

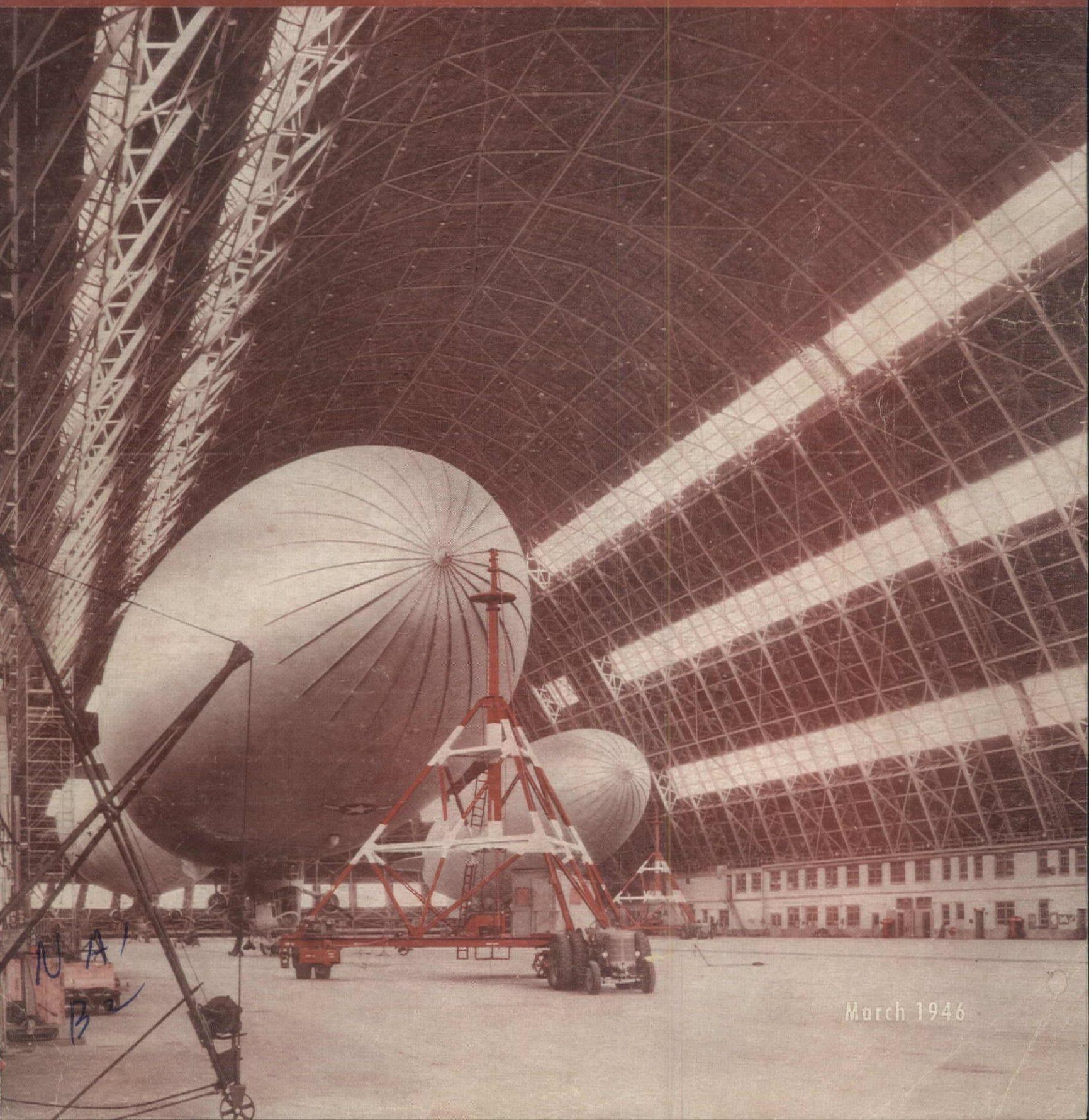
CIRCULATE

The Architectural

FORUM

Magazine of Building

UNIVERSITY OF HAWAII
LIBRARY



March 1946



*"29% decrease in
typists' errors!"*



*"37½% decrease
in absences!"*

*"47% decrease in
employee turnover!"*



**Your Clients can have Results like These
if you specify Acousti-Celotex**

SOUND CONDITIONING!

Q. That's claiming a lot for sound conditioning. Where's your evidence?

A. The Aetna Life Insurance Company. By actual test in its own offices, this leading company conclusively demonstrated that sound conditioning paid those dividends. What's more, over-all efficiency of employees was increased 8.8%!

Q. What does noise do to people to affect them so seriously?

A. "There is both practical and experimental evidence," says the *Manual of Industrial Hygiene* of the U. S. Public Health Service, "to indicate that noise produces fatigue, decreased efficiency, impaired hearing, emotional disturbances and neurosis."

Q. How does sound conditioning stop noise?

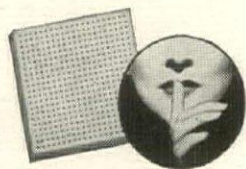
A. Sound is reflected from a hard surface just as light is reflected from a mirror. Thus in an average room with hard plaster walls and ceiling, the sound, traveling at an approximate speed of 1120

feet per second, will bounce around the room in all directions many times before the energy it contains is dissipated, or absorbed. In a sound conditioned room, the sound is not sustained by repeated reflections. And loudness is lessened because the original sound dies out faster.

Q. What's the most widely used sound conditioning material?

A. Acousti-Celotex*—the original and genuine perforated fibre tile. For more than 20 years Acousti-Celotex sound conditioning has paid real dividends in offices, schools, factories, hospitals, stores, banks, restaurants, churches and theaters. And the Acousti-Celotex distributor organization is the world's most experienced—with the know-how of more than 100,000 acoustical installations. So consult your local Acousti-Celotex distributor. His advice is yours without obligation and he *guarantees* results.

FREE! "25 Answers to Questions on Sound Conditioning." Interesting, fact-packed booklet. Write: The Celotex Corporation, Dept. AF-346, Chicago 3, Illinois.



Sound Conditioning with
ACOUSTI-CELOTEX

** Perforated Fibre Tile* REG. U.S. PAT. OFF.
SINCE 1923

Sold by Acousti-Celotex Distributors Everywhere • In Canada: Dominion Sound Equipments, Ltd.

A PRODUCT OF THE CELOTEX CORPORATION, CHICAGO 3, ILLINOIS

FORUM

The Architectural
MAGAZINE OF BUILDING



March 1946

Published by TIME Incorporated

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

The Architectural FORUM

MANAGING EDITOR
Henry Wright

ASSOCIATES: Leslie Cheek, Jr., Louise Cooper, James M. Fitch, Jr., Joseph C. Hazen, Jr., Mary Mix, Mary Sanders, Richard Saunders (Washington), Madelaine Thatcher.

ASSISTANTS: Millicent Bell, Helen Benz, Eleanor Bittermann, Martha Howard, Sighe Kennedy, Mary Jane Lightbown, Lawrence W. Mester (Production) Charlotte Speight.

ART DIRECTOR: Paul Grotz.

CONSULTANTS: Miles L. Colean, George Nelson.

BUSINESS MANAGER: Vernon Hitchcock.

CIRCULATION MANAGER: George Seufert.

ADVERTISING MANAGER:
GEORGE P. SHUTT

PUBLISHER
HOWARD MYERS

The Architectural FORUM is published monthly by TIME Inc., 350 Fifth Ave., N. Y. 1, N. Y. Subscription may be sent to publisher's office or to 330 East 22nd Street, Chicago 16, Ill. Address all editorial correspondence to 350 Fifth Ave., N. Y. 1, N. Y. Yearly subscription payable in advance. U. S. and Possessions, Canada, Mexico, South America, \$4.00. Elsewhere \$6.00. Single issues, including Reference Numbers, \$1.00. All copies mailed flat. Copyright under International Copyright Convention. All rights reserved under the Pan American Copyright Convention. Entered as Second Class Matter July 17, 1944 at the Post Office at New York, N. Y., under the act of March 3, 1879. Copyright 1944 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, Eric Hodgins, 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; Director, Radio Programs Department, Frank Norris.

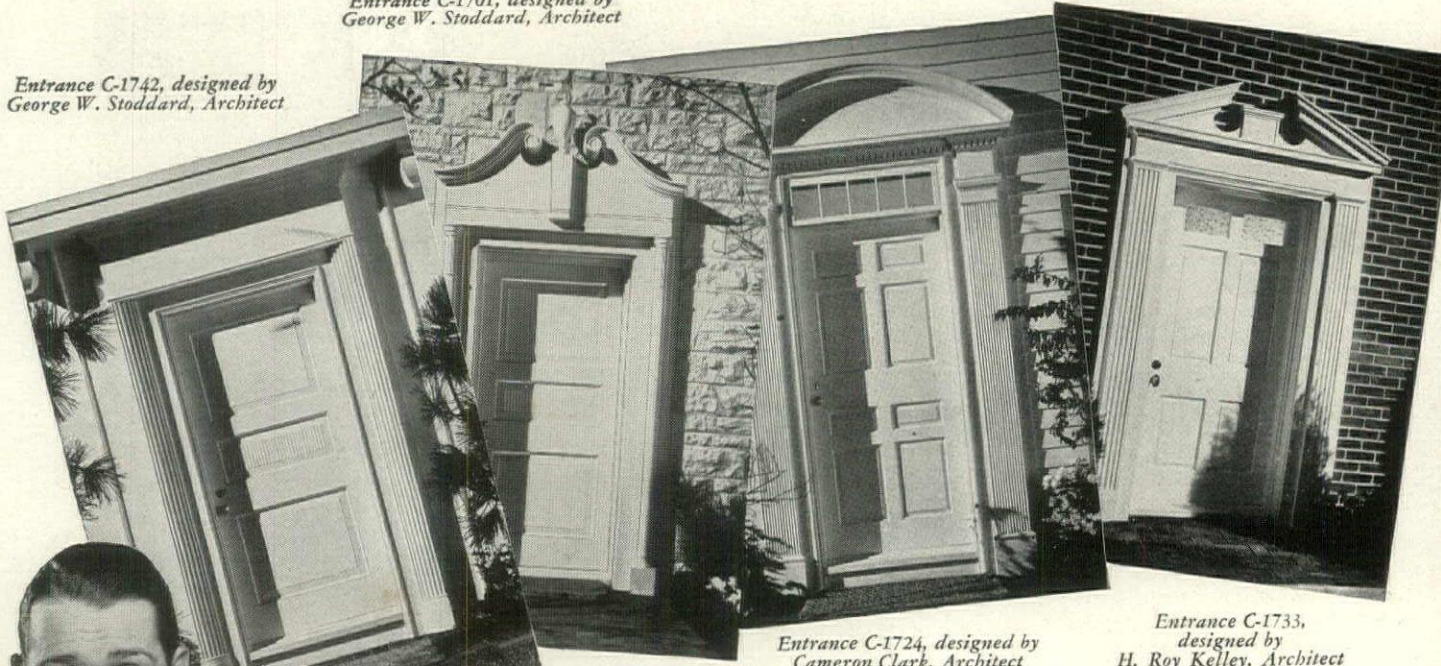
VOