS OF CONCRETE PROGRESS"

### MEDUSA PORTLAND CEMENT CO.

1013-1 Midland Building

Cleveland 15. Ohio

Gentlemen: Please send me copies of the books "How to Waterproof Concrete, Stucco, and Masonry", and "Integral Waterproofing Explained".

Address		

City .....

Also made in Canada by Medusa Products Co. of Canada, Ltd., Paris, Ontario

THE CENTRAL OFFICE for the Michigan Bell Telephone Co. at Cadillac, Mich. (see below) provides for two distinct company needs-a small business office and a large wing where dial equipment and a long-distance switchboard are located The design by Minoru Yamasaki (of Smith, Hinchman & Grylls, Detroit) provides for both these functions and allows for expansion of either unit without need of interference with the other. Entrances on opposite sides of the building for employes and the visiting public prevent possible congestion. Well-landscaped grounds and a terrace where the giant switchboard is visible to the passerby is not only a good public relations gesture, but provides excellent lighting for employes. The setback shades equipment from direct sunlight in summer. In the cleared space at the right parking space is provided. The concrete site-fabricated slabs are now in process of construction in spite of sub-zero weather. Owen-Ames-Kimball Co. is general contractor.



Elmer L. Astelford

A NINE-STORY OFFICE BUILDING for Carnation Milk Co. is now under construction at Los Angeles, Calif. In line with modern office design development, the new structure will be equipped with flush strip lighting, electric and telephone duct systems baseboard hot water radiation and mechanical ventilation. The exterior will be plaster with granite trim. Through a special financing arrangement, Carnation Co. constructs the building; N. Y. Life Insurance Co. purchases it on completion; it is immediately leased back to Carnation. Stile Clements, architects and engineers, designed the structure.

#### **FELLOWSHIPS**

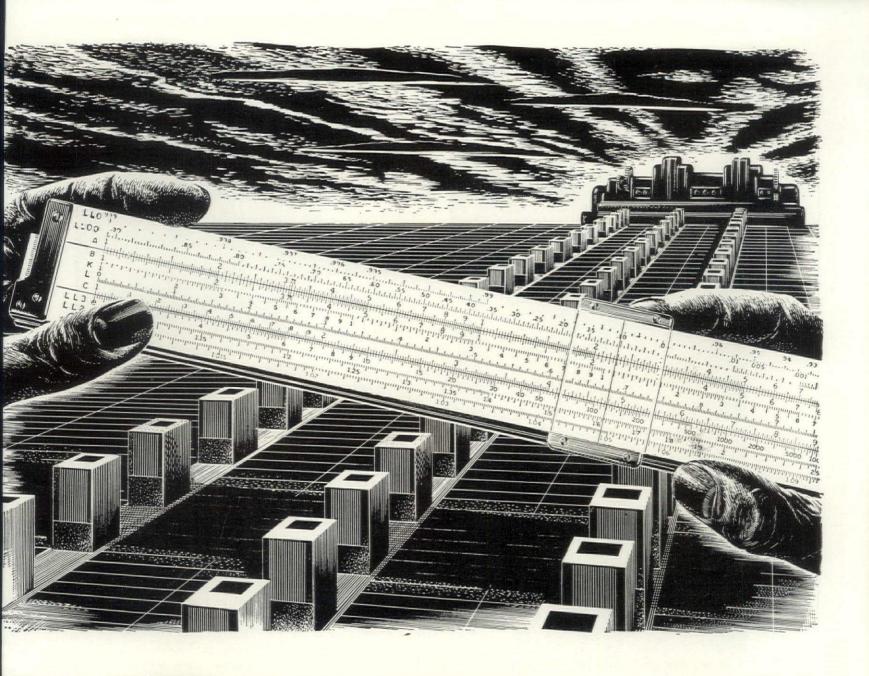
The McKim Fellowship, open to graduates of Columbia University School of Architecture graduated within the las 25 years, offers \$2,000 to assist in carrying out a research project in any field of architecture or city planning—history criticism, methods, or materials are within the scope of subjects included. Application blanks and detailed statement of proposed project must be filed with the Secretary of the University, 213 Low Memorial Library, Columbia University New York 27, N. Y. before April 1, 1948.

THE UNIVERSITY OF MICHIGAN announces that the competition for George Booth Traveling Fellowship in Architecture will be held during the two weeks beginning April 3. Any interested graduates of the University who have not reached their 30th birthday by that date may get further information from the office of the College of Architecture and Design.

#### ARCHITECTURAL CONGRESS

THE INTERNATIONAL UNION OF ARCHITECTS, a newly created international organization for the profession, will hold its first Congress in Lausanne, Switzerland from June 29-July 1—replacing meetings

(Continued on page 66)



### TRANE HEATING and AIR CONDITIONING --

### **Engineered Products for Engineered Systems**

Complete air conditioning systems provide heating as well as cooling. More than that, they provide humidification, dehumidification, filtering, and air circulation. Obviously, no two applications require exactly the same combination of all of these functions . . . thus mass-produced air conditioning often provides too much of one factor and too little of another.

Architects, engineers, and contractors who know that each job calls for a specially designed system—find their solution in the complete Trane line of heating and air conditioning products. They combine Trane engineered products—built with the economy of line production—into systems that meet exact requirements in every way.

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 their entire cooperation.

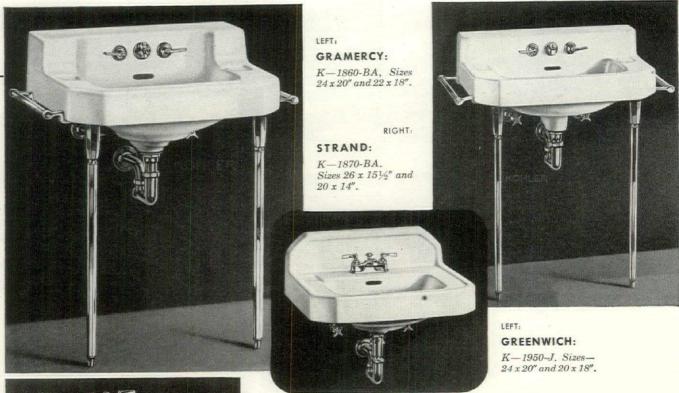
The Convector-radiator—modern successor to the old-fashioned cast iron radiator—has been engineered by Trane for universal application to steam and hot water heating systems, and is being produced in quantity so you can now secure it from local distributors' stocks.

### TRANE

Manufacturing Engineers of Equipment for HEATING AND AIR CONDITIONING

THE TRANE COMPANY, LA CROSSE, WISCONSIN • Also TRANE COMPANY OF CANADA, LTD., TORONTO, ONTARIO









### Sell the satisfaction that goes with KOHLER

### Vitreous China Lavatories

IT is a real service to your customers to point out the advantages of Kohler vitreous china lavatories. Among those illustrated the average home owner will find the practical answer to his needs.

Made of fine imported and domestic clays, Kohler vitreous china lavatories are fired under intense heat to give them glasshard, permanently lustrous, acid resistant surfaces that are easy to clean. The chromium plated fittings with pop-up drain are engineered to Kohler high standards of efficiency.

The Gramercy and Chesapeake, both popular lavatories, are available in two sizes, with or without legs. Both are shelf lavatories, as also is the Strand, designed especially for small, narrow rooms. The Jamestown is available with pedestal as well as with legs. The Greenwich combines smartness and low cost.

LEFT CENTER:

### CHESAPEAKE:

K-1910-C. Sizes 24x20" and 20x18".

LEFT:

#### JAMESTOWN:

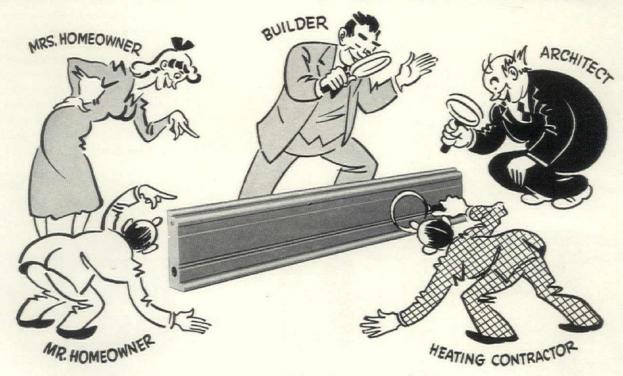
K-1780-F. Sizes 27 x 22", 24 x 20" and 20 x 18". Send for free copy of new 16-page color booklet showing Kohler fixtures in attractive settings, with practical floor plans, color suggestions, data on sizes and dimensions and other helpful information. Address Kohler Co., Dept. 15-B, Kohler, Wis.



### KOHLER OF KOHLER

PLUMBING FIXTURES . HEATING EQUIPMENT . ELECTRIC PLANTS

# Why EVERYBODY'S looking into BASE-RAY—a practical approach to radiant panel heating



Remember, it was Burnham who pioneered the development of radiant baseboard panel heating. Burnham's BASE-RAY\* Radiant Baseboards have now been on the market for nearly three years.

As time passes, Mr. & Mrs. Home Owner are going to be more and more frequently asking for your opinion of this sensational new method of radiant heating.

There are sound reasons why you can confidently recommend BASE-

RAY Radiant Baseboards.

Our experience has given us ample opportunity to iron out

the "bugs" which are usually present in any radically new product—and to work out installation procedures that time has proven are simple, practical and economical. Yes, Burnham's BASE-RAY Radiant Panels are an accepted and established product. They have already been installed in thousands of homes and have demonstrated their ability in actual use to live up to every claim we have made for them.

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



Mel let ins Ro

Mail coupon below for Booklet which gives ratings and installation data on BASE-RAY Radiant Baseboards.

Burnham Corporation

'PIONEERS OF RADIANT BASEBOARD HEATING'

IRVINGTON, N.Y., Dept. AF-38

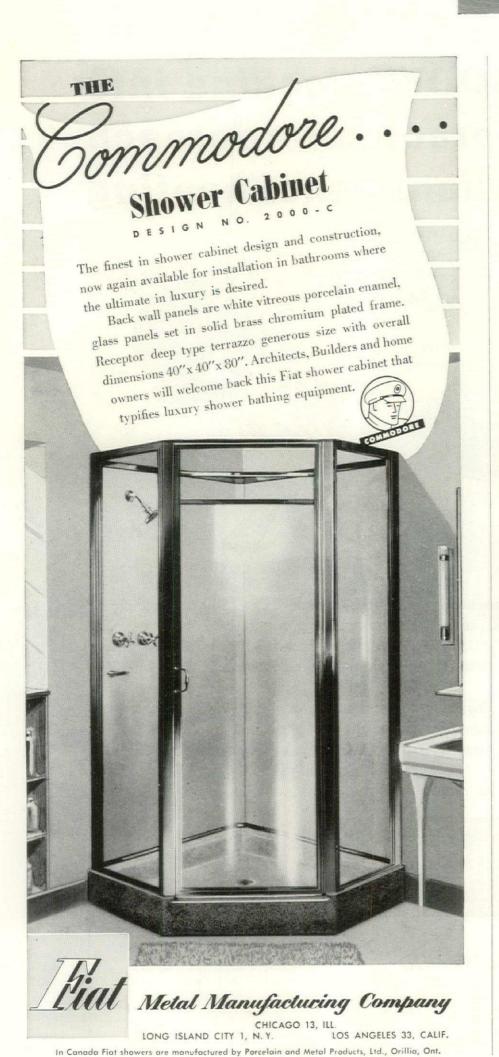


Burnham Corporation Irvington, New York	Dept.	AF-38
Please send me copy of "Ratings and Guide on BASE-RAY Radiant Basebo		
Name		

Addres

ity.....State...

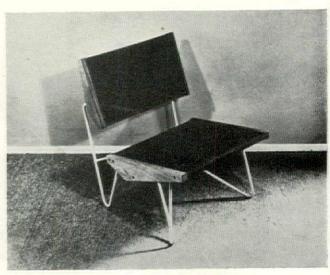
### **ANNOUNCEMENTS**



of the earlier organizations, the International Congress of Architects (C.P.I.A.) and the International Reunion of Architects (R.I.A.). The theme for discussion at the Congress will be "The Architect and his New Problems—Planning; Prefabrication; the State and Society." Further information may be obtained from Prof. Jean Tschumi, president of the organization, at 1 Rue St. Pierre, Lausanne, Switzerland.

#### AWARDS

The American Institute of Decorators has announced the winners in its annual design competition for furniture, lighting fixtures, fabrics and wall coverings used in the home-furnishing field during 1947. Best on the market in the furniture division, the jury decided, was a steel, wood and fiber chair (photo below) designed by Maurice Martine of Corona del Mar, Calif. Other first places went to: Kurt Versen, N. J., for an adjustable standing lamp; Claire Falkenstein of Berkeley, Calif., for a washable handscreened wallpaper design entitled "Mass Vertebrate"; Erwine and Estelle Laverne of New York City for a printed fabric; and Joan Maag of New York City for a woven fabric.



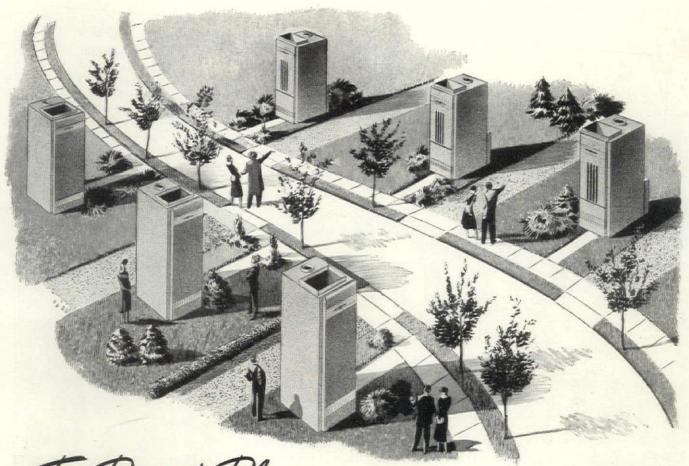
Honorable mentions went to the following designers: furniture, Florence Knoll and George Nelson; lighting, Zahara Schatz and Pipsan Saarinen Swanson; wallpaper, Dorr Bothwell and Dorothy Liebes; fabrics, Ruth Adler, Else Regensteiner and Julia McVicker, Pipsan Saarinen Swanson, Angelo Testa and Samuel Tushingham.

After a three-weeks exhibit at New York's Architectural League beginning February 26th, the designs will be shown on a tour of the country. The next showing will be in Los Angeles at the end of March.

#### **EXHIBITS**

THE CONTEMPORARY HOUSE AND ITS NEIGHBORHOOD, an exhibit of photographs, renderings and models, will illustrate recent work of members of the New Jersey and New York chapters of the American Institute of Architecture at its showing in the New Jersey State Museum in Trenton, N. J., from March 7 to April 16.

IDEA HOUSE II, co-sponsored by Walker Art Center and the Home Institute of Minneapolis, has proved so popular that it will be reopened to the public from April through the early fall. (Its first session ran from last September to January). The house, designed by William Friedman and Hilde Reiss with Malcolm Lein, associate, aims at showing today's homebuilders how to get their (Continued on page 70)



For Project Planners ...



### FEATURE ATTRACTIONS

For easy, time-saving installations of heating equipment, more and more project planners are specifying General Electric Oil or Gas Heat.

Both the G-E Gas and Oil Warm Air Furnaces are approved for closequarter and alcove installations with only 2-inch clearance from walls of standard construction.

All G-E warm air units are factory-assembled, factory-wired and factory-tested...ready for quick installation. Two good men can hook a unit to prepared duct, fuel, and power lines in just about one-half hour. Just

compare G-E installation savings with the cost of putting in units that must be assembled on the job.

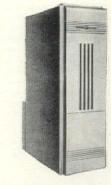
For today's small home, another G-E Unit, the Oil-Fired Boiler, is ideal for baseboard heating, radiant heating as well as for standard radiator or convector systems—steam or hot water.

For full specifications, call your General Electric Distributor . . . or see Sweet's Catalog, Section 29A-6.

General Electric Company, Air Conditioning Department, Section H8133, Bloomfield, New Jersey.



G-E Oil-fired Warm Air Furnace



G-E Gas-fired Warm Air Furnace

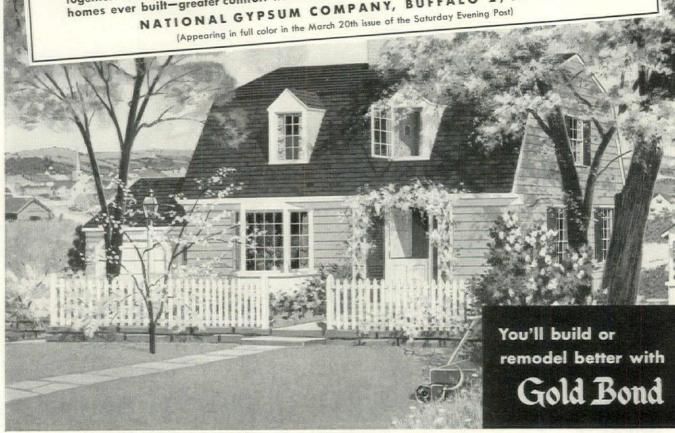
GENERAL E ELECTRIC

Automatic Gas and Oil Heat

### Gold Bond is still carrying the ball for you!

Here is the latest ad in the Gold Bond Saturday Evening Post series which is now in its third year. Too many people have the mistaken idea that today's homes are merely "thrown together." Instead they are getting the finest homes ever built-greater comfort with Rock long lasting beauty with Gypsum Lath and Plaster. Of course, the ads feature Gold Bond building products but we think you'll agree they are doing a constructive job for the whole building industry.

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.



For the newest in building and remodeling products, see your local Gold Bond dealer first.

### What kind of dreams is a house made of?

Our friends really thought we were dreaming when we insisted our new home was going to be fire-safe. "Wait till you figure up what it costs!" they said. But the laugh was on them when our dream came true . . . because our architect showed us how to use fireproof materials without spending an extra penny!

Real fire protection in woodframe houses is no dream today with the modern materials now available. It starts with the sheathing that goes on the outside walls under the clapboards or other finish. Just ask for Gold Bond Gypsum Sheathing. These big, husky panels build a permanent barrier against fire, and a stronger, more weather-fight wall at less cost than old style inflammable sheathing.

Your insulation should be fireproof too. Yet n all insulation is fireproof and it will pay you to be sure . . . by specifying fireproof Gold Bond Rock Wool. Gives you full insulation value and absolutely cannot burn. (For your present home, call the Gold Bond applicator and have him "blow" Gold Bond Rock Wool into the roof and sidewalls. He is in the phone book under "Insulation").

For walls and ceilings too, you can have fireproof materials at no extra cost. Just be sure the specifications say "Gold Bond Gypsum Lath and Plaster". And for charming painted interiors, with no fire hazard, there's non-inflammable Gold Bond Sunflex. Comes in many attractive colors and dries in an hour with no "painty" smell.

Fire protection is only one of many sound values

that research has put into Gold Bond building materials to help you build or remodel better. Your local Gold Bond lumber and building material dealer can now supply over 150 of these superior Gold Bond Products. He can give you helpful free advice. When you build or remodel, see him first!

NATIONAL GYPSUM COMPANY BUFFALO 2, NEW YORK

Gold Bond Building Products add greater five protection, permanency, and beauty at no extra cost. These include fiveproof wallboard, lath, plaster, lime, sheathing, wall paint, insulation, metal and sound control products.







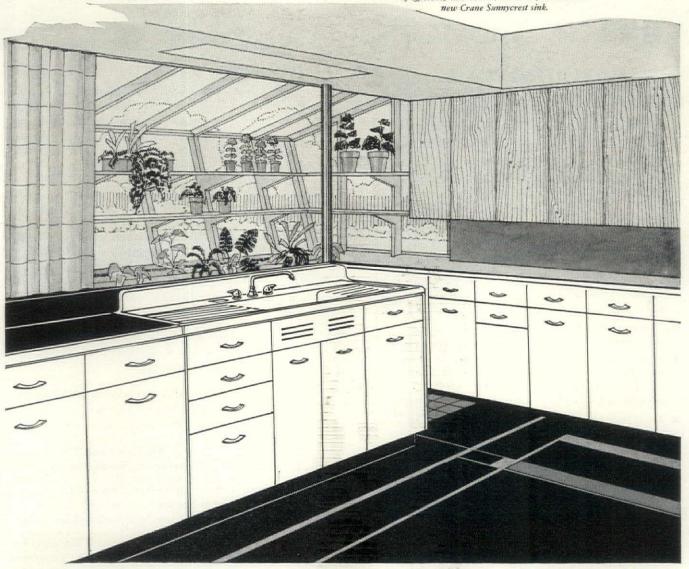


# say CRANE

and your client asks no more

He himself has chosen Crane time after time in nationwide surveys. He knows Crane for fine quality . . . modern styling . . . for beauty that endures. And you know the completeness of the broad Crane line will suit his needs exactly. These things are true of Crane kitchen sinks as well as bathroom and laundry fixtures—and all feature the new finger-tip Dial-ese faucets. Crane offers a full choice of heating equipment, too . . . for any system, any fuel. See your Sweet's Builders' File for selections from the Crane line. Of course, some fixtures still are more available than others—check your requirements with your Crane Branch or Wholesaler.

The outdoors comes in . . . to this Conservatory kitchen. A gay blend of efficiency and charm, the room focuses on the



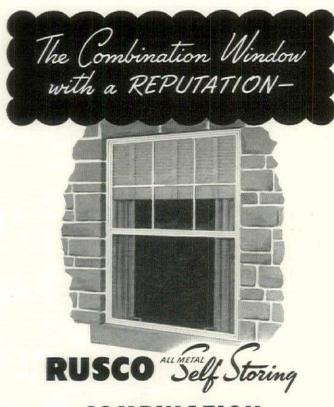
# CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5

PLUMBING AND HEATING VALVES • FITTINGS • PIPE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

#### **ANNOUNCEMENTS**

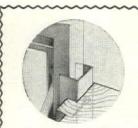


#### COMBINATION SCREEN AND STORM SASH

year 'round advantages have been pre-sold to many thousands of prospective home, industrial and commercial builders through pioneering efforts and consistent advertising in leading publications.

#### YOU CAN RECOMMEND THESE RUSCO ADVANTAGES

- All the benefits of storm, windows, screens and weatherstripping in one permanently installed unit
- Nothing to change—nothing to store
- Year 'round rainproof, draft-free, filtered-screen ventilation by fingertip adjustment from inside
- Up to 1/3 saving on fuel cost



RUSCO PATENTED
THERMOLOK\* CLOSURE FRAME

... assures perfect alignment and permanent weather-tight fit ... adjusts automatically to contraction, expansion and settlement.

Specifications will be found in Sweet's File for Architects and Builders or complete descriptive literature and specifications will be sent on request.

#### THE F. C. RUSSELL COMPANY

6400-AF HERMAN AVENUE . C

CLEVELAND 2, OHIO



Also manufacturers of the Rusco All Metal Venetian Awning

money's worth by use of straightforward design and currently available material (photo below). Planned for a family of four, it provides living, eating and sleeping quarters for the changing needs and tastes of growing children and their parents. The interior is completely furnished and equipped with products of good modern design now on the market. Funds for construction (approximately \$21,000) were supplied by the Home Institute, a public service department of the Northwestern Bank of Minneapolis. This group has attracted a local membership of more than 7,000 people interested in building and remodeling their own homes.



#### **APPOINTMENTS**

NORTH CAROLINA STATE COLLEGE at Raleigh, N. C. is forming a full-fledged School of Architecture. Henry Kamphoefner from the University of Oklahoma has been chosen Dean of the new school and is entrusted with powers and responsibility for developing a vigorous and coherent program. Architects Edward Waugh, George Matsumoto and James Fitzgibbon and Artist Duncan Stuart (all from Oklahoma's School of Architecture) as well as City Planner Hugo Leipziger-Pearce of Texas University will be added to the newly-formed staff.

THE UNIVERSITY OF TEXAS announces that its School of Architecture now consists of two Departments. James Pollard, AIA, will head the new Division of Architectural Engineering while Hugh McMath, AIA, remains as Director of the School and Chairman of the Architecture and Planning Department. M. Robert Louard will serve as Visiting Lecturer of Design.

Walter Sanders, New York architect, will serve as Senior Design Critic during the Spring term at the College of Architecture, University of Michigan.

Dr. E. George Stern, AIA, has been appointed Director and Research Professor in Wood Construction of the Virginia Polytechnic Institute, Blacksburg, Va.

CLAIR DITCHY of Detroit has been elected Secretary of the American Institute of Architects, Washington, D. C.

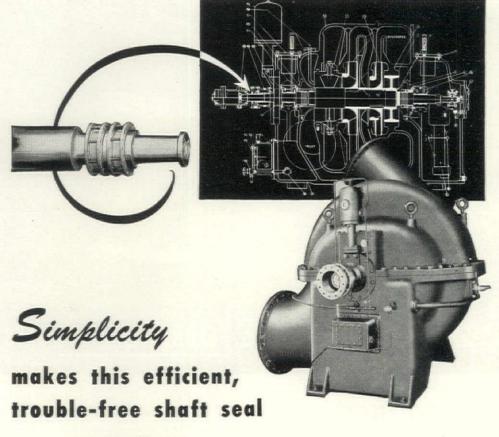
JOHN ABBOTT, Secretary of New York's Museum of Modern Art, has resigned to become Assistant to William Zeckendorf, President of Webb & Knapp, New York real estate firm.

JOSEPH WOLFF of Detroit's Department of Buildings has been made chairman of the Building Officials Foundation, an organization to effectuate building code reforms.

George Hunt has taken over the post of Los Angeles Regional Manager for Raymond Loewy Associates, industrial designers.

Paul McCobb has been appointed design consultant for Modernage Corp., New York. (Continued on page 74)

## Weigh all the advantages



York's
Engineering
Assistance
backs up York's
Outstanding
Equipment

Experience and practical technical assistance unequalled elsewhere are available to you as a York customer ... wherever you may be.

In the East Central District, for example, Manager Yoder located in Cleveland, assisted by thirteen York-trained sales engineers, are at the service of York customers in this district. The highly practical, up-to-the-minute assistance and advice of these gentlemen are available to you at all times, whether you are planning, purchasing, installing or operating refrigeration or air conditioning systems or equipment.

#### DIFFERENT

In the York Allis-Chalmers Turbo Compressor, leak-proof sealing is secured through impingement of stationary carbon rings on either side of a "Meehanite" seal ring which rotates with the shaft. The carbon rings are enclosed in nonferrous bellows secured to the compressor housing, and contact with the seal ring is maintained by spring pressure. Oil circulated by the main oil pump lubricates the rotating faces of the shaft seal and carries off

the heat of friction. A gravity tank maintains an oil head on the seal when the compressor is idle. Since this high efficiency seal has few parts to get out of order, maintenance is negligible.

This unusual shaft seal is but one of the many exclusive design features of the York Turbo Compressor and is representative of the thoroughness of York engineering throughout its complete line of refrigeration and air conditioning equipment. York Corporation, York, Pa.



H. S. Yoder, District Manager

C. J. Schurman Sales Manager

Assisted by:

L. W. Cordrey

L. R. Craig

J. O. Currie

C. G. Gillespie

F. J. Goff

W. P. Kohn

L. Lewis

L. P. Quinlivan

J. A. Schurman

G. O. Weddell A. P. Wolff

D. J. Wood

YORK Refrigeration and

Air Conditioning



#### ... WITH GREATER EFFICIENCY ... DISTINCTIVE APPEARANCE

HERE'S WHY. The kind of lighting in any office has a decided effect on the efficiency of employes. Poor fixtures and poor planning can cause eyestrain, increased errors, reduced efficiency. But, with Westinghouse Planned Lighting and equipment, you get the right amount of light for each office task... eliminating glare and eyestrain...and giving the office a distinctive modern appearance.

THE RIGHT EQUIPMENT. The new Westinghouse Troffers... concealed in the ceiling... give both distinctive appearance and better lighting. Adapted to any type of suspended ceiling... designed to fit the 12-inch block pattern of most acoustical ceilings. Available with egg-crate louvers, cross baffles, hinged door or open. Easy to install . . . easy to maintain without disturbing ceiling.

In addition to Troffers, Westinghouse makes a wide line of lighting equipment for every need. Write today . . . for a copy of Troffer Book B-3959. Or call your nearest Westinghouse Distributor. Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pa.

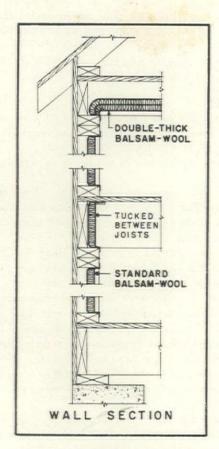
J-04163

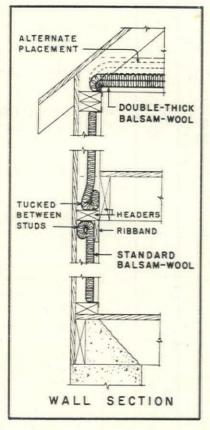
J-04103

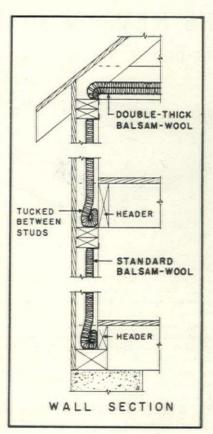
Your local power company and electrical contractor will be glad to help with your planning



Services of a Lighting Sales Engineer are available through your near-by Westinghouse distributor



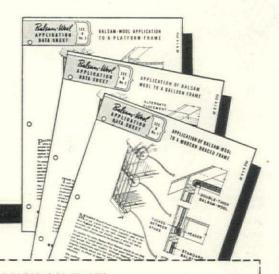




# PLATFORM-BALLOON or BRACED Balsam-Wool has the Insulation Answers!

• No matter what the type of construction, Balsam-Wool provides the *sure* way to insulate. Its method of application and special features assure a *lasting* insulation job—wind-proof, moistureproof, highly fire retardent and non-settling.

To place insulation application data at your finger tips, Wood Conversion Company has developed a series of 32 Balsam-Wool data sheets, with carefully prepared drawings and explanatory text. You'll want a set of these sheets for your files—and it is yours for the asking. Just mail coupon!



MAIL THE COUPON FOR YOUR SET!

## Balsam-Wool



SEALED INSULATION

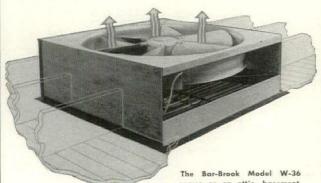
REG. U. S. PAT. OFF.

BALSAM-WOOL • Products of Weyerhaeuser • NU-WOOD

	RSION COMPANY National Bank Building tota
Please send me a se	et of Balsam-Wool Application Data Sheets,
Name	
Address	224 MARCH 1
City	

#### **ANNOUNCEMENTS**

#### the NEW versatile Bar-Brook w-36 Fan Unit



serves as an attic, basement or wall fan unit when used with an automatic shutter-or as a win-

dow fan. Mounted vertically or horizontally. Direct drive slow dependable cooling speed motor insures quiet, efficient operationcomfort.

The Model W-36 has big 36" blades, and two-speed air delivery (High speed — 4500 CFM). Easily portable, easily installed; the W-36 has an attractive ivory white baked enamel finish, matching 11' cord and plug. Available with or without automatic shutters.

Write today for full information about the complete line of Bar-Brook Fans in sizes from 18" to 54".

#### BAR-BROOK FANS

for Home, Office, Industry

BAR-BROOK MANUFACTURING CO., INC., SHREVEPORT, LA.

Cllways Specify

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 CRUCIBLE STEEL COMPANY uredis DIVISION . DETROIT 11, MICHIGAN SSI BUTLER RVENUE

CARL GARDNER has been named executive director of the Chicago Plan Commission after the resignation of H. Evert Kincaid who will return to private practice as a city planning consultant.

ERNEST GILBERT, AIA, is now an associate in the firm of Marcellus Wright & Son, architects, Richmond, Va.

#### **NEW OFFICES**

ROBERT BROWN, AIA, and WILLIAM WELLS, AIA, have opened an office of architecture and architectural engineering in Roanoke Va. (P. O. Box 1205).

WARREN WEBER, AIA, is now in practice in the Fenton Bldg., Portland 4, Ore.

L. ROBERT GARDNER announces the opening of his office of architecture at 173 South Second West, Cedar City, Utah.

CLIFFORD and Melissa Coleman, registered architects, are in general practice at Landisville, Pa.

F. EUGENE SMITH, SAMUEL SCHERR and MARY ANN SCHERR have set up a firm for industrial design and store planning with offices at 408 United Bldg., Akron 8, Ohio.

HUGH JOHNSON & ASSOCIATES, industrial engineering consultants in housing design and development, have opened offices at 1129 Vermont Avenue NW, Washington 5, D. C.

Paul Harris and Marvin Frank announce their association as architects at 4122 Maple Ave., Dallas 4, Tex.

LESLIE WILLIAMS and CHARLES UPHAM, JR. have established an advisory service on traffic and city planning problems at 292 Madison Ave., New York 17, N. Y.

WILLIAM CROW CONSTRUCTION Co. announces the opening of branch offices in Washington, D. C. and in Syracuse, N. Y. MARY COLE, architect, is now in practice at 1107 Sunset Drive, Tulsa, Okla. (Continued on page 78)



Write for your copy of the Moleta COLOR GUIDE -\$5.00, delivered anywhere in the U. S. A.

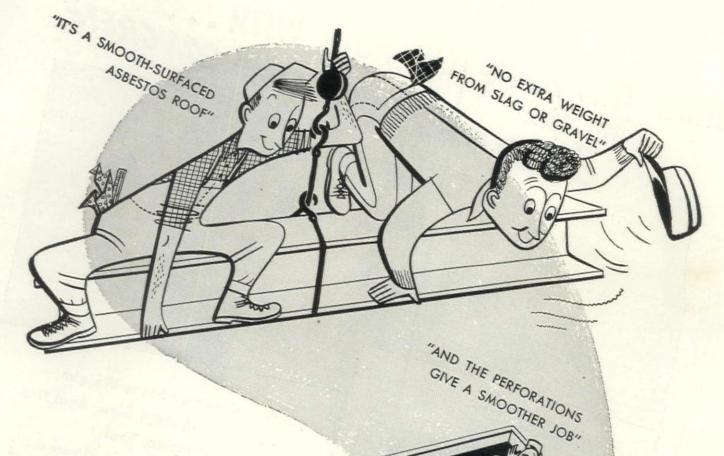
15"). The correct mixing formula is given on the

MONROE, LEDERER & TAUSSIG, Inc. 606 N. American St., Phila. 23, Pa.



reverse of each page.

The Truly Washable **FLAT OIL PAINT** 



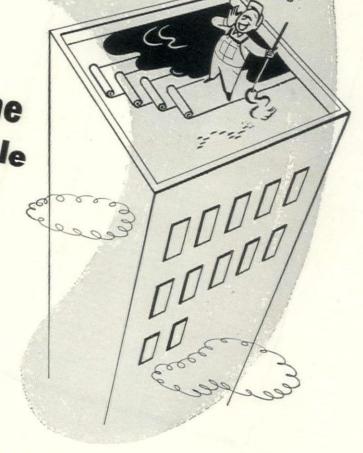
# Yes-it's Flexstone Each ply is a flexible covering of stone!

• The secret of a Johns-Manville Flexstone Roof is in the felts. They're made of fireproof, rotproof, enduring asbestos.

Flexstone Built-Up Roofs won't dry out from the sun... need no periodic coating. They're smoothsurfaced, too-permit thorough drainage ... make any damage easy to locate and repair. They are engineered to each job . . . applied only by J-M Approved Roofers.

J-M asbestos felts are perforated to make application easier ... give you a smoother job and conform better to irregularities in the roof deck.

Send for Flexstone brochure BU-51A. Contains complete specifications. Address: Johns-Manville, Box 290, New York 16, N. Y.





Johns-Manville FLEXSTONE Built-Up Roofs

INSULATES FOUR-ACRE ROOF WITH . . .



September 5, 1947

Southern Zonolite Company 407 Chandler Building Atlanta 3, Georgia

Re: Lily-Tulip Cup Job 1550 Wrightsboro Road Augusta, Georgia

Attention: Mr. H. K. Sterrett

We have your letter of September 2nd in regards to information you desire in connection with advertising the application of Zonolite on the above job.

We hereby give you authorization to use the enclosed pictures and our name for trade magazine publication.

For your information we list the following facts: The building has approximately 180,000 Sq. Ft. of floor area.

Zonolite insulation was very successfully used over Zonolite and its application was less than our anti-cipated cost.

We were delighted with the splendid cooperation of your local distributor and the supervision and inspection of your representatives. This was the first occasion we had to use your material and we surely occasion we had to use your saterial and we surely occasion we had to use your saterial and we surely occasion we had to use your saterial as well as will use it on future jobs in this wichnity as well as other operations we are contemplating.

The roofing contractor is also very satisfied with the base he received for his roof covering.

In connection with using Zonolite plaster, we will contact your representative in due time.

Very truly yours,

P. KRETZER & SON, INC.
William Kretzer, Pres.

#### **Zonolite Concrete Saves Weight** ... Saves Money! Gives Real Fire

#### Protection, Too!

Yes, millions of pounds dead-load were eliminated on the four-acre roof of the Lily Tulip Cup Corporation's new Augusta, Ga., plant. And, as you know, weight costs money! Here, Zonolite insulating concrete was combined with a lightweight steel roof deck to form a permanent, fireproof structure. An equivalent amount of ordinary concrete would weigh five million pounds more than the Zonolite insulating concrete used in this roof.

Zonolite insulating concrete, made by mixing Zonolite brand vermiculite Stabilized Concrete Aggregate with Portland cement and water, weighs as little as 16 lbs. per cubic foot as compared to 145 lbs. per cubic foot for ordinary concrete. Applications of this versatile material are numerous and varied ... for insulating fill-type roofs, or structural roof decks . . . warm dry floors for industrial, commercial, rural or residential buildings ... economical, lightweight fireproofing of structural members . . . these are but a few of the many applications.

Send today for full particulars on Zonolite insulating concrete.



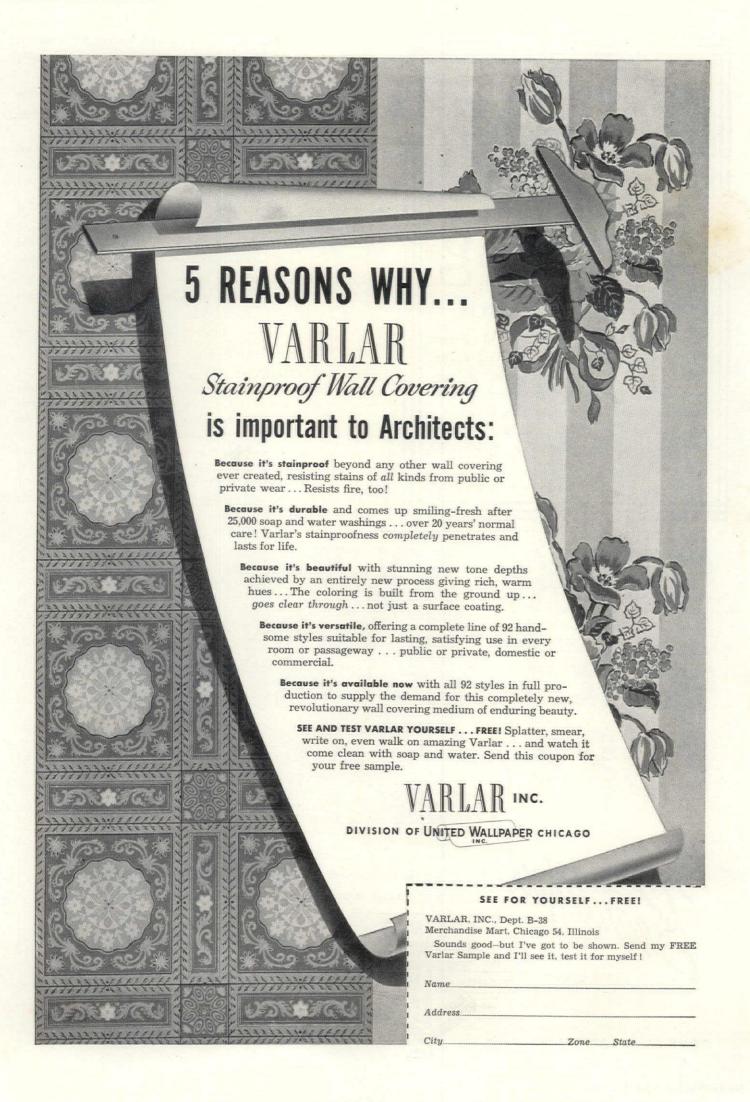
**Zonolite Company** Dept. AF-38, 135 S. LaSalle St. Chicago 3, Illinois

(Formerly Universal Zonolite Insulation Co.)

MAIL COUPON FOR DETAILS

SEE YOUR LOCAL LUMBER AND BUILDING MATERIAL DEALER

Zonolite Company Dept. AF-38, 135 S. LaSalle St., Chicago 3, Ill.	
Please send me full details about Zonolite Insulating Concrete Roof	
Decks.	
Name	
Address	
CityState	
*Zonolite is the registered trade-mark of Zonolite Company	



#### **ANNOUNCEMENTS**

# American Bilding

JAMES MARSTON FITCH

Here is a crisp, entertaining and coherent approach to the problem of building design, giving equal importance to history and airconditioning and telling what American builders have done and what they plan to do.

Trained as an architect, Mr. Fitch is at present Technical Editor of The Architectural Forum.

At all bookstores, \$5.00

HOUGHTON MIFFLIN CO.

ERNEST SMITH, DENNIS CARTER and WALTER KATELNIKOFF, architects, have formed a partnership with offices at 289½ Garry St., Winnipeg, Canada.

Benjamin Baldwin announces the opening of an office specializing in interior architecture, furniture and product design at 33 E. 75th St., New York 21, N. Y.

JOHN GARTMAN has established a studio of Modern Home Furnishings at 299 W. 12th St., New York 14, N. Y.

#### CHANGES OF ADDRESS

GERALD ANTHONY PAUL, architect, announces the removal of his office to 140 E. 44th St., New York 17, N. Y.

G. LLOYD PREACHER & Associates, architects, engineers and consultants, have moved their Atlanta office to 843 Peachtree St. N.E. in that city.

J. Mandor Matson, architect, announces that his new address is 610 Main St., Racine, Wis.

THEODORE EARNE, architect, is now located in offices at 40-22 Main St., Flushing, N. Y.

#### CORRECTIONS

CREDIT for the design of the temporary quarters of the Solomon Guggenheim Collection (mentioned in text, January FORUM, p. 137) were designed by the office of William Muschenheim, New York architect.

Faulkner, Kingsbury & Stenhouse, architects, are now located at 1200 18th St. NW, (not just "W") Washington, D. C. Thomas Twerdahl, Chicago architect, opened the office of Barr & Twerdahl in 1940, instead of 1942 as reported in the February Forum, p. 52.

# CORK is QUIET, CORK is



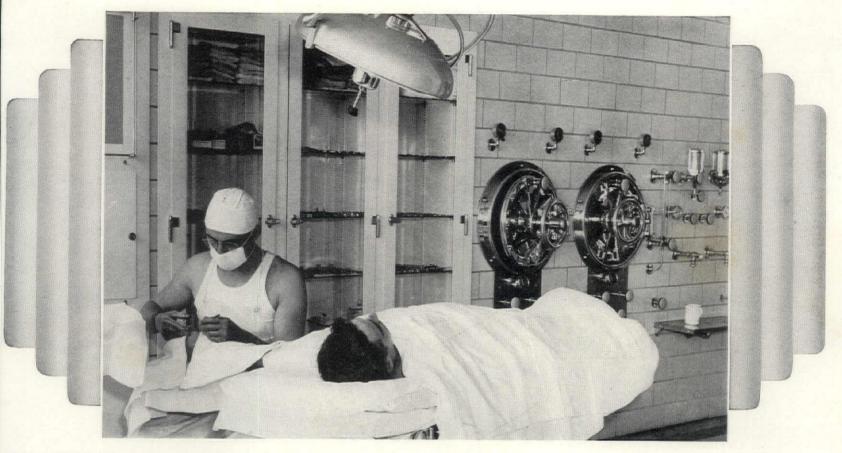
For homes, offices, churches, schools, and public buildings of all kinds, there's nothing like Corinco Cork Flooring. It's quiet. It's beautiful. It keeps its resilience for years. It's easy to install on either old or new construction, on metal, concrete

or wood. It's easy to maintain—with an occasional dusting. No wonder so many far-sighted architects and contractors are giving their clients the benefits of this versatile flooring. Write our engineering office for specifications, details and layouts.

For homes, offices, che nothing like Corinco Cori for years. It's easy to insta

CORK INSULATION CO., INC.

155 EAST 44th STREET, NEW YORK 17, N.Y.



# Healthier budgets...happier patients with HOSPITAL INTERIORS of Facing tile

Picture a hospital with interiors of Structural Clay Facing Tile.

They glisten! They radiate cheer and sparkle with cleanliness. They meet the heaviest, most varied demands of the busy, modern hospital... meet them day after day without losing one bit of their lustre, strength or efficiency.

Do you want to achieve economy in construction?

Do you want to create an atmosphere of warmth-dignity-confidence?

Do you want to provide for sanitation and patient's protection?

With Facing Tile the architect achieves all these... and more. Facing Tile builds a strong, fireproof wall and a permanent

surface finish in one! It's fast-building. It's easily cleaned with soap and water. It will not harbor dirt or germs because it will not crack, scratch, mar or decay.

Whatever your demands, Facing Tile is a material you can specify with confidence. Available in efficient modular sizes, glazed or unglazed, pure white or a variety of light-reflecting colors. Write the Institute or contact any Institute member for further information. Additional data also in Sweet's Architectural Catalog.

#### SEND FOR NEW 90-PAGE MODULAR FACING TILE HANDBOOK

Free to registered architects and engineers. Write Desk AF-3 of the Institute on your letterhead. Fifty cents to others.

#### FACING TILE INSTITUTE

1756 K STREET, N. W. . WASHINGTON 6, D. C.

#### 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

Standard Clay Manufacturing Co., New Brighton, Pa.

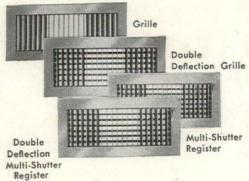
West Virginia Brick Company, Charleston, West Virginia



Check the size of grilles and registers you normally install for air conditioning jobs . . . then check the standard Tri-Flex and Aerovane sizes.

You'll readily see why T&B STANDARDS meet practically all requirements ... how they eliminate haphazard selection that can be exceedingly troublesome. And there are other important advantages of standardization . . . efficient production methods mean cost savings ... on-the-shelf stock assures quick delivery.





8 x 4
10 x 6
10 x 6
12 x 5
12 x 6
14 x 4
14 x 5
14 x 6
16 x 5
16 x 6
20 x 5
20 x 6
20 x 8
24 x 5
24 x 6
24 x 8
24 x 10
24 x 12
30 x 6
30 x 8
30 x 10
30 x 12
36 x 8
36 x 10
36 x 12



48 x 36



20 STANDARD SIZES



Grille



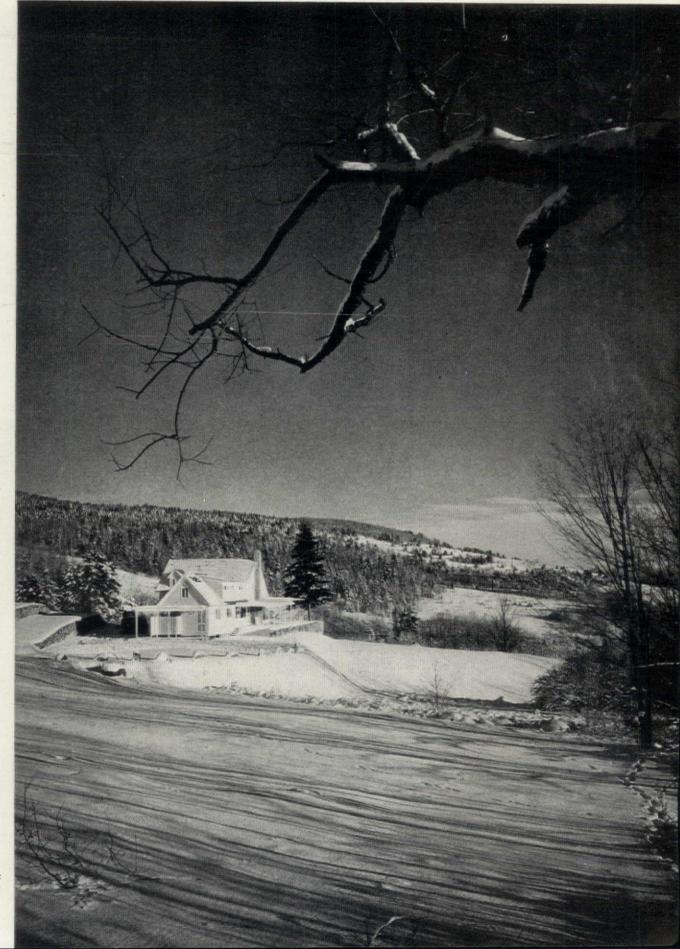
Multi-Shutter Register

FOR DETAILED DESCRIPTION, ENGINEERING DATA AND COM-PLETE SELECTION INFORMATION WRITE TODAY FOR A COPY OF BULLETIN 47TF.



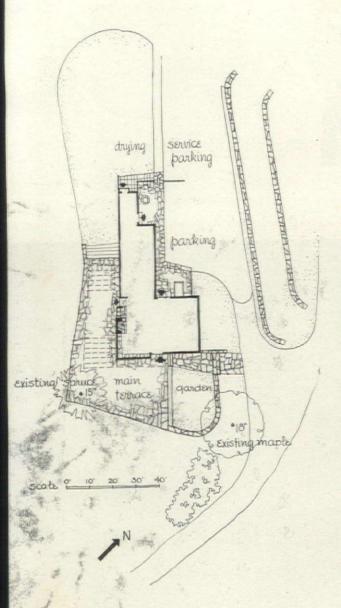
2TB48

# The Architectural FORUM Magazine of Building



ON THE BROAD SWEEP OF THE WHITE MOUNTAINS, A NEW NEW ENGLAND HOUSE IN AN OLD FRAME

Lionel Freedman: Pictorial Services



# The bones of a New Hampshire farmhouse are retained in this warm country home

DAN KILEY, Architect

JAMES VIETTE, General Contractor

B. M. KIMBALL, Owner

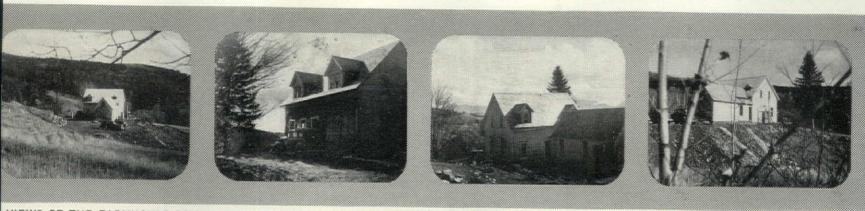
At first view, the most arresting feature of this house is its site. It stands above a wide, bare New Hampshire slope, facing a magnificent view of matching White Mountains. But the building itself—a remodeling job built within the frame of an old farmhouse—has quiet strength, achieved not by boldness but by controlled use of building shapes and forms which have come to be regarded as native. Agreement was made with the farmhouse forms up to the optimum point of practicality, then the designer confidently introduced modern elements like shin-to-ceiling glass in the living room. The result has a nonascetic leanness and spareness familiar to the New England scene, plus all the comfort of a good contemporary house.

No real break in the rhythm of the slope was made for the shelf that holds the building, and the entrance was placed on the uphill side so that one comes into the house before the view is revealed, thus heightening the effect of both. The major structural change in the farmhouse was breaking out the southeast and southwest living room walls 2 ft. beyond the original wall line and replacing these walls with plate glass. Carefully considered use of space in the plan is highlighted by the good built-in furniture and cabinets. The architect was not called in until the job of remodeling had been started—the fireplace chimney was 3 ft. above grade when he came out to inspect; but once the owner had engaged him he cooperated fully.

The site, Black Mountain Farm, is more than 1,600 ft. above sea level, and the old farm-house was oriented well for sun and wind, with walls waiting to be glazed for full advantage of the view to Franconia Notch. The design has a restraint traceable perhaps in part at least to its lineage of complete utility. It was remodeled primarily to be a summer residence, but when completed it was an all-year house, a home. Even in these winter pictures, which emphasize its warmth, it is not a cocky proclamation of victory over the elements, but an evidence of having learned to live more comfortably with nature, to enjoy the snow and mountains.

FLAT PLANE OF THE TERRACE GENTLY EMPHASIZES FLOW OF LAND, WITHOUT DIVORCING THE HOUSE FROM THE NATURAL SLOPE





VIEWS OF THE FARMHOUSE PRIOR TO REMODELING SHOW HOW ORIGINAL CHARACTER WAS RETAINED AND EXTENDED IN NEW DWELLING



STEEP ROOF LINE WAS BENT AND EXTENDED OVER NEWLY GLASSED FIRST FLOOR WALLS FOR PROTECTION AND SUMMER SUN SHIELD

CORNER OF LIVING ROOM POINTS SOUTH, FOR BEST ORIENTATION AND VIEW



Lionel Freedman : Pictorial Services

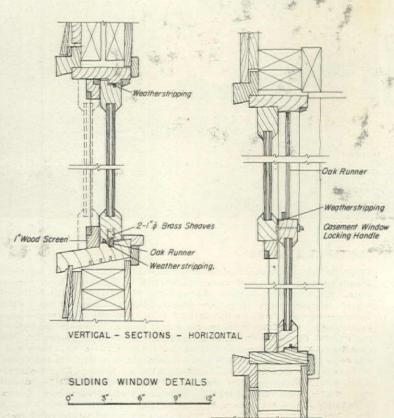
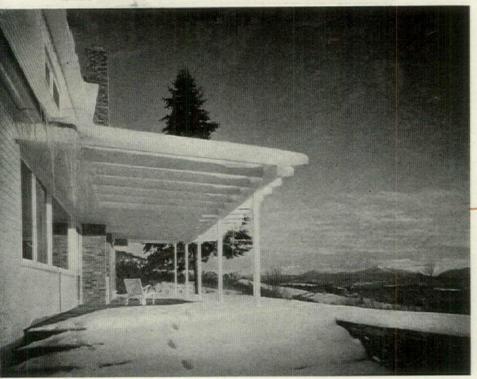




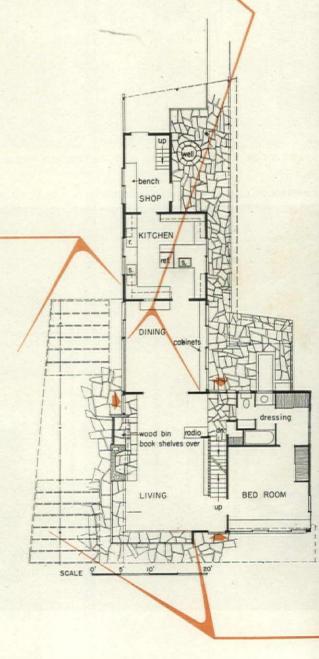
PHOTO THROUGH DINING ROOM TO LIVING ROOM SHOW S UTILIZATION OF THE VIEW IN PLACING OF GLASS

VINES WILL BE GROWN OVER THE FRONT TERRACE BEAMS IN SUMMER



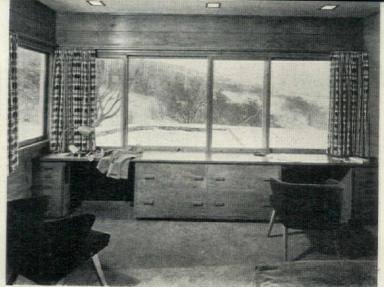
#### CONSTRUCTION OUTLINE

FOUNDATION-masonry and concrete. STRUCTURE: Exterior walls-clapboards, sheathing, 15 lb. felt, wood studs; inside—T. & G. Ponderosa pine. Floors—wood or slate. ROOF—cedar shingles. Deck—4-ply built-up. INSULATION—glass wool batts, Johns-Manville Corp. or Acousti-Celotex, Celotex Corp. FIREPLACE: Damper—Bennett Fireplace Co. SHEET METAL WORK: Flashing—copper. Ducts Damper—Bennett Fireplace Co. SHEET METAL WORK: Flashing—copper. Ducts—aluminum. WINDOWS: Sash—horizontal sliding. Glass—Pittsburgh Plate Glass Co. FLOOR COVERINGS: Living room—carpet, Mohawk Carpet Co. Kitchen and bathrooms—linoleum, Armstrong Cork Co. CABINETS—birch, cherry and Kimpreg, Kimberly-Clark Corp. HARDWARE—Russell & Erwin Mfg. Co. and Grant Pulley & Hardware Co. ELECTRICAL INSTALLATION: Wiring—Bx. Switches—General Electric Co. Fixtures—Kurt Versen. KITCHEN EQUIPMENT—General Electric Co. BATHROOM EQUIPMENT—American Radiator-Standard Sanitary Corp. HEATING-warm air system, filtering and humidifying, Timken Silent Automatic Div., Timken Detroit Axle Co. Regulator-Minneapolis-Honeywell Regulator Co.



Lionel Freedman: Pictorial Services





AN OUTSTANDING NICETY OF THE HOUSE IS THE BUILT-IN FURNITURE, MADE ON JOB BY THE CONTRACTOR

# BED ROOM BED ROOM BED ROOM BED ROOM

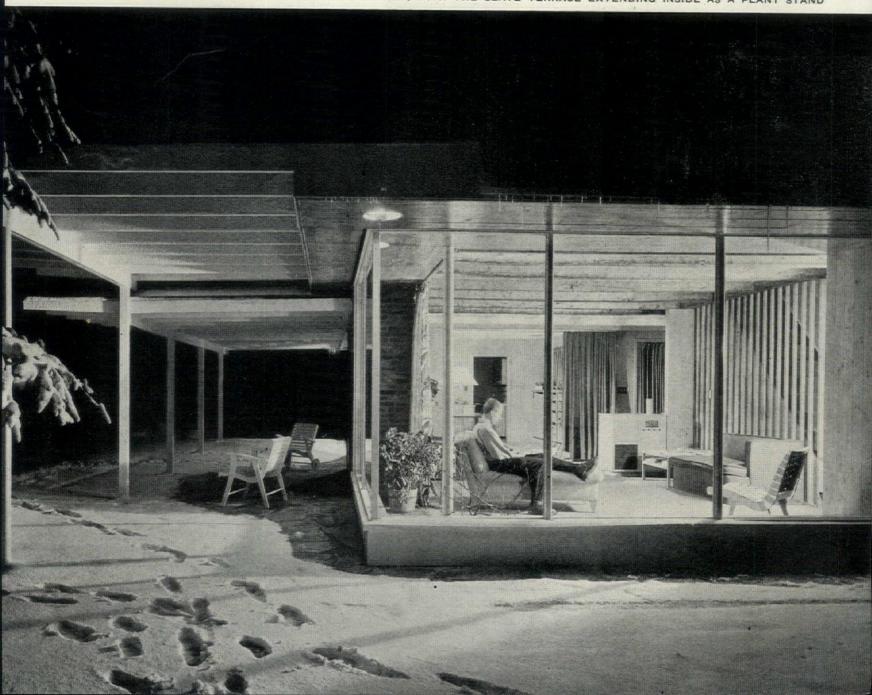
MAID

SITTING &

#### OWNERS' STATEMENT

Our modernized New England farmhouse is a shining example of modern planning and execution. The design provides us with everything we have ever hoped for in modern comfort, and in beautiful and simple living. We lived there from about July 15, 1947 until about November 18 and never in our lives have we been happier or enjoyed a home more. We had many friends visit us and they all felt as we did, that it was just out of this world—grand view. perfect comfort—a grand place to rest. If we were to build it over, we would do the same.

GLASS LINE OF LIVING ROOM CORNER WAS PUSHED OUT TWO FEET, WITH THE SLATE TERRACE EXTENDING INSIDE AS A PLANT STAND



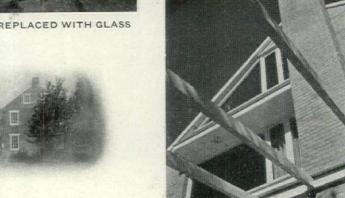
#### Pennsylvania house is rebuilt without a wagon wheel in sight

HUGH MOORE, JR., Designer
FRANK J. LERCH & SONS, Contractor
MR. & MRS. CRAIG MOORE, Owners

Ben Schnall, photos

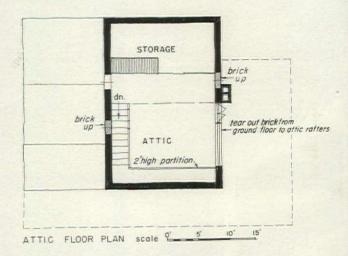


NON-STRUCTURAL BRICK WALL FACING SOUTH WAS REPLACED WITH GLASS



The rolling countryside in western Pennsylvania is famous for stone fences and farmhouses which have been elaborately remodeled to the supposed images of their Eighteenth Century selves. In the last 20 years uncounted fortunes have been poured into these old buildings by city folk, who have caught the fever to restore them historically complete to the hand wrought nails and weevils in the bread box. Here is a refreshing remodeling, and-for this section-a reasonable one. The \$10,000 spent here was not poured into antique trimmings; instead, the old house was used for all it was worth to achieve a dwelling that is contemporary not only in plumbing, but even in fenestration. There aren't many of those rare old devices, shutters, hanging on the brick, but there is a lot of glass penetrating it in the right places. The original was one of those vertical brick country houses, very small and blatantly exposed in its closeness to the road. Throwing together a hall and two roomsliving and dining-on the first floor created a sense of space downstairs, while two of the four first floor windows on the road side were bricked up.

CONSTRUCTION OUTLINE: INSIDE FINISH: plywood, U. S. Plywood Corp., or plaster, U. S. Gypsum Co. SHEET METAL WORK: Flashing—Republic Steel Corp. WEATHERSTRIPPING—Chamberlin Co. of America. GLASS—Pittsburgh Plate Glass Co. FLOOR COVERINGS: Kentile—David E. Kennedy, Inc. PAINTS—Sherwin Williams Co., Medusa Portland Cement Co. ELECTRICAL FIXTURES—Sylvania Electric Products Inc., General Electric Co. KITCHEN EQUIPMENT—Westinghouse Electric Corp., Crosley Corp. LAUNDRY EQUIPMENT—Bendix Home Appliances, Inc. BATHROOM EQUIPMENT—American Radiator-Standard Sanitary Corp. HEATING—Holland Furnace Co.

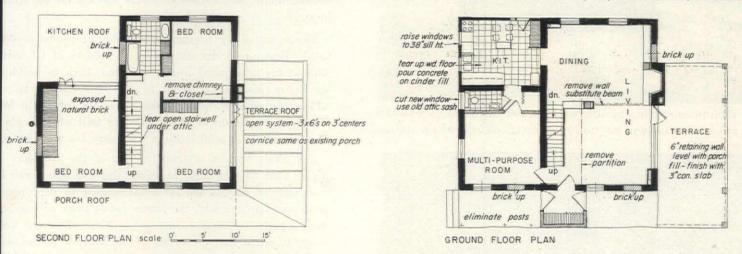


OWNERS PARTICULARLY LIKE ATTIC WITH SOUTH WINDOW





NAKED BRICK WAS USED IN MANY INTERIOR WALLS, LEFT NATURAL AS IN LIVING ROOM ABOVE, OR, IN KITCHEN, PAINTED

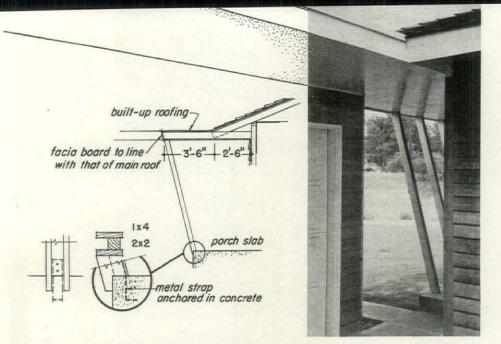


BEDROOM WINDOW BUTTS INTO SUNKEN MORTAR JOINT; OTHER VIEWS SHOW KITCHEN FROM OUTSIDE, AND DINING-LIVING ROOM

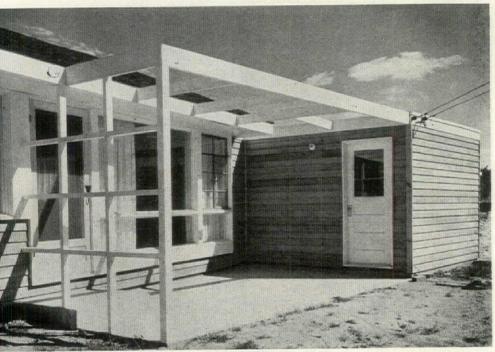




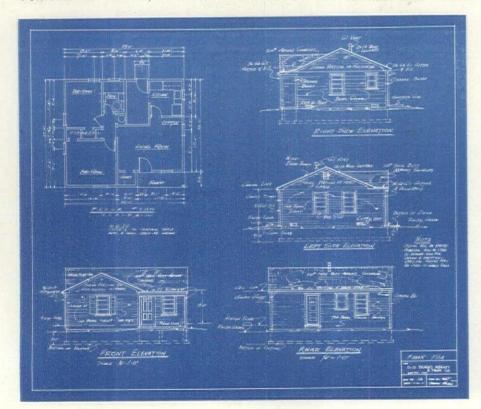




ADDED CARPENTRY AND MILLWORK COSTS WHICH DID NOT ADD SQUARE FOOTAGE TO ENCLOSED FLOOR AREA CAUSED THE FINANCIAL TROUBLE



HOUSES WERE DESIGNED AFTER FOUNDATIONS HAD ALREADY BEEN POURED



#### Denver Developer's House,

JOSEPH P. MARLOW, Architect BURNS REALTY & TRUST CO., Builders

The two houses pictured on these pages raised again—thitime in Denver—a brooding question: How much mone is the element of design worth in a house? A Denver resestate developer, Frank Burns, came up against one blur answer last fall when he went to the interesting extrem of hiring architect Joe Marlow to design two good house for the low price GI loan-backed market. The houses considerably more to build than the conventional under \$10,000 house illustrated in the drawings on this page bottom left—with most of the extra money going into special millwork and carpentry for the large windows, cabinets, an overhangs—but he expected the extra value to be recognized in the price.

However, when Burns presented six of the finished house to the Denver Veterans' Administration Appraisal Board whose price on houses must not be exceeded if vetera buyers are to be eligible for GI loans, he ran into mone trouble. The VA's minimum appraisal in Denver was the \$7.75 per sq. ft. for residential housing. On appeal of extr costs they did boost this minimum to \$8.50 per sq. ft. fo the larger Marlow house and \$9.75 for the smaller, bu according to Burns cost sheets this still was insufficient. Th total VA appraisal for the smaller house, including site, wa \$8,750 and for the larger house, \$9,250. Burns says th houses cost an average of \$9,325 to build and should be priced around \$9,950. Appeal brought no further upwar adjustment of the VA appraisal. Interestingly, FHA apprais als of the same houses were \$450 lower than the VA for th smaller house, and \$375 higher than the VA for the large

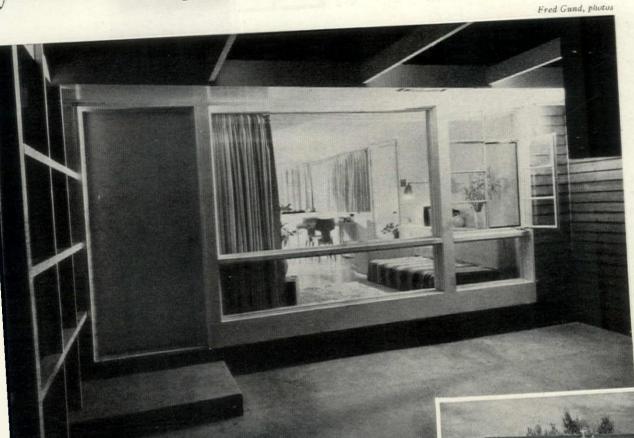
The result of the jousting match was of course predetined. Burns sold the six houses to holders of GI loan without his anticipated profit, and went back to building the more conventional small houses—although he is not without hopes of turning out these Marlow houses for less money in the future by using standard mill work in place of some of the special cuttings necessary for the first six

The affair remains a good framing of the problem: design such an intangible in houses this size that it can be demonstrated only in the far distant future by their resal price as compared with the future resale price of bun-bouilt equals (in square footage)? Most observers we ready to admit that the resale of the Marlow houses wi have been considerably enhanced by what some called the trimmings; but the essential dispute as to whether the addedintrinsic value exceeds or even equals the added cost of carpentry remains the bone. The conventional house it of course, not without some extra millwork. Note sing set of shutters on facade.

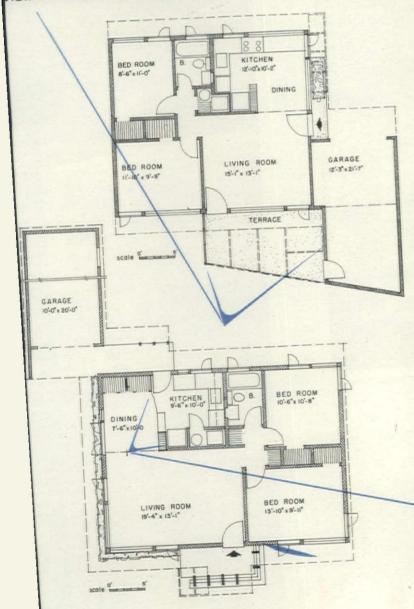
#### CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—cedar siding, wood sheathing; insidestuds, plaster board. Floors—oak finish over pine sub-floor. ROO—asphalt shingles. SHEET METAL WORK: Flashing and ducts galvanized iron. WINDOWS: Sash—steel casement. Glass—plaster double strength, quality B. FLOOR COVERINGS: Kitches and bathrooms—linoleum. WALL COVERINGS—plaster board are plywood. GARAGE DOORS—Overhead Door Corp. KITCHE EQUIPMENT: Range—Detroit Jewel, Detroit Michigan Stove C Refrigerator—Gibson Refrigerator Co. LAUNDRY EQUIPMENT Washing machine—Bendix Home Appliances, Inc. PLUMBING: Scrippes—cast iron. Vent and branch pipes—galvanized iron. HEATING—forced hot air system.

### ry at better design, hits snag



VIEW THROUGH BACK WINDOW INTO LIVING ROOM OF SMALLER DESIGN



SMALLER HOUSE, ABOVE, TOTALS ONLY 679 SQ. FT. FLOOR AREA



LARGER HOUSE, LEFT, HAS SERVING COUNTER TO KITCHEN, BELOW



#### PIERRE GRILL

One of New York's Sleeker hotels livens up a luncheon room.

MARX-FLINT-SCHONNE, Architects
EDWARD H. KLEIN, General Contractor

In the wave of hotel modernization sweeping the country, the Hotel Pierre had the particular problem of gently updating conservative guests who were accustomed to elaborately barren Adam's surroundings with their lunch. Pursuing a comprehensive remodeling plan begun before the war with the hotel's main dining room, the management re-engaged Chicago architects Marx-Flint-Schonne, who had put that room on a financially successful operating basis, to re-do this downstairs room. Again they have pulled a room out of the red, by accomplishing a major transformation into what the architects term "a straightforward contemporary" room. They have also redesigned the adjoining grill lobby, as well as the main Fifth Avenue entrance and hotel foyer.



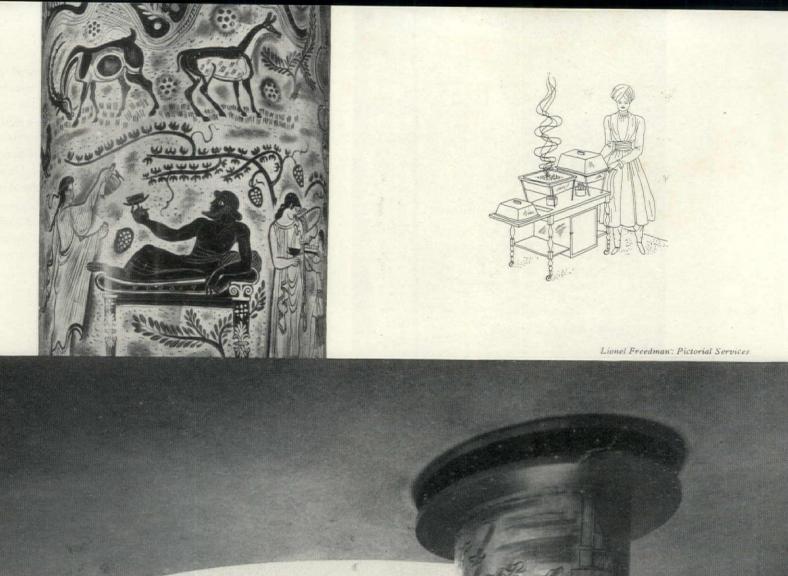
ROCOCO ART SUPPOSEDLY APPEALS TO MASCULINE NOSTALGIA FOR THE TRADITIONAL

An unobtrusive background of flexible English oak veneer, Cordova shell stone, lighted by indirect coves, quietly sets off the richly subtle color of the pillar murals in vermillion, black, and multileaf metal. These were executed by artist Edgar Miller, known for his work in Washington's Statler. Miller also designed the plaster wall plaques which repeat some of the mural motifs.

At one end of the room there is visible a gleaming stainless steel kitchen. This bit of eye appeal is enhanced by an exotically-garbed waiter in East Indian dress, who plies the curry pushcart. Further glitter comes from the bar at the other end of the room.









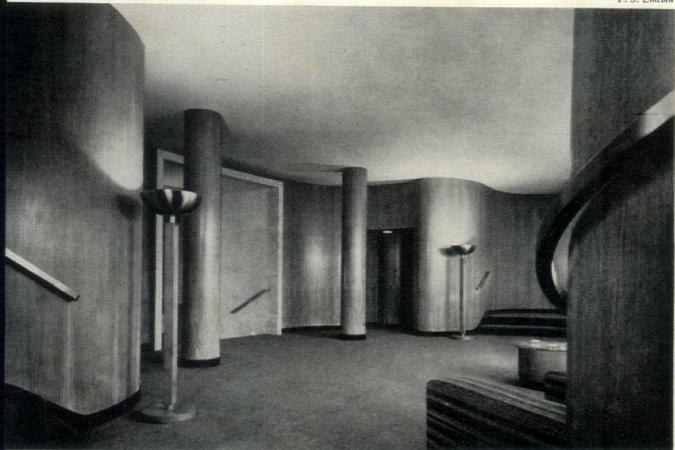


Up some steps from the grill room is its curvilinear, oval lobby, sheathed in fumed oak plywood (probably to please the older Adams element among the lunchers). Here the spot-lighting reflects on a curved Miller panel, interestingly executed in sgraffito by cutting through various coats of metal leaf to the underlying vermillion, then sandpapering to different tones, then outlining the design in black. Miller not only worked in several media here as did the old Rennaissance artist-craftsmen, but he developed his designs spontaneously while working, without reference to sketches or notes. In fact, the hotel people are so pleased with their new modern art gallery that they issue to luncheon guests an illustrated catalogue describing the murals and how they were made.

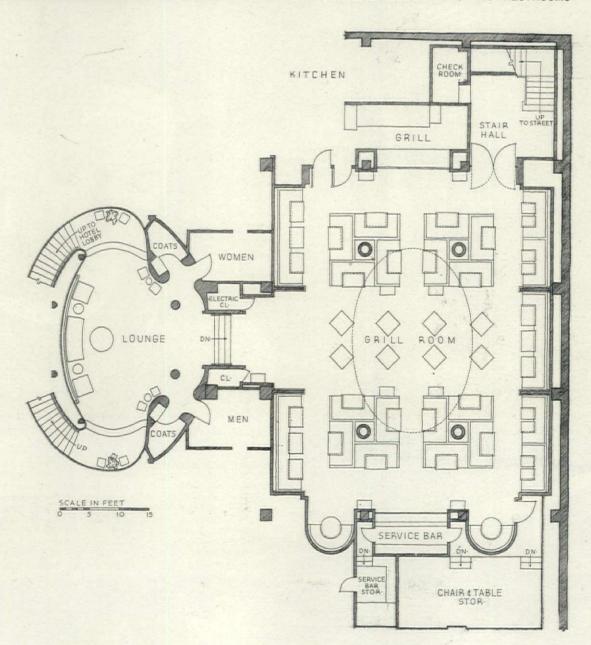


SCENES FROM THE MEALS OF MONTEZUMA, PILGRIMS, WILLIAMSBURG, VALLEY FORGE AND PLANTATION WARM THE AIR-CONDITIONED LOUNGE

FINISHES AND EQUIPMENT: INTERIOR PARTITIONS—hard burned hollow title. Ceiling—Sabinite plaster, U. S. Gypsum Co. MURALS AND SCULP-TURE—Edgar Miller. STAIRS—terrazzo and steel, Herculite railing, Pittsburgh Plate Glass Co. FLOOR COVERINGS—carpet, Mohawk Carpet Co. WALL COVERINGS—Cordova shell stone, stainless steel or Flexwood, U. S. Plywood Corp. FURNISHINGS: Fabrics—Dorothy Liebes. Leather—Lackawanna Leather Co. DOORS—Herculite, Pittsburgh Plate Glass Co. PAINTS—Casein Co. of America. ELECTRICAL FIXTURES—cold cathode and fluorescent. KITCHEN EQUIPMENT—Workrite Equipment Co. Grilles—Anemostat Corp. of America.



IEAVY COLUMNS CASED IN UBIQUITOUS FLEXIBLE VENEER HELP CONCEAL CHECKROOMS AND RESTROOMS





### PRIDE OF THE PRAIRIE A high priest of indi-

#### vidualism is designing in a strikingly regional idiom for his grass roots clients

BRUCE GOFF was born in 1904 in Alton, Kansas on the 8th of June, the birthday of Frank Lloyd Wright. Astrologers should be delighted with this coincidence, for Goff, more than any other contemporary architect, has followed in the footsteps of the Master. Rumor has it that Wright, when asked if Goff had ever studied at Taliesin (he hasn't), drew himself up and replied with hauteur: "Mr. Goff has been a student of mine for 20 years."

Actually Wright was short by eleven years. His disciple, now aged 43, started worshiping at the shrine of Organic Architecture when only 12—and nothing has come along to make him change idols since.

Like Wright, Goff is a native of the Middle West. The first ten years of his life, before the family settled in Tulsa, were spent on the plains of western Kansas, in various small Indian towns throughout Oklahoma and in Denver, Colorado. These three environments made a deep impression on him—the horizontal serenity of the wheatfields and endless sky in Kansas; the vertical force of the jagged mountains around Denver; the primitive patterns and colors of the Indian towns, where Cherokees still whirled in wild native dances and wore the ancient ceremonial costumes of a primitive America.

Like Wright, too, Goff has been influenced by the Orient. Japanese, Chinese and Javanese architecture plus primitive island art forms (all of which he considers much freer in conception than western design) have left an unmistakable stamp on his work.

In spite of these eastern flavors, Goff's architecture, like Wright's, remains basically American, middle west American—and from these native roots stem both its virtues and its faults. Its virtues are those of individualism, regionalism, boldness and imagination. Its faults lie in a romantic license which, without self-discipline, can all too easily turn into good old-fashioned corn.

Perhaps this is an inevitable part of an architecture springing from Goff's particular design philosophy. But perhaps also the freshness and vitality of his buildings are worth the obvious extravagances. For Goff believes in the American people. And with or without taste, it is the people he's designing for.

"There's nothing wrong with the International Style," he explains, "except that it doesn't fit America. Most modern designers miss the boat trying to put across a formal, abstract architecture on our people. Americans are a bunch of softies. We have sentiment and even sentimentality. It doesn't scare me that people want Cape Cod, Spanish or English barns. They're just trying to express this sentiment. You can call me a screwball or a romantic. It doesn't matter. The farther along my work goes the less the architects like it and the more the people do. I think the people have a lot more sense than you give them credit for."

Either there's something in what Goff says or he is an expert at applying the Indian sign. For where even "conservative" modern is greeted with apprehension, Goff's sometimes quite wild designs garner ecstatic approval. Fellow architects are hardly unanimous in praising him and FHA officials have been known to look askance, but his clients are as faithful and as dedicated as a covey of nuns. A Baptist minister, for whom he is building a tepee-shaped church on the Oklahoma oil fields out of insulation board and abandoned pipe, is convinced that he has hired the latterday Michelangelo. One of his Chicago clients remarks: "We wouldn't know how to live in another house. I even get uncomfortable when I go to see my friends. Being in a room with a flat ceiling gives me a funny feeling."

Clients also like Goff's penchant for using cheap materials and common objects in unusual ways. A favorite trick is to inset dime store glass pickle plates or ashtrays into wall or ceiling as flush lighting fixtures. He once provided texture for his office walls by tacking paper plates, bottom side out in a continuous pattern and painting them burnt sienna. For curtains he sometimes uses perforated player piano rolls which, he says, provide an unusual

pin-prick pattern of light. "Bruce always does best when he's meeting a challenge," reports one of his loyal admirers.

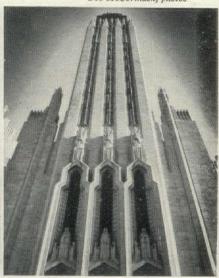
The highest praise that Goff considers he ever received, however, came from his sister's Negro cleaning woman in Tulsa. Of the Boston Avenue Methodist Episcopal Church, designed by Goff when he was 22 years old, she said: "That's the most beautiful building I ever saw. It looks like it came right down out of heaven."

COFF'S prewar designs, particularly the houses he build in or near Chicago, were strikingly like Wright's with their earth-hugging masses, low, horizontal lines and geometric detailing. A house in Kentucky, completed just before entering the service, marks the first time that he struck off on his own tangent. This design was based on a triangular plan, with soaring eaves reminiscent of airplane wings, and walls of changing planes of glass to produce a crystalline effect. Since the war he has turned more and more toward transparency and a freeing of the building mass from the ground. Some of his new houses, suspended from a central mast, are even suggestive of Buckminster Fuller's Dymaxions (although without Fuller's clean-cut simplicity). But this doesn't indicate a change of heart for, as Goff points out, he has never copied Wright, but rather has tried to work from Wright's principles of organic design in finding his own way.

He does say that he differs from Wright on

Bob McCormack, photos





1927. BOSTON AVENUE METHODIST EPISCOPAL CHURCH, Tulsa, Okla.

One of Goff's early designs when working for Rush, Endacott & Rush. Although Gothic in feeling, its detailing strives for a new regional symbolism.

the grounds that architecture should be designed less by rules of geometry and more on the principles of non-geometric growth found in nature. "Rocks, trees and people are not geometric," he explains. "And there's no reason why people's surroundings should be. In the things which are closest to us—clothes—we can't tolerate geometry. But up to now all man-made things have been essentially geometric. The Eames chair is the first one really designed to fit the human body. The floor in Bucky Fuller's Dymaxion house is another example of fluid design. It has resiliency, flexibility and movement. There's no reason why architecture should be static."

Goff is impressed with the early work of Eric Mendelsohn which was completely ungeometric, often resembling natural rock or shell formations rather than the conventional idea of a building. As an example, he cites Mendelsohn's Einstein Tower, an inhuman, abstract, scientific structure concerned with the heavens rather than the earth. And at the opposite pole his House of Friendship, which Goff expansively describes as "an abstraction of friendship with open arms."

Goff's feeling for natural form is perhaps best illustrated by his wartime career in the Seabees which took him to the Aleutians—an assignment dreaded by men less sensitive to nature's beauties.

He landed at Dutch Harbor in a 120-mile an hour Williwaw (which he describes as a cross between a hurricane and a cyclone with sleet and snow thrown in and going in all directions). "It was wild with Williwaw," he recalls. "But they loaded us on open trucks like cattle, took us way out near the mountains. dumped us in the middle of a snow drift and said, 'Here we are!' "Tent peaks were showing above the snow and with picks and shovels the unhappy men excavated their dwellings, dirty tents with ice on the floors, coal stoves and no lights. "It looked like a pretty hard winter," says Goff.

But the next morning he gazed out on the most beautiful landscape he had ever seen. The air was opalescent. Their camp was in a valley near a series of mountains which looked like extinct volcanoes. The snow was pink from the rising sun and the mountains cast purple shadows. "They were the most fantastic forms I ever saw," recalls Goff. "Rounded tops, sharp crags, perfect cones. It looked like some place on the moon. It knocked my breath out. I knew then I was going to like it."

During Goff's year in the Aleutians he saw every season. "In summer there were 1,500 kinds of flowers," he reports. "Begonias, violets, lupins, brownslipper orchids, deep purple Japanese iris. Lord, you couldn't even walk any place without walking all over 'em. I went hiking in the mountains - Ballyhoo Mountain. It looked like a headless sphinx. And Pyramid Valley with seven waterfalls. The most beautiful scenery I ever saw. Magnificent rocks with breakers smashing on 'em. The tundra was a mat of vegetation-solid over everything-olive brown in winter and then it looked like Holstein hides when the ice started to melt. In the summer it got emerald green. And then the rainbows started. Like a

loose wash of color. It was just a grand place."

Goff, to whom nature is almost a religion, believes that every great artist has turned to nature for inspiration. "That's one reason Wright is a great architect," he explains. "His houses look like they're growing right out of the landscape." Although admiring the work of Corbusier and other European and American purists, he feels that, unlike Wright, they have depended too much on the machine and too little on nature's teaching. Goff himself looks with suspicion on cities, mass-produced housing, machine-like precision in building or anything else that smacks of regimentation. In his work, he employs the newest materials and methods of construction, but only to advance his pet theory: that anything that can be done, goes. "Bruce feels that if his odd forms can be constructed, why not use them?" explains a friend. "He realizes the limitations of the functional idea in architecture," says another admirer. "He designs for human emotions as well as for use."

Goff's only venture into industrial design, as might be expected, was not an outstanding success. Alfonso Ianelli, the Chicago sculptor who did work for Wright's Midway Gardens and for numerous churches by Barry Byrne, had met Goff in 1928 in Tulsa. He was so impressed with his work that, in 1934, he invited him to come to Chicago and buck bad times by collaborating on product design for industry. "But Goff was too much of an individual to be able to design products for mass use," Ianelli reminisces. "It was a struggle. We had to readjust everything he did to make it more generally acceptable."

OFF, whom Wright, in a rare burst of generosity recently called "one of the most talented members of the group of young architects devoted to an indigenous architecture for America," holds no architectural degree and has never studied at any architectural school. His entire professional training was with the firm of Rush Endacott & Rush in Tulsa, Okla. Here he started afternoon and Saturday work when he was only 12 years old and advanced by the time he was 25 to be a partner. Goff's appointment last year as professor at the University of Oklahoma was managed in spite of his obviously deficient academic background. This teaching job tops a career which started with unusual vigor, was almost shattered when the depression hit Tulsa in 1927, recovered in Chicago during the Thirties and was again interrupted by the war.

With the postwar world, however, Goff's private star seems to be in the ascendency. At present he is running a three-ring operation with headquarters at the University of Oklahoma in Norman. He started a new practice in Berkeley, Calif., when discharged from the Seabees there. But the offer of a professor's job at the University, coupled with a desire to get back to the Middle West, lured him inland again. He kept his California office, however, and has recently reopened the one in Chicago, rotating three trusted apprentices from home base in Norman to take charge in the other two cities.

From his arrival on campus a year ago,

Goff has been the sensation of Oklahoma's School of Architecture, and local clients are already clustering about him like bees around a honeycomb. His designs have been tempered not at all to fit what many people consider are essentially conservative community. In fact his own comment, with a grin, is: "The wors is yet to come." But Goff perhaps better that any other human being is able to put across extraordinary ideas and make quite ordinary people rise up and shout Hallelujah.

This is undoubtedly because people like Goff's architecture. But it is also because the like him. As President George L. Cross of the University of Oklahoma explained it: "His distarming and unassuming manner wins over the opposition in spite of his radical ideas." A student said it perhaps better: "Prof Goff' just like anybody."

And indeed he is. Some men of unusua talent achieve through the years a splendie arrogance of bearing, an intellectual turn o phrase or a cosmopolitan assurance. Goff' appearance and manner are not unlike thos of a middle western farm hand. He is of me dium height and weight with a round, ordi nary weather-beaten face, blue eyes and ligh brown wavy hair. He is quiet and slow, both i speech and movement, but not with the slow ness of a heavy mind; rather it is the slownes of one who walks softly, not wishing to cal attention to himself. Upon demand he car charm an audience with his unlimited store of anecdotes, in which he plays the role of humorous, philosophic observer. But unles questioned he lets other people do most of th talking. As one of his co-professors at th University explained:

"Goff never takes exception to anything anyone says. You get no bounce from him—i comes back slowly."

If criticized about his work he shrugs hi shoulders and replies with a grin, "I just wanted it that way."

Goff's middle western drawl is appro priately replete with middle western turns o phrase: "It sure was nice;" "I'd like for you to have it;" "That's pretty ratty looking: "It was real swell." The result of this home spun manner is that fellow midwesterners lose both the antagonism usually felt toward anyone with "queer ideas," and the sense of inferiority induced by a person more talented or sophisticated than themselves. People are lulled into such security that even a quotation from Gertrude Stein or a reference to the latest venture of Man Ray seems as homey a a stanza from Eugene Field. Goff reports tha visitors meeting him for the first time are ap to say, "My, you aren't a bit like what I ex pected."

"I don't know what they expected," he chuckles.

Goff, however, is a study in contradictions (and probably takes a quiet pleasure from this fact). One negation of the just-plainfolks atmosphere is his clothes. At first glance one sees that they are old, unpressed and appear to have been worn so long that they have taken on the contours of their owner. On a double take, it is clear that with apparel Goff proclaims his artistic personality, silently set-

#### 1937. HOUSE FOR PAUL COLMORGAN,

Glenview, Ill.

Typical of Goff's Chicago work during the
Thirties is this low-slung FHA house
for a commercial artist, built of shaggy spruce,
common brick, flagstone and plate glass.
Its elongated gutters are designed to drain
into a rock garden pool, in winter forming
picturesque icicles. Split-level floor (right)
provides partial seating for diners.



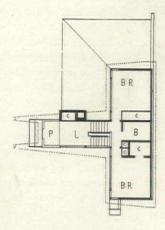


Photo below by Fons Ianelli, balance by Hedrich-Blessing



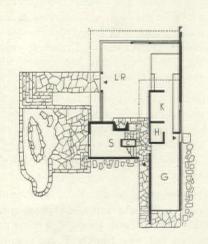


GLASS PLATES from dime store are inset as light fixtures





TERRACE near pool is shaded by cantilevered studio, right



ting himself apart from other people. His most conservative outfit is a pair of old gray slacks and sweater and a slate blue jacket with silver buttons. He has been known to combine light blue slacks with a brilliant orange shirt. When he wears a tie it may be chartreuse or purple. On his sturdy masculine frame and in the conservative atmosphere of a middle western town, the effect is distinctly macabre.

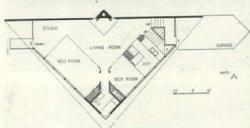
Goff's living quarters offer another contradiction to his folksy personality. He is now living in "Sooner City," the white, tin-roofed prefabricated row housing whisked up in the drowsy college town of Norman to care for the influx of GI students. His apartment, like its 500 neighbors a miniscule affair, is a distinct shock to Oklahoma visitors. The living room walls are completely shrouded in dead black plastic shower curtain material. The conical ceiling, left in the prefab's original white, is decorated with black string. spaced in a continuing pattern of decreasing squares. The furnishings include a huge (3 ft.) Chinese brass gong which takes up the greater part of the space, a gold-figured Japanese screen and a rectangular bench covered in brilliant scarlet cloth. The effect when one walks in from the beating Oklahoma sun and the coarse dirt road, is of stumbling into an Oriental opium den.

Goff came to the University of Oklahoma in January, 1947, lured by a small band of fans, already entrenched on the campus. Henry L. Kamphoefner, a brisk and eager professor who had previously staged a minor revolution in guiding the campus building program toward modern design (Forum, Sept. '45), spearheaded the new offensive. But the delicate juggling necessary to get Goff (who wanted to continue practising architecture) together with university officials (who were appalled by his fantastic designs) was a difficult feat. The climax came when Goff, assured of leeway to continue practising, agreed to come from California to run the gamut of a faculty interrogation. Before a company of deans, administrative officials, the President of the University, and professors of architecture, engineering, art, music and zoology, Goff expounded his buildings and his beliefs for 45 minutes, as comfortable as though he were chatting with each person at home. Wearing his old blue jacket and sweater, occasionally rocking back in his chair and speaking in his quiet, slangy manner, he managed to mesmerize the entire group. His final triumph came afterward, when a man who had opposed his appointment rose to question him:

"I travel a lot and I know the architecture of the state pretty well," said this stern official, "and I think the Tulsa building is the most beautiful building in the state. Now, Mr. Goff would you mind telling me what you think of this building?"

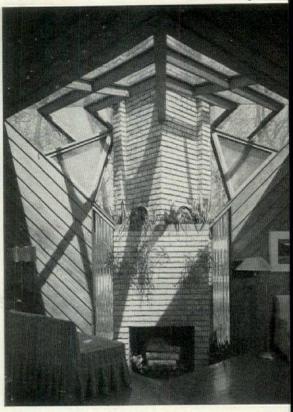
Goff rocked back in his chair, looked out the window and finally stuttered: "Well, now sir, that's a very hard question for me to answer. To tell you frankly I don't quite know what to say. I've seen the building many times. In fact, I designed it when I was 18 years old."





1940. UNSETH HOUSE, Park Ridge, Ill.

Most dramatic feature is the sky window
which allows owner to watch sparks
flying from chimney. Triangular motif is
used in both plan and detailing.



Goff's arrival among the red "Cherokee Gothic" buildings of the Oklahoma campus was a distinct shock to the student body, unused to the extremes of freedom which Goff displays. They had been startled by the unorthodox designs which preceded him. When introduced at assembly, they thought him arty and odd. But after three days of classwork, they had decided he was "terrific" and "the best teacher in the country." James Fitzgibbon, a fellow professor explains:

"Bruce pulls a cork out of a lot of architects. They think, 'If this quiet little fellow can do it, why can't I?' He bolsters the courage of kids because he says most modern architects don't go far enough."

Says President Cross: "I think he is one of the most important additions to the faculty since I became President in 1944. We feel that we have the makings of one of the best schools of architecture in the country. And Goff is responsible for this change to a feeling of optimism and enthusiasm."

Despite this joyful noise, there does exist a minority opinion on Goff — which wavers between hilarity and contempt. One of these sour notes comes from a veteran who returned for his last year of schooling to view with horror the changes made in his absence. "When I look for a job I'm going to make it clear that I was a pre-Goff student," he remarks coldly.

Another less than fatuous admirer is a young architect in nearby Oklahoma City who took his master's degree at Columbia and worked for several years in New York. Goff's houses and nonchalent approach to design reduced him to a state of irritated boredom. He shrugs the whole thing off as "so much architectural finger painting."

GOFF teaches only the first and fifth year students, ("I get 'em coming and going")

but welcomes everyone into his office, a cubicle buried behind green filing cabinets next to the senior drafting room. His relationship with the students is one of complete informality.

During class he perches on a table and "just talks about something a lot of the time." If a student inadvertently calls him Mr. Goff, he pointedly replies, "Yes, Mr. so and so." "Bruce never tells us what to do," explains a fifth year student. "He just says anything goes. The most important thing he's done for us is to make architecture fun."

At present, the School of Architecture, due to overcrowding of regular facilities, is housed in an abandoned naval base away from the campus proper. Across this flat, windswept area with its gray, precise wooden buildings and dustry red roads, Goff and a band of the faithful may often be seen tramping to the student hangout for a mid-afternoon coke. From the students and from his apprentices, one of whom is always in, or passing through Norman, Goff has picked up a patois of heptalk-"reeny, reet, natch"-which he uses selfconsciously but with obvious enjoyment. He is rewarded with the world-weary comment from his young friends: "Yeah, Bruce just made Bobby Socks, Junior Grade."

One of Goff's most popular student institutions is the Tuesday night record session, which has assumed almost the quality of a rite among his followers. Here, for the edification of all comers he plays selections from his 5,000-record collection of Oriental, native and modern music. When he first started these seances at his own apartment, he brought out the squad car because of his practice of playing the records at ear-splitting loudness (this is to scare off the pink tea crowd, he explains). Now most of the meetings take place in the school of architecture where, after hours, there is no one but the night watchman to complain of noise.

Goff's musical passions are hardly more conservative than his architecture and he considers such composers as Bach and Beethoven motheaten in the extreme. Many of his records are so advanced that they make Shostakovich sound like a country walk with Brahms. One in particular, by a Japanese modernist, leaves one feeling as though a ping pong ball had been batted ferociously back and forth inside one's head. A less startling favorite is Debussy whom Goff considers the greatest European composer to write "organic" music.

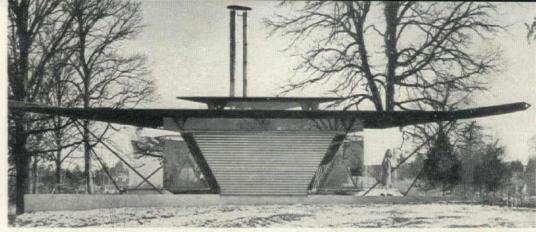
The reason behind these record sessions is more than mere entertainment, however. It is part of Goff's far-reaching design philosophy which extends beyond architecture to include all of the arts. He feels that architecture, music, painting, sculpture, even writing are fundamentally related and that basic elements of composition are common to all. The breaking away of music from traditional formula he believes parallels a questioning of the old forms in architecture. An article by Gertrude Stein, "Composition as Explanation," sums up much of what Goff means. She explains that composition should be in the "continuous present -beginning again and again." For instance, in paintings by the old masters there is always a path of composition. The same is true of Beethoven's music which is written within a strictly prescribed formula. In traditional architecture, the path of the eye travels along an axis and to the climax of dome and spire. In all these paths of composition, there is a beginning, a development and an end, in specified relation to each other. The entire idea is grasped at once.

The newer concept, which Goff believes in, eliminates the traditional beginning, middle and end. In Taliesin West, for instance, it is impossible to get the idea immediately. The parts form a related and ordered whole, but each part is an incident—related to other parts in many beginning and ending relationships. It becomes an "interspatial composition." "This is a design in the continuous present," Goff says, "a much more complex organism. It is one of the most advanced compositions ever built."

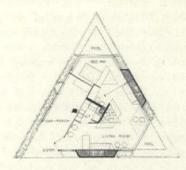
Goff points out that, like Taliesin West. Debussy's La Mer is interspatial. Beethoven's Fifth Symphony, written according to traditional form is easily grasped, but "La Mer has so much freedom that people didn't think it had discipline when they first heard it," he says. "Actually it has the finest order of discipline. The construction is there, but it is not obvious. It is finer, freerer and more complex than the old masters."

The same is true of the graphic arts. "In modern painting the compositions are in small parts all hanging together, but without a specified path," he explains. "People are confused at first because they don't know where to go in the picture. They have been taught to want one obvious theme or direction to follow."

In exposing his students to the discipline of freedom found in modern and native music and in contemporary painting Goff hopes to loosen up their approach to modern composition in architecture.

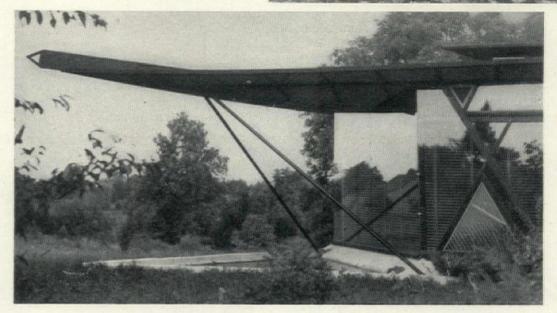


Louisville Courier Journal



1940. "TRIAERO HOUSE" for Mrs. Erma Bartman,
Ferncreek, Ky. Goff's first attempt at lightness
and transparency was built of glass with a
touch of redwood and copper. It has
a sweeping lattice-work roof supported by three
interior pipe columns and exterior bracing.





1947. LEDBETTER SUMMER LODGE. Texoma, Okla. Goff's most recent job shows development of the "lightness" theme started in Kentucky seven years before. Entire structure is suspended from center mast. Wood walls let down to form terrace, can be pulled up to any angle or closed for security.



He himself paints for relaxation, considering it a relief to work out spontaneous improvisations in color after the more complex and controlled designing necessary to architecture. Last year the college put on an exhibition of his abstract tempera designs which drew the impressed student comment, "Gee, these are sharp." Since the show, several faculty members and students have been inspired to try out a paint brush themselves.

In fact, Bruce's insidious influence is everywhere. His architecture, his painting and his music produce an initial effect not unlike shell shock in unsuspecting victims. After exposure they become either violent admirers or equally violent enemies (but most usually the former) of anything and everything Goffian.

The policy-makers at the University are most anxious that the architectural department not turn into a one-man style school such as they consider Harvard and Illinois Tech. Goff himself is emphatic in saving that he doesn't want the students to copy his work or design the way he does. But the load of dynamite which this unobtrusive man packs, would be difficult to withstand. His first semester of teaching at Oklahoma brought forth a rash of Goff trademarks (Quonset shapes, irregular holes in brick or stone walls, triangular plans, etc.) in student work.

This year, with the shell shock wearing off, these trademarks are gradually disappearing. But it's a safe bet that Oklahoma student designs have little in common with those from other colleges throughout the country. This is all right with Goff and apparently all right with Oklahoma's big guns. After a year as professor, Goff is being promoted to Director of the entire architectural school. When four faculty members resigned recently to join the staff of an eastern college, he was given carte blanche to build up the school exactly as he wants it.

What Oklahoma's School of Architecture will be like after Goff takes the reins next year is open to speculation. But it's certain that he comes to the new job with well-defined ideas about education. Like every architect who takes his profession seriously, Goff has been disturbed all his life at the scarcity of good buildings on the American horizon. At first he thought this was the fault of the public-that stupid clients demanded mediocrity of design. Then he began to feel that the fault lay with the architect-that there was hardly anyone able to design creatively without following the stereotype of either traditional or modern styles-and Goff considers the modern stereotype almost as bad as the older one. "Mr. Wright had only the old eclectics to fight," he explains. "I have the new ones."

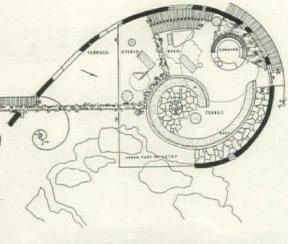
By now, however, Goff has come to believe that the reason for bad architecture lies with the authoritarian method of teaching-that the student never has a chance to find his own way because he is taught that someone else's way is right. And Goff believes that anything taught as the only truth, is wrong. "Much as we admire what's done now, if we ever think its the last word in architecture, it's deadly," he explains.

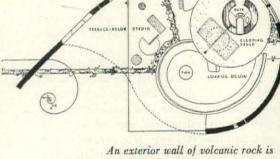
Goff took his first teaching job at Chicago's Academy of Fine Arts as a way of earning extra money during the Thirties, when architectural pickings were slim. Since that time the idea of education has occupied much of his thoughts. He doesn't know of any school at the present time that he could recommend wholeheartedly to a student. "I've studied the Vienna workshop, the Bauhaus, Taliesin, Cranbrook and many more. There's something wrong with all of 'em." But he feels that what's wrong with education is what was wrong with architecture before Wright came along. "Education, like architecture, should be organic," he says, "and the student should be allowed to develop from the inside out minus external rules and regulations which stop him before he starts. If we can train young

(Continued on page 190)

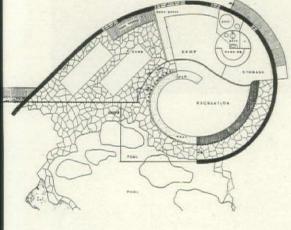
1945. "HELIX HOUSE" for Constance Gillis, Bend, Ore. One of Goff's more unrestrained flights of fancy, it is the type of building which has earned him the epithets "romantic," "undisciplined" and "just plain crazy." An expression of his belief in natural form, the house is designed as a continuous spiral with five levels. An irregular pool bordered by volcanic rock extends into the house through a plate

glass wall tinted rose to reduce snow glare.

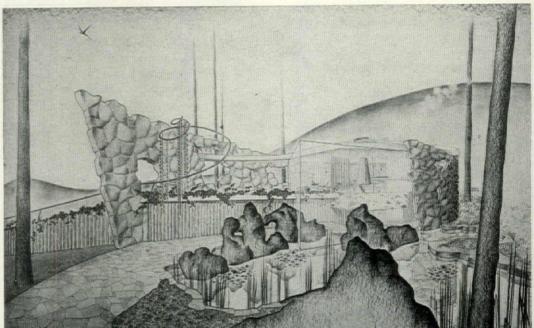




curved to shut off cold winds, has irregular openings which frame views of distant mountains. Some openings are embellished with amethyst, rose or shattered safety glass.



1st level is only partly excavated, includes workshop, dark room, heating equipment. 2nd level at grade is garage and entrance with ramps leading down to basement, up to lounge. 3rd level lounge contains music space, cooking unit and fire pit around which wraps a large seat covered in Holstein hides. From music section one can look down to 2nd floor, up to 4th floor studio and terrace. 5th level is a sleeping shelf with sky window.

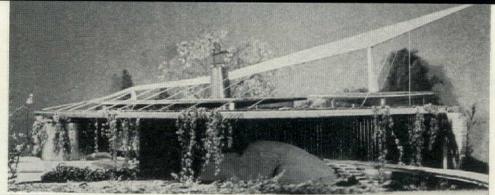


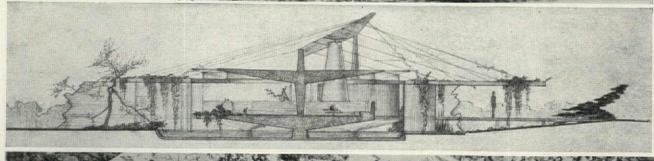
LILY PAD HOUSE' for Donald Leidig.

Hayward, Calif. Goff's ability to tailor

the house to the client is shown in this

design for a water garden enthusiast.





ARDEN

R GARDEN

KITCHEN

ATION &
T SPACE

N

OUSE

BRICK SIDE WALLS

SLEEPING - CHILD

SLEEPING - PARENTS

2 DRESSING SPACES
2 BATHS
CORRUGATED BLUE
GLASS WALLS

ENTRANCE BOARDWALK

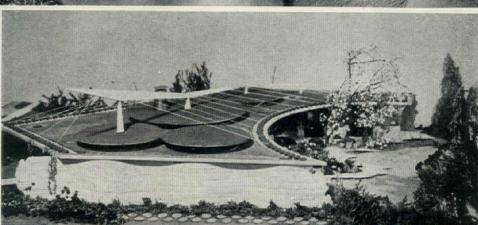
CORRUGATED BLUE GLASS SCREEN LOUNGE, MUSIC, DINING

-PLATE GLASS WALL

-WATER GARDENS FOLLOW CONTOURS

DRIVEWAY &

Four circular "islands"—living, dining, deeping and guest areas—are suspended over a water garden and connected by hardwood plank walks. Water flows through the house under plate glass floor sections. Each island shape is repeated by a lily pad monitor above a continuous flat roof, suspended from an overhead beam which, in turn, is supported by center columns in three of the islands. Serpentine side walls insure privacy. Colors are terra cotta and cream to set off the lush pinks and blues of flowering trees, shrubs and water plants.





Paul Giganti, photos

### **SHOWROOMS**

Wholesale salesrooms are becoming better tailored, as more and more smart wholesalers adopt their retail shopmen's bright views in merchandising, and retain designers to custom-clothe their establishments. Shown here are five recent examples of the designers' dictum, Make it lush, but remember you're not selling walls and ceilings. These five examples are designed to sell:



#### **JEWELRY**

GRUEN & KRUMMECK

ASSOCIATES, Architects

NAT HALPERN WHOLESALE

JEWELERS, Owners



#### **SHIRTS**

ROBERT HELLER

ASSOCIATES, INC., Designers

CLUETT, PEABODY & CO. INC.,

Owners



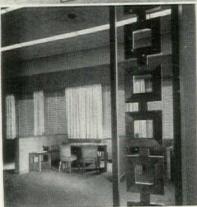
#### CARPETS

ZAREH SOURIAN, Architect
MAGEE CARPET CO., Owners



#### **FURNITURE**

PETER SCHLADERMUNDT, Architect VALLEY UPHOLSTERY CO., Owners



#### **FABRICS**

ALFONS BACH, Designer
A. D. JUILLARD & CO. INC., Owners

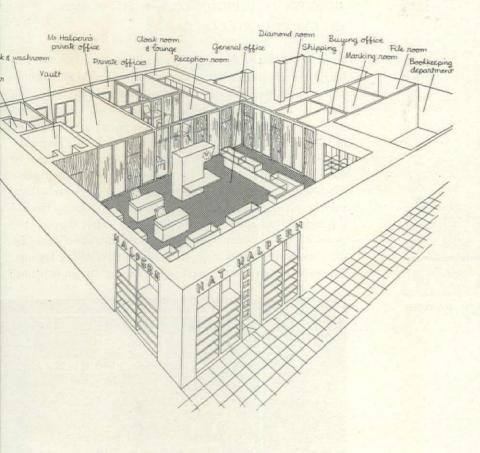


WALL ON PUBLIC HALL WAS BREACHED FOR DISPLAYS, INTERIOR VIEW

WOODWORK IS BLEACHED MAHOGANY, WALLS ARE PAINTED TURQUOISE



#### JEWELRY salesmen display wares and confer with buyers in large light-flooded room.



GRUEN & KRUMMECK ASSOCIATES, Architects
R. J. BRENNAN, General Contractor
NAT HALPERN WHOLESALE JEWELERS, Owners

The combination of solid reputation and glitter necessary for success in the jewelry business is shown in this fifth floor display room. In addition to an imposing atmosphere of firm solidity and trust, the clients wanted a showroom attractive enough to lure the buyers who stalk through the halls of the building, which is occupied almost entirely by other jewelry companies with the same idea. Since Halpern is a seller to the trade, no effect of intimacy-so dear to the retail jeweler in his ironbound salon-was desired. The idea was rather a large careful handling of many small precious objects. Buyers sit comfortably at the counter, separated from one another only by space, with an acoustic ceiling to sop up the details of their conversation with company representatives. No visual screen, however, tempers the buyers' realization that a few feet away are competing buyers who may be after the same merchandise at the same moment.

FINISHES AND EQUIPMENT: WINDOWS (show)—1/4 in. plate: (office partitions)—corrugated structural glass, Mississippi Glass Co. FLOOR COVERINGS—asphalt tile, Armstrong Cork Co. COLUMNS—marble, Vermont Marble Co. FURNISHINGS: Chairs—Hans Knoll Associates. Fixtures—H. D. Cowan Fixture Co. HEATING AND AIR CONDITIONING: Heating by coils in duct system. Air conditioning—General Air Conditioning Co.

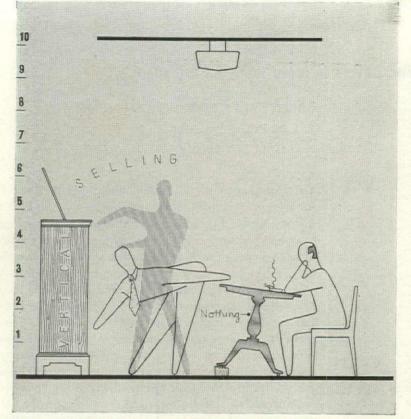
SOME COUNTERS WERE DESIGNED AS TABLES FOR SALESMAN-BUYER CONFERENCES



TEXTURE OF DESIGN ECHOS FEELING OF MERCHANDISE



Fred R. Dapprich, photos

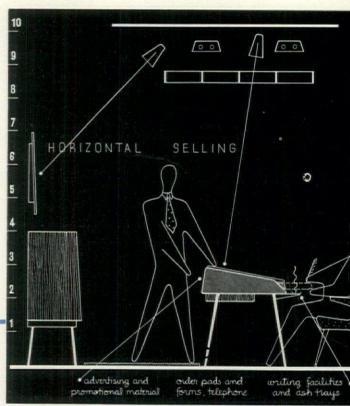


IN OLD SCHEME USUAL DISTRACTIONS MADE SELLING HARDER

#### SHIRTS are presented as units with the sa

ROBERT HELLER ASSOCIATES INC., Designers
BEACON CONSTRUCTION CO., General Contractors
CLUETT, PEABODY & CO., Owners

In this wholesale showroom for a shirt company there is bright detail, interesting ornamentation, and high accent—and it all is accomplished in one medium, Shirts. From the time the buyer walks into the screened end of the room, which is used as a waiting area, he is pleasantly compelled to look at the company's goods. He may pick up a magazine while he's waiting to be given the complete presentation at the other end of the carpet, but not before the selling process has begun with the sight of the eight stylish shirts embellishing the pipe-mounted plywood panels before him. He has the right brand shirts in mind before he starts flipping the pages of his magazine—probably to be confronted again by the same shirts, burning up at him from advertising layouts. All room colors are subdued grays and green; in contrast,



NEW DESIGN FOCUSES ATTENTION AND MINIMIZES MOVEN

60 to 70 per cent of the shirts and neckties are blue and red, solid colors or on white.

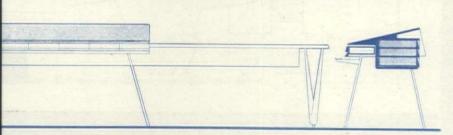
In the main area of the salesroom, there is more precise directing of the buyer's attention. He is seated comfortably before a combination cloth and wood-topped table, while spotlights above a central egg-crate focus on the single items he is shown and on three presentation panels on the rear wall. A quiet, handsome shirt case designed for maximum convenience and speed in displaying the sample line backs the salesman.

The salesroom is the pilot model for 15 different designs which are to use the same component parts, arranged in each situation to greatest advantage. The same staging ideas will be used in each. Also involved in the large design job is subsidiary selling equipment, including portable displays to be set up in hotel sample rooms, and even newly thought-out shirt suitcases for the traveling store-to-store salesman. At all levels, in all designs, the module is a shirt.

rt focused on one buyer and one sample shirt at a time in this pilot model for a set of showrooms.

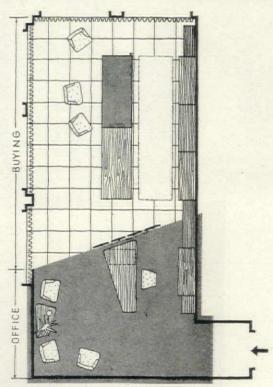


FTER CUSTOMER EXAMINES MERCHANDISE ON CLOTH-COVERED SECTION OF TABLE, ITEMS ARE MOVED OFFSTAGE TO WOOD SURFACE



ABINET AND TABLE DRAWERS ARE MODULAR TO FOLDED SHIRT SIZE





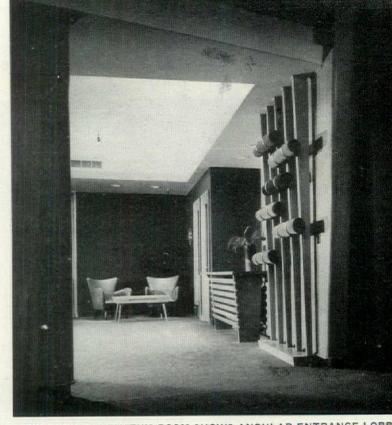
FINISHES AND EQUIPMENT: FLOOR COVERINGS—carpet, Alexander Smith & Sons. FURNISHINGS: Cabinets and tables—Roswell Snider. Chairs—Jens Risom. DOORS—walnut, U. S. Plywood Corp. HARDWARE—P. & F. Corbin. ELECTRICAL FIXTURES—Kleigl Bros. from special designs by Robert Heller Associates.

# CARPETS pose a difficult problem in how to display large rectangles interestingly.

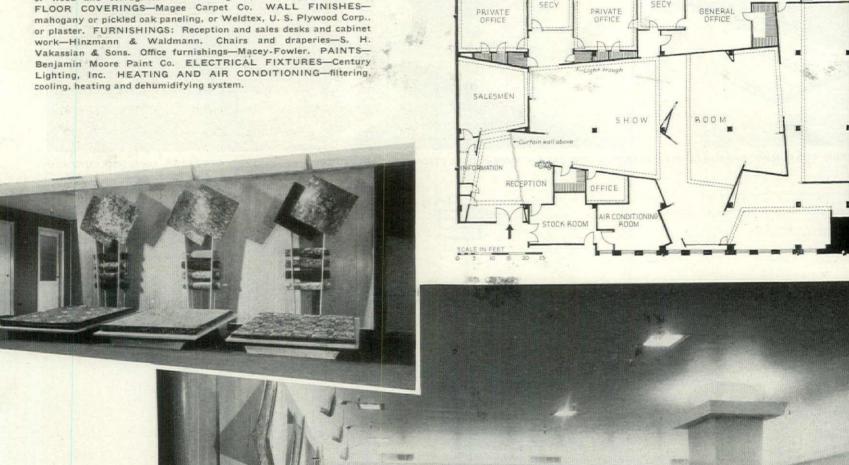
ZAREH SOURIAN, Designer GEORGE BACKER, General Contractor MAGEE CARPET COMPANY, Owners

Perhaps the most difficult merchandise to display of any in the set of showrooms is pictured on this page. In order to sell carpet material and rugs, you have to present a considerable expanse of it to most people, including professional buyers. Very few will be able to visualize the effect of an entire floor covering, having been shown only a small sample of the material. So the design problem resolves itself in a great measure to developing an area which will retain interest with a number of large rectangles—the rugs—put down in it. Here, the designer eliminated rectangular rooms to avoid monotony. He also made a point of keeping the rack arrangement flexible, and providing a great amount of light, direct and indirect, fluorescents on the ceiling for diffusion and incandescent spotlights down on the displays.

FINISHES AND EQUIPMENT: INTERIOR PARTITIONS-cinder block or wood and corrugated structural glass, Mississippi Glass Co. FLOOR COVERINGS—Magee Carpet Co. WALL FINISHES—mahogany or pickled oak paneling, or Weldtex, U. S. Plywood Corp... cooling, heating and dehumidifying system.



VIEW FROM SALESMEN'S ROOM SHOWS ANGULAR ENTRANCE LOBBY



Richard Garrison, photos

# FURNITURE showroom saves money, retains flexibility with 8 ft. curtain walls.

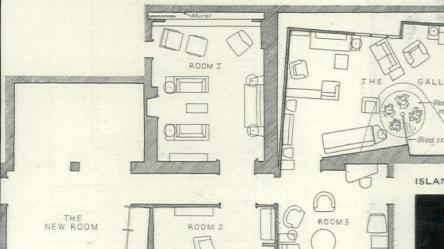
PETER SCHLADERMUNDT, Architect

VALLEY UPHOLSTERY CORPORATION, Owners

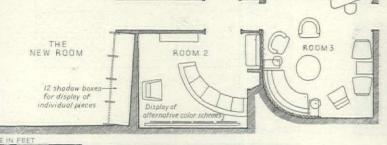
The designer here used a favorite—and sometimes very effective-method to keep costs down and produce rooms of changeable, semi-permanent character. He designed the showrooms as a theatrical set, by painting the permanent ceilings, pipes, and sprinklers a dark eggplant color to lose them, and erecting 8 ft. high vertical backgrounds and partitions of various combinations of wall boards, corrugated metal. draperies, and plain surfaces. Then he hung sectional drop ceilings with contained lights. Not only does this sort of scheme offer many opportunities for changing the exhibits and using varied backgrounds of interesting texture, but the material contrasts are very effective.



LINE MURAL IN ROOM ONE IS DRAWN FROM SEATING STATISTICS



ISLAND OF POTTED FOLIAGE IS SPOTLIGHTED IN MAIN GALLERY

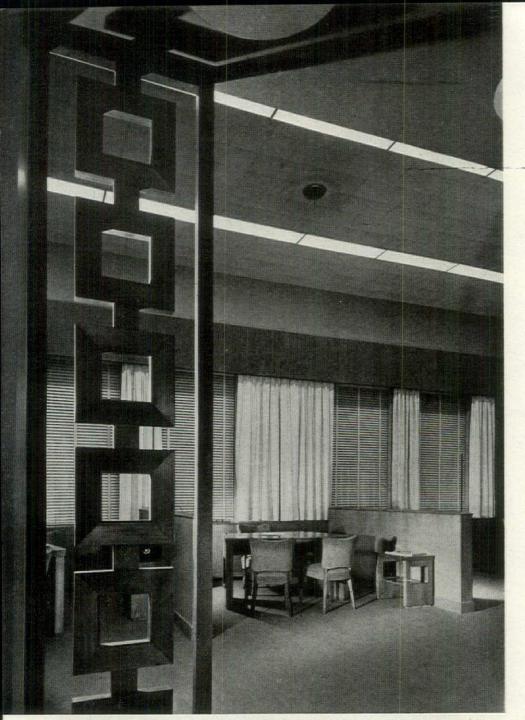


FINISHES AND EQUIPMENT: WINDOWS: Glass-1/4 in. Magnalite. quality A, Mississippi Glass Co. Screens-Vinylite, Union Carbide & Carbon Corp. FLOOR COVERINGS-Broadfelt, Charles Lockman & Co. WALL COVERINGS-Weldtex, U. S. Plywood Corp., Plasterboard, U. S. Gypsum Co. or corrugated metal panels. PAINTS-E. I. Du Pont de Nemours & Co. ELECTRICAL INSTALLATION: Wiring system—BX, Circle Wire & Cable Co. Fixtures—Gotham Lighting Co. FABRICS AND CURTAINS-Valley Upholstery Corp.

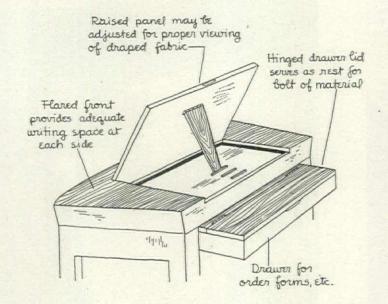




Ben Schnall, photos

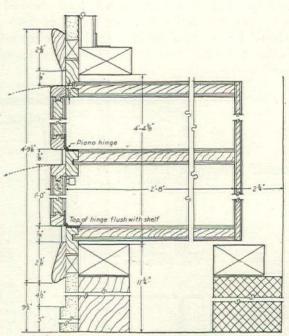


DECORATIVE SQUARE MOTIF IS USED THROUGHOUT TO SCREEN SHOWROOMS



# FABRICS are highly organized high style and should be draped against a stylish—but undated—background.

ALFONS BACH, Designer
C. G. FLYGARE INC., General Contractor
A. D. JUILLIARD & CO., Owners



SECTION THROUGH SAMPLE CABINET

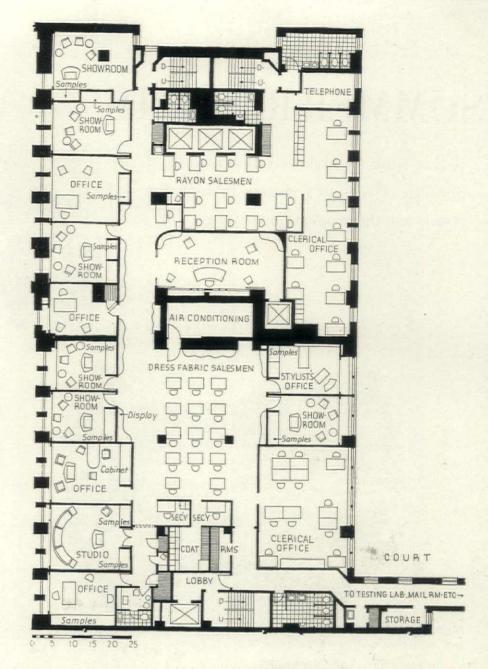
DISPLAY DESK AND SAMPLE CABINET IN SHOWROOM



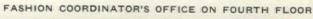
The planning problem in this showroom and set of offices was larger than that in any of the other cases. The designer set out to organize the selling and clerical functions of the company spatially as it was organized administratively, into three general sections with such interlocks as the fact that almost every buyer visiting any of the fabric showrooms is required to visit also the record department, to get information on shipments and back orders. The three general display sections, each organized as a separate entity, are: corduroy and greige goods on the first floor; woolens and dress goods on fourth floor west; and silks and rayon on fourth floor east. The rayon and woolen departments are arranged close together so that buyers purchasing woolens for suits need only cross the floor to buy rayons for the linings. Administrative offices of the company, which uses up to 20 manufacturing mills, fill the third floor, with a clerical department on the first floor mezzanine.

The business of the company is high style, a very fickle lady. So what the designer reached for in general atmosphere was a feeling of stylish sumptuousness that would remain a background for the fabrics, and would not declare itself in specifics, one to give the required feeling of lavishness, and yet be of such nature as to remain stylish for a long period of years. Special attention was given combined artificial and natural lighting for the fabrics.

FINISHES AND EQUIPMENT: INTERIOR PARTITIONS—block, plaster both sides, U. S. Gypsum Co. STRUCTURAL STEEL—Bethlehem Steel Co. SHEET METAL WORK: Ducts—Armco, American Rolling Mill Co. GLASS SCREEN—Mississippi Glass Co. FLOOR COVERINGS—asphalt tile, Armstrong Cork Co., or carpet, Bigelow Sanford Carpet Co. WALL COVERINGS—Flexwood, U. S. Plywood Corp. or wallpaper, Katzenbach & Warren and Imperial Paper & Color Corp. HARDWARE—Russell & Erwin Mfg. Co. PAINTS—Pittsburgh Plate Glass Co. PLUMBING FIXTURES—American Radiator-Standard Sanitary Corp. HEATING AND AIR CONDITIONING—split system, filtering, humidifying and cooling, Carrier Corp.



STUDIO SHOWROOM FOR LARGE GROUP OF BUYERS OR PERSONNEL MEETING





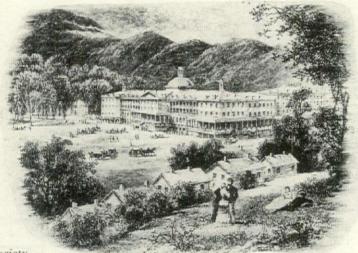


Ben Schnall, photos

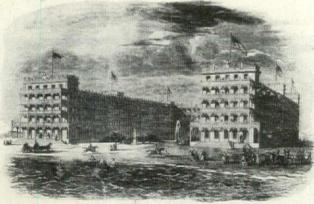
# SUMMER RESORTS

Recent work by architects Robin & Vogel illustrate a century's change in both the resorts and the people who visit them.

To contemporaries of Ruskin, this would-be chalet
in New York's Catskills seemed an ideal vacation spot . . .



But high society preferred the great, sophisticated resorts such as Virginia's slave-powered "Old White."



Along the seacoasts, resorts like this housed vacationers who came to look at the sea, not to swim in it.

In General Grant's day, Saratoga's famous "Grand Union" was a mecca for the fast and frothy new rich.



The Bettmann Archive

In order for the summer resort to grow from an escape mechanism for a few wealthy Victorians into a mass-entertainment business with an income of \$750,000,000 last year, a lot of changes in resort hotels and the habits of the American people had to take place. These changes have been immense. A century ago, overfed and overdressed guests would travel for days by railroad, stagecoach or private carriage to Saratoga's Grand Union or White Sulphur Springs' Old White. There, exhausted by the journey, they were content

to spend the summer sitting on the lofty piazzas, disturbed only by occasional parasol-shaded strolls to "take the waters" or by band concerts on the lawn. Although croquet was a standard for every resort and some of the more alert institutions provided billiard tables and gaming rooms, recreation was largely passive. Even the seaside resorts were designed for spectators, with only the hardiest venturing into the surf.

Today, from metropolitan New York alone, hundreds of thousands of ordinary folk each summer flee to the mountains, lakes and seashores of the northeast. Where they flee is largely a matter of cost (though preference on the one hand and racial discrimination on the other are limiting factors). The luxury resorts still flourish, and the wealthy still sit on the piazzas. But the bulk of these vacationers go to moderate-priced hotels which specialize in the mass-production of rustic comfort.

What these refugees from urban heat demand is two weeks' of active recreation in the heart of nature without any of nature's drawbacks. This calls for a delicate resort formula, in which waterfalls, birches, moonlight and woodsmoke are separated from their natural concomitants—boredom, mosquito bites, burned food and poison ivy. It calls for hot baths and cold martinis; scanty daytime dress along with evening formality; a variety of sports when the weather's fair, plenty of indoor entertainment when it's foul.

To meet a formula like this, and do it at popular prices, is enough to keep any management jumping. And to complicate matters, a year's summer-resort income must be squeezed out of a season no longer than 16 weeks. How they do it is a matter of wonder, even for the operators themselves. The technique has been evolved by a process of trial and error. Many of the northeastern resorts started out as boarding houses or "adult camps." Their physical plant was often merely a farmhouse with some natural asset—a fine view good swimming, cool summers. Expansion was usually plantess; but by the late Thirties, the vacation business had grown to proportions justifying—in fact, demanding—skilled architectural assistance.

One of the firms which was quick to see this developing need for architectural services has been the New York architects, Robin & Vogel. As a result of a decade's work in the field, they are now acting as year-round counsultants to a number of large resorts. Some of their recent work is shown in the following pages. These buildings are significant not only because of their individual design but also because they illustrate a complicated set of operational procedures.

The summer resort business learned long ago that a successful hotel does not just cater to the public in general. It cannot depend on tourists, transients or passersby. It has to have a definite clientele and this is apt to be surprisingly homogeneous—socially, economically, even geographically. Its accommodations will determine, and in turn be determined

(Continued on page 114)



GREEN MANSIONS: this adult camp adds lounge to enlarged dining hall, opens both to panorama of the Adirondacks.

Typical of the resorts for which Robin & Vogel are carrying out extensive reconstruction programs is Green Mansions, near Lake George, N. Y. A comparatively small, privately-owned camp, Green Mansions has a capacity of 400-450 guests and a staff of 150-175. In remodeling and



NEW LOUNGE USES GLASS WALLS COMMANDING FINE VIEWS OF LAKE AND MOUNTAINS

Esra Stoller: Pictorial Services

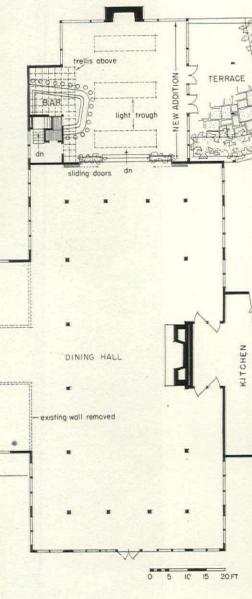
GREEN MANSIONS

NEW ADDITION———FOR RAINY DAYS

AVOIDING RUSTICITY, LOUNGE OFFERS GUESTS PLEASANT RETREAT FOR RAINY DAYS



refurbishing their dining hall the owners wanted, in addition to greater dining facilities, a lounge where guests could meet before meals, have a cocktail if they wanted one, check their wraps if the weather was bad. New glass walls were added in the west gable end of the existing dining hall as well as a new glass-walled wing to the north, and sliding walls into the lounge. Except for acoustical ceilings, new light fixtures and new paint, that completed the alterations to the hall.



The new lounge (left) exploits fine views in all directions with wall-high glass panels on either side of the slate-faced fireplace. Replacing ar open porch which previously had been the dining hall's only lobby, the new lounge is thus a perfect answer to the resort guests requirements for a rainy day—big windows with a view, an open fire, and easy access to the cup that cheers. In its general design, the room marks a change in architectural policy on the part of the owners—away from the self-conscious rusticity of earlier years and towards a more urbane concept of rural comfort. The materials used are simple and inexpensive, since costs had to be sternly controlled.

### TAMIMENT: this large Pennsylvania resort, has a long range renovation program that is the fruit of equally long experience.

Camp Tamiment was founded 28 years ago by the People's Educational Camp Society. Begun on a shoestring as a non-profit operation, it was strictly amateur, with no capital and little knowhow. For some years, the physical plant reflected this—Tamiment built what it could, when it could, out of what it could get. But there is nothing amateurish about the camp today. It is a handsome resort (350 buildings on a 2,200 acre estate), smoothly run by a salaried staff. For 14-16 weeks each summer, it plays host to a daily roster of some 1,000 guests who—judging by its success—find exactly the right balance of mountain scenery and snugly landscaped comfort.

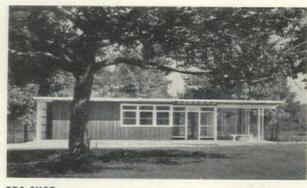
Like all older resorts, it had an inheritance of

disparate, foxily-rustic buildings. But unlike many others, it has for some years been engaged on a program of planned renovation. As a part of this program, the architects had already completed a theater, social hall and dining room before the war (FORUM, Feb. 42). Now they have completed the six smaller buildings shown here, along with the larger one shown on the following pages.

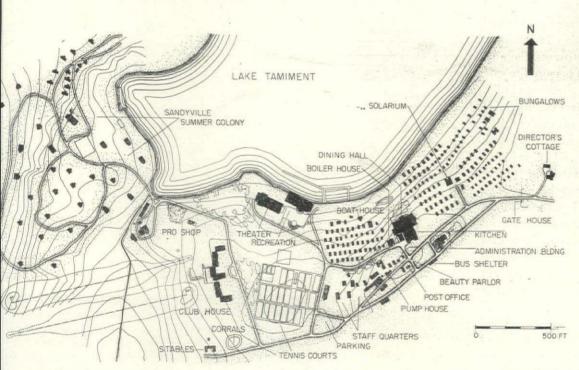
Tamiment, in line with a long established policy, did all its own construction work, adding specialists to its regular maintenance staff only as required. But their experience has convinced them that skilled architectural guidance is one service no resort should try to get along without.



SOLARIUM, located in center of largest cottage group, has steam baths and showers for men and women on first floor, a divided sun bathing deck on the roof.



PRO SHOP. This new building has living quarters for a golf pro, a small workshop as part of a showroom for golf supplies, and a shaded terrace for players awaiting their turn.



KITCHEN is an alteration of its obsolete predecessor. Bank of projecting sash was added for light and ventilation. Lean-tos house new toilets (left) and bake shop (right).

PUMP HOUSE displays resort's new water equipment to advantage and attracts interest.



INCINERATOR'S function is housed in handsomely designed building.



Ezra Stoller: Pictorial Services



BUS SHELTER protects departing guests from sudden showers, is located near administration building.

by, this clientele. Thus, each of the three hotels shown here depend upon a very definite base. All three are designed primarily for young adults-one of them (Tamiment) even prohibiting children altogether. Two of them are non-commercial-Tamiment being run by an educational foundation, Unity House by a trade union. Since such groups have fairly consistent preference in terms of sports, entertainment, even food, there is a corresponding tendency on the part of the management to specialize. As a matter of fact, a resort's ultimate success hinges in large part on the managements' ability to anticipate his group's preferences and prejudices; and no orchestra leader has a sharper ear for grumbling or a keener eye for boredom than the successful resort manager.

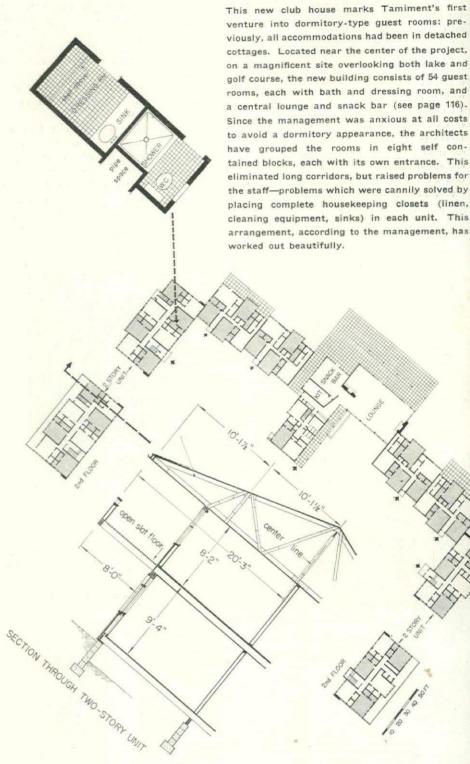
One quality, however, seems common to all modern vacationers. They do not want to travel a couple of hundred miles only to end up at a big citified hotel set in the middle of the woods. Unlike their grandfathers, they don't want an "indoors feeling." On the contrary, they want to get away from long carpeted corridors, elevators, bellhops and the like. "They like the idea of stepping right out of their room onto the grass" as Tamiment's Ben Josephson puts it.

Architecturally, this means that new resort hotels must be horizontal. Except for special situations such as Miami Beach, where restricted areas and exhorbitant land values make it imperative, the vertical hotel is frowned on by all hands.\* Naturally, a horizontal, spread-out hotel raises a lot of what hotel men call "housekeeping problems." With the kind of service demanded, it means a fairly large staffthe three hotels shown here require about one employe for every three or four guests. (The ratio for urban hotels is about one employe per room.) It poses certain architectural problems such as the need for covered passageways for bad weather and a certain amount of duplication in facilities. But, aside from the fact it's what the guest wants, the oneor two-story plant has many advantages. It is more fire safe and (if designed for summer use only) it is cheaper to build.

Decisive in the equation, however, is the fact that the long, low resort conforms to present concepts of outdoor life. Magazines and movies have produced a pleasant mish-mash image of ranch, farmhouse, hunting lodge and ski cabin in the public's mind. But whereas, it still wants rusticity, the public also wants comfort. Most owners greet this change in taste with a sign of relief, for such arty woodcraft was neither cheap to build nor easy to maintain. As one manager who survived the log cabin era puts it: "For years, the worms eating away at our log chandeliers kept a constant shower of sawdust falling on the guests." Another owner points out that "people like wood and stone in the country but it doesn't have to look like it was hacked out by Daniel Boone." There is still a strong bias in favor of regional tradition among resort owners but this is more and more tempered with a functional approach. Typical of this tendency is the new work at the three resorts shown here. Without exception the owners report that it has proved very popular with postwar guests. "They respond to it in an amazing manner" reports Mr. Josephson. "They get a big kick on rainy days out of being able to sit indoors and look at the pleasant countryside through the big windows."

Since most of the popular-priced resorts cater to younger people, the emphasis upon sports is very strong. The more sports and athletic facilities a given resort can furnish the (Continued on page 118) better. But

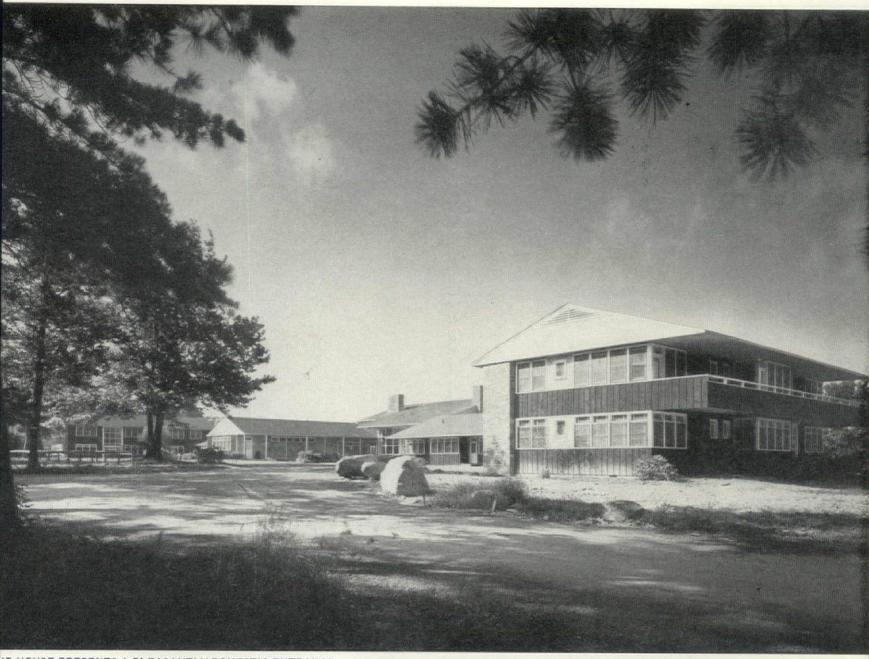
### NEW DORMITORY gives guests cottage privacy, hotel service.



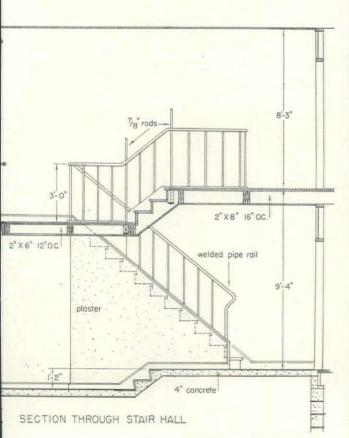
ROOM HAS PRIVATE BALCONY, NICE

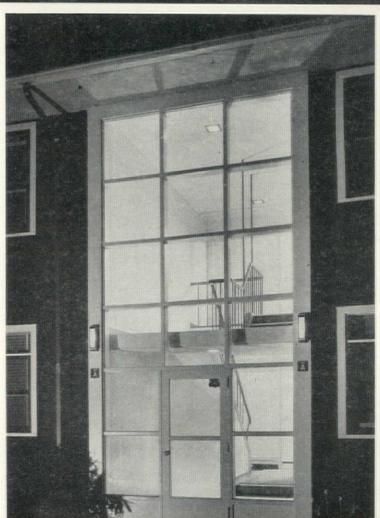


<sup>\*</sup> Despite the fact that many of the big vertical luxury resorts built during the earlier part of the century (Colorado Springs' Broadmoor, Hot Springs' Homestead) are still doing a land office business.



JB HOUSE PRESENTS A PLEASANTLY DOMESTIC ENTRANCE
WINGS HAVE GLASS-WALLED STAIRS (RIGHT)





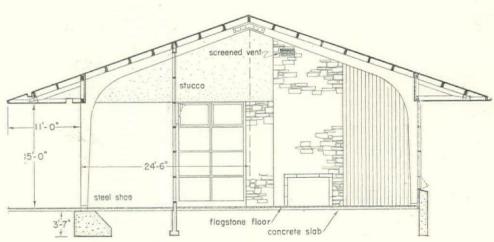


Ezra Stoller: Pictorial Service

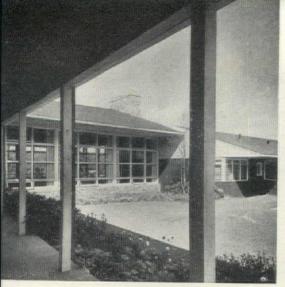
### CLUB HOUSE LOUNGE, with big windows and small restaurant, shows how Tamiment keeps its guests happy on rainy mornings.

The attention with which successful resorts study their guests' requirements, and the skill with which they anticipate them, are well illustrated in Tamiment's new dormitory. Here was a new building deliberately located at a spot of great natural beauty but some distance away from the resort's main centers of interest. Ordinarily many guests would prefer this isolation: but there would be times when they missed the station wagon for breakfast, or rainy afternoons when they'd like a cup of tea without going half a mile, or evening parties when a late snack would be the thing. Anticipating this problem (it is just such "unimportant" details which often make the difference between a happy guest and a restless one) the management asked for a lounge with adjacent terraces and cafe.

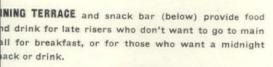
This request, Architects Robin & Vogel met with great skill. They provided a charming lounge (above) which opens out onto a great terrace (right, center) and adjoins a cosy, slatefloored tavern (right, below). The lounge itself, beautifully enclosed by laminated wood frames, offers a fine view and two fireplaces. Here a guest can sit on a rainy day or a cool night and think how lucky he is.



SECTION THROUGH LOUNGE



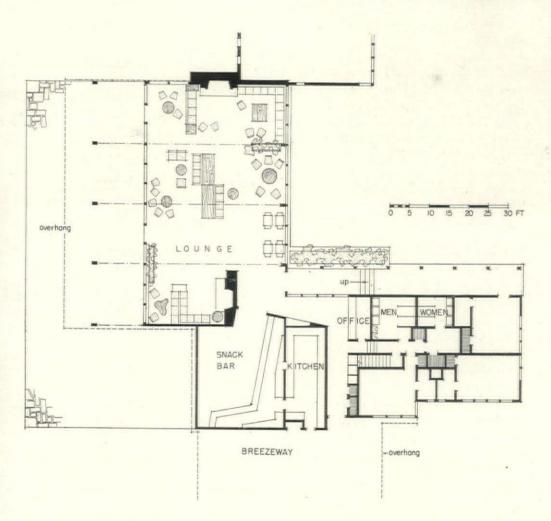
OVERED LOGGIA (above) leads from entrance drive to andsome central lounge (right). This room, spanned y five laminated wood arches, opens on to a big errace overlooking golf course. Glass wall is recessed a yield covered porch.











### CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—Douglas fir vertical boards and battens, building paper, Vaporseal sheathing, Celotex Corp.; inside—studs, Rocklath and plaster, U. S. Gypsum Co. Wainscote—Masonite Corp. Trusses—laminated plywood, Rilco Laminated Products, Inc. Floors—oak or bluestone. ROOF—asphalt shingles. SHEET METAL WORK—copper. SOUND INSULATION—Audiotone, U. S. Gypsum Co. WINDOWS: Sash—wood. Glass—double strength, quality A. FLOOR

COVERINGS: Bath and dressing rooms—Kentile, David E. Kennedy, Inc. WALL COVERINGS: Lounge and bar—vertical oak. FURNISHINGS—Morton Sandor, Hans Knoll Associates, Feldman Bros. HARDWARE—Schlage Lock Co., Sargent & Co., P. F. Corbin, Stanley Works and Vincent Whitney Co. ELECTRICAL FIXTURES—Condi-Lite Corp. PLUMBING: Fixtures—Crane Co. Shower stalls—Flush Metal Partition Corp. PLUMBING: Soil pipes—cast iron. Connections—lead. Water pipes—copper tubing.

the swimming pool appears to be an absolute essential. Architect Francis Keally, consultant for the American Hotel Association, thinks there should be a pool—equipped with pool-side bar, chairs and umbrellas—even if there is a lake or ocean nearby.

Boredom is the enemy of the resort owner—and most of them employ a large staff of specialists whose job it is to prevent it. In good daytime weather, this is not much of a task. But, come nightfall, the guests are bathed, wined and fed—and "ready to be entertained." Then the managements trot out dancing, cards, movies, lectures and plays. So important has good entertainment become to the successful resort, that New England alone annually absorbs a large part of the actors, dancers and musicians from New York's entertainment center around Times Square. Contrariwise, these resorts have also served as a kindergarten for newcomers—Danny Kaye, Clifford Odets and Garson Kanin among others got their start at summer resorts.

As the scale and importance of such entertainment increased the resorts have had to provide better facilities. This, too, was a hit-or-miss development but, even before the war, many summer resorts had complete theaters which are fully up to professional standards. Both Tamiment and Green Mansions have handsome theaters designed by Mr. Robin, completely equipped for both stage productions, concerts and lectures (FORUM, Feb. '42).

In the luxury resorts of 20 years ago many such facilities were incorporated into the central building. Operators with their ears to the ground nowadays believe that they should be dispersed. Mr. Keally thinks clubhouses, social halls and theaters should be at least 700 ft. away from the main hotel block. "When people sit around the hotel all day, they have had enough of it. They want some place to go—a variation in tempo." If the night life is dispersed, guests can leave the children at the hotel and the guests who go to bed early won't be disturbed.

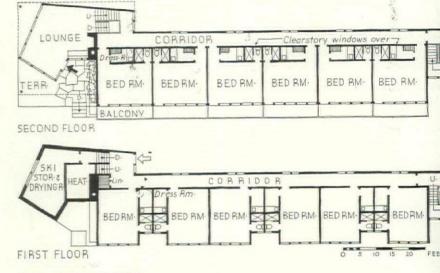
Quite by accident, this criterion of dispersal has been accomplished in many resorts, including the three shown here. Beginning as camps, they never had big central buildings, so they don't have to disperse now. But, in their effort to segregate guests rooms from all centers of activity, Robin & Vogel have gone even further. In their hypothetical design (right) they have grouped all these facilities together at a center: all guests rooms (whether cottages or dormitories) are placed well away from this as well as from the sports' areas.

Another great change is taking place in the resort field, one which has the owners guessing: the possibility of extending the vacation season around the calendar. This conversion is already well under way in the Florida winter resorts, where low-priced summer vacations are increasingly popular. In the north, the problem is reversed by the astonishingly rapid rise of winter sports. Many of the summer resorts are located in areas ideal for skiing, sledding and skating and some already are constructing ski tows, toboggan slides and skating rinks. However, this involves not only substantial new investments but also converting the existing plant to wintertime operation. And this involves a real gamble since many of them are unheated, uninsulated and generally ill-suited to cold weather use.

Robin & Vogel have had a wide experience in overcoming all sorts of natural obstacles and man-made errors in their resort work. But they have never had the chance to do a new project from the ground up. Whether they ever will is a moot question; but at least they can dream about it and—shown on these two pages—is one of their most considered dreams.

### MODEL RESORT PLAN distributes guests and facilities over 500 cou

At least an acre a guest is the minimum size for country resorts, design authoritie Robin & Vogel maintain, and they exemplify their point in this imaginary resort, which is planned to accommodate 400 adult guests. Complete use of land is evident in the scheme, with unusual consideration for the staff in both the elaborateness and placement of their quarters, which are arranged for maximum privacy from the paying guest Checklist and area allotments listed below testify to the complexity of the resordesigner's task.



RESORT CAPACIT

400

Area sq. ft.

300-

900

8.000

### AREA REQUIREMENTS

ADMINISTRATION BUILDING

1. Lobby .....

ENTRANCE GATE

1. Foyer

2. Theater

6. Workshop

Stage and Stage House

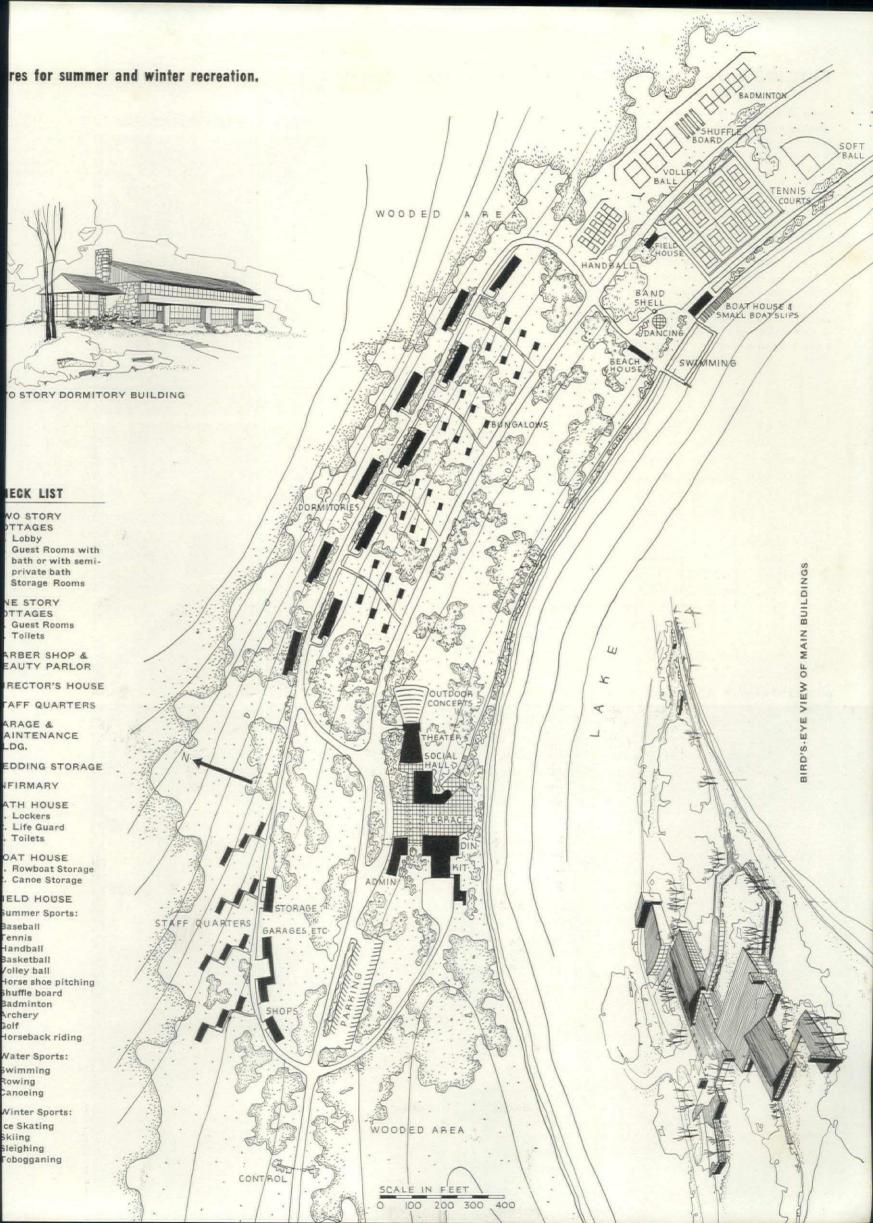
Motion Picture Booth

Scene & Property Storage

4. Dressing Rooms

8. Wardrobe Room

2. Lounge	800—1,000	1,200-1,5
3. Registration	80— 100	300— 4
4. Administration Offices:	300— 400	1,000—1,2
(a) Bookkeeping and Accounting		
(b) Director's Office		
5. Luggage Room	120	200
6. Writing Room	300	600
7. Card Room	300	800
8. Toilet Facilities	400	700
9. Cigar, Cigarette, Candy, Newspaper		
10. Telephones (Public)		
11. Coat Room		
	RESORT	CAPACIT
	400	900
DINUNC HALL	Area sq. ft.	Area sq. f
DINING HALL		
1. Foyer and Bar	1,000—1,200	1,600- 2,0
2. Coat Room		
3. Dining Room	4,000—4,500	9,000-11,0
4. Kitchen	2,500—3,000	5,000 6,0
5. Kitchen Office	80	120
6. Bakery	300— 400	600
7. Storage	300- 500	1,000 1,8
8. Linen Storage	200— 300	600—
9. Help's Dining Room	400 500	600—
10. Help's Locker Rooms and Toilet Facilities	400	600
11. Incinerator		
	RESORT	CAPACIT
	400	900
SOCIAL HALL	Area sq. ft.	Area sq.
1. Foyer	800-1,000	1,200-1.5
2. Coat Room		
3. Dance Hall	4,000	9,000
(a) Band Shell	1,000	-,
(b) Public Address System		
4. Bar and Refreshments	1,000-2,000	4.000-6.0
5. Small Kitchen	300 400	800-1,0
6. Toilet Facilities	400	800
7. Game Rooms (Ping Pong, etc.)	-	
it wante its sine (ring i ong) oto./		
THEATER		
IIILMILI		

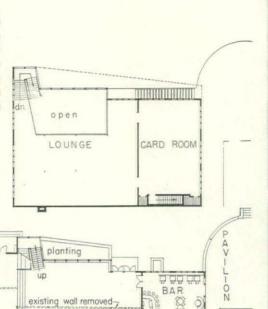


## UNITY HOUSE—a skillful operation increases size and efficiency of its central building.

Unity House is the famous union-owned-andoperated resort of the International Ladies Garment Workers Union in eastern Pennsylvania. More centralized in its layout than Green Mansions or Tamiment, and larger than either (1,100 guests), Unity has certain peculiar problems. One of them is that the central administration building includes the main dining hall. This means that, three times a day, the resort's entire population is concentrated here. Since this building also includes the registration desk and hotel offices, as well as a popular bar and lounge, the pressure on the original building designed by William Lescaze in 1933 was immense. It was to ease this situation that Robin & Vogel have carried out the expansion shown here: additions to the lobby, lounge and office facilities, including a mezzanine card room.

SECOND FLOOR

FIRST FLOOR

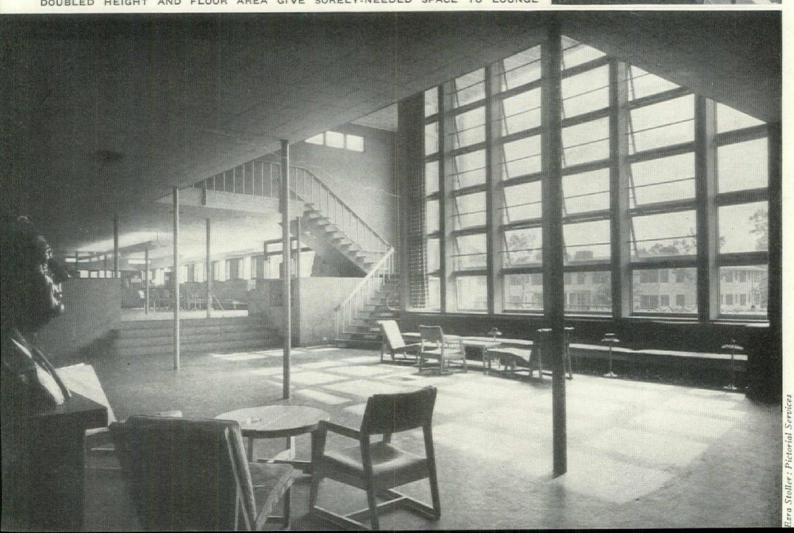




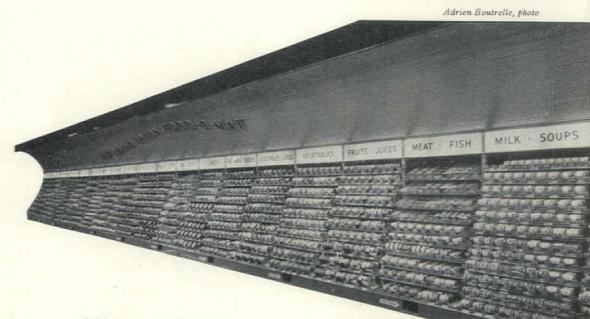




LOUNGE



# PRODUCTS AND PRACTICE



# AUTOMATIC MERCHANDISING evolves as a changing force in the nation's stores.

Current developments in the field of automatic vending are claiming the thoughtful attention of alert grocers and other packaged goods retailers, some of whom predict an approaching revolution in their selling methods equal to that brought about by the introduction of the self-service supermarket in the Thirties. Just as new will be the store design inspired by the machines for selling, now in use or experimental stages in increasing numbers. A great capital outlay, of course, is necessary in store mechanization, and only packaged goods an be handled; automatic vending is initially very expensive investment. But as the facors of rent and labor costs climb, more merchandisers are considering the practicality of nechanization as not only an increaser of sales efficiency but as an economic stabilizer for uture operation.

Manufacturers of these machines are at present concentrating on single-action, one-customer installations in heavy traffic areas such as railroad stations and public lobbies, impersonally dispensing everything from popor or to nylons. But the other large field, retail tores, is also beginning to show effects of careul study by mechanical experts in attempts of further unclerk the business. Though none of the grocery installations so far have elimitated the human cashier, the number of other lerks has sometimes been reduced substantially, and inherent in the same causes for the aving on salaries are also savings of total oor space, and space per unit sale.

Present store schemes range from Food-O-Mat, a simple gravity-feed shelf system which eeps packages displayed and readily accessible to the self-shopper, to Keedoozle, a near-antastic scheme in which neither shopper nor tore employe handles any merchandise until he shopper reaches the cashier.

Food-O-Mat, developed by President Lanng P. Shield of the Grand Union chain stores.

is in use not only in several of that chain's stores, but also in R. H. Macy's trickily-named Fancy Pantry food department in New York. All package stacking in this scheme is done from back aisles; the merchandise shifts down to replace items which shoppers select. Not only does this result in better display, with more repeated showing of labels at the visual level, but store circulation is much simplified. What many designers have overlooked in their allowances for aisles in super-market type layouts is the constant obstacle to customer traffic offered by clerks replenishing conventional shelving stacks from the aisles. This is a continual process in markets of large turnover. In keeping clerks out of these aisles and consolidating stack displays, Food-O-Mat speeds circulation and also saves enough space to allow entire new departments such as drugs and lending libraries to be brought into grocery stores. Managers of a Grand Union installation in Hempstead, Long Island, say that their grocery sales with Food-O-Mat are five times as great per square foot of floor, as with use of the old stack system. Price of the installation, which is high (up to 61 dollars per running foot, with 6.6 cents per foot per year royalty to the Food-O-Mat Corp. for five years) is justified under some conditions of high space rental and clerk's salaries-conditions which grocerymen do not expect to be relieved soon.

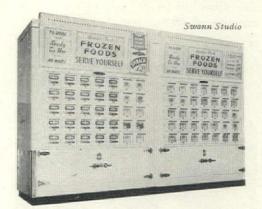
Frez-O-Mat is a frozen food dispenser which operates horizontally, presenting a battery of small doors—each holding a stack of different frozen foods, labeled—which open singly to release the packages. A package-presenting mechanism in each compartment eliminates need for the shopper to reach into the cold interior.

Another food idea, even more revolutionary in that it presents both a new food product and a new automatic dispenser, is *Remco's* Fresh-





FOOD-O-MAT uses gravity principle on slanted shelf to keep packages close to shoppers, and brand names in concentrated, repeated display.



FREZ-O-MAT, above, has separate lockers for each frozen food item; Remco vender, below, will dispense complete meals, pre-cooked.



frozen and Pre-cooked Dinner. This will be released during 1948 institutionally and to consumer markets through a coin-operated vender. Remco will sell complete pre-cooked entree's, including plate, through new food preparation processes and packaging and serving techniques.



Mechanization of selling is carried to the ultimate in *Keedoozle*, which seeks to avoid transportation of goods in the supermarket's aisle even by the buyer. In this system, the customer carries a *key* with which she perforates a coded tape indicating which of the many items of merchandise displayed which she wishes to

take home. When she reaches the cashier, he puts the tape into a machine which feeds the called-for packages on a belt circulating behind the displays and carries them to the wrapping counter, simultaneously computing the total cost to a fraction of a cent. Total cost of the *Keedoozle* itself has not been thoroughly established.

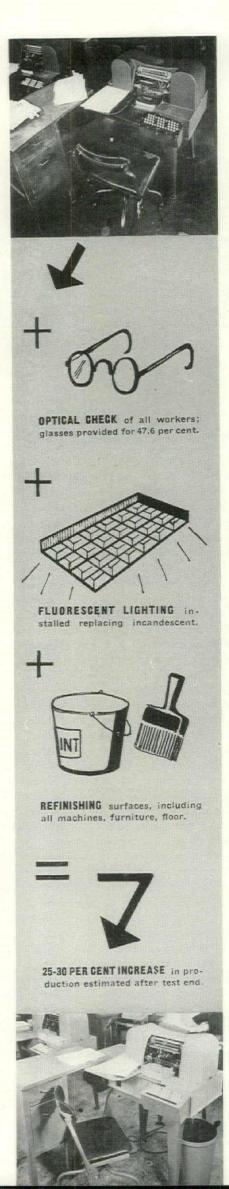
Single-machine automatic vending is well established as a large business, with estimates of last year's merchandise sales running as high as \$600 million, and informed predictions place the yearly gross at 2 billion in five years. Not only are many new products being presented automatically for the public's coins, but a switch to electrical operation of the machines is under way. And more and more ambitious installations are being produced, like the U. S. Vending Corp.'s Automatic Food Dispensing Unit which will sell up to ten different items for various multiples of a nickel.

With the expanding of this high-profit business, some designers expect soon to be planning almost all public areas with an eye to extensive automatic vending sections. Zoning changes are even looked for by some.

Mechanical complications in this field remain, like the penny change problem posed by the varying cigarette taxes in different states, and the complexity of keeping food and



drink venders sanitary. In some machines dispensing summer juice drinks which are loaded in cans, not only must the liquid be kept cold by artificial refrigeration, but the automatic can-opening and pouring devices within the machine have to heated for sanitation. But even with the complicated problems of design and upkeep and high initial cost, some automatic venders have been found to rival slot machines in profit ratios. And to many it looks now as if the automatic dispensers in cashierrun retail stores may not be far behind.



# INCREASING OFFICE EFFICIENCY with better light, sight correction and color engineering.

Work output of clerical employes can be increased as much as 25 per cent through carefully planned programs of optical correction, studied illumination, and other environmental improvement, a federal experiment in Washington, D. C., indicates. To arrive at this conclusion the Public Buildings Administration and the Public Health Service worked together for two years, starting in July 1945, in a study conducted with a card-punch subsection of girl clerks housed in a run-down office of the Bureau of Internal Revenue. The experiment went in three stages, first correcting the girls' vision, then-with periods out for observation-modernizing the lighting, refinishing the walls, ceiling, floor, and desks of the office. Even the standard tabulating machines were changed from black to a light green in the extensive study. Charles P. Tolman, consulting engineer for the National Society for the Prevention of Blindness, was the original advocate of the idea.

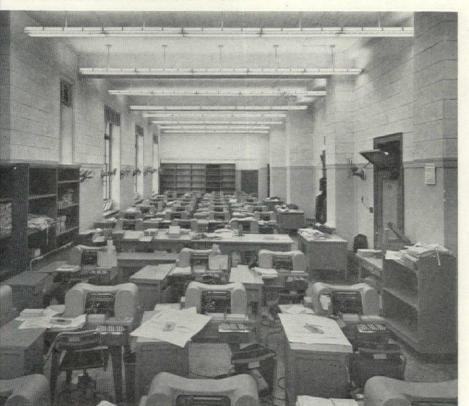
The results justified his expectations. Although the Tax Bureau, staying firmly in character, did harry the experiment by changing the clerical operation midway to a more complicated one, 5.5 per cent more tax forms were completed by the girls in the year after the improvements had been made; in one of the income tax returns which was slightly more difficult to audit during that second year, a striking increase of 37.4 per cent was made. Overall, the girls' work was considered to be as much as 50 per cent more difficult the second year, so the 25 per cent estimate of improved efficiency by environment is conservative.

What the experimenters started with was a room lit by 20 300-watt incandescent bulbs, with badly soiled acoustic tile walls and ceiling, and a dark brown mastic floor. crowded with battered furniture. This yielded a luminous environment of between 5 and 10 ft, candles (see fig. 1). Their first move (see fig. 2), after 47.6 per cent of the girls had been given new glasses, was installation of 100 new semi-direct, 4 ft. lighting fixtures, each containing two 40-watt, 3,500 degree, K-white fluorescent lamps mounted on either side of a central reflector. With these the light value ultimately-after several spaced stages of painting and refinishing the room (fig. 3), and time for softening (fig. 4)—was 45.75 foot-candles per sq. ft. The wattage per sq. ft. had been raised only from 1.61 to 2.54 representing a gain in light of approximately 176 per cen on a 58 per cent wattage increase, with no new wiring Light distribution, as indicated by the charts on the oppo site page, was vastly improved, with direct illumination on all parts of the room. After this, corrected reflectance and brightness factors were determined, to provide uniform background for the area in the machine operators normal field of view. The card-punch machines are the immediate background for the tax return forms, so the were treated as the primary visual field, and the colors and reflectances of other portions of the room were coordinated accordingly. (see chart) The final light balance reached was 29 ft. lamberts on the tax returns, with the machines floor and lower walls generally ranging between 10 and 20 ft. lamberts, to make a slightly darker "surround" for the seeing task.

Cost of the environmental improvement, exclusive of engineering services, was \$6,497.78. The room totaled 3,735 sq. ft. in floor area, with a 16 ft. ceiling. The improvement was figured on an amortization of 15 years, the estimated life of the lighting installation. This represents a yearly square-foot cost of 9.69 cents. Morale of the girls as well as work-production, rose sharply. More than 95 per cent approved the change in lighting and 93 per cent the new room color.

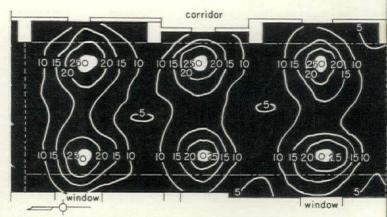


**SAME ROOM**, in the photograph below, is estimated to be 25 per cent more efficient for work-production than in the photograph above, taken before the three stages of illumination redesign, painting, and refinishing were begun.

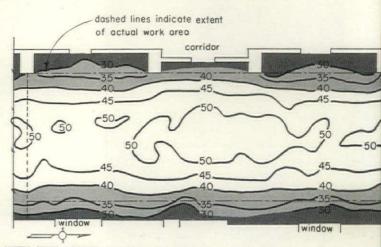


COMPARATIVE COLOR TABLE

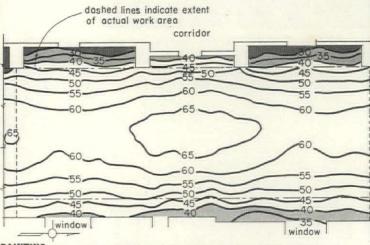
	BEFORE		AFTER	
Area	Color	Apparent reflectance (I.C.I. il- luminant "C")	Color	Apparent reflectance (I.C.I. il- luminant "C")
Card punch machine, housings, writing shelf	Black	± .05%	Med. gray green	23%
Card punch machine, chassis and legs	Black	± .05%	Dark gray green	15%
Walls (8'-0" high)	Tan (soiled)	± 30%	Light blue green	50%
Trim, doors, sash, furniture, at walls	Metal Wood-grained walnut	± 4%	Blue green	15%
Acoustic tile-ceilings beams, upper walls	Light tan	± 45%	Off white	Approx. 70%
Floor	Dark brown	± 4%	Tan marbelized linoleum	33%
Furniture, desks, chairs, tables	Golden oak—pine and metal	± 12%	Medium gray green with light linoleum tops	23%



ORIGINAL CONDITION: in preliminary stage light is insufficient, badly distributed—concentrated in spots, not diffused.

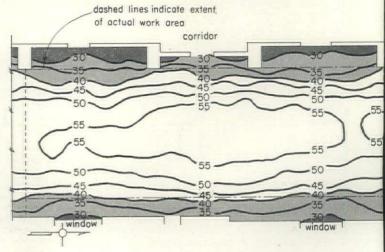


WITH NEW LIGHTS, in first stage, both the light total and its spread is improved—overall light level is raised.

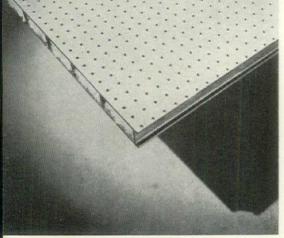


**PAINTING,** in second stage, raises reflectances, further improves distribution—new, bright finish circulates light further.

AFTER 950 HOURS, in final stage, "aging" has caused general downward adjustment—paint soiling stabilizes light level.



Geoffrey Baker



HOLOPLAST, kraft paper impregnated with synthetic resin, is to be made available in numerous finishes, including integral veneers.

### BRITISH LAMINATED PLASTIC is designed for load bearing partitions.

Holoplast, a laminated plastic structural material developed by the British and already in production and use in their home islands, has been patented in the U. S. and will soon be produced here, according to officials of the company. Qualities of the material indicate a wide potential market, especially if its present estimated U. S. price of a dollar per square foot can be lowered or even held. In effect ar inch thick cellular plank, Holoplast's two exterior surfaces are both very hard, and, in some of its wide range of finishes, very handsome.

The material is not only fireproof but fireretarding, and has a very high strength-weight ratio. Produced now in 4 ft. x 8 ft. x 1 in. panels, it is particularly adaptable for use in interior partitions, effecting economies in space and speed of construction without sacrificing sound-insulation or load-bearing qualities. It can be used in single or double-thickness walls.

Holoplast was developed during the war at the behest of the British government, who were seeking a strong light material for primary use in planes and ships as bulkheading and partitions. In kraft paper impregnated with synthetic resin, they found what they wanted—a weight of 2 lbs. per sq. ft. with ultimate tensile strength longitudinally of 12 tons per sq. in., transversely 5.4 tons per sq. in. For load-bearing, Holoplast is best utilized longitudinally in the direction of the webs, when the full stiffness of the material is realized and a modulus of rupture of 8.3 tons per sq in. is attained.

Sound transmission tests have given Holoplast very respectable ratings, especially when the cavities between the webs—spaced about 2 in. apart—are filled with sand, foamed slag, or other insulating material. One type, designed for sound absorption, is surfaced with perforated sheets (1/8 in. holes, 1/2 in. o.c.) and filled with glass silk, mineral wool, or other noise-eaters.

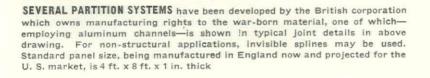
Holoplast can be machined or power-sawed, and can support heavy wall fittings such as washbasins, bookshelves, and cabinets, fixed with self-tapping screws to one surface of the panel. Its moisture absorption is almost nil, and heat insulation is good, especially when filled with insulation. It can be supplied with surfaces integrally veneered in selected hardwoods, and a similar companion product, "Chequerplast," will be available for flooring.

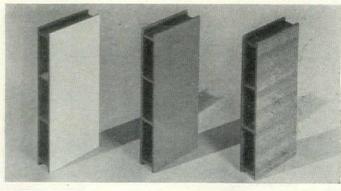


DOOR JAMB

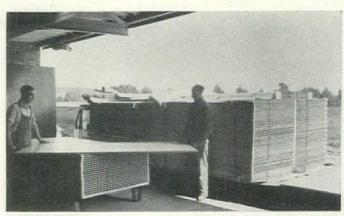
TYPICAL DETAILS with ALUMINUM ALLOY EXTRUSIONS

BASE OR CORNICE





SAMPLE SLABS show the sturdy web-and-flange construction.



EASY HANDLING is feature. The sections weigh about 64 lbs.

INTERIOR, below, including furniture, is made of Holoplast.



EXTERNAL CORNER



Even the fussiest home owner would have a tough time finding fault with Ro-Way Overhead Type Doors. For Ro-Ways have what it takes to make home owners happy!

Simple, clean-cut architectural beauty—designed, and engineered to compliment any style of residence. Finest materials—from kiln-dried lumber to selected steels. Proud workmanship in every detail from design to finished door.

Exclusive, extra-value features for smooth, quiet operation and lasting, trouble-free service.

That's why so many architects, builders and owners look upon Ro-Way as the standard of comparison in overhead type doors. Make your own comparison and see for yourself. ROWE MANUFACTURING COMPANY, 933 Holton Street, Galesburg, Illinois, U.S.A.

Ro-Way distributors in all principal cities. Consult your classified telephone directory, or write for distributor's name. See our catalog in Sweet's.

There's a Rollay for every Doorway!



# Hospitals aren't the Only **Buildings** where REAL Radiant Heating is Ideal

Birmingham Hospital Center in England has Crittall warm water coil radiant heating throughout. Lanchester, Lodge & Davies, FF.A.R.I.B.A., Architects. Henry Lea & Sons, Consulting Engineers.

Crittall radiant heating with concealed warm water coils is not only ideal for hospitals, but also for all other buildings where healthful, comfortable warmth must be supplied. Here is what it does:

- 1. Provides gentle, comfortable, evenly distributed warmth without overheating the air at any point.
- 2. Lower comfort temperatures minimize irritation of respiratory passages.
- 3. Permits natural ventilation without loss of comfort temperature.
- 4. Has no highly heated surfaces on which dust can settle, hence discourages propagation of germs.
- 5. No unsightly radiators or registers.
- 6. Heating coils are invisible.

- 7. Leaves walls and floors clear for greater flexibility of interior arrangements.
- 8. Creates no high speed convection currents, thereby redissemination ducing dust.
- 9. Reduces risk of air-borne
- cross infection.

  10. Provides uniform floor-toceiling temperatures.
- No stuffy, overheated rooms. 12. Cuts down amount of fuel
- used. 13. Summer cooling with the same coils.
- 14. Installation costs are competitive.

### Also Electrical Radiant Heating Panels

Crittall offers Medrae electrical radiant heating panels for immediate shipment. They are economical and safe for auxiliary heating. These "packaged sun-warmth" panels are easy to install. Plug in portable models are available.

### Consult CRITTALL on Radiant Heating

Now, through your architect and engineer, you may have the



benefit of Crittall's more than 40 years of world-wide experience in the design and installation of radiant heating systems.

This book on the principles and economies of Crittall radiant heating will be mailed on request. Write for your copy today.

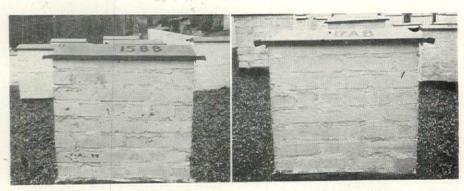
## RICHARD CRITTALL

Radiant Heating, Inc.

665 FIFTH AVE. NEW YORK 22 N. Y .- Plaza 9-3316 Richard Crittall Radiant Heating (Canada), Ltd. 215 St. James St. West, Montreal - Lancaster 9171

## PRODUCTS AND PRACTICE

### MASONRY PAINTS tested and classified by Bureau of Standards.



At left are the tests which weathered poorly; at right are typical satisfactory finishes.

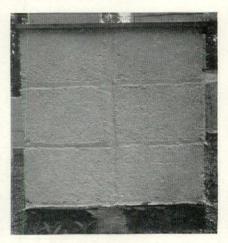


A six year series of weathering tests recently finished in Washington by the National Bureau of Standards helps clear up tenuous notions on what can be expected from finishes applied on

Inquiry into this vaguely known area of exterior finishing was conducted on typical blocks of stone-and-cinder block, lightweight aggregate block, new and used common brick, and cast concrete slab. Finishers used were cement-water, resin-emulsion, oil-base, and rubber-solution paints. According to the Bureau, the results indicated that these masonry paints, well-formulated and skillfully applied, are durable; and that it is possible to maintain painted masonry at minimum cost.

The cement-water paints were found to provide a very durable coating and good results were also obtained with oil-base, resin-emulsion, and synthetic rubber-base paints. (The latter are not yet on the commercial market but are being developed for large production).

Importance of grouting was also brought out as indicated in the cuts. When base coats of grout (consisting of equal parts of white Portland cement and mortar sand mixed with sufficient water to a creamy Betty Crocker consistency) were used to improve the surface prior to painting by filling the voids in the block and closing openings in the



mortar joints, increased endurance was evident. Sharp sand included in the cement-water paint or priming coat of grout was found to improve further the durability of subsequent organic coatings on open-textured walls or surfaces having cracks or other defects.

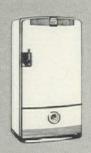
Several hundred 2 ft, masonry walls, were built for the tests, in addition to concrete slabs made in lacquered-wood forms using a 1:1:6 mix. The masonry wall specimens which were exposed for the six year period in general showed the same results as those exposed for the three year period.

Another useful property long known to many painters who like to see walls get whiter season after season, and corroborated by the Bureau of Standards: oil-base paints usually weather by chalking, a property that makes them self cleansing.

The wall specimens were rated as good painting surfaces in the following order, declining: (1) new cement asbestos shingle-faced wall specimens, (2) stone-concrete block, (3) cinder-concrete block, (4) new common brick, (5) lightweight - aggregate - concrete block, (6) cast concrete, and (7) used common brick wall specimens.

For cement-water paints, the method of application, the curing, and the conditions under which surfaces are painted

(Continued on page 130)



REFRIGERATORS

A wide variety, including famous "Cold-Wall." All powered by the "Meter-Miser."



ELECTRIC RANGES

A model for every family. Important automatic features, even on low-priced ranges.



HOME FREEZERS

Several sizes from 8 to 16.5 cu. ft. capacities. Heavily insulated, economical to operate "Meter-Miser" mechanism.



#### CABINETS AND SINKS

Combine all-steel cabinets with refrigerator and range to form efficient work centers.
One- and 2-bowl sinks.



#### **AUTOMATIC WASHER**

Revolutionary new "Live Water" washing action. Easily installed: no bolting to floor.



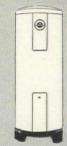
#### ELECTRIC DRYFR

Gets clothes ready to iron in 15-25 min. Completely automatic. Simplifies planning.



#### ELECTRIC IRONER

"Prestoe-matic" toe control, "Button-Saver" edge, many other important advantages.



### WATER HEATERS

Thirty to 80-gal, including "Table-top" model. Put anywhere, no flues; short pipe runs.



Whether you're an architect, builder, building manager, or owner, there are many good reasons for considering Frigidaire. Here are just a few of them!

A wide variety of appliances and equipment to choose from, including Refrigerators, Electric Ranges, Water Heaters, Home Freezers, Kitchen Cabinets, Kitchen Sinks, Automatic Washer, Automatic Dryer, Electric Ironer.

One single source for appliances, for service, for warranty. Your nearby Frigidaire Dealer, with his expert facilities for installation and service, is always ready to consult and co-operate with you.

One high standard of quality throughout. Skillfully engineered products, precision-built for dependable operation and long life.

Family appearance and beauty of de-

sign adds charm to kitchen and laundry. The name Frigidaire builds prestige—builds confidence in buyer or renter—means the backing of over a quarter-century of experience and leadership.

See your Frigidaire Appliance Dealer for complete information. Find name in Classified Telephone Directory. Or write Frigidaire, Dayton 1, Ohio. In Canada, Leaside 12, Ontario.

You're twice as sure with two great names



FRIGIDAIRE made only by GENERAL MOTORS



# ... the greatest forward step in modern heating science!

Two great heating principles blended into one-that's what Modine Convector Radiation offers you! This modern, combination heating is the dependable new hot water and steam heating system for moderate cost homes and apartments . . . as well as commercial and institutional buildings.

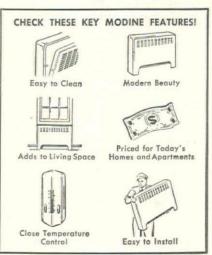
Best of all-Modine Convector Radiation now costs less than any other form of radiation. It gives you these extra advantages which you can't afford to overlook: 1) individual room control. 2) instant response to automatic controls. 3) gentle air circulation without the use of moving parts that wear out.

4) distinctive room charm and cleanliness without unsightly radiators.

If you're planning to build or modernize, specify Modine Convector Radiation. Call Modine's Representative listed in the "Where-to-Buy-it" section of your phone book. Or send for new, free Convector Booklet! MODINE MANUFAC-TURING Co., 1507 DEKOVEN AVENUE, RACINE, WISCONSIN.

# CONVECTOR RADIATION

The modern "proved by use" heating method



news flash for architects and builders

# AMAZING KAPCO BOARD IS TRUE VAPOR BARRIER!

691/2 times better vapor seal than any other wall board on the market!

retarding. Stands up where other boards can't-will not rust, rot, mildew, mold, oxidize or de-laminate.

Bureau of Standards report reveals moisture penetration of Kapco Board is practically nil-only 1/25 gram (0.04) per sq. meter per day with quarter-inch board. This is  $69\frac{1}{2}$  times better protection than any other board on the market gives. Nothing finer for plaster base or dry wall construction. OK'd by F.H.A.

### TWO TYPES FOR A THOUSAND USES NOW AVAILABLE . . .

PLASTER BASE-Monolath. Prevents vapor and moisture condensation inside of outer walls. No more soggy, packed-down insulation-no more ice formations inside the walls. No chance of walls sweating-the cause of most plaster failures. Gives rigid support. Plaster clings better, is stronger-dries slower-from one side only. Comes in standard sizes. Priced competitively with ordinary sheet plaster base.

DRY WALL CONSTRUCTION—May be sealed and painted any color, or wallpapered. Filler or tape conceal joints perfectly. Use also as backerboard, as roofing base, as sheathing board, as flooring and linoleum underlayment, as a general utility construction board. Wonderful for basementless houses and concrete slab construction. Waterproof. Use on the farm for lining poultry houses, barns, silos, sheds. Stands all weathering. Easy to cut. Sizes to 4 x 8 ft. Costs *less* than ordinary building boards.

Also Kapco Board with knotty pine and light walnut wood grain finishes on one side now available!

See Kapco Board at the National Association of Home Builders Convention in Chicago, February 22-26

KEYSTONE ASPHALT PRODUCTS CO.

A Division of American-Marietta Co. 43 E. Ohio St., Chicago 11, III., U. S. A.

FACTS NOW.  MAIL COUPON TODAY!	SEND FOR
	FACTS NOW.
TODAYI	MAIL COUPON
	TODAYI

Keystone Asphalt Products Co. 43 E. Ohio St., Chicago 11, III., U.S.A.

Rush booklet and details about Kapco Board. I am: JOBBER DEALER ARCHITECT

Address

State.

### PRODUCTS AND PRACTICE

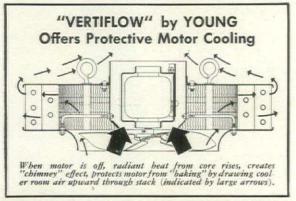
# Young Announces... New, Circular 'VERTIFLOW'

UNIT HEATER



# How to Get Effective Heating from High Ceiling Installations

Increased airflow and lower final air temperatures of the new, circular "Vertiflow" Unit Heater make it possible to heat floor areas from greater heights than previously practical . . . thereby providing greater heating efficiency with fewer units. The new, Young heating element provides correct final air temperatures, maintains more even heat at thermostat levels, and eliminates excessive air buoyancy, which causes over-heated air to rise before reaching the floor areas. An added bonus in assuring trouble-free installations is the patent-applied-for protective motor cooling principle, described below. Young-designed diffusers and "Anemostats" are available for specific installations. Write for new, free Catalog No. 2648 today!



YOUNG HEAT TRANSFER



YOUNG RADIATOR CO.
Dept.158-C, Racine, Wis., U.S.A.
Sales and Eng. Offices in All Principal Cities

MEATING, COOLING AND
AIR CONDITIONING PRODUCTS
Convectors \*\* Unit Heaters \*\* Heating
coils \*\* Cooling coils \*\* Evaporators
\*\* Air conditioning units \*\*

AUTOMOTIVE AND INDUSTRIAL

PRODUCTS

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

(Continued from page 126)

are more important than the composition of the paints as long as the Portland cement content of the paint is not less than 65 per cent by weight, it was found. With the possible exception of cast concrete poured against oiled forms, cementwater paints are satisfactory for the initial painting of new masonry. Further coatings are not necessary although for improved appearance the cement coating can be covered with an exterior masonry oil-base, resin-emulsion, or rubber-solution paint. A synthetic rubber paint can be applied immediately after the cement-water paint dries, but it is recommended that the cement-water paint be permitted to age for at least two weeks before application of resinemulsion paints and three months before application of oil-base paints.

Oil-base paints can be used, the Bureau says, on close-textured masonry or open-textured surfaces that have been moisture-proofed, although new surfaces of both types should not be painted for six to twelve months. Walls must be dry when the paint is applied and so constructed as to remain dry after painting. Applied to a wet wall or one that becomes wet through structural defects, these coatings fail by scaling and flaking.

When grout is used, a protective primer such as rubber-solution paint should be used as the following coat if there is the possibility that the wall is damp or contains soluble salts. Over this, one coat of oil-base paint should give a good finish, although two coats will of course have much greater durability.

Resin-emulsion paints have a good clean appearance and are durable on exterior masonry. Before application, open-textured surfaces and brick walls with cracks around the mortar jointsshould get a base coat of either grout or cement-water paint containing sharpsand. Resin-emulsion paints, which provide good coverage, are easily applied by brush or spray to either damp or dry walls-a minimum of three weeksshould elapse before painting new masonry walls. Synthetic-rubber paints will be marketed in two types: rubber emulsion and rubber-solution, to beapplied on either dry or slightly damp wall surfaces but not on wet walls, (excessive moisture may prevent adequate bond.)

Rubber-solution paint is similar in composition to oil paint, with rubber resin replacing the synthetic or natural resin in the vehicle. This type paint may be brushed or sprayed on a surfaceto form a protective primer, under oilbase or resin-emulsion paint, or a complete covering of two or more coats. Normally, two coats will give adequate coverage and good durability; on opentextured surfaces, cement-sand grout should first be applied and allowed todry from three to six days. Rubber-solution paint is especially suitable for coating cement-asbestos shingles or siding, but it also gives good service on other masonry surfaces.

## ANNUNCIATOR SYSTEM summons salesmen quietly from selling area.



1. TELEPHONE OPERATOR takes call for salesman in furniture department at John Wanamaker's in New York. At left is control board of Faraday Electric Corp.'s signal system. Salesmen at Wanamaker's receive dozens of calls daily, creating a considerable paging problem, solved to the company's satisfaction recently by the new installation.



2. SALESMAN'S CODE SIGNAL is registered on the keyboard of the auto-sequence visual paging system. Six different calls may be flashed at the same time, in sequence, without loss of time in paging while calls are re-set, in the Wanamaker's installation. If ten successive digits are used for coding, 175 individuals can be called from the floor for conference.



3. ANNUNCIATOR FLASHES CODE for salesman in demand. A soft-toned bell rings to call attention to the ten annunciators on the furniture floors, and the code numbers flash on and off periodically until the salesman notifies the operator he is ready to take the call. The system is electronically operated, using power relays, with no motor-driven flasher.



SLOAN-KETTERING INSTITUTE for CANCER RESEARCH of MEMORIAL HOSPITAL Center for Cancer and Allied Diseases, New York City

SKIDMORE, OWINGS & MERRILL,
Architects, New York City
TURNER CONSTRUCTION CO.,
General Contractors, New York City
BARKER BROS. PAINTING CORPORATION,
Painting Contractors, New York City

HIS project, global in scope, is the world's leading institution for prevention, treatment, teaching and research for cancer and allied diseases.

Pratt & Lambert dependable paint products, in distinctive colors, were used on the first building, Memorial Hospital, for initial decoration and later fc: maintenance. They are likewise standard for Sloan-Kettering Institute, shown above, and Strang Prevention Clinic.

On request, a representative, trained in the proper use of color, will aid you in developing complete color plans and sound painting specifications for both new work and maintenance.

PRATT & LAMBERT-INC., Paint & Varnish Makers

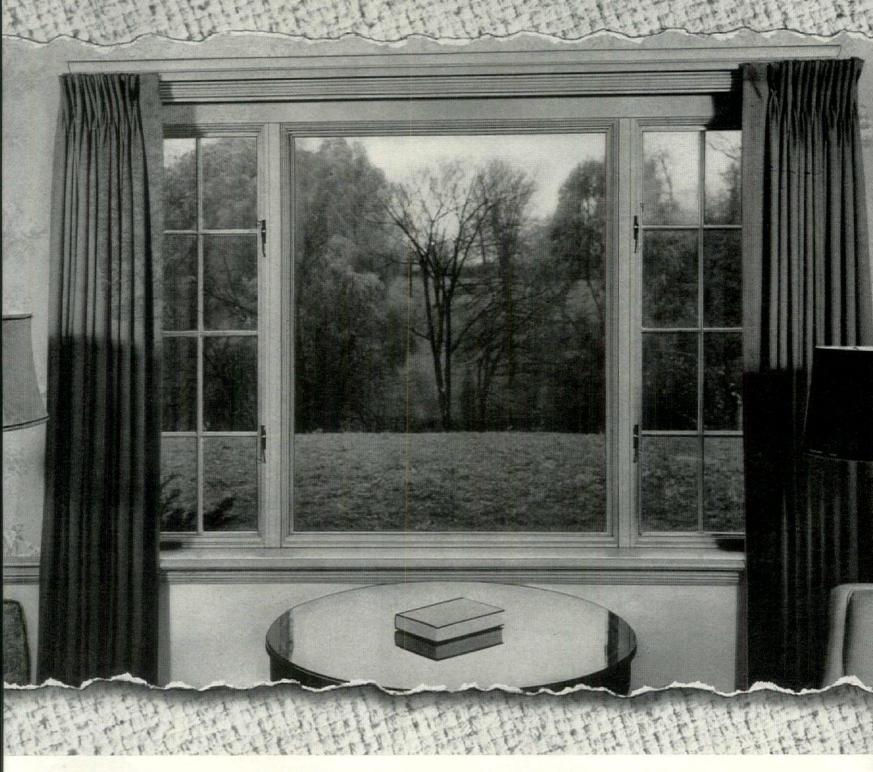
NEW YORK · BUFFALO · CHICAGO · FORT ERIE, ONT.



# PRATT & LAMBERT PAINT AND VARNISH

Andersen Undowalls

FOR A VIEW - AND FRESH AIR, TOO



One of the remarkable things about an ANDERSEN WINDOWALL is its ability at once to open up the home to its finest view and to provide ample fresh air during mild weather.

This Andersen Casement Picture Window in a Columbus, Ohio, home designed by Downie Moore, architect, is a good example of windows that function simultaneously as walls and windows.

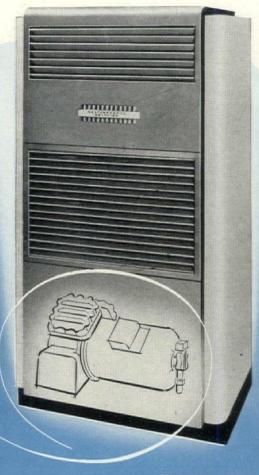
The installation is stock unit number 542. The sash at each side swing out.

Details of this and other ANDERSEN WINDOWALLS are to be found in Sweet's Architectural File. Your correspondence with Andersen at Bayport is invited.

\* TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation
BAYPORT · MINNESOTA





THE WORLD'S FINEST
AIR CONDITIONING COMPRESSOR
— SEALED IN STEEL
FOR A LIFFTIME OF SERVICE

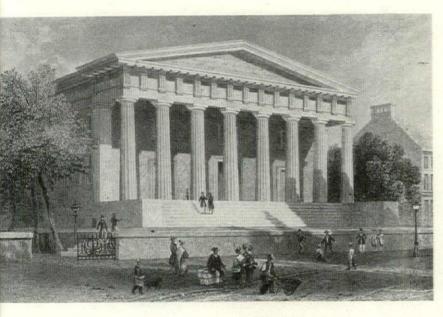
THAT MAKES THE DIFFERENCE IN THIS

# Hir-Conditioner

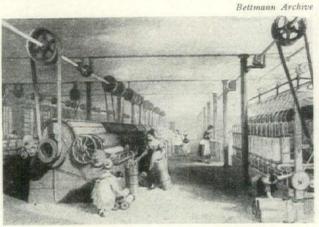
The compressor is the heart of an air conditioning unit. That is why Westinghouse, having created the first hermetically-sealed compressor for air conditioning, has continued to perfect this important development. The result of this leadership is the Life-Line Compressor-Motor unit, which places Westinghouse air conditioning far ahead in economical, trouble-free service. Equally important: every part of the Westinghouse air conditioner is made to work in perfect coordination with every other part. For only Westinghouse builds all of the important components that make up an air conditioning unit. These benefits and more are yours at no premium in first cost. So specify Westinghouse—you can't buy more dependable air conditioning. Call your nearest Westinghouse air conditioning distributor or write to: Westinghouse Electric Corporation, Sturtevant Division, 38 Readville Avenue, Hyde Park, Boston 36, Massachusetts.

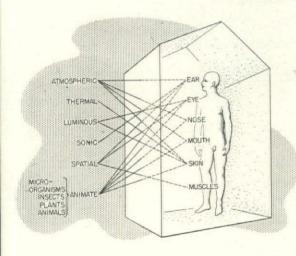
# Westinghouse Air Conditioning

# REVIEWS



Behind the classic facades of the 1830's industrialism the force which was to reshape American building was already apparent.





The function of modern building: environmental control. The purpose: increased well-being. The result: a new esthetic.

Roger Sturtevant



AMERICAN BUILDING—the forces that shape it. By James Marston Fitch. Houghton Mifflin Co., Cambridge, Mass. 372 pp. Illustrated. 6 x 9. \$5

The stature and quality of this book rank it, in its field, the contribution of the decade. This may seem too positive a statement for the opening sentence of a review but Mr. Fitch's study of American building is so complete, balanced and authoritative that the risk of commitment seems small. Certainly our generation has seen no similar work. If a contemporary comparison must be made, Gideon's Space Time and Architecture is probably the closest competitor. However, this deals with world architecture whereas Mr. Fitch has confined himself to the national picture (and has succeeded manfully in disentangling it from the international skein). Furthermore, the fundamental approaches of the two authors are sufficiently divergent to preclude anything but the most superficial comparison.

When Mr. Fitch entitled his book he meant building in the broad sense—not architecture alone. His study divides itself in three parts: an historical survey, an analysis of contemporary building developments and trends, and a theoretical integration of modern esthetics and techniques. The first two could stand as books in themselves. The third, of course, reflects Mr. Fitch's personal convictions, which might arouse controversy on some fronts but are undeniably the product of a highly lucid and perceptive mind.

The historical survey is unusually readable and alive and contains a staggering amount of research gathered from countless sources, obscure and recognized. The reader cannot help but wonder why such a full and colorful portrayal of the American building scene has not been compiled before, and can only assume that to date no other mortal has had the courage and stamina to tackle and carry through such an ambitious project. The text is peppered with new anecdotes and shrewd bits of insight into our national past that enable the reader virtually to relive the times. The book is illustrated in a particularly satisfactory manner. Each section contains a group of beautifully reproduced black and white illustrations, correlated, and pertinent to the chapter's text. Furthermore, their running captions more or less capture the gist of the text so there is no frantic leafing back and forth, no consulting of index.

Mr. Fitch's account of the historical development of U. S. building is based on a premise as simple as it is radically new in this field: the decisive forces-technical, political and economic-that shape any society are also the forces that shape the patterns of its building. Other reviewers have compared this book to Parrington's Main Currents of American Literature, and the comparison seems an apt one. Like Parrington, Mr. Fitch assumes that the appearance of a new style or form is not the result of spontaneous combustion-a misapprehension under which the majority of our contemporary art and architectural historians would seem to be laboring. For the critic who attempts to lift architecture out of the society it is designed to serve, the endless procession of American "revivals" of various architectural styles is an unintelligible phenomenon. For Mr. Fitch, who sees how the Republic of Jefferson needed a building form that would symbolize power and order not only for its own citizens but also for its European financial backers, the Roman Revival becomes a meaningful and dynamic part of American history.

Speaking of the supercharged post-Civil War period, Mr. Fitch declares that: "the defeat of the slave owners removed the last barriers to the full economic development of modern capitalism. Never had the shift in class forces been so abrupt

(Continued on page 138)

# COST RELIEF with DESIGN FREEDOM

# -through co-ordinated standard parts



STEEL WINDOWS-for schools, hospitals, offices, factories, homes-any building. Wide choice of types, sizes and vent arrangements. Distinctive appearance. Rugged construction. Easy operation.



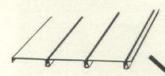
You don't have to standardize a building to benefit from the economies of modern manufacturing and construction methods.

Use standard parts-Fenestra Windows, Panels and Doors. The wide selection in each of these families of building products permits full latitude in building design. They're quality products in every respect . . . standardized to bring you marked economies.

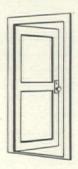
Standardization results in production savings that mean lower first cost. Installation savings are achieved because these windows, panels and doors are sized to co-ordinate with standard dimensions commonly used in up-to-date construction practice. It keeps on-the-site work at a minimum . . . saves both time and money.

There's economy in lower maintenance, too. Steel won't warp, shrink or rot. Steel is sturdy-well able to stand up to hard use. And Fenestra's long experience in steel fabrication assures quality suitable for the finest buildings.

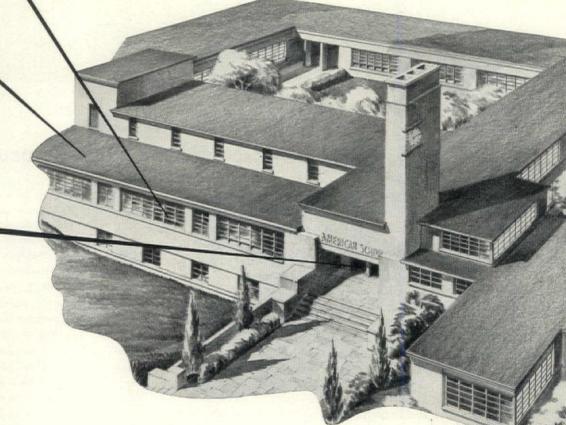
Whatever type of building you are planning, look into the moneysaving opportunities which Fenestra Building Products offer for floors, walls, roofs, partitions, windows and doors. The Fenestra sections in Sweet's Architectural File for 1948 (Sections 16a-14 and 3c-1) give full information. Look them over-better yet, write or call us.



METAL PANELS-Holorib Roof Deck for quickly-laid, economical roofs. Also metal panels in standard widths for walls, floors, partitions. Flat surfaces provide ideal surface for finishing material of your choice.



DOORS-complete with pre-fitted or attached hardware; some with pre-fitted frame. Faster installation-better fit. Designed for easy operation. Swing, slide and overhead types available.



# Fenestra standardized building products

Detroit Steel Products Company . Dept. AF-3, 2251 East Grand Blvd., Detroit 11, Michigan



# FIBERGLAS\*

## ... sets new standards in roof insulation

What are your specifications for a roof insulation?

Do you want high insulating efficiency, durability and long life-or are light weight and ease of application your first consideration?

In any event, there's no need to compromise; Fiberglas Roof Insulation answers all these requirements-and more, too. That claim has been proved in use by some of the country's leading industrial plants and by architects, builders and roofers.

Here's what they've found:

It's economical to apply, economical in use. The insulating core-Fiberglas PF Insulating Board-is durable, dimensionally stable, won't rot or decay-because the fibers are inorganic. Moisture doesn't materially affect its durability. Fiberglas Roof Insulation has a compressive strength and a

surface tough enough to withstand normal handling and application traffic. And, because it's light in weight (a square foot, 1" thick, weighs only 1.3 pounds), it's easy to handle, easy to design for-since no significant weight is added to the roof structure. Standard roofing practice is followed in applying it-no special technique is required.

Most important of all, of course, Fiberglas Roof Insulation is highly efficient-its thermal conductivity is as low as any in the roof insulation field, lower than most. It keeps heat in (or out) permanently.

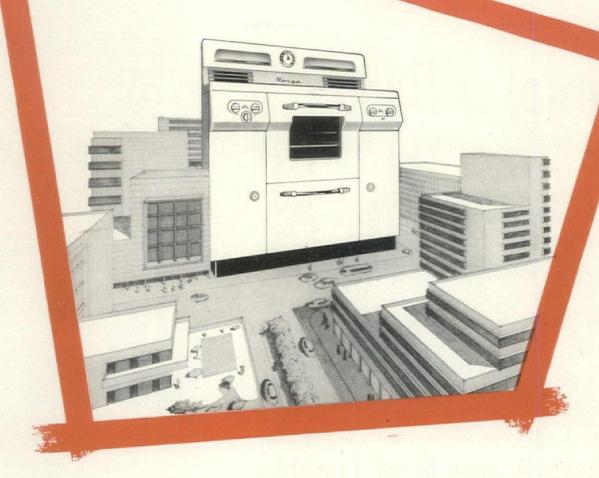
What additional facts or specifications can you use? For complete details, write for descriptive literature . . . Owens-Corning Fiberglas Corporation, Dept. 830, Toledo 1, Ohio. Branches in principal cities.

In Canada: Fiberglas Canada Ltd., Toronto 1, Ontario.



\*FIBERGLAS is the trade mark (Reg. U. S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.

# There's a place for NORGE in your picture!



Good design—whether for a modern apartment building or a NORGE appliance—has these attributes in common. The unit must utilize all available space efficiently. It must have all the beauty that symmetry

permits. It must have all functional parts arranged for greatest convenience. That's modern architecture... and that's NORGE. Norge Division, Borg-Warner Corporation, Detroit 26, Michigan.

### A BORG-WARNER INDUSTRY

Refrigerators • Electric Ranges • Water Coolers Washers • Electric Water Heaters • Home Heaters Gas Ranges • Home Freezers



or profound; never had the change in upper class ideology been more climactic; and never had its expression in architecture been more immediate. The stylistic continuity of the previous century was shattered at a blow . . . But though archeology grew steadily more precise, use of its idioms did not regain that precision which had characterized the revivals of the past . . . Between and around and below them developed that characteristic set of symbols called the Victorian or (by fin de siecle snobs) the Parvenu . . . This period saw also the further separation of the architect from the main stream of American building. Under the severe strain placed upon it by expanding industrialism, the building field itself began to undergo a qualitative change . . . The building process began to be industrialized, and this was the main stream from which all advance in the future was to flow."

Recognize a Trend?



# More and More People Want Lumite

STAINPROOF!

RUSTPROOF!

NEVER NEEDS

PAINTING!

LASTS A LIFETIME!

Day-in and day-out use—all over the country—is proving that LUMITE has qualities never before found in window screening . . . qualities that have started a trend towards this amazingly different plastic screening.

Here is the screen material that absolutely can't rust, rot, stain, or corrode...that never needs painting, lasts a lifetime. Made from Dow's SARAN. It costs less to own

than any screening made.
You'll find all the facts about
this amazing material in SWEET'S
FILE, or, if you want samples and
more complete information, write
LUMITE DIVISION, Chicopee Mfg.
Corp., 47 Worth Street, New York
13, N. Y.

Sold through Hardware and Lumber Dealers and Screen Manufacturers.

SPECIFY BY NAME

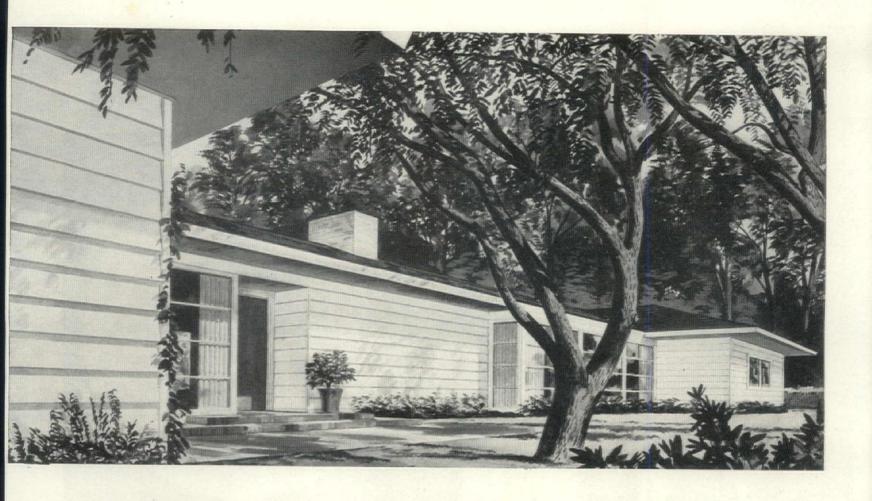
SPECIFY BY NAME

STATEMENT OF THE STATEM

Later, scrutinizing the spark of contradiction between the ideology and mechanics of building that was so effectively fanned by the first Chicago World's Fair, the author takes exception to certain heretofore accepted theories. He asks: "Was it merely as Professor Gideon would have us believe, the architect's desire to give 'an artificial backbone to people who were too weak in their emotional structure'? Many things might have been said of Chicago's beef and railroad barons, but scarcely that their 'emotional structure' was 'weak'. No, the abrupt change in esthetic standards was not to be explained in terms of esthetics, but of basic changes in American society... the substantial completion of the modern structure of monopoly and its absorption of the Chicago capitalists."

The section on contemporary building has been admirably conceived and presented. Mr. Fitch has chosen to discuss the complex modern building product only as it relates to the individual human being. By this broad approach, he has managed to integrate all contributing factors and elements. He does not stoop to scrutinize individual buildings, then label good, medium or bad; nor does he offer any "how-to-do-it" principles, architectural or structural. What he does offer is an integrated philosophy of building which, based on a high level of technique, evolves of itself a new standard of esthetics. Health, in the Fitch estimation, is the social function of building and the final criterion by which it must be judged. As he puts it: "Modern building acts as a selective filter which takes the load of the natural environment off man's body and thus frees his energies for social productivity." This natural environment he breaks down into six groups, based primarily on the senses-the thermal, atmospheric, luminous, sonic, spatial and animate. Mr. Fitch therefore recommends that in judging performance, the following questions be posed: Does the building regulate commerce between the human body and these natural environments in such a way as to provide for optimum health? And, from the standpoint of society as a whole, do its buildings provide that precise control of environment that guarantees maximum productivity to all its operations and processes? To these standards the author relates the nature and function of contemporary building equipment, not as static elements but as forces that work to control the environment. Analyzing structure, Mr. Fitch finds that the frame's sole function is to withstand the vertical forces of weight and the horizontal forces of wind-pressure and earthquake. To the skin he delegates the task of withstanding chemical and physical attack, "admitting those phases of natural environment which are desired and excluding those which are not." Elaborating on the schizophrenic function of the common wall, he says: "The wall which admits sunshine in the daytime will, unless equipped with additional membranes, also lose artificial light at night. The wall which admits fresh air may also admit pollen, while that which excludes the glare of the summer sun may also exclude the cooling breeze. A soundproof wall is apt to be lightproof as well; while one which is opaque to the infra-red rays of the sun may also be opaque to its ultra-violet band. To unlock these contradictions, it is clear that no single sheet of any known material will suffice. Instead, by the sheer logic of the problem, the contemporary designer is forced to evolve increasingly complex skins composed of many membranes. Moreover, to maintain an internal constancy against external fluctuations, many of these membranes must be adjustable.... Naturally, the complexity of the building skin will vary with the precision of environmental control required: the ordinary

(Continued on page 142)



# NEW! A better building material at no increase in cost!

One look at this new Kaiser Aluminum clapboard Siding and Roofing and we think you'll agree—

it is better looking, stronger, more weathertight, more durable than any other siding and roofing on the market!

We know that to be a fact, because our engineers investigated every known design in order to select the one that proved itself superior on every count.

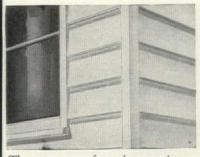
Made of full hard Kaiser Aluminum, each section is absolutely uniform. When nailed down, the curved surface creates a tension which results in a weatherproof lock! No other siding has this feature!

Prime-coated for painting, it easily takes finishing coats . . . in fact, the appearance of paint is enhanced. And you save costs all down the line. On handling, erection, nails, paint, and elimination of waste.

Today—wire, write, or phone any Permanente Products office below for a free folder giving all the facts!

# Kaiser Aluminum

### SIDING AND ROOFING



The concave surface gives maximum strength, ultimate rigidity, provides deep shadow lines.



Applied from top to bottom, each section locks with a spring action, assures weather tightness, no rattles.



Gives on-the-job savings in labor, nails, paint, elimination of waste. Can be worked with regular wood tools.



Roofing has all the features of the siding and can be applied at lower cost than shingles.

### a Permanente Metals product

SOLD BY PERMANENTE PRODUCTS COMPANY, KAISER BUILDING, OAKLAND 12, CALIFORNIA...WITH OFFICES IN:

Atlanta • Boston • Buffalo • Cincinnati • Cleveland • Dallas • Detroit • Kansas City • Los Angeles • Milwaukee • Minneapolis • New York
Oakland • Philadelphia • Seattle • St. Louis • Wichita



Control of temperature and humidity is paying its way for modern industrial laboratories in more and better research. Such exacting work demands precise control the year round. That is why so many industrial laboratories choose Carrier centrifugal refrigerating machines for their refrigerating and air conditioning requirements.

Recently Carrier centrifugals have been installed by such companies as Louisiana Division of Standard Oil Company of New Jersey, Sinclair Refining Company, and the B. F. Goodrich Company. Like other corporations operating extensive research laboratories, they find precisely controlled air conditioning and refrigeration permit more exact measurements, promote cleanliness, and help control chemical and biological reactions. And comfort of the research personnel encourages better work.

Compact, dependable Carrier centrifugal refrigerating machines are used all over the world in laboratories,

industrial plants, hotels, office buildings. Their efficient operation, ease of maintenance and lack of vibration make them the choice for refrigeration and air conditioning applications.

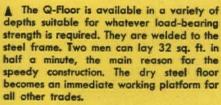
Whatever the kind of laboratory or type of construction Carrier engineers will be glad to help you. They're the most experienced in the industrial field. And they've worked for years with architects and consulting engineers to unravel knotty problems. Carrier Corporation, Syracuse, N. Y.



AIR CONDITIONING . REFRIGERATION . INDUSTRIAL HEATING









National Standard Bldg., in Houston, Texas, was designed by Alfred C. Finn, Architect, R. J. Cummings, Struct. Eng., and R. F. Taylor, Mech. Eng. By using steel Q-Floors by the H.H. Robertson Co., of Pittsburgh, Pennsylvania, construction time is usually reduced 20 to 30%. These complete 4-hour floors, weighing less than forty pounds to the sq. ft., account for the remarkable building feat told in this story.

Construction is dry, free from forms and shoring; incombustible and clean. There is no delay for wet materials, another factor making for early completion date, a point much in mind with owners. Q-Floor, with suspended ceiling, weighs less than forty pounds per sq. ft., yet earns a fourhour fire rating.

### NATIONAL STANDARD BLDG. USES Q-FLOOR originally designed for 8 extra floors...got 14

The largest and most progressive postwar buildings have specified steel Q-Floor by the H. H. Robertson Company. Main reasons are that construction time saved makes for early occupancy date, offsetting possible occasional delay in delivery of steel.

Also, the electrical availability over the whole floor appeals to architects and owners alike. It saves architects great expense in the drafting room and increases the building's earning power. The Q-Floor fittings can be seen at any General Electric construction materials distributor's.

National Standard Building in Houston was originally designed for eight monolithic stories to be added. W. A. Bellows, Houston contractor, was able to add fourteen stories because of the light weight of steel Q-Floor.

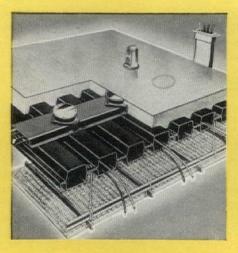
For details and cost (they cost less than the carpet that covers them) write to the

### H. H. ROBERTSON CO.

2403 Farmers Bank Building
Pittsburgh 22, Pennsylvania

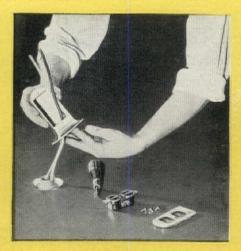


Offices in 50 Principal Cities World-Wide Building Service



■ Tremendous amount of drafting room headache is saved by Q-Floor's electrical flexibility. The steel cells are crossed over by raceways for wire of all electrical services. An outlet can be set up on every six-inch area of the exposed floor. Layouts are permanently flexible. Outlets and partitions can be located after occupancy.

An electrician merely drills a small hole to establish an outlet. No fuss, no trenches. This relieves architects of need for costly electrical planning. The floor plans are always modern because Q-Floor is prepared for any electrical device, even those not yet on the market.



five-room bungalow will not have requirements as stringent as those of the acoustical laboratory. Yet the difference between the two is more one of degree than of kind, for the same principle must be applied to the house if it is ever to approach the efficiency of the laboratory." (Italics mine).

To the professional, the building standards set by Mr. Fitch automatically demand a new high in esthetic standards. For the term health, in his hands, means both physical and spiritual well-being. "To imply that such materialistic factors as light, heat, sound... are the only elements in architecture worthy of consideration... would violate the evidence of history itself." To be finally effective, he says "a building must conform to esthetic as well as physiological standards." This is not, however, an easy concept to project to the popular mind which represents, as he repeatedly points out, the ultimate



### MURPHY CABRANETTE KITCHENS

PORCELAIN ON STEEL

In single, compact units Murphy Cabranette Kitchens provide complete kitchen facilities in minimum space. 1948 models (four sizes) are characterized by clean, sweeping lines and such features as refrigerators with push-button doors and stainless steel frozen food compartments . . . gas or electric ranges of advanced design . . . one-piece sink and range tops. Best of all is the appealing, permanent beauty of genuine vitreous porcelain on all exposed surfaces, a feature exclusive to Murphy Cabranette Kitchens.

Murphy Cabranette Kitchens are recommended to those seeking tenant appeal, tenant permanence and absolute minimum of maintenance costs. Write for new catalog now in preparation.





building consumer. Were it not for attempting to bridge this gap, the last chapter of the book, Toward a Democratic Esthetic, could well have been omitted since it appears somewhat inconclusive after the force and positive quality of the preceding sections. In it, the author reviews contemporary artistic currents, the backwardness of the building industry, the familiar plight of the artist in present day society and the countless other problems confronting architects today. He believes the public taste to be basically sound, laments the average man's lack of information about building performance, suggests that what the layman further wants of modern building is sentiment, that he must be educated to the point of achieving emotional satisfaction through the realization of form and function rather than historical symbols. In conclusion. Mr. Fitch states: "American building as it stands today, at the end of World War II, is too broad in scope, complex in function, varied in form and material, to be easily related to any private set of esthetic standards. Judged relative to those currently operative in the modern movement, most of our building seems poor. But the issue is not simply one of whose standards are best-the layman's or the specialist's. It may be true, as is often charged, that the average American has a low level of taste: but it may also be true that the standards which the architect and artist are offering him are incorrect in the light of social reality; for the mortal dichotomy between esthetic and technique, between the fine art and the folk art, is in the last analysis an expression of the deeper conflicts in our society itself. To free American building from the contradictions which paralyse it today, building designer and building consumer must join with all Americans of good will in building a society of peace, freedom and plenty."

On a book like Mr. Fitch's, the critical verdict cannot come from a reviewer. It must come from the book's professional audience, and it probably cannot come for some years. But however wide the eventual agreement may be with the conclusions at which Mr. Fitch arrives, there can be little doubt that he has started off for them from a basically new direction. The critical base of this book stands as a sharp departure from the historical course of architectural criticism; it strikes a path as distinct from what has gone before as Ruskin's was from the Academicians. Like anybody striking new directions, Mr. Fitch has left a lot of rough edges lying around. The organization of his book is certainly not flawless (he has enough material for at least three); his syntax might have benefited from a more careful pruning. But these are niggling points. It is not too much to say that an important new critic has appeared on the architectural scene, and that it is against men of the stature of Mumford and Gideon that he will have to be judged.-M.S.

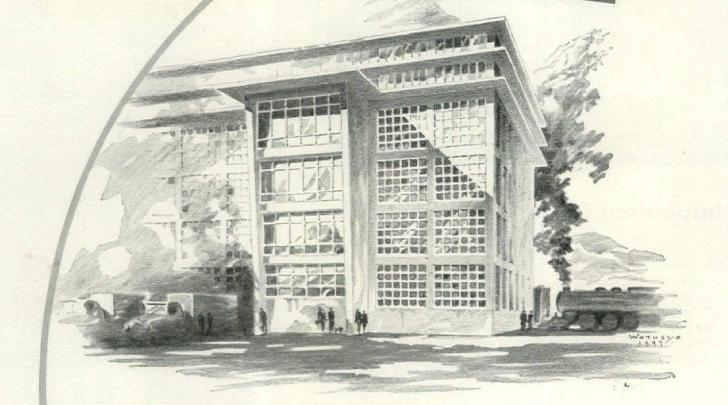
### **EXHIBITIONS**

"Access to the realm of Art," said Naum Gabo in 1937, "is open to every man. He judges about Art with the unconstrained ease of an employer and owner. He does not meditate upon those processes which brought the artist or group of artists to make one special kind of Art and not another." In keeping with this creed of making the inscrutabilities of modern art easily accessible to every man, New York's Museum of Modern Art is now presenting (until April 25th) the sculpture of two brothers, Naum Gabo and Antoine Pevsner, Russian-born Constructivists who have been designing in their particular idiom since before World War I.

(Continued on page 146)



## Gill & Bianculli design a factory.



Mesker Steel Windows

"Steel windows are perhaps the greatest single contribution to modern industrial architecture. Skillfully used, they combine attractive appearance with efficient fenestration."

Architects Harrison Gill, left Mario Bianculli, right Chattanooga, Tenn.



For your copy of the Mesker Book of Industrial Windows, write to Mesker Brothers, 4336 Geraldine, Saint Louis 15, Missouri

### "We Save time and money with

### Modern J&L Steel Junior Beam Floors"

DeLashmutt Brothers, Barcroft Apartments, Arlington, Va.





Fire-proof, vermin-proof, shrink-proof floors for both residences and apartments

There are three reasons why DeLashmutt Brothers, owners and contractors, and Albert D. Lueders, Architect, selected J&L Steel Junior Beam Floors for the modern \$3,500,000 Barcroft Apartments just being completed in Arlington County, Virginia, near Washington, District of Columbia.

First—they cost less, in both time and labor. The extreme simplicity of construction with J&L Junior Beams cuts labor cost and saves time on the job—factors of vital importance under today's conditions.

Second—they cut maintenance cost to a minimum. Because they are rigid, vibration-free and shrink-proof, J&L Junior Beam floors elim-

inate the "settling" which causes plaster cracks, sagging doors, sticking windows—and costly repairs.

**Third**—J&L Junior Beam floors are fire-safe, which means an additional saving through the lowest possible insurance rates.

There is a nation-wide trend to this modern type of steel floor construction—for residences, apartments and other light occupancy buildings. This trend is a "natural," because J&L Steel Junior Beam floors are: Rigid and Vibration-free Shrink-proof Termite-proof Fire-proof Permanent Easy to install Adaptable to any finished floor Economical

When you build, build better at lower over-all cost, with J&L Steel

Junior Beam Floors.

Junior Beams, made exclusively by Jones & Laughlin Steel Corporation, are available now through your favorite steel warehouse—or through J&L service warehouses at Chicago, Cincinnati, Detroit, Memphis, New Orleans, New York and Pittsburgh.

#### ARCHITECTS! CONTRACTORS! BUILDERS!

Send for descriptive literature and engineering data on J&L Junior Beams and J&L Junior Beam floors. Use the coupon!

Jones & Laughlin Steel Corporation Room 401, 311 Ross St., Pittsburgh, Pa.

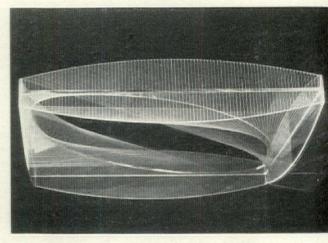
Gentlemen: Please send me complete data on J&L Junior Beams and Junior Beam Floors.

NAME		
COMPANY		
COMMITTEE	TOTAL PROPERTY OF THE PARTY OF	

### JONES & LAUGHLIN STEEL CORPORATION

Although the work of Gabo and Pevsner (which goes beyond "abstraction" to "the whole complex of human relation to life") is well-known in Munich, Paris and London, this is the first comprehensive exhibition to be seen in the U.S. It is of particular importance because it may be one answer to the architect's search for a decoration organically suited to modern building

Most of the sculptures shown at the Museum are constructed technically, like a building, rather than being molded or chiseled. Their materials are those of modern science rather than the traditional mediums of stone and solid bronze. Gabo's work is mainly translucent plastic while Pevsner employs sheets of oxidized tin and brass or colored plastics, actually riveting some of the metals together. Many of his pieces are designed as placques and could be built into a wall.



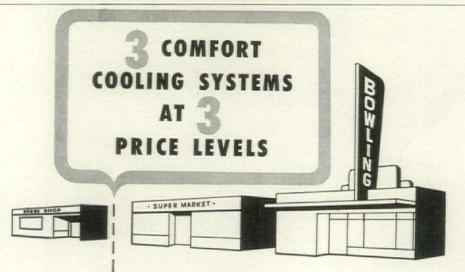
One of the loveliest and perhaps most representative pieces is a clear plastic by Gabo dated 1942-43, called "Linear Construction Variation." (See cut). It is a simple, built-up shape consisting of clear, thin plastic planes, their surfaces grooved with a fine design of lines flowing in many directions and continued by plastic threads. The combination of planes and lines suggests rounded form. An earlier example of the same theme is shown nearby: "Torsion," 1928-36; but it is not nearly as well-balanced as the later piece, although interesting in comparison. (A nice bit of display technique is used here as the two variations are fenced off from the rest of the show by white string, which adds a further light touch to the elegant delicacy of the plastic constructions.) Pevsner is often concerned with the theme of "World Construction." One of his

Courtesy: Museum of Modern Ar

most recent interpretations of this ambitious concept (1947see cut) has captured the endless quality of a sea-shell; it is shaped of bronze edged with a finely-engineered brass binding. Like some of Gabo's plastics, the surface is grooved with myriad lines, oxidized to a nacreous, mollusk-like finish.

The exhibition is handsomely presented, continuing Rene d'Harnoncourt's tradition of open-vista grouping (see "Art of the South Seas." FORUM, May '46). Here he has given the constructions of Gabo and Pevsner a background of air and space and sparkle that is quite in keeping with the time-space concepts of their work. "The problem," as Mr. d'Harnoncourt says, "was to present two artists so different and yet related,

(Continued on page 150)



Every building, regardless of its size, presents a single, basic problem in comfort cooling, with the possibility of three different answers.

The problem simply is this: what type of comfort cooling can each size business afford ... and show a profit.

usAIRco has the correct, and the profitable answer. In its three great comfort cooling systems, it offers Refrigerated Kooler-aire, Cold Water Kooler-aire, and Evaporative Kooler-aire . . . each a, pre-engineered package unit . . . available in a variety of sizes to take care of every building size.

We'll gladly send you complete details on each of these three usAIRco systems . . . tell you how they function . . . and how usAIRco cooperative engineering counsel assures correct, efficient installation. Write or wire United States Air Conditioning Corporation, Como Avenue S. E. at 33rd St., Minneapolis 14, Minn.

UNITED STATES AIR CONDITIONING CORPORATION

WASHERS

izes and capacities for every air condition ing application.

Cleans, cools, h

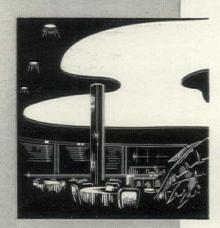
Sizes to 100 000 cfr











. . . regardless of what atmosphere you are setting — in the theatre, nightclub, school auditorium or cocktail lounge . . . effective lighting helps to create that certain atmosphere . . . cleverly molding the decorative scheme of a cocktail lounge, making a stage show more colorful. That is why POWERSTAT Dimmers can play so important a part in creating any desired effect.

POWERSTAT dimming is smooth and flickerless . . . from blackout to full-on by means of precise, simple operation.

POWERSTAT dimming is cool . . . its non-resistance qualities permit low temperature operation.

POWERSTAT dimming is practical . . . can be ganged to serve any number of complete lighting circuits.

POWERSTAT dimming is economical . . . no wasted power, no lost energy in the form of heat . . . resulting in high efficiency.

POWERSTAT dimming is dependable . . . these units are ruggedly built to stand the wear and tear of constant use assuring minimum maintenance.

Take advantage of expert advice . . . look to The Superior Electric Company for the answers to your dimming problems. A fully illustrated engineering data brochure is available. Request your copy of Bulletin 347.

Write The Superior Electric Co., 4038 Demers Ave., Bristol, Conn.

THE SUPERIOR ELECTRIC CO



Powerstat Variable Transformers • Volthox A C Power Supply • Stabiline Voltage Regulators.



unusual durability and beauty for vir-

THE LEADING HARDBOARD

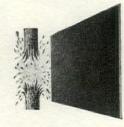
PRESDWOO

\*Trade-marks Reg. U. S. Pat. Off. "Masonite" signi-

AF-3, Chicago 2, Ill.

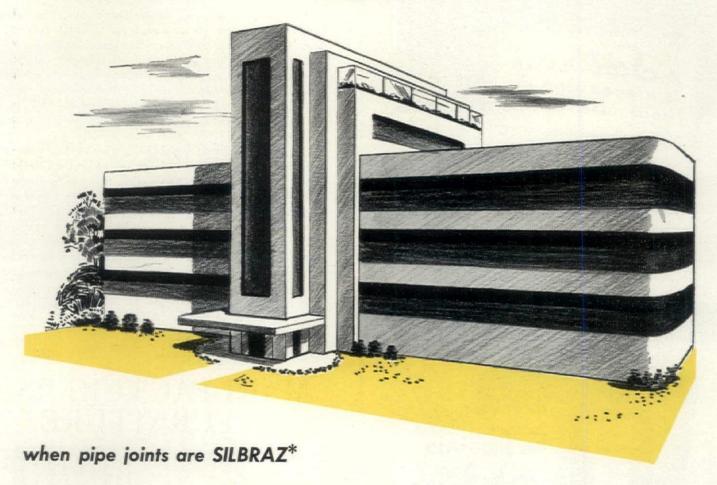
tually every kind of construction or remodeling job. It can be bent into curved shapes. It is smooth, grainless, extremely hard and dense. And it goes up easily and quickly. Presdwood is made from natural wood, re-

fined to a better, stronger, wonder wood. Lumber dealers have Presdwood - both Untempered, and Tempered to extra hardness. Write for technical data to Masonite Corp., Dept.



"The best wood is Presdwood" MADE FROM EXPLODED WOOD

### a modern building is truly modern...



Silbraz joints are threadless, silver brazed joints that, when properly installed, actually make a "one-piece pipeline" on red brass or copper pipe runs. Silver brazed-not soft soldered-Silbraz joints will not creep or pull apart under any condition which the pipe itself can withstand.

Experience covering hundreds of installations where Silbraz joints were specified by leading architects and builders, proves that this type of pipe connection is permanent, leakproof, and

troublefree. Its use has avoided costly maintenance and repairs.

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

The Walworth Company, oldest manufacturer of valves and pipe fittings in the United States, produces a complete line of Walseal Valves, Fittings, and Flanges for making Silbraz Joints -the modern method of joining brass or copper piping. For further data, see your nearest Walworth distributor, or write for Circular 84F.

\*Patented - Reg. U. S. Patent Office



### valves and fittings

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



Make it a "one-piece pipeline" with Walseal

DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD

### REVIEWS



It's easy to build a reputation for completing homes and industrial projects with lawns which are everything your clients hoped for. Especially if you specify Scotts Lawn Seed and Turf Builder. To help you with your planning, grading and seeding operations, send today for a complete volume of "Lawn Care" bulletins. It's FREE! Our soil experts are also at your service, no obligation of course.

O M Scott & SONS CO.,102 Spring St., Marysville, Ohi Also Ridgefield, N. J. and Palo Alto, Calif.

SPECIFY **Scott** GRASS SEED AND TURF BUILDER FOR FINE LAWNS



A drinking fountain isn't modern unless it's free from any possible source of contamination, Halsey Taylor Drinking Fountains have pioneered this idea of health-safety through the years, thus promoting hygiene and convenience for schools, hospitals, and public buildings.

The Halsey W. Taylor Co., Warren, O.

### HALSEY TAYLOR

Drinking Fountains

Fountains

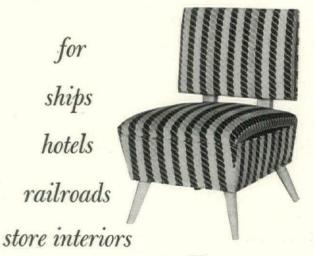
to keep them apart and yet nearby; so we arranged to have both galleries long and narrow." The first section of the exhibit contains Gabo's plastic pieces; this area is separated from Pevsner's by loosely-hung fishnet curtains allowing a contrasting view of Gabo's delicate translucent constructions against the background grouping of Pevsner's work, which is much darker and more somber in quality.

Constructivism derived from French cubism, but its practice in Russia during the Twenties was frowned upon as an example of decadent Western culture and in 1923 the two brothers were thrown out of Russia by the Communists, who were then instituting demands for realism and pictorialism in art. For a long time their work was not well-known outside a small group in Europe and London, but as sculptors' sculptors, they have had a far-reaching influence on modern art and even modern architecture. One of the more dated constructions in the exhibit, executed by Gabo in 1923, is a plastic "column" which reminds one of gasoline-station architecture throughout this country.

The Museum is currently publishing a book on the work of Gabo and Pevsner which contains two essays on the historical importance of the artists. An excellent foreword by Herbert Read points out: "There is no doubt that many people not prejudiced by emotional factors, people of general esthetic sensibility, find difficulty in discovering an esthetic response to non-figurative art. I believe that in most cases such people cannot separate the superficial 'decorative' appeal of a non-figurative composition from its constructive significance . . . The visual language may be just as difficult to learn as any language . . ."

The Museum, with this exhibition, is simplifying the learning process.—E.B.

### MANUFACTURERS OF FURNITURE



public buildings

WAVERLY CHAIR Width 21½ In. Depth 25½ In. Height 31½ In.

J. G. FURNITURE COMPANY, INC. SHOW ROOM 317 EAST 32ND ST., NEW YORK, N. Y. OFFICE AND FACTORY 102 KANE ST., BROOKLYN, N. Y.



"Look-Ahead Builder"

Tauxemont of Washington installs Bendix Washers and Dryers in every home!

The first group of all-aluminum houses made by General Homes, Inc., Columbus, Ohio and erected by Tauxemont Development Corporation in their development south of Alexandria, Virginia are causing quite a stir in the vicinity of Washington. Unusual, different, they provide another answer to the problem of mass-erected modern housing—and the Bendix automatic Home Washer and Bendix automatic Dryer are right in each blueprint!

Today's emphasis is on better, more leisurely living. Smart builders like Tauxemont, and many, many others, specify Bendix appliances in their plans . . . because they make life so much easier for the housewife who does her own laundry!

Would you like to know more about how easily you, too, can bolster your reputation as a builder . . . how simple it is to install Bendix equipment in your projects . . . how much more livable, more salable, your developments will be? Remember, Bendix appliances can be included in an FHA package mortgage!

Simply write to Bendix Home Appliances, Builder Division, South Bend, Indiana. Find out how you can keep on selling your homes faster than you can build them! More and more prospects are looking for the "sign of a Look-Ahead Builder". Display it. It's worth money to you!

Houses range from \$10,500 to \$12,000: including Bendix automatic Washer and Dryer in package mortgage plan

TO LIVE BETTER - LIVE WITH BENDIX!

BENDIX HOME APPLIANCES, INC., SOUTH BEND, IND.

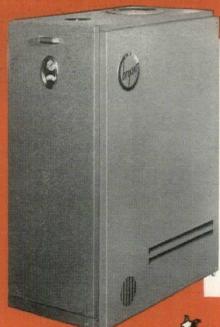


# SIZED TO

YOUR REQUIREMENTS FOR

### radiation heating

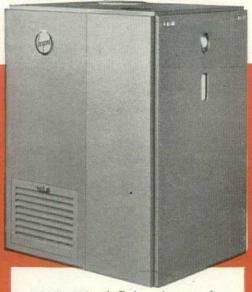
• Like fitting a gown to a personalized form... you can meet exact requirements on your domestic, commercial or industrial radiation heating job with one of the thirty-six automatic gas-fired boilers provided by the Bryant Line. Bryant Boilers are rated from 67,500 to 3,996,000 btu per hour, backed by full automatic operation, long-life, castiron sections and high operating efficiency... all proved in thousands of on-the-job successes since 1908. For perfect fit in hot water, steam and vapor systems, or for hot water storage applications, choose your gas-fired boilers from Bryant's thirty-six sizes . . . the perfect 36 for radiation heating.



MODEL 26 - A. G. A. ratings sq. ft.: Steam 230-600, Water 360-1920. Inputs: 67,500 to 360,000 btu per hour. For moderate size hot water and steam radiation heating systems. Features maximum heating surface, with water tubes surrounding the combustion chamber. Jacket is asbestos-insulated, completely encloses boiler and controls ... A favorite for home radiation heating systems.



BRYANT HEATER COMPANY . CLEVELAND, OHIO . ONE OF THE DRESSER INDUSTRIES



MODEL 455—A.G.A. ratings sq. ft.: Steam 660-2860, Water 1060-4580. Inputs: 198,000 to 858,000 btu per hour. For large homes and other buildings of medium and large size. Water tube design provides maximum brushing action to utilize the most possible heat.

MODEL 630—A. G. A. ratings sq. ft.: Steam 2960-13,320, Water 4740-21,300. Inputs: 888,000 to 3,996,000 btu per hour. For steam, vapor or hot water systems in large homes, apartments, commercial and industrial buildings. Like all Bryant boilers, operates efficiently on natural, manufactured, LP or mixed gases.





### PC Glass Blocks, with a fibrous glass screen, which diffuse daylight, reduce solar heat transmission.

A MODULAR PRODUCT

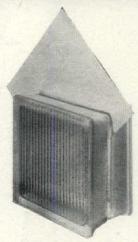
• PC LX-75 Glass Blocks were in great demand before the war. The many architects who found them so useful then, will welcome the news that they are once again available.

Panels of these LX-75 blocks distribute well-diffused daylight evenly over large areas. And even when direct sunlight strikes them, the screen in the blocks helps them to diffuse it so that objectionable glare is eliminated.

These blocks also decrease the transmission of solar heat through large lighting areas in which they are used. The insert in

the blocks gives them extra insulation value, extra resistance of the passage of heat, so that fuel costs are reduced, and the load on air-conditioning equipment is eased.

PC LX-75 Glass Blocks give your clients all the other advantages inherent in the regular PC Glass Block patterns: Good looks, privacy, easy-cleaning, prevention of dirt infiltration, reduction of outside noises. Why not send the coupon for our new folder which contains the complete facts about LX-75 Glass Blocks? Pittsburgh Corning Corporation also makes PC Foamglas Insulation.



A screen is inserted and permanently sealed between the halves of the block. This screen, composed of glass fibers pressed into a thin sheet, effectively diffuses the light. It causes a marked reduction of brightness and solar heat transmission.

PC GLASS BLOCKS . . . the mark of a modern building



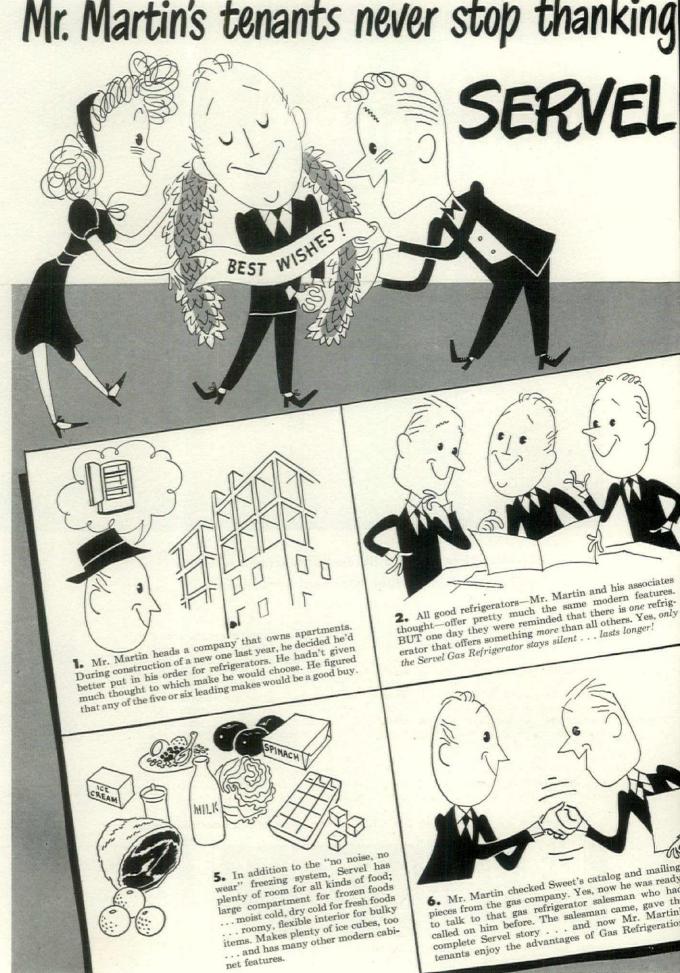
### GLASS BLOCKS

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 Corpo Room 647-8, 632 Duquesn Pittsburgh 22, Pa.	oration ne Way
Please send along my fre LX-75 Glass Blocks. It is obligation.	ee copy of your folder on PC s understood that I incur no
Name	
Address	
City	State

### Mr. Martin's tenants never stop thanking

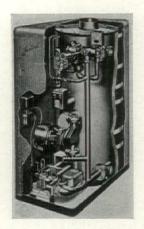


roomy, flexible interior for bulky items. Makes plenty of ice cubes, too ... and has many other modern cabinet features.

## him for their NEW, SILENT GAS REFRIGERATORS

He also thanks himself, for Servel gives dependable service year after year . . . at low cost





### HOT WATER SYSTEM combines three functions—house heating, 140° bath water and 180° laundry water.

Surface Combustion Corp.'s new "triple service" hot water heating system combines in a single gas or oil-fired assembly the three functions of home heating: water at controlled temperatures for house warmth; hot water for the new types of automatic home laundries and dishwashers; and tempered water for lavatory, tub, and shower.

Mechanically circulated from the single heating unit, the water can be used in either conventional convector-radiator fixtures or in hot water radiant panels. A completely packaged system is available, including convectors and all necessary tubing, fittings, and straps for installation. Water for house heating is mechanically circulated through a completely closed system, while that for laundry and similar high tem-

perature services is taken at 180° F. from a coil submerged in house-heating water. Temperature of bath and lavatory water is modulated to 140° F. by a mixing valve using cold water from the local supply. The coil has high capacity—for a 100° F. rise above the temperature of the local water supply, the continuous output is 90,135, and 185 gallons per hour for the three sizes of system available. Tempered water supply for tub, shower, and lavatory—where a 63° F. rise is usually ample—is twice these gallonages.

Operation of the system is entirely automatic. A room thermostat controls the water circulating pump to provide the desired room temperatures, and an automatic flow control valve prevents the water from circulating by gravity when the pump is not operating. An air eliminator prevents air from accumulating in the system, and also acts as an expansion tank to prevent excess pressure due to expansion of the water. The system is available in three sizes: 100,000, 150,000, and 210,000 Btu per hour input, A.G.A. rated.

Manufacturer: Surface Combustion Corp., Janitrol Division, 2375 Dorr St., Toledo 1, Ohio.



### The Original Inside Screens That ROLL UP AND DOWN Are Fella ROLSCREENS

ROLSCREENS in a building or home are a "trademark" of good planning. They speak well for the architect or designer who specifies them. An important part of your business is providing CONVENIENCE. ROLSCREENS help you do it like no other window accessory.

### CONVENIENCE of ROLSCREENS SELLS ON SIGHT

Once in place . . . always in place. That's Rolscreens! No putting up! No taking down! No storing! No painting! No seasonal repairs! Installed and operated on the inside. Inconspicuous. They preserve the beauty of clear, sparkling glass. For all types of windows — both old and new construction.

Made by makers of

FAMOUS PELLA VENETIAN BLINDS and CASEMENT UNITS

### 10-YEAR GUARANTEE

This is your assurance that your clients will be satisfied and enthusiastic about ROLSCREENS over the years.

#### DISTRIBUTORS AND DEALERS WANTED

A number of choice ROLSCREEN territories are open. Write for details if interested.

SEND FOR FREE ROLSCREEN CO	BOOK
Dept. 40, Pella, Iowa	
Please send FREE BOOK on ROLSCREENS, for all types of windows. Also price data.	Date:
Name	
Address	
City	Zone
State	

#### WATER HEATER is completely encased.

J. L. Gillen Co.'s new oil-burning water heater is entirely

encased, controls and all, inside an easy-to-clean enameled metal shell, to make the controls immune to tampering on the part of children, to eliminate the likelihood of damage by accidental bumping with broom or mops, and also—according to the manufacturer—to save space over other hot water heater installations. Water temperatures are automatically controlled from 125° to 165° F. by a thermal bulb, and a thick jacket of Fiberglas insulation on top and sides saves heat and gives fast temperature recovery. Unit is available in 30 and 45 gal. sizes.



Manufacturer: J. L. Gillen Co., Dowagiac, Mich.

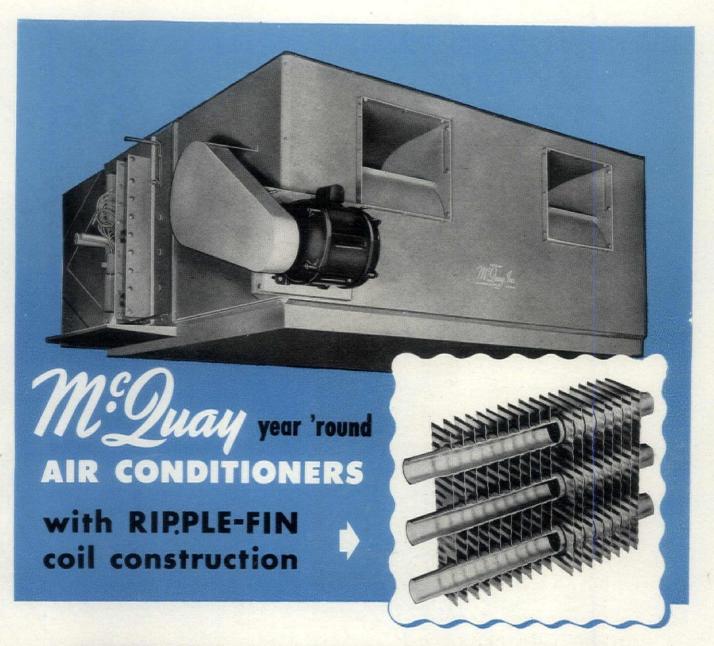
### VERTICAL DISCHARGE UNIT HEATER for normal ceiling height installations.

Vertiflow is a new vertical air discharge unit heater for normal ceiling height installation. Reported to increase heating efficiency, reduce operating noise to a minimum and save 35

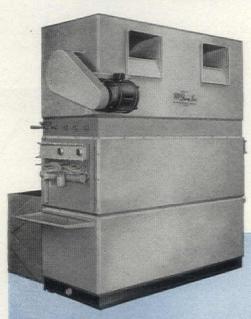
per cent in total unit weight, it features a unique motor-cooling method, "open-stack ventilation," which is said to eliminate "motor-baking." The fan motor is mounted in a stack, open at both ends, at the center of the circular heating core.



Specially designed fans draw room air through the open ventilating stack and at the same time force air taken from the heated core downward through the fan opening. This provides a flow of air around the motor which is rejected to reduce the motor operating temperature by as much as 75° F. When the motor is off, the core-heated air rises in a natural draft. Thus cooler room air is drawn up through the stack to cool the motor. The continuous circular round tube and fin heating core have inlet and outlet connections located for easy plumbing and the unit is suspended by rods through eye bolts. Vertiflow's seven models are



### MAKE THE SEASONS COME TO YOU



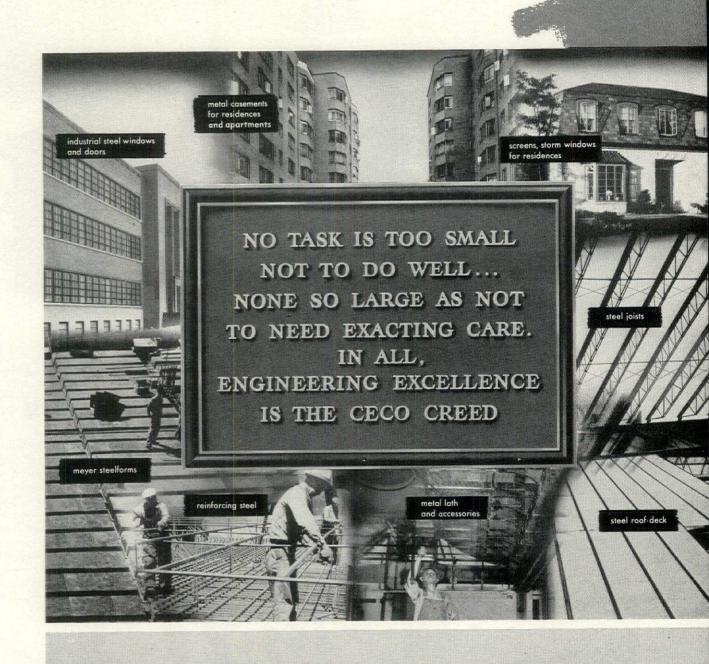
Complete flexibility of operation with McQuay air conditioning units, assures the comfort you want. From factory to small shop, McQuay units provide the right degree of fresh, conditioned air necessary for efficient working atmosphere. Secret of McQuay air conditioning performance is the versatile Ripple-Fin coil, with tubes hydraulically expanded into fins for unmatched heat transfer efficiency. Continuous plate-type construction, tough, vibration-free Ripple-Fin coils mean added years of dependable service. McQuay Year 'Round Air Conditioners are available in horizontal or vertical type models in a wide range of capacities for new or remodeling installations. See the McQuay representative in your area, today, or write McQuay, Inc.

McGuay Inc.

1609 Broadway Street N. E. • Minneapolis 13, Minnesota

IN HEATING . AIR CONDITIONING . REFRIGERATION . IT'S THE REAL MCQUAY

An Attitude ... a Creed behind a company slogan



## "In construction products CECO ENGINEERING makes the big difference"

Thirty-six years ago an attitude, an ideal, started the Ceco Steel Products Corporation. Today, that attitude, that ideal, is summed up in a Creed, which best describes the way Ceco and all its people have worked to build the company. No lofty phrases make up this Creed, just simple, direct language. Here it is:

No task is too small not to do well . . .

None so large as not to need exacting care.

In all, Engineering Excellence is the Ceco Creed.

Today the Ceco Creed puts into words what thirty-six years of practice put into action, to dramatize the company's oft repeated slogan . . . "In Construction Products CECO ENGINEERING Makes the Big Difference." Actually, there are three types of engineering at Ceco:

**CREATIVE ENGINEERING.** Here there is the ceaseless and endless search for new and better ways to do things, for new and better products to simplify building . . . to provide short-cuts in construction methods so as to reduce building costs.

**PRODUCTION ENGINEERING.** This type of engineering means the organization of work in manufacturing so that each process flows properly, merging individual jobs into the whole for better manufacturing practices, with savings in time and, consequently, in costs . . . plus the making of better products.

**FIELD ENGINEERING.** This is where Ceco Engineers test and prove the products they make . . . where product advantages are proved by practice . . . where in-the-field on-the-job data is developed so that the best way to use a product is discovered.

In all the aspects of Ceco work, meticulous attention to little things is the byword, for we believe no product is better than the perfection of its smallest detail. And here it is that Ceco applies all its engineering skill in seeking excellence. That's why we say that all jobs at Ceco are important . . . every task must be well done because each has a relation to the whole. That's why we say the Ceco Creed makes true the Company Slogan . . . "In Construction Products CECO ENGINEERING Makes the Big Difference."

CECO STEEL PRODUCTS CORPORATION

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



### BUILDING REPORTER



designed to deliver from 52,600 to 552,000 BTU's per hr., under standard operating conditions. According to the manufacturer, this large capacity, plus design features, results in maximum efficiency and permits heat to be delivered from heights heretofore considered impractical.

Manufacturer: Young Radiator Co., Racine, Wis.

### AIR DIFFUSER provides desired air flow pattern at turn of a knob.

Type C-1 Anemostat features a unique adjustment mechanism to produce different air flow patterns (ranging from draftless diffusion to downward projection) without affecting air resistance. With the turn of a knob this mechanism varies the vertical position of the third cone, adjusts the air flow pattern to meet changing conditions of room occupancy, seasonal

weather variations or the effect of local sources of heat gain or loss. Adjustment of the device can be accomplished by remote automatic or manual control; or, if desired, pneumatically operated control equipment may be used to regulate any number of Anemostats simultaneously. Another feature of the unit is a new latching method for fastening the inner assembly to the outer cone. This development is said to not only save two-thirds of the usual installation time but, since the inner cone assembly is instantly removable, to allow direct CFM readings to be readily taken in the neck of the unit. The new Anemostat can be used for heating, ventilating or cooling in any combination, is reported to function equally well whether mounted flush to the ceiling or on exposed duct work. Manufacturer: Anemostat Corp. of America, 10 East 39th St., New York 16, N. Y.

### SELF-CONTAINED HUMIDIFYING UNIT automatically maintains any relative humidity, is extremely compact.

Automatically controlled by a humidistat, this new compact, self-contained humidifying unit will maintain any relative humidity. The unit has all of its essential parts built into a

cabinet 13% in. x 143% in. x 6 in. deep and contains four humidifying nozzles, water tank with float valve, water strainer, air filter, air regulator with pressure gauge and solenoid operated valve. The nozzles are individually adjustable to allow the direction of the sprays to be set as required. Also included as a part of the

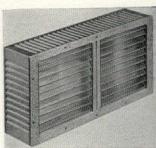


system but not contained in the cabinet is the Humidistat for automatic control. Cabinet comes complete ready for connection to air lines, water lines and electrical circuit, is reported to be economically installed. The standard unit is supplied with four nozzles that will atomize 35 lbs. of water per hr. using 5 c.f.m. of atomizing air supplied at 32 p.s.i. When specified it may be furnished in smaller capacities. Manufacturer: Spraying Systems, 4021 W. Lake St., Chicago, Ill.

### VENTILATING BLOCK harmonizes with glass block construction, provides controlled interior ventilation.

Wind-O-Brik is a new ventilating unit for use in glass block construction. Styled and sized to harmonize with standard  $73/4 \times 73/4$  in. glass bricks, it is reported to be the first device

on the market to provide controlled ventilation through glass block panels without distorting the architectural effect. Wind-O-Brik is rigidly constructed of cast aluminum, has a modern louvered exterior and four easily adjustable glass ventilators on the inside for



finger-tip control of fresh air. A weather resistant fine mesh screen built into its body protects against the entry of rain, snow and insects. According to the manufacturer, the new unit is capable of supporting any glass block wall. Corrugations in the frame provide greater mortar adherence and installation is simple. If necessary the entire front of the unit may be removed for repairs. Wind-O-Briks are available in two sizes conforming to one or two (Continued on page 164)



Pro

Visible Value

ADDS A LOT

A LITTLE

KINTRIM

MORE

### decorative and protective metal mouldings

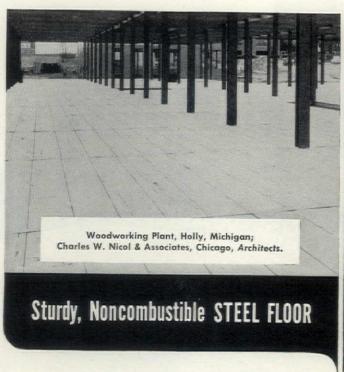
Engineered for sturdiness, designed for decorative beauty—KINTRIM Stainless mouldings enable you to achieve extra smartness in modern interiors. With graceful, lustrous KINTRIM you can exploit all the decorative and serviceable possibilities of linoleums and wall coverings. For, along counter edges, on paneled walls and wall corners, on floors and stairs—KINTRIM accents your line-of-design. Precision-made, in all gauges, to fit all coverings snugly and protectively—KINTRIM can add more apparent value to your creative work. Plan on it . . . specify it.

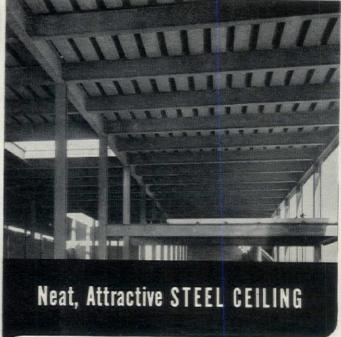


See KINTRIM in Section 13J-2 of Sweet's 1948 Architects' File—or write us, Dept. 38, for reprint



440 W. SUPERIOR ST., CHICAGO 10, ILL.





### Both in Fast!

### with Fenestra Building Panels

Fenestra Building Panels were real timesavers in this Michigan woodworking plant. The topside provided a smooth, level base for the concrete wearing surface . . . the underside ceiling ready for final spray coat of paint.

No special skills were required to lay the 221 squares of Fenestra Type D Panels. The panels lock together simply and firmly—making a platform for other work, with flat surface ideal for wheeling in other materials.

When desired, the channel side can be up and flat surface down. Or cover plates can be used to

provide two flat surfaces. The panels are primecoated, ready for application of concrete, mastic and wood or linoleum, or other surface material of your choice.

Fenestra Building Panels are suitable for all types of buildings. They save construction time and money, not only in floors and ceilings, but also in walls, partitions and roofs. The building pictured above, for example, is roofed with Holorib Insulated Steel Deck. See Sweet's Architectural File for 1948 (Section 3c-1) or mail the coupon for full information.



TYPE C FOR WALLS. Two metal members pressed together, with felt at each side to prevent metal-to-metal contact. Filled with insulation and closed at the ends, 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. Standardized in 16" width. Depth 1½" to 9". Gages 18 to 12. Type AD available with two flat surfaces.



HOLORIB ROOF DECK. Steel sheets reinforced by three integral triangular ribs on 6" centers. Flat surface for mopped application of insulation and roofing. 18" wide. Lengths to 24' to fit. Gages 18 and 20 are standard.



DETROIT STEEL PRODUCTS COMPANY Building Panels Division Dept. AF-3, 2251 E. Grand Boulevard Detroit 11, Michigan

Please send me,	without	obligation,	information	on	Fenestra	Build-
-----------------	---------	-------------	-------------	----	----------	--------



### A THOUSAND ELECTRICAL OUTLETS AVAILABLE IMMEDIATELY FOR ANY CHANGE IN STORE LAYOUT

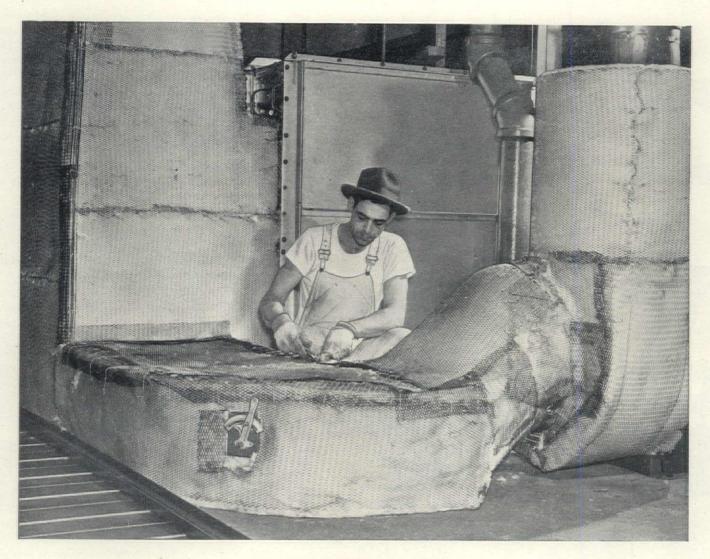
Baltimore Markets, in planning their giant food store in Camden, New Jersey, realized the need for a flexible electrical system. WALKER, pioneer in the field of underfloor distribution, supplied the answer. "Locked-in" inserts provide outlets for power and light from concealed raceways running the length and breadth of the 30,000 square feet of floor space. Connections for light and power for any point on the floor at any time in the future may be quickly and cheaply made without disturbing the terrazzo floor. WALKER "Preset" method of underfloor distribution works just as well in office buildings, banks, factories, and schools.

For further details, write for our Catalog #146 or consult Sweet's Architectural Files.



WALKER BROTHERS
Conshohocken 21, Pa.

of Conshohocken UNDERFLOOR SYSTEMS



### FIBERGLAS\*

### ... a star performer in industry's hot spots

Wherever you find hot spots—those "we-can't-afford-heat-loss" points in the plant—you'll find Fiberglas Insulating Blankets right for the job.

Why? Because they save installation time, they save fuel—and they save money. That's the proved-in-use experience at many of the country's important plants—on industrial ovens, boilers, ducts, breachings, retorts—and a long list of specialized processing equipment.

The high thermal insulating efficiency of Fiberglas results from the countless tiny air spaces enclosed in a lightweight, wool-like blanket of long, fine fibers of glass. Here is a material that will not burn, rot or decay—is non-corrosive and will not corrode metals. Fiberglas insulation holds together, is resilient, will not settle under vibration.

This basic material is further processed into blankets that meet the requirements of industry for insulating hot surfaces up to 1000° F. In the illustration, Fiberglas Insulation has been fabricated with a metal mesh exterior surface to facilitate application and provide a base for insulating and finishing cements.

Get all the facts about Fiberglas blankets—their many forms and uses. Write for "Fiberglas Insulations for Industry" . . . Owens-Corning Fiberglas Corporation, Dept. 830, Toledo 1, Ohio. Branches in principal cities.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario



### **BUILDING REPORTER**



standard glass block dimensions, can be used singly or in any number or combination. Contractor's price is about \$17.50 for the single unit, \$27.50 for the two-unit size.

Manufacturer: Consumers Co, 228 N. La Salle St., Chicago,

#### LIGHTWEIGHT AGGREGATE with insulating properties reduces weight but not strength.

Having opened a large perlite mine in southern Colorado this company is offering both processed aggregates and shipments of classified raw ore ready for furnace expansion. The processed PerAlex aggregates-actually series of lightweight, pure white particles containing millions of air cells under partial vacuum-weigh about 1/10 as much as sand and gravel. Depending on size they range in weight from 7 to 15 lbs. per

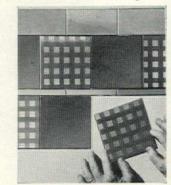
cu. ft. The larger size aggregates are used to replace sand and gravel in blocks, bricks, load bearing walls and masonry where strength and insulation are required. The smaller sizes, lighter in weight, are used for insulated fireproof roof decks, sound deadening fireproof plaster and various end products. According to the manufacturer, when standard cement is used as a binder for masonry and roof decks, and gypsum the binder for plaster, with PerAlex replacing sand and/or gravel, the plaster and concrete end products show a two-thirds reduction in weight. These end products are also nailable and sawable. PerAlex aggregates are available in Colorado and adjoining states. Classified ore will be supplied to perlite expanders east of the Rockies.

Manufacturers: Alexite Engineering Division, Alexander Film Co., Colorado Springs, Colo.

#### ALL-METAL WALL TILES achieve unusual effects in bathrooms, restaurants, recreation rooms, etc.

These two all-metal wall tiles—a chromium plated zinc tile and a new colored aluminum tile-have been introduced for use in bathrooms, kitchens, restaurants and other places

where modern styling, utility and a clean appearance are desired. Used either separately or combined in varied patterns, they form a solid, permanent tile wall that may be easily cleaned with soap and water. Tiles measure 5 x 5 in., are immune to water or moisture penetration and will not crack, buckle, chip or craze.



Chrome units come in four lustrous finishes: striped, bright, checked and satin finish. Aluminum tiles are available in five colors-ebony, gold, maroon, royal blue and sage green-with the color included as an integral part of the tile itself. According to the manufacturer, the units can be easily set with Tile-O-Chrome adhesive or any of the better oil-mixed cements prepared for wall tile installation. A corresponding 21/2 x 5 in. tile and a 5/8 x 5 in. unit are available for cap rail and feature stripe.

Manufacturer: Tile-O-Chrome Corp., 4421 North Clark St., Chicago 40, Ill.

#### PLASTIC SEALANT waterproofs mortar joints between glass blocks to eliminate cracking.

Klee Sealant for Glass Block is a new mortar sealant especially formulated for use with glass block. Developed to eliminate mortar cracking which in turn brings about

cracking of blocks, it coats the exterior mortar joints, adheres to the mortar and forms a tight flexible bond to the glass. As glass blocks are not porous, ordinary mortar cannot form a good mechanical bond. Thus cracks develop in the mortar from shrinkage, water enters,



freezes and causes the block to crack. By forming a film over the joint which expands and contracts with the mortar as well as the glass the new material waterproofs the joints. Klee Sealant is of plastic-like consistency, can be applied with a caulking gun or thinned down with solvents to brushing con-(Continued on page 168) sistency. It remains rubbery



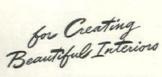




For the bright, efficient kitchen that will complete your plans for that modern house . . . for the practical beauty you need for that office building still on the drawing board . . . plan on Marlite plastic-finished wall and ceiling panels.

For any room, in any building - wherever practical beauty is reguired - Marlite colors and patterns provide the sparkling, colorful beauty and economical practicality that appeals to every client and simplifies your specification problems. See the new Marsh catalog in Sweet's File, Architectural, for complete details on Marlite wall-size panels, Marsh Mouldings, Marsh Bathroom Accessories and other Marsh products that help you do a better job. Marsh Wall Products, Inc., 301 Main Street, Dover, Ohio.

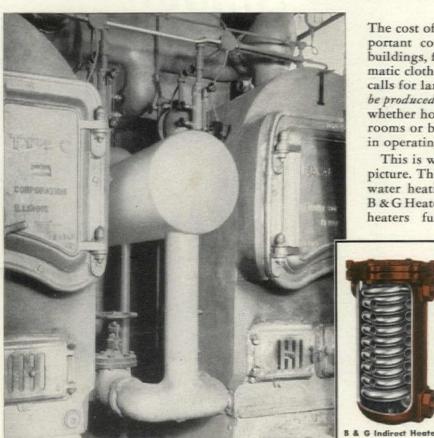




Marlite, Marsh Mouldings, Marlite Polish, Marsh Bathroom Acces-sories, Marsh C-100 Caulking, Marsh C-200 and C-300 Adhesive, Marsh C-400 Household Adhesive

### MORE HOT WATER

### FOR LESS MONEY!



The cost of heating water is becoming a more important consideration every day. In residential buildings, for example, the growing use of automatic clothes washers, dish washers and showers calls for large volumes of hot water-which must be produced at a reasonable cost. In industrial plants, whether hot water is used for process work, washrooms or both, the cost of producing it is reflected in operating expenses.

This is where B & G Water Heaters fit into the picture. There is plenty of evidence to show that water heating costs are amazingly low where a B & G Heater is installed. And remember that these heaters furnish hot water all year 'round—no separately fired heater needed!

B & G sets the pace for completeness of line as well as efficiency. From this one source you can specify all your water heater requirements...external types for use with storage tanks...tankless heaters...and submerged heaters for installation with and without storage tanks.

Send today for complete information.

Above photo shows an industrial application of a horizontal B & G Indirect Heater.



B & G Tankless Heater



B & G Tank and Heater









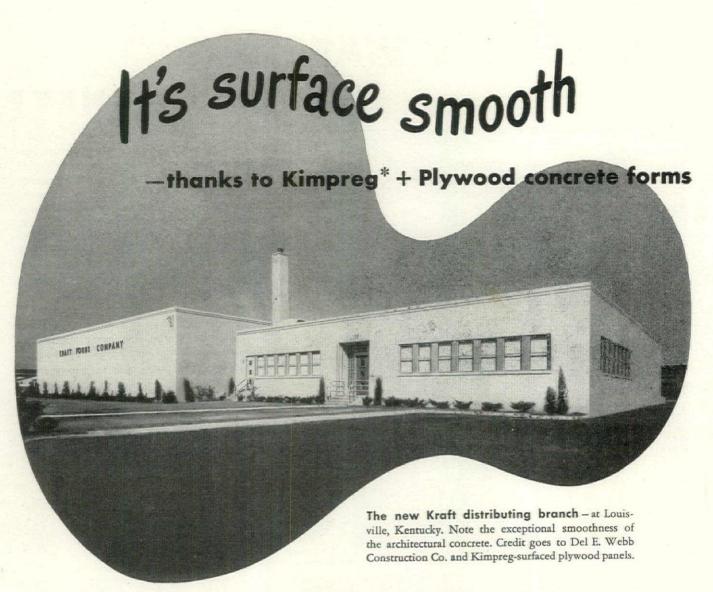
There is no greater modern convenience than an ever ready supply of hot water . . . and B & G Heaters supply it the low cost way.

WATER HEATERS FOR HOME AND INDUSTRY



Hydro-Flo

BELL & GOSSETT CO., Dept. AL-10, Morton Grove, III.



Surfaces are smooth, attractive. Kimpreg\* plastic surfacing is a hard, flint-like material that is bonded to plywood in manufacture. Its phenolic resin facing produces a remarkably even, long lasting concrete finish. Lessens rubbing down labor.

Maintenance expense cut. Plywood forms protected with Kimpreg resist the abrasion of sand, gravel and cement. On the Kraft project, these panels used a minimum of oil. They stripped fast-cleaned quickly. Light in weight and durable, they were easily moved, safely shipped to another job.

This sectional view shows how Kimpreg surfaces are fused to the outer layers of plywood. A tough, water-resistant sheathing, Kimpreg increases the abrasion resistanceadds to the life of plywood.

Ultimate cost of the forms reduced. Handled with reasonable care, Kimpreg-surfaced plywood panels can be re-used many, many times. They're unaffected by rain, or snow, or temperature extremes.

Panels are easily constructed. These versatile panels can be sawed, drilled or nailed to erect any size form desired. They're available through your local plywood jobber; are also sold by individual plywood manufacturers under the trade name Laminex, Inderon and Westboard Industrial Plastic. For full information, write us on your business letterhead.

KIMBERLY-CLARK CORPORATION Neenah, Wisconsin **Plastics Division** 





TRADEMARK

## Pittsburgh Steeltex Floor Lath Gives you both FORM AND REINFORCEMENT



Floors are placed faster with Pittsburgh Steeltex Floor Lath. Additional reinforcement is not required because Steeltex Floor Lath is a combination of form and reinforcement for both concrete and gypsum floors and roofs.

With Steeltex you get high-tensile reinforcement, uniformly spaced and laced to a water-proof cord reinforced backing. It definitely aids curing of concrete because the water cannot run through and must evaporate slowly. This provides maximum strength and reduces cracking in the slab. Also Steeltex minimizes drip and prevents waste of cement and aggregate and the resultant clean-up

expense on joists and floors below. Note that the lacing wires in Steeltex are crimped and permit separation of the backing from the reinforcing fabric which gives you automatic imbedment from the weight of the mix.

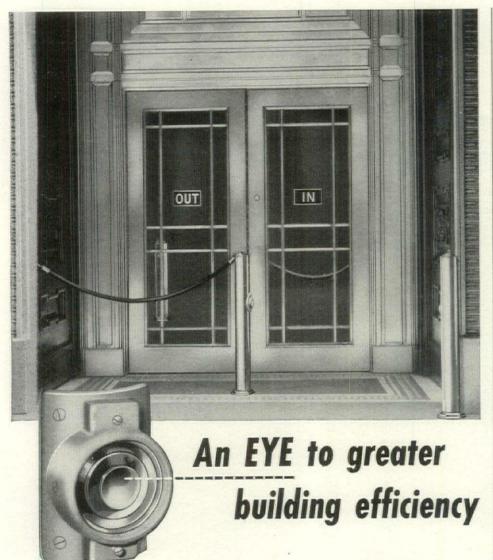
You'll like the way your jobs move along—swiftly, smoothly and at a big saving in time and material. You'll like the end result: better finished floors and roofs with Pittsburgh Steeltex Floor Lath. Specify Steeltex on your next job. For your copy of our catalog D. S. 133 write today to Pittsburgh Steel Products Co., 3232 Grant Bldg., Pittsburgh 30, Pennsylvania.

The background photo shows Steeltex—one-third actual size.

Pittsburgh Steel Products Company

Subsidiary of Pittsburgh Steel Company

### BUILDING REPORTER



Stanley Magic Doors written into the plans can make the buildings you design more efficient in three different ways.

Magic Doors eliminate unpleasant crowding around entrances - speed traffic in and out of your building.

Magic Doors make appreciable savings on heating and air conditioning costs.

Magic Doors improve service and build good will in hotels, stores, restaurants, office buildings - in almost any type of commercial or institutional building.

Stanley Magic Doors can do all this be-

cause they are operated by a photo-electric "eye" that opens them automatically when someone approaches, holds them them quickly and silently.

requirements of space or location. They can either swing or slide. They have been proved by years of trouble-free operation in important buildings all over the country. If you have not already done so, it will pay you to investigate the full possibilities of Stanley Magic Doors now. Mail this coupon for complete information today.

representative to call.

open till the passage is clear, then closes Magic Doors are adaptable to almost any

CONTROLS The Magic Door-Reg. U.S. Pat. Off. HARDWARE - HAND TOOLS - BLECTRIC TOOLS THE STANLEY WORKS, Door Control Division, New Britain, Conn. Please send me full information on Stanley Magic Doors. Check if you would like a 

and bonds tightly to mortar, glass, tile, brick and wood Available in white in quart or gallon containers, it can also be furnished in colors.

Manufacturer: American Fluresit Co., Inc., 635 Rockdale Ave., Cincinnati 29, Ohio.

#### FIRE RESISTANT FINISHES for building interiors provide effective fire protection.

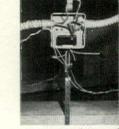
Combining quality paint with fire retardant chemicals, Fyr-Kote finishes are reported to give effective fire protection to all interior surfaces. Applicable to either new or painted areas they are said to confine and retard the flames so that even under prolonged, intense heat, coated surfaces will merely blister or scorch. Fyr-Kote resists fires in three ways according to the manufacturer: by releasing carbon dioxide to smother flames; by forming a tough film to reduce heat and oxygen from reaching wood fibers; and by utilizing a noninflammable resin base which does not support combustion The new line of fire resistant finishes includes a washable Interior Flat Finish, supplied in white and five pastel tones; a Brilliant Base Coat or white interior undercoat and a Bril liant Finish which is a lustrous white enamel. In addition the line also includes Flame Proof Clear, a transparent solu tion for flameproofing curtains, rugs, blankets, etc.

Manufacturer: Fyr-Kote Co., 1823 Washington Ave., St Louis, Mo.

### LOW VOLTAGE CONTROL SYSTEM permits more flexible switching.

Saflex Control Relay Systems make possible a greater number of switch stations to control each room's fixture-lighting-

switch by each door if desired-without increasing the wiring expense over that of more commonplace systems. Saflex is less costly because it can use cheaper wire to replace the expensive conduit used in the conventional system, since it reduces the regular 120 v. home current to a 24 v. level with a small magnetic switch



hidden in the outlet fixture box. The possibility of electrical shock on touching the light control is also reduced. The system is adaptable to a master control so that any number of rooms can be lighted from a single switch in any one room.

Manufacturer: Square D Co., Western Division, 4335 Valley Blvd., Los Angeles, Calif.

#### MERCURY SWITCH is equal in interrupting capacity to best specification switches.

This new silent mercury switch with a 10-ampere T-rating a 125 volts has been introduced by General Electric to replace the familiar 5-ampere switch. The doubling of the interrupting capacity in the new switch, according to the manufacturer makes it equal in interrupting capacity to the best specification switches and opens wide new fields for its use. The new mercury switch assures silent, smooth operation, comes equipped with white or brown plastic handles.

Manufacturer: General Electric Co., Appliance and Merchandise Dept., Bridgeport 2, Conn.

#### ONE-PIECE STAINLESS STEEL SHOWER RECEPTOR with non-slip surface is easy and inexpensive to install.

Deep drawn from 16 gauge 20 per cent clad stainless steel (Continued on page 172) this one-piece shower receptor

City.....State....

### Special to the Waldorf! Bigelow's 48' x 69' Rug!





### Special to <u>You!</u> The Same Custom Service for <u>Your Problems!</u>

Breath-taking in size—breath-taking in beauty! That's the specially designed and woven Bigelow Rug master-piece you see above, in New York's famed Waldorf-Astoria Hotel!

Our designers planned it around the World Tree motif—to harmonize with the Scandinavian inspired décor. Our weavers loomed it—the largest rug ever produced by Bigelow—to cover over 3300 square feet of the Waldorf's main lobby!

Perhaps this is the most unusual assignment ever filled by Bigelow craftsmen. But the Bigelow service —

specialized, custom planning by the Bigelow Carpet Counsel—is entirely usual.

If you have a problem—bring it to our Carpet Counsel. We offer the most complete and efficient service there is.

Let our Carpet Counsel experts help you get the most value from every carpeting dollar. Advice on colors and designs. Timesaving recommendations of carpets suited to your problems of beauty and wear. Supervision right through to the final installation. One of

our 26 Carpet Counsel offices is near you—waiting to help. Call them in!

### Bigelow rugs and carpets

Beauty you can see . . . quality you can trust . . . since 1825



are an insurance policy on your reputation

TALLY W. PATT

Your good reputation thrives or

falters largely on the performance of the

fixtures you sell. It's very important, therefore,

that your fixtures deliver rated light output, provide long

lamp life and give trouble-free operation . . . the kind of performance Certified Ballasts are designed to supply.

Certified Ballasts are better . . . because they are built to rigid specifications . . . then tested and checked by independent, impartial Electrical Testing Laboratories, Inc.

That's why commercial and industrial fluorescent installations give more lasting satisfaction when they're equipped with Certified Ballasts.



 All Fleur-O-Lier fixtures and Certified Lamps with circline tubes have Certified Ballasts.

### BALLAST MANUFACTURERS

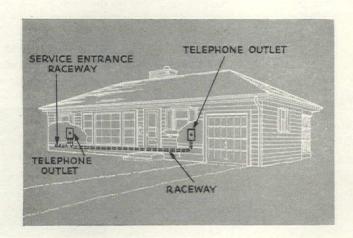
Makers of Certified Ballasts for Fluorescent Lighting

2116 KEITH BLDG., CLEVELAND 15, OHIO



Bertram Weber-Architect

### A TELEPHONE RACEWAY COMES WITH THIS COTTAGE



A raceway for concealing telephone wires is an inexpensive feature which adds a lot of convenience to any new home.

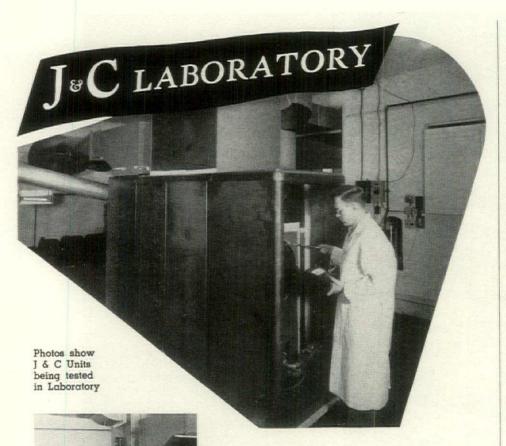
Installed within walls during construction, a few sections of pipe or electrical conduit will carry telephone wires to conveniently located outlets. A raceway eliminates the need for exposed wiring on walls or woodwork and assures modern built-in telephone outlets.

Your Bell Telephone Company will be glad to help you plan telephone wiring facilities scaled to cottage or mansion. Just call your Telephone Business Office and ask for "Architects and Builders Service."

BELL TELEPHONE SYSTEM



### BUILDING REPORTER



### PROVES PERFORMANCE

PRECISE MEASUREMENT . . . Of exact static pressure drop across each J & C unit and proper blower size for each J & C Model.

**EXHAUSTIVE TESTS...** of J & C units provide installation engineers with the data needed for correct installations.

ONLY IN THE LABORATORY . . . may technicians definitely establish:

Correct Pressure Loss Measurements Proper Temperature Rise Accurate Flue Gas analysis Known Heat Transfer

NO GUESSWORK . . . The J & C laboratory, working for you, permits accurate installations because performance capabilities are precisely determined.

### THE COMPLETE LINE . . . . COMPLETELY PROVEN

J & C, America's largest and most complete Warm Air Heating Line, offers over 100 types and sizes with outputs from 3,800,000 down to 100,000 Btu in the Famous Tubular Series . . . other models down to 52,500 Btu. Exact engineering plus endless testing provide the J & C features that give you an "edge" when you specify or install J & C.



A PRODUCT OF

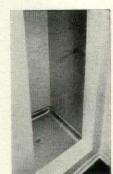
JACKSON & CHURCH COMPANY, SAGINAW, MICHIGAN

WORK WELL DONE SINCE '81



with threshold is attractive, easy-to-clean and sanitary. The

interior surface is specially polished to a non-slip glossy satin finish that harmonizes with any color scheme. The under side, coated with 3-M underseal asphalt rubber emulsion to prevent corrosion, provides a cushion base. Installation is reported to be simple and inexpensive and the one-piece construction to assure against leaks. Receptor is stocked in five popular sizes, is available in other sizes on special order. It is supplied



with drain and chrome plated strainer, is also furnished without threshold.

Manufacturer: The Perfix Co., 4509 Firestone Blvd., South Gate, Calif.

#### HOME LOCK presents features of more expensive safeguards.

Sargent & Co.'s newly developed lock for outside doors of small homes offers several big-lock features at a well

moderated cost, \$18 retail. The keyhole is built into the center of the knob to simplify locating and unlocking; a quarter turn of the key is all that is needed to release the lock and open the door—turning the knob is unnecessary since the key releases both latch and



bolt. Available in a variety of finishes, the lock has integral parts of cold forged steel and extruded brass.

Manufacturer: Sargent & Co., New Haven, Conn.

### METAL LETTERS AND NUMBERS for interior and exterior use blend with new or remodeled buildings.

Available in a choice of five popular styles, these exceptionally legible, solid bronze and aluminum architectural letters and numbers add dignity and trim appearance to new or remodeled buildings. Adaptable to almost any style of architecture, they come with a polished, matte or satin finish, range in size from ½ in. to 14 in. high. The larger sizes are appropriate for names and numbers on building exteriors, the smaller sizes for identification on doors and walls. Knight letters and numbers come with spurs cast on the back or with drilled holes. Manufacturer: H. W. Knight & Son, Inc., Seneca Falls, N. Y.

#### MAGNESIUM FOLDING CHAIRS are lightweight and durable, can be easily lifted, folded, unfolded and stored.

Boasting an easily-folded, extremely lightweight magnesium frame, these new Solid Kumfort Folding Chairs combine

comfort, strength and durability. In use they resemble a deeply padded permanent piece of furniture, yet when folded they measure only 7½ in. thick for convenient storage. They fold in one simple motion and stack flat. Styled by Schorn Asso-



ciates, the new chair is available in two models, in natural metallic, mahogany, walnut or maple finish. The sponge rubber cushions are upholstered in colored leatherette.

Manufacturer: Louis Rastetter & Sons Co., 1300 Wall St., Ft. Wayne 1, Ind. (Technical Literature, page 176)



### ARE THE KIND WOMEN DREAM ABOUT!

Women, as you know, are largely "sold" on a house by its "kitchen appeal". Recognizing this, Raymond Loewy has given AMERICAN KITCHENS many demonstrable advantages ... features women instantly recognize as dis-

tinct benefits... extras that will lead them to recommend you and the houses you build. American Kitchens are outstanding, yet moderately priced. See them—at your local distributor's or dealer's.



Like Having Loewy On Your Staff

American Kitchens, designed by Raymond Loewy Associates, are as structurally strong as they are handsome and convenient. Typical of their functional design is this new-type faucet. Handles are lever-type and may be turned on and off even when woman has hands full! Spray attachment operates by push-button control.



### CHECK THESE EASY-TO-SEE ADVANTAGES!

(Just a few of many incorporated in American Kitchens)

- Extended "Knee-Action" counter tops—permit continuous knee room for natural stance.
- 2 Concealed pulls for streamlined beauty.
- 3 Double-action, spring-type hinges hold doors open or closed without catches.
- All corners rounded protects against scratches and torn clothing.
- 5 Linoleum counter tops Flush-sealed between cabinets — waterproof, dirtproof, easy to clean.
- 6 Finger-tip, lever-type faucet handles on or off with a flick of a finger!
- 7 Backsplash faucet mounting eliminates dirtcatching ledge, permits larger bowl.
- 8 Drawers rounded inside for easy cleaning.
- 9 Drawers glide on special nylon slides open and close silently, effortlessly.
- Concealed cutting board, special cuttery drawer (lined with linoleum).
- Double wall, insulated construction for noiseless operation of doors and drawers.

FREE Complete Architects-Builders File available at no cost or obligation. Gives blueprints of outstanding kitchen treatments for varying layouts, equipment specifications, etc. Write today for name of your local distributor or dealer

### AMERICAN CENTRAL

Division - Avco Manufacturing Corporation . Connersville, Indiana

# WHY DOES CCC\* MEAN SMOOTHER OPERATION?

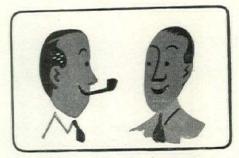


These are only three advantages! Columbia-Controlled-Construction has developed many other improvements and new features in the new Columbia Venetian Blind . . . steel or aluminum slats. A Columbia dealer will be glad to show you . . . help you choose the most suitable and economical blind for your particular institutional or commercial use. Ask us for the name of the nearest dealer.

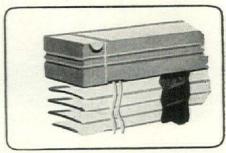
\*"CCC" means Columbia-Controlled-Construction



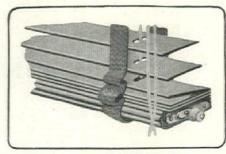
THE COLUMBIA MILLS, INC. . 225 FIFTH AVENUE, NEW YORK 10, N. Y.



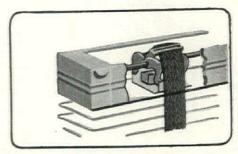
"IF YOU'RE LOOKING FOR A VENETIAN BLIND that works like a charm . . . cuts down maintenance cost, here's a tip. I found all the answers in Columbia-Controlled-Construction, so my advice to you is to specify Columbia. Here are some of the reasons . . ."



SMART APPEARANCE, SMOOTH OPERATION... Columbia's handsome new headbox is a miracle of efficiency, too. All-steel, galvanite-plated, rustproof. Mechanism entirely enclosed. No fascia required.



WORKS LIKE A CHARM... NEW AUTOMATIC STOP. Radically new, radically better, and exclusive with Columbia! Just release the cords... blind stops automatically just where you want it; cords can't slip.



EASY TO RE-TAPE OR SHORTEN... Tape Clip-Grip, a new feature exclusive with Columbia, takes all the headaches out of re-taping blinds . . . reduces cost to a minimum.



Here's why you'll want to specify Honeywell P.H.C. for your clients

- Saves fuel—heating costs average
  20% less
- Increases tenant satisfaction easier rentals
- Promotes longer leases, less turnover
- Tenants will pay higher rentals for P.H.C. comfort and convenience.

UNIQUE in both design and construction, the 21-story Promontory Apartments, now under way on Chicago's South Shore Drive, represent a splendid modern example of reinforced concrete construction.

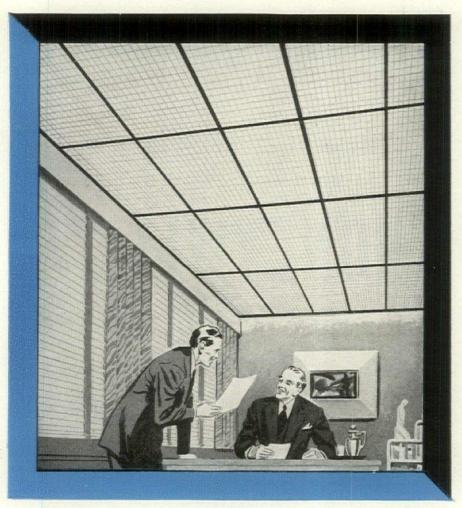
Specially designed steel frame picture windows used throughout the 122 suites take full advantage of the lake shore view overlooking Promontory Point. Other distinguishing features include sound-insulated double walls and radiant heating with Honeywell Personalized Heating Control. With a thermostat in each apartment, every tenant will select just the individual temperature desired. This means not only the comfort of home heating in every apartment, but important operating economies as well. Tests prove that among present installations P.H.C. systems are saving fuel at an average rate of 20 percent.

And in existing buildings, too, Personalized Heating Control brings these same benefits. Installation is fast, simple—without inconvenience to tenants. Get complete facts about P.H.C. now. Write Minneapolis-Honeywell, Minneapolis 8, Minnesota. In Canada: Toronto 12, Ontario.



PERSONALIZED HEATING CONTROL—Honeywell's homeheating comfort contribution for apartment dwellers.

### TECHNICAL LITERATURE



### Ceilings that Glow with Light!

### A spectacular new development based on VINYLITE Plastics

IT HAS NEVER been achieved before—a ceiling that glows from wall to wall with soft, glareless, shadowless light. Light that pervades every corner. Light that seems to come from everywhere at once. Enough light for all general store or office illumination. But never too much light that would produce harsh reflections and eye-straining brightness.

It is the pure, colorless light of fluorescent tubing—shielded and directed and diffused by a glowing, light-transmitting grid made of VINYLITE Brand rigid Plastic.

Stores, offices, showrooms, theater lobbies and other public places will soon be transformed by this new and spectacular lighting installation.

Light transmission is but one of the properties that make VINYLITE Plastic an ideal choice for such a use. It is easy

to clean, non-warping, non-aging, dimensionally stable, non-flammable, light in weight—and if color is desired it can be produced in all the shades of the rainbow.

If you are building, remodeling or redecorating a store, office or similar interior, remember "the ceiling that glows with light!"

Write Department DA-14 for further information on electrical properties and uses of VINYLITE Brand Plastics.

Data courtesy: Benjamin Electric Mfg. Co., Des Plaines, III.



PLASTICS

BAKELITE CORPORATION

Unit of Union Carbide and Carbon Corporation 1 30 East 42nd Street, New York 17, N.Y.

ENGINEERING. Simplified Engineering For Architects and Builders. By Harry Parker. John Wiley & Sons, Inc., 440 4th Ave., N. Y. 245 pp. 51/2 in. x 8 in. Price \$3.00.

One of the rare things in technical literature is a small book of simplified engineering for architects and builders which contains something besides sets of charts and tables and stripped-down instructions on where to put your finger on the right size beam. This book does contain more. Written by a professor of architectural construction at the University of Pennsylvania, it has brisk, clear explanations of the principles of mechanics, and design procedures in timber, steel and reinforced concrete. The author has obviously worked hard to attain very practical explanations of theory, as nearly understandable as possible to someone who has been away from classrooms for some time. In working to attain this end, he also has written an unusually clear textbook.

Timber Engineer's Handbook. Edited by Howard Hansen. John Wiley & Sons, Inc., 440 4th Ave., New York. 882 pp. 51/2 in. x 9 in. Price \$10.00.

In this thick book is correlated information about the advances made in the past ten years in the utilization of wood as a structural material. Wood properties, grading specifications, working stresses, preservatives, fastenings, design formulas, and methods are discussed, with many illustrations and tables, and coverage of all the wood varieties in use in this country. Sections on glued laminated construction and plywood are included.

**SAFETY.** Best's safety directory 1948. Alfred M. Best Co., Inc., Best Building, 75 Fulton Street, New York 7, N. Y. 494 pp. 8 in. x 11 in. Price \$5.00.

Significant because it illustrates the ever-increasing thought being given to detailed planning against accidents in industrial and public buildings, Bests Safety Directory has been issued a second time, in the new 1948 edition, 50 per cent bigger than it was last time out. Profusely illustrated and well indexed, it is a catalogue of safety devices—from asbestos mittens to carbon monoxide indicators—with directions, definitions, and sources.

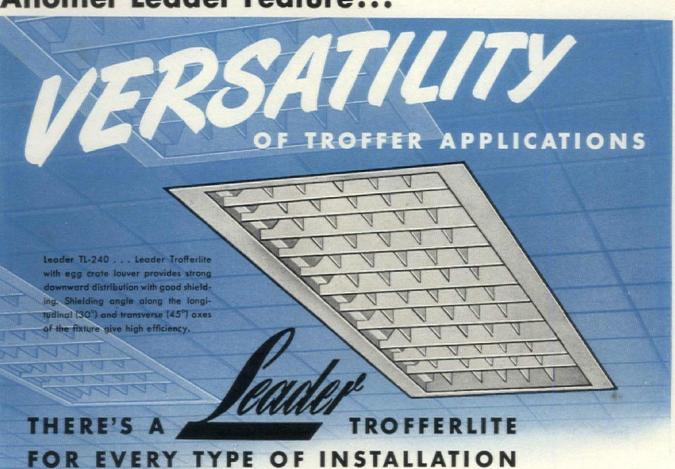
FABRICATION METHODS. Standard Welding Symbols and Rules for Their Use. American Welding Society, 33 W. 39th St., New York 18, N. Y. 68 pp. 6 in. x 9 in. Price 50 cents.

These 1947 Standard Welding Symbols provide the means of placing complete welding information on drawings. Covering 34 of the welding processes used in various industries, this revised edition represents an ultimate in simplification and should meet the needs of industry. In the 1947 Standard the method of presentation has been revised from a form of rules, to a step-by-step presentation in lecture-type form. In addition, the rules have been expanded to include a means of indicating welds having root penetration. Other features of the new standard include elimination of the confusing terms "far side" and "near side" from the nomenclature, the addition of 45 illustrations showing various applications of the symbols and a chart which provides a compact summary of the use of the welding symbols for ready reference.

Technique of house nailing. Housing and Home Finance Agency, Washington, D. C. 53 pp. 6 in. x 9 in. Price 20 cents.

Two factors make the issuance of this pamphlet by the Housing and Home Finance Agency in Washington particularly timely. One is the shortage of (Continued on page 180)

#### **Another Leader Feature...**



Leader new type Trofferlites are offered in a variety of types and models
to fit every lighting need: 12" wide, 24" wide and 13¾" wide. All styles can be
furnished in deep (7¾s") and shallow (6") construction. All are available with or without
trim. 12" and 24" units are available open, louvered, baffled or glass enclosed.
13¾" width fixtures are available only with Holophane controlens. All 2 and 4 light
models are available for instant start operation. 12" Trofferlites can be furnished
for 1, 2 or 3 40-watt lamps; 24" for 2, 3 or 4 40-watt lamps; 13¾" for 2 and 3 40-watt
lamps. 12" and 24" deep Troffer units can be had for use with 96" and 72" Slimline
tubes. Leader Trofferlites are finished inside in high gloss baked white enamel, with gray
satin aluminum exterior.

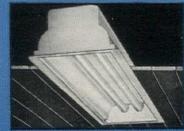
COMING SOON: Leader's New Trofferlite Catalog. Write for your copy on letterhead, please, to

#### LEADER ELECTRIC COMPANY

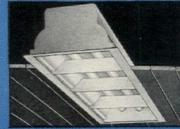
3500 N. KEDZIE CHICAGO 18, ILLINOIS

WEST COAST FACTORY - 2040 LIVINGSTON STREET, OAKLAND 6, CALIFORNIA

#### Cutaway Views Showing Typical Installations



Leader T-240 Open Type Trofferlite. Designed for installations where shielded sources are not considered a necessary requirement.



Leader TB-240 Trofferlite with Baffle. Ideal for use where high levels of illumination and uniformity of light with minimum shadows are desired.



Leader TG-240 Glass Enclosed Trafferlite. Provides low cost lamp shielding due to factrolite glass panel. Light distribution is symetrical with high overall efficiency.

# 1,900,000 Cubic Feet of FIBERGLAS\*-FILTERED AIR DOL MINUTES

John H. Graham, Cleveland, Architect.

System designed by John Paul Jones, Cary & Millar, Cleveland Consulting Engineers.

Equipment manufactured by American Blower Corporation.

A complete change of air takes place every two minutes at this prizewinning Cleveland Graphite Bronze Company plant, located in Cleveland, Ohio. The ventilating system in this huge plant draws 1,900,000 cubic feet of air per minute through 8" thick packs of Fiberglas fibers in the air washer, providing clean, filtered air for the entire plant. The system has been in operation over 5 years and the packs of glass fibers have not required replacement.

The inherent characteristics of Fiberglas fibers account for their use by the leading makers of equipment for air washing, evaporative cooling, humidifying and dehumidifying.

The fibers are, in fact, long, fine "rods" of glass—inorganic, non-cellular, non-absorbent, non-odorous. And the pack presents an unusually large surface area for liquids—this being the key to higher efficiencies.

Fiberglas packs also are used as eliminator mats on the discharge side of washers or spray chambers to gather any free particles of water entrained in the air stream.

Before specifying any unit as a part of the systems you are designing, make certain that it is equipped with Fiberglas packs. For the names of manufacturers of this equipment, write Owens-Corning Fiberglas Corporation, Dept. 830, Toledo 1, Ohio. Branches in principal cities.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario.



\*FIBERGLAS is the trade mark (Reg. U. S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.

#### GLASS FIBER PACKS ...

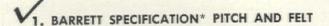
For Air-Washing, Cooling, Humidifying and Dehumidifying Units

#### "DUST-STOP" AIR FILTERS . . .

For Designing into Heating, Ventilating and Air-Conditioning Systems (write for Booklet A5.2.1)

# Why the Barrett\* CIFICATION

is the toughest, longestlasting, best-value built-up roof that can be made



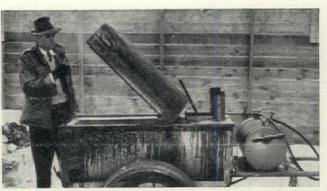
- 2. Barrett Application Methods
- 3. The Gravel or Slag Armored Surface
- 4. The Barrett Approved Roofer

The superiority of the Barrett Specification\* Roof is due to the combination of highest-quality roofing ma-

terials, the protective surface of gravel or slag, and scientifically standardized application techniques used by Barrett Approved Roofers. The result is a roof so good that it can be & bonded against repair and maintenance expense for periods up to 20 years—a roof so good that THE BARRETT DIVISION it regularly outlasts the bonded ALLIED CHEMICAL & DYE CORPORAT period by many years.



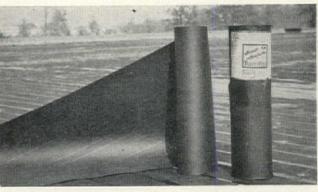
40 Rector Street, New York 6, N. Y. 36th St. & Gray's Ferry Ave. 2800 So. Sacramento Avenue Birming Chicago 23, III. Alaba In Canada: The Barrett Company, Ltd. 5551 St. Hubert St., Montreal, P. Q.



BARRETT SPECIFICATION\* Pitch is the only pitch that measures up to the high standards of the Barrett Specification\* Roof. It is refined from top-quality coal-tar, and recommended application temperatures have been carefully developed. Used according to Barrett specifications . . .



IT PROVIDES the life-prolonging oils that are virtually immune to climatic variations. Barrett Specification\* Pitch is actually preserved by water, and possesses creosote properties that retard fermentation and the development of fungi.



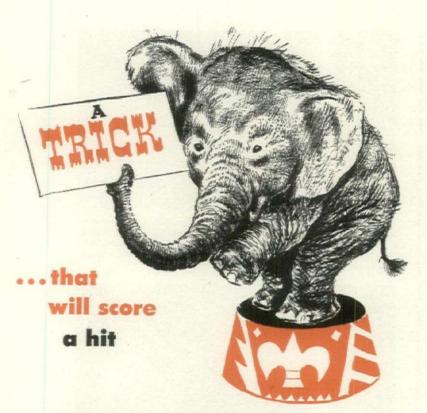
COMPANION TO Barrett Specification\* Pitch is Barrett Specification\* Felt-the only felt good enough for a Barrett Specification\* Roof. It is made from carefully selected and fabricated stock and special coal-tar saturant to meet rigid manufacturing standards.



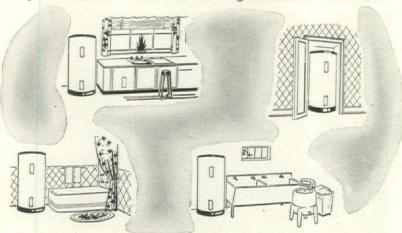
THE UNIFORM texture and thickness of Barrett Specification\* Felt are appreciated by experienced architects and contractors Accurately spaced longitudinal guide lines marked on the felt are an aid to quick and accurate application.

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

#### TECHNICAL LITERATURE



And it's easy to do-install an Electric Water Heater and profit from the appreciation of the home-buyer. There's a trend toward automatic Electric Water Heaters-they're the home-buyer's preference. But there's no trick to installing them.



#### How to reduce construction costs and add customer features

Construction costs can be reduced with Electric Water Heaters because there's no flue or vent, so installation can be made anywhere-in a closet, in the kitchen, in the bathroom, in the utility room. Hot water lines can be short, cutting piping cost

Customers like Electric Water Heaters because they are: (1) AUTOMATIC (con-

tinuous hot water, no attention); (2) CLEAN (smokeless, sootless); (3) DE-PENDABLE (short hot water lines; no flue or vent); (4) TROUBLE-FREE (as electric light); (5) ECONOMICAL (plenty of hot water, fully insulated storage at low cost); (6) Safe (all-electric); (7) FLEX-IBLE INSTALLATION (can be located in living quarters; does not consume oxygen).

Electric Water Heater Section . NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION 155 East 44th Street, New York 17, N. Y

FOWLER . FRIGIDAIRE . GENERAL ELECTRIC . HOTPOINT . WHITEHEAD . KELVINATOR . MONARCH . NORGE . PEMCO . ELHUBER . SELECTRIC . SMITHWAY . SUNBEAU . THERMOGRAY . O-WATT . UNIVERSAL . WESIX . WESTINGHOUSE

## It's EASY to

... in a house wired for an Electric Range!

nails in many areas of the country, and the other is a lack of basic knowledge among many carpenters, particularly younger ones—the result of the great lack of apprentice training in the Thirties. The pamphlet can teach the techniques of nailing, which are more varied than most people and many carpenters think, for better construction with fewer nails.

DOORS. An Improved Prefabricated Ellison Balanced Door Unit. Ellison Bronze Co., Inc., Jamestown, N. Y. 12 pp. 83/8 x 11 1/16 in.

Containing many illustrations, detail drawings and specifications, this brochure comprises full information on Ellison Balanced Doors. These doors, used primarily for entrances, are complete and self contained units consisting of door, frame, threshold, weatherstrip, operating mechanism and hardware.

MOTORIZED DOORS. Kinnear Motor Operated Doors. Bulletin No. S-17. The Kinnear Manufacturing Co., 7000 Fields Ave., Columbus, Ohio. 8 pp. 81/2 x 11 in.

Kinnear Power Units which provide Kinnear commercial and industrial doors with push-button control are the subject of this pamphlet. The various units for bracket and wall mounting are effectively illustrated with large photographs, and their construction features are discussed. Emergency manual operation, control stations, mounting details and suggested specifications are also reviewed.

DIRECTORY. Heating & Ventilating Buyers' Directory 1948. The Industrial Press, 148 Lafayette St., New York, N. Y. 320 pp. 55% in. x 81/4 in. Price \$1.00.

This directory lists the sources of supply for equipment and materials used in piping, air conditioning, refrigeration, ventilation, heating and air sanitation. A trade name section includes both current and obsolete trade names together with the product with which it is associated and the manufacturer's name. Street addresses of manufacturers are listed separately in the closing section.

FLUE PIPE. Metalbestos Gas Vent and Flue Pipe. Williams-Wallace Co., 168 Hooper St., San Francisco 7, Calif. 12 pp. 81/2 x 11 in.

The advantages of Metalbestos Gas Vent and Flue Pipe and how it answers the problems of gas appliance venting are set forth in this catalog. Cut-away drawings show the vent's patented pipe-within-a-pipe construction, photographs illustrate its available shapes. Other sections picture and describe the complete line of fittings for both round and oval Metalbestos, give specifications, dimensions and weights of pipe and fittings and installation instructions.

ATTIC VENTILATION. Attic Ventilation Code. Propeller Fan Manufacturers' Association, 5-208 General Motors Building, Detroit 2, Mich. 7 pp.  $81/2 \times 11$  in.

This code sets forth the basic requirements for satisfactory attic ventilation. Its scope is not confined to any specific type of structure or equipment, thus the basic items governing the installation of attic ventilation are covered under the following headings for clarity: geographical variations in house structures, location of ventilating unit, type and characteristics of fan unit, air changes per minute, air velocities through grille and fan unit, attic discharge vents, fan housing and plenum chamber, protection against winter heat-losses, electrical installation and installation and operating sugges-(Continued on page 184)



To make your customers remember you with pleasure, popular home-buyer trends must be recognized. Today the trend is to Electric Ranges. Another million American families switched to Electric cooking last year. Estimates indicate that this year over a million more Electric Ranges will be installed.

This is a definite trend that cannot be ignored. Progressive builders recognize this trend. Electricity is a "must" in any house, and it's simple and economical to include wiring for an Electric Range leading to a range outlet in the kitchen at the time of construction. This is assurance that the houses you build are not only modern today, but will stay modern for years to come!

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

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

0000

Follow the trend: YOUR HOUSES

Another 1,000,000 American families switched to Electric Cooking last year



Better Homes & Gardens' job is to sell families on what's new and good in homes. We help create a demand for better homes — help create a group of clients ready to appreciate and welcome and enjoy the new ideas you build into houses for them. That's why it's a good idea for you to keep an eye on trends as they're These advertisers have found BH&G a top medium for sales:

idea for manufacturers to catch this trained audience with their ads in BH&G. Take a look at our March issue. There's a rambling house that fits a 50-foot lot, a Five-Star house that requires a minimum of maintenance, and two articles on intelligent remodeling.

APPLIANCES Admiral Refrigerator Ben-Hur Home Freezer Boss Oil Ranges Cadillac Vacuu Caloric Ranges Caloric Ranges
CP Gas Ranges
Dexter Washing Machine
Easy Washing Machine
Frigidaire Electric Range
Frigidaire Refrigerator
GE Electric Range
GE Home Freezer GE Electric Range
GE Home Freezer
Grand Gas Range
Harvester Home Freezer
Hoover Vacuum
Hotpoint Matched Kitchens
Hotpoint Matched Kitchens
Hotpoint Refrigerator
Kelvinator Refrigerator
L & H Gas Range
Majestic Home Incinerator
Maytag Dutch Oven Gas Range
Norge Washing Machine
Oriole, Acorn & Vulcan Gas
Ranges

Ranges
Philco Refrigerator
Premier Vacuum
Roper Gas Range
Servel Gas Refrigerator
Voss Washing Machine

ELECTRICAL & WIRING Amer. T. &. T. Bell System Burgess Batteries Cutter-Hammer Fuse Boxes Delta Flashlights Onan Power Plants

#### HANDYMAN

Casco Glue
Durham's Rock Hard Putty
Lowell Paint Spray
Plastic Wood
Schalk Handyman's Aids
Smooth-On Cement

Aldrich Automatic Hot Water
Heat
American Radiator Automatic
Arvin Portable
Bennett-Ireland Fireplace
Burnham Base-Ray Automatic

#### HEATING & AIR CONDITIONING (Cont'd)

Burnham Portable Electric Steam Radiators Chelsea Attic Fans Chelsea Attic Fans
Crane Automatic
GE Hot Water Automatic
Heatilator Fireplaces
Hýdro-Flo Automatic
ILG Kitchen Ventilator
Janitrol Automatic
Minneapolis-Honeywell Controls
Mueller Automatic
Oil-O-Matic Mueller Auto Petro Automatic Waterbury Auto

#### INSULATION

Baldwin-Hill Balsam-Wool Gold Bond Kimsul Zonolite

#### - MILLWORK & LUMBER - M SERVICES

Orylt Greenhouses
Plan-a-Home Model Kit
Prestile Wallboard
Rusco Comb. Storm-Screen Sash
Southern Shower Doors
Weldwood
Western Pines
Weyerhaeuser Services

PAINTS

Alston-Lucas Paint
Albron Pigments
Bruce Terminix
Cabot Paint
Cuprinol Wood Preservative
Kentone
Kyanize
Lin-X Clear Gloss
Luminall
Minwax Floor Finish
Nu Enamel
O'Brien
Paratex Paint
Sherwin-Williams

#### PLUMBING

American Central Kitchen American Standard Fixtures Burks Water System Capitol Toilet Seat Crane Fixtures

#### PLUMBING (Cont'd)

PLUMBING (Cont'd)
Deming Water System
Eljer Fixtures
GE Hot Water Heater
Goulds Water System
Kitchen Maid Kitchen
Kohler Fixtures
Mertland Hot Water Heater
Midwest Kitchens:
Myers Water System
Orangeburg Pipe
Roto-Rooter Sewer Cleaner
Salter Fixtures
Sepco Hot Water Heater
Sherman Fixtures
Smithway Hot Water Heater
Toostmaster Hot Water Heater
White Hot Water Heater
White Hot Water Heater

#### WALL COVERING

WALL COVERING
Imperial Wallpaper
Sanitas Fabric Wall Covering
Trimz Ready-Posted Wallpape
United Wallpaper
York Wallpaper

#### MISCELLANEOUS

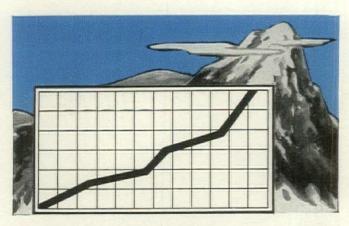
Armstrong Linoleum
Barre Guild Monuments
Dunbrik & Dunstone
Johns-Manville Roofing
Perma-Stone Siding
Portland Cement
11. S. Steel U. S. Steel

CIRCULATION OVER 3,000,000

America's First Service Magazine



#### **ANNOUNCEMENTS**



#### Point for Peak Sales with Lo-K" INSULATION

Lo-"K" flameproofed Cotton Insulation gives you every advantage you could possibly have for doing a record insulation business in the current and oncoming building and repairing boom. Note these special features that few, if any other insulations can give to an equal degree.

- 1. Lightest weight type of insulation on the market. Requires only one third the normal trucking and warehouse space. Installs at a saving in time and labor up to 40 per cent. Easier and more economical to stock, handle and install. Does not sag or settle.
- 2. Lowest "k" factor (.242 per inch) or thermal conductivity of any recognized insulation material. Provides from four to 36 per cent greater insulation efficiency.
- 3. Saves up to 30 per cent in fuel bills when used in both ceilings and side walls-more than ordinary insulation.
- 4. Special vapor paper barrier prevents all risk of internal or external damage from moisture condensation.
- 5. Flameproofed. Resistant to rot and vermin. Non-irritating to the skin.
- 6. Sized for standard construction in convenient, easy-to-handle blanket type rolls.
- 7. Nationally advertised. Profitably priced. Liberal terms. Backed by Lockport's 78 year old reputation.

Lo-"K" flameproofed Cotton can automatically make you the top insulation dealer in your town. Write for full details.

#### LOCKPORT COTTON BATTING CO.



WASTE DISPOSAL. Industrial Waste Disposal for Petroleum Refineries and Allied Plants by W. B. Hart. Petroleum Processing, 1213 West Third St., Cleveland, Ohio. 103 pp. 85% in. x 111/4

A complete treatise on the subject of industrial waste disposal, this book gives up-to-date information and authoritative reference data on the effective, economical control and disposal of petroleum wastes. The text, a series of 20 original articles reprinted from Petroleum Processing magazine, is clearly presented under the main divisions: economical and legislative aspects, kinds of wastes, effects of industrial wastes, preliminary investigations and treatment of oil-containing wastes. Methods for determining, measuring and controlling industrial wastes are covered in a practical way with appropriate sketches and diagrams. Fully illustrated, the work includes 68 detailed illustrations and 11 tables.

Septic Tank System, Circular Series G 5.5. Small Homes Council, Mumford House, University of Illinois, Urbana, III. 6 pp. 81/2 in. x 11 in.

For those building or modernizing homes in areas where sanitary sewers are not available, this non-technical illustrated circular offers practical information on septic tanks. It describes how the system works, lists the essential parts of the system and discusses the design, construction and size of the tank. A helpful chart elaborates upon the materials used and installation of the system.

#### REQUESTS FOR LITERATURE

Peter Alkemade, Kerkehout 33, Wassenaar (Z-H) Netherlands. DONALD O. ALLAN, Department of Public Works, Provincial Hospi-(Continued on page 188) tal, Essondale, B. C., Canada.



faction with the lighting job -Better light for office, store, factory-Lack of intermediate burn-outs-No lamp replacement during working hours - Complete absence of flickering; practically no de-terioration throughout the entire life of the tube

COLOVOLT Cold Cathode lamps give an even, glare-free light that is soothing and pleasing, no spots of greater or lesser brilliance-no flicker; start instantly—have low surface brightness, give true color discrimination.

COLOVOLT Lighting Fixtures are modern in design—and lend themselves to all interior and exterior treatments. They are Union made and Un-







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

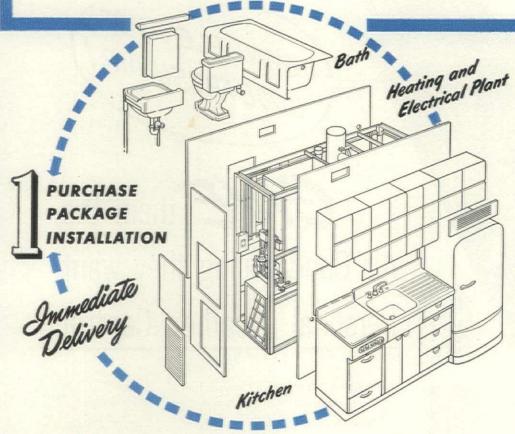
derwriters approved.

GENERAL LUMINESCENT CORPORATION

622 So. Federal Street

Chicago 5, Illinois

# **Ingersoll** Utility Unit Proves Its Economy, Convenience, Adaptability in Small Homes Construction!



The Ingersoll Utility Unit is a single, engineered assembly of the fixtures, appliances, controls and fittings of Kitchen, Bathroom, Heating Plant; plus all basic plumbing and electrical lines.



#### BUILDERS, ARCHITECTS, HOMEOWNERS ENTHUSIASTIC OVER PERFORMANCE UNDER ACTUAL LIVING CONDITIONS!

Proved practical, economical and satisfactory in every way in thousands of installations, the Ingersoll Utility Unit offers architects and builders the means to speed up small home construction and give greater value.

The Ingersoll Utility Unit is compact, requiring less than 80 square feet of floor space. It is complete, simplifies time-consuming specifications—everything comes with one purchase, from one source, right when it's needed. Every part of the Unit is of the finest quality—not a makeshift collection of fixtures—but an engineered assembly of top quality products.

If you haven't learned of all the time and space saving features of the Ingersoll Utility Unit, it will pay you to get the details immediately. Just mail the coupon today—we'll send you complete information explaining how the Ingersoll Utility Unit will help you produce better homes faster, more economically.

Installations in 316 Cities Prove That Unit Meets

Local Requirements, Fits Individual Plans and Needs



#### MAIL THIS COUPON TODAY

INGERSOLL UTILITY UNIT DIVISION Borg-Warner Corp., Dept. F-3 321 Plymouth Court, Chicago 4, Ill.

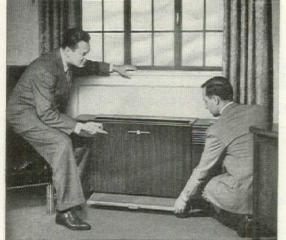
We're interested in learning how the Ingersoll Utility Unit is saving time, money and space. Please send details and illustrated brochure.

Name ....

Address

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





EASY-TO-CLEAN FILTER — The permanent filter slips out readily from the front of the G-E unit for easy maintenance.

NEW BUILDING GOING UP? A General Electric Room Unit Air Conditioning System can be fitted to your building design

OLD BUILDING FIXING UP? This flexible General Electric System requires a minimum of alterations.

A single piping system is served by a central plant in the basement. Each room can be cooled or heated to the tenant's taste. Turn a switch . . . or set a thermostat . . . that's all!

Re-circulated air as well as ventilating air is filtered...to minimize dust circulation and reduce cleaning bills. And the amount of fresh air introduced can be varied...depending on the size and needs of each space unit. This is a special G-E advantage tenants will appreciate.

Your local General Electric air conditioning specialist can give you expert assistance. He'll be a help in suggesting the type of air conditioning best suited to your building design. General Electric Company, Air Conditioning Department, Section A8133, Bloomfield, New Jersey.





NEW...for longer roof life, lighter roof Toad, cooler buildings in summer

### REYNOLDS Lifetime ALUMINUM

.004" embossed aluminum that rolls in as easy as felt, bonds firmly, seals in the life of asphalt by sealing out air, light, moisture. Saves 400 to 500 pounds per square compared with slag or gravel dressed roofs. Reflects sun heat—to keep interiors up to 15° cooler. Rolls 36" wide, contain 10 squares, weigh about 60 pounds. Ideal for re-caps, a world of new business! Write for specifications on 2- and 3-ply new roofs and re-caps.

REYNOLDS PIONEERING MADE ALUMINUM COMPETITIVE . . . TAKE ADVANTAGE OF ITI

UILDING PRODUCTS WORLD'S LARGEST PRODUCER OF ALUMINUM BUILDING PRODUCTS:
Aluminum Shingles • Clapboard Siding • Sheet Roofing & Siding • Eaves Trough & Conductor Pipe • Ceiling Panels
Wall Tile • Windows • Garage Doors • Reflective Insulation • "Alumi-drome" (Farm and Commercial Utility Bldgs.)

REYNOLDS Lifetime ALUMINUM

#### **ANNOUNCEMENTS**

#### "So they MASTIPAVED the Stairs, Ramps, and Corridors for Non-Slip Safety, Wet or Dry!"



#### **PABCO** GRIP-TREAD MASTIDAVE

America's No. 1 Long Life, Low Cost Floor Covering

Safe footing plus easy maintenance, quietness, rugged wear! Hundreds of millions of square feet in use, solving the world's toughest floor problems! Write us for "no obligation" survey of your needs!

THE PARAFFINE COMPANIES, INC.

New York 16

Chicago 54

San Francisco 19



#### SO MUCH MORE IN BEAUTY...IN VALUE..

#### YET Modernfold

#### COSTS NO MORE\*!

Look at the beauty Modernfold Doors offer . . . with their colorful fabrics! Amazing utility, too! They save space . . . eliminate the area required for the swing of conventional doors. And they need cost no more! For, in figuring the cost of a closure, you must consider not only the actual door, but the trim, jamb, hardware, painting, etc. So in your plans, remember Modernfold, the accordion-type door - fabric-covered for beauty, metal-framed for rigidity and strength. Write us.



\*A door 2'4" wide x 6' 81/2" high, cost \$26.00 (F. O. B., New Castle). Other Modernfolds at correspondingly low prices.



#### **NEW CASTLE PRODUCTS**

New Castle Consult your telephone directory for the names of our installing distributors.

#### REQUESTS FOR LITERATURE

WILLIAM BOEDEFELD, architect, 1003 Main St., Kansas City, Mo. HENK BREEBAART, architectural student, 31 Reeweg O, Dordrecht,

THEODORE EARNE, architect, 40-22 Main St., Flushing, N. Y. J. W. EULEN, Dunkeld, Caledonian Rd., Mowbray, Cape Province, South Africa.

LAITALA & NUECHTERLEIN, architects, 6201/2 West Saginaw St., Lansing, Mich.

Monahan, Meikle & Johnson, 255 Main St., Pawtucket, R. I.

ASSISTANT DIVISION ENGINEER FOR CONSTRUCTION AND REPAIR. Public Buildings Administration, Room 468, New Custom House, Denver 2, Colo.

MAX RATNER, architect, 45 N. Prospect, Oberlin, Ohio.

#### REQUESTS FOR INFORMATION

ENRICO CENSON, architectural student, Via Alberico IIº No. 11, Rome, Italy, desires information on lighting, heating and air conditioning equipment for theaters and offices.

DAH YUE CONSTRUCTION Co., LTD., building contractors, 170 Zi-Ka-Wei Road, Shanghai, China, would like to contact manufacturers of structural materials not already represented in China,

N. H. Fok, architect, The Bank of Canton Building, 6 Des Voeux Road C, Hong Kong, China, would like quotations on aluminum doors, windows and other aluminum building materials.

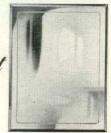
JOHN HARRISON, chief sanitary inspector and building surveyor, South Westmorland Rural District Council, Sanitary Dept., 32 Lowther St., Kendal, England, requests literature on residential construction, heating, plumbing and sewage disposal units.

H. B. HOAGLAND, designer, Biloxi Home Builders, 2110 Wilkes Ave., Biloxi, Miss., requests information on all products used in construction of residences selling for \$12,000 to \$15,000.

now you see it



now you don't



Soap, tumbler and tooth brushes out of sight when not in use, avoiding unsightly, unsanitary exposure. Solid brass chromium plated panel revolves in seamless housing. No. 338. Concealed Lavatory Unit. (U. S. Patent No. 2,039,065.) See Sweet's for complete line of quality bathroom accessories.

#### HALL-MACK COMPANY

1344 W. WASHINGTON BLVD., LOS ANGELES 7, CALIF. 7455 EXCHANGE AVENUE, CHICAGO 49, ILLINOIS



#### This slot always means a light overhead

 $\mathbf{I}^{\text{r's}}$  EASY to provide for both present and anticipated lighting requirements when you design a plant.

Sometime in the future, machines may have to be moved . . . an entire production line relocated . . . or the lighting set-up changed. With old-type wiring systems, this involves much time, expense and high overhead. All this can be avoided.

#### Every inch a tap-off

Lighten the overhead of all your clients with Bull-Dog Universal Trol-E-Duct, the completely flexible lighting system. Every inch of the continuous slot in the bottom of Trol-E-Duct is a potential outlet, ready to be tapped by inserting trolleys or twistout plugs.

Once you install Universal Trol-E-Duct, expensive rewiring is eliminated, regardless of changes. The reason is this: Tap-off plugs or trolleys for lights or small tools can be added or moved to new locations at any time.

Prefabricated and standardized Universal Trol-E-Duct can be dismantled and reinstalled quickly anytime, without scrapping a single part. And an existing system can be expanded simply by adding standard Universal Trol-E-Duct sections and fittings. Learn more about this modern, efficient system from your nearby BullDog Field Engineer. He will be glad to show you a typical installation in your vicinity. Or, write BullDog direct for descriptive literature.

BullDog's Field Engineers welcome the chance to sit in on planning stages of a building project. Their knowledge of electrical distribution layout can mean savings in installation and maintenance costs, as well as highest efficiency and reliability in actual operation. Why not take advantage of this pre-building service?

#### BULLDOG ELECTRIC PRODUCTS COMPANY

DETROIT 32, MICHIGAN - FIELD OFFICES IN ALL PRINCIPAL CITIES IN CANADA: BULLDOG ELECTRIC PRODUCTS OF CANADA, LTD., TORONTO

#### BULLDOG



HEADQUARTERS FOR ELECTRICAL DISTRIBUTION

FORUM reports 1947 advertising income at \$1,152,000 an all-time record for building publications

The Architectural FORUM Magazine of Building, 350 Fifth Ave., New York 1, N. Y.

architects to have principles and the courage of their convictions, the problem will be half-solved."

This is a heartfelt philosophy, for Goff, since his youngest days, has been an individualist, by-passing what was expected of him in favor of what he himself wanted to do. Instead of playing touch football with the other boys, Bruce spent his hours drawing fanciful castles and cathedrals, to the distress of his parents and the scorn of his sister, who was the tomboy of the family. One day his father, a small-time jeweler by trade, decided that this passion for pictures should be put to use. Embeldened by a libation at the local saloon, he marched his bewildered son into the office of Rush, Endacott & Rush and announced: "Here! You take this kid and make an achitect out of him."

Bruce was first put to work copying the five orders but, like the free soul he was, found the venture most distasteful. One hot summer day, when Bruce was sweating it out with a Corinthian column, Mr. Endacott, the engineer, of the firm, asked him what was the matter. "Oh, I don't like to do this," replied Bruce. "Then what the hell are you doing it for?" asked Endacott, "Never get anywhere that way. Why don't you see what you can do? Design a house.' Such a sympathetic attitude could hardly be expected in a busy firm, concentrating mainly on commercial and industrial jobs, but as Goff says, "I've been lucky all my life."

His subsequent effort, shown around the drafting room, drew the comment: "Looks like some of old man Wright's stuff." "Who's he?" asked Bruce. "Oh, a crazy architect up in Chicago."

The curiosity inspired by this remark led Bruce through a Wright hunt in the public library and local book shops, finally ending successfully in a private cabinet belonging to his boss. A dogeared copy of The Record for 1908, containing some of Wright's first published work, gave him "the biggest thrill I ever had. For the next two years I couldn't eat, sleep or think anything but Frank Lloyd Wright."

At the age of 14, by then an accepted member of the firm, Goff designed the first of his houses to be built. One day, as the proud young architect was watching the finishing touches being put on his creation, a car of sightseers drew up and, between giggles, shouted "Oh, look at the funny house." Bruce looked and looked to see what they meant, but he couldn't see anything funny about his house. When he reported the episode

to Endacott, the older man replied "What's wrong? As long as you're in the trenches with everyone else, doing what they're doing, nobody will notice you or laugh at you. It's when you ge in No Man's Land that they start shoet ing at you from both directions. And brother, the way you're headed, you better get an iron helmet, because you're going to be in No Man's Land all your life."

This advice has stayed with Goff ever since. When architects accuse him of "doing things for effect," he replied mildly that "everything is done for effect. The only valid question is what effect do you want to create?"

He is also accused of "going too far."
But he believes that nobody ever wentoo far. "If you know your direction and you know your idea is bigger than you are, you're ok. If your idea is only as big as you are you're stuck."

He believes that mystery and surprise are two of the greatest qualities of art as they are of nature. "People who aren't afraid, don't mind being surprised," he suggests, "and they don' mind mysteries which can't be deciphered."

Goff himself is such a mystery. A quiet man, one sees in his architecture more turmoil than serenity. A home spun middlewesterner, his interests are nevertheless esoteric in the extreme. A a youngster in the raw, oil-rich city of Tulsa, Okla., he went without luncle every day, not to save up money for a bicycle, but to collect 50 cents a week for an obscure avant garde magazine "Broom," which contained reproduction of experimental painting by Gropper Derain and Juan Gris; writing by Stein Cocteau, Pound and Cummings.

Although he has many friends, Goff's paintings recently inspired the comment: "Some of these are so lonely they make me want to cry." He has been described as "a bachelor and in a sense a recluse, who lives almost like a monlin his own world." One of his colleagues at the University muses: "Goff is every body's friend and nobody's friend. You don't realize it at first, but there's a wal between Bruce and everyone else."

A firm believer in designing for the people, his designs are nevertheless more Goff than client-inspired. One of his favorite quotations, a line from Debussy's little-known essays, perhaps sum up his attitude. "Give ear to no man' counsel; but listen to the wind, which tells in passing the history of the world."

## Why The Kitchen Is Today's "Measure Of Value"



Prices Look Lower Through The Windows of Hotpoint All-Electric Kitchens

ALERT ARCHITECTS and builders find there is "magic" in modern electric kitchens. For the tremendous impact of powerful advertising has made Americans thoroughly kitchen conscious. Today, buyers are apt to judge the value of the house on the merit of the kitchen.

Within the past three years Hotpoint has received over 2,000,000 inquiries about All-Electric Kitchens. Pioneer of the modern electric kitchen, Hotpoint has designed new and revolutionary appliances that make the kitchen a real showplace.

Today the Kitchen is the Measure of Value

Thirty million people know that Hotpoint means

Thirty million people know that Hotpoint means the finest, and prospective owners say houses which include All-Electric Kitchens are better buys. Payments are easier, too, because in most states the cost of both the house and the appliances may be included in a "package mortgage." See your Sweet's Catalog for details or consult your nearest Hotpoint Distributor. Hotpoint Inc., 5651 W. Taylor Street, Chicago 44, Ill.

Hotpoint has everything for the kitchen and laundry:

RANGES • REFRIGERATORS • FREEZERS • DISHWASHERS • DISPOSALLS\*

CABINETS • SINKS • WATER HEATERS • FLATPLATE IRONERS

ROTARY IRONERS • WRINGER-TYPE WASHERS • DRYERS

\*Reg. U. S. Pat. Off

Everybody's Pointing to

Hotpoint Inc. A General Electric Affiliate
PIONEER IN THE ALL-ELECTRIC KITCHEN



#### For Hotels, Offices, Stores, Homes

A choice of 10 Modern Tints in O'Brien's Pen-Chrome "Blonde" Wood Finishes now enables you to control the beauty of natural wood to meet the requirements of any color scheme!

Pen-Chrome is the ideal finish for paneling, trim, plywood, furniture—woodwork of all kinds. Suitable for wide use in the finest homes, exclusive shops, hotels, offices—yet it is economical enough for mass housing, and other applications where price is a controlling factor. Pen-Chrome does not hide the grain.

Pen-Chrome not only beautifies in a wide variety of luxurious tints—it seals, waterproofs, protects the wood surface. Easy to apply, it dries to a soft lustrous surface—retains its marproof beauty after years of cleaning!

#### 10 MODERN TINTS OFFER INTERESTING POSSIBILITIES!



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

Call your O'Brien dealer today—ask to see the ten Pen-Chrome tints as applied on actual wood panels. Or if you prefer, write on your letterhead to the O'Brien Corporation for free sample, color card and name of nearest dealer.

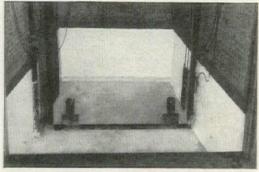


THE O'BRIEN CORPORATION, 101 NORTH JOHNSON ST., SOUTH BEND 21, IND

# BENEKE PLASTIX No. 524-B BENEKE PLASTIX SEAT for elongated bowl. One piece solid plastic; has cushioned check hinge. Columbus, Mississippi, U.S.A. • Offices in Principal Cities

## 4-FT. TIDE in Elevator Pft **HELD BACK**

The Barnum Garage, Bridgeport, Conn., is located directly over an old river bed. For years, when the tide came in, the pit filled with 4 feet of water, rusting cables and causing frequent breakdowns. Aquella was applied in 1945. Since then, though surrounded by water, the walls and floor of the pit have remained thoroughly dry.



Elevator pit, following treatment with Aquella 3 years ago

Over and over Aquella does "the impossible." Working on entirely new principle, this amazing mineral surface coating controls seepage above or below grade, interiors or exteriors. Use Aquella for all porous masonry surfaces -brick, concrete, stucco, stone, cement, cement plaster, masonry units. Brilliant white, also buff, rose, green, grey.





Theatre, Sacramento, Cal., and ra-dio station, Memphis, Tenn., show-ing beautiful white Aquella finish. Damp, unsightly home (below) now bright and dry after Aquellizing.



Cross section showing how Aquella penetrates tiniest pores, then expands to harden with age. Will not crack, peer or rub off.

-

#### -- MAIL COUPON TODAY

PRIMA PRODUCTS, INC. Dept. D, 10 E. 40th St., New York 17, N. Y

Please rush FREE 16-page booklet, "Aquella and Concrete Masonry Con-struction."

ADDRESS



brochure shows how architects, engineers, contrac-tors use Aquella to control water seepage in all porous masonry Send coupon.

#### SPECIFICATION AN

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.

	conjuence. This Poron does.	
	Alberene Stone Corporation	. 46
	Aluminum Company of America	183
	Aluminum Window Corporation, The (Subsidiary of General Bronze Corporation) American Central Division (The Aviation Corporation)	49
	American-Marietta Company	129
	American Radiator & Standard Sanitary Corporation American Structural Products Company	43
	American Telephone & Telegraph Company American Trucking Associations	171
	Andersen Corporation	132
	Anthracite Institute	. 56
	Asphalt Roofing Industry Bureau Aviation Corporation, The	173
	Bakelite Corporation	74
	Barrett Division, The (Allied Chemical & Dye Corporation)  Bell & Gossett Company	179
	Bendix Home Appliances, Inc. Beneke Corporation	151
	Better Homes & Gardens	182
	Bigelow-Sanford Carpet Company, Inc. Borg-Warner Corporation (Ingersoll Steel Division)	185
	Borg-Warner Corporation (Norge Division) 50 Bruce, E. L., Company 50	), 137
	Bruce, E. L., Company	152
	Burnham Boiler Corporation	65
	Cabot, Samuel, Inc.	42
	Cambridge Tile Manufacturing Company, The	er II
	Carrier Corporation	140
	Celotex Corporation, The	2
	Certified Ballast Manufacturers Chapman Chemical Company	38
	Columbia Mills, Inc., The	138
	Committee on Steel Pipe Research (American Iron & Steel Institute)	52
	Crane Company	69
	Crittall, Richard, Radiant Heating, Inc. Curtis Companies	24
	Day-Brite Lighting, Inc.	19
	Detroit Steel Products Company . 135 Devoe & Raynolds Company, Inc.	, 161
	Dunham, C. A., Company	195
	Dwyer Products Corporation	142
	Eagle-Picher Lead Company, The	54
	Eljer Company	r 111
	Facing Tile Institute	79 66
	Fir Door Institute	36
	Fleur-O-Lier Manufacturers Forum, The Architectural	17 190
	Frigidaire Division (General Motors Corporation)  Fulton Sylphon Division (Robertshaw-Fulton Controls Company)	127 23
	Gates City Sash & Door Company	46 49
	General Electric Company	184
	General Motors Corporation (Frigidaire Division) Grand Rapids Hardware Company	127 38
	Hall-Mack Company Hotpoint, Inc.	188
	Houghton Mifflin Company	78 5
	Ingersoll Steel Division (Borg-Warner Corporation) Inland Steel Products Company	185 51
	In-Sink-Erator Manufacturing Company Insulite Company, The	30 21
	Jackson & Church Company	
	J. G. Furniture Company, Inc.	150
-	Johns-Manville	75

#### UYING INDEX

Jones & Laughlin Steel Corporation	45 26
Kennedy, David E., Inc.  Kewanee Beiler Corporation  Keystene Asphalt Products Company (Division of American-Marietta Company). 1  Kimberly-Clark Corporation  57, 1  Kinkead Industries	66
Kohler Company	64
Leckport Cotton Batting Company	53 84
Marsh Wall Products, Inc	48 35 57
Mesker Brothers	44 42 32 50 75 28
National Electrical Manufacturers Assoc	
National Cypsum Company	68 31 88
O'Brien Varnish Company 1 Otis Elevator Company Overhead Door CorporationCover Owens-Corning Fiberglas Corporation136, 163, 1	28 IV
Permanente Products Company	37 39 53 , 7 67 59
Revere Copper and Brass, Inc.  Reynolds Metals Company	45 23 41 4 156 125 27
Sloan Valve Company	34 155 33 58 39 168 143
Taylor, Halsey W., Company, The	150 34 63 61 80
United States Air Conditioning Corporation 1 United Wallpaper, Inc. 1 Universal Zonolite Insulation Company	146 77 76
Walker Brothers	149 26 133
York Corporation	71



#### THERE IS A DUNHAM SYSTEM TO TAKE CARE OF IT—DUNHAM PRODUCTS TO MAINTAIN IT!

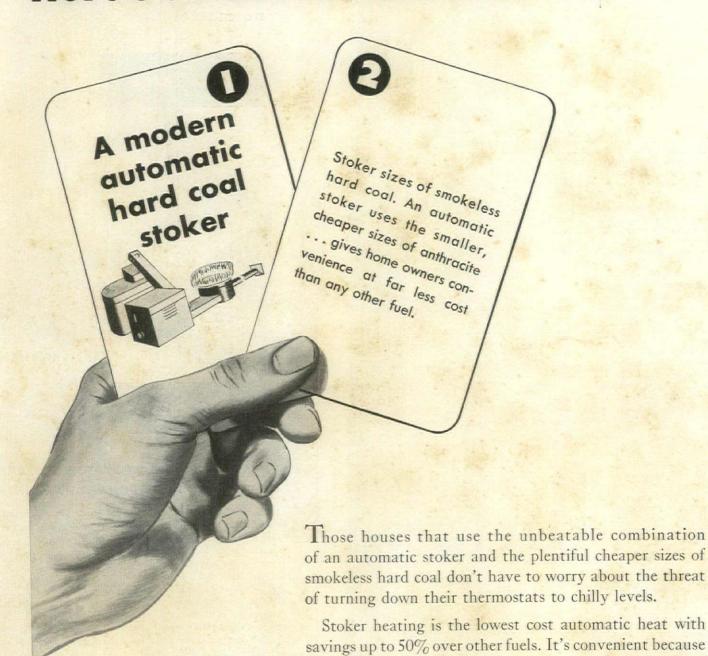
Dunham Baseboard Convectors are easily installed, take no more space than the baseboard. The piping is on the inside of the baseboard spreading the heat along the inside of the outside walls. Every room, every corner; even the floors in houses built without basements, are assured of comfortable temperatures. Finned radiation concealed behind the attractive baseboard with concealed louvers, is engineered to keep walls clean and decorating costs to a minimum. The Dunham Baseboard method of heating provides a blanket of warmth for the home using either hot water or steam. Bulletin 639F with complete details will be sent on request-C. A. Dunham Co., 400 W. Madison St., Chicago 6, Ill.

The Dunham Differential Vacuum Heating System has the important advantage of sure immediate and automatic control of room temperature under all weather conditions including sudden and extreme changes. This system, circulating sub-atmospheric steam, has established both tenant satisfaction and reduced heating and maintenance costs in hospitals, hotels, large apartment projects, office and industrial buildings. Fuel savings from 33% and more are commonplace. Write for Bulletin 631F and get the complete story on satisfactory, trouble-free Differential Heating-C. A. Dunham Company, 400 W. Madison Street, Chicago 6, Ill.

DUNHAM PRODUCTS ENGINEERED TO GIVE
EFFICIENT, LOW MAINTAINENCE PERFORMANCE
BASEBOARD CONVECTORS • FLOAT & THERMOSTATIC
TRAPS • HIGH PRESSURE STEAM TRAPS • HEATING & VENTILATING UNIT
ONE TUBE HEATING ELEMENT • PUMPS • PACKLESS RADIATOR VALVES
THERMOSTATIC RADIATOR TRAPS • UNIT HEATERS
DIFFERENTIAL VACUUM STEAM HEATING SYSTEMS



## Here's an unbeatable combination-



Anthracite Institute Dept. 3-A 101 Park Avenue New York 17, New York Please send me more information on anthracite and anthracite heating. Company.

of depending on weather hindered winter deliveries.

it feeds from the bin, controls temperature and ash removal automatically. Then too, a full winter's supply of hard coal can be stored in the summer which eliminates the necessity

ANTHRACITE INSTITUTE

101 Park Avenue •

New York 17, New York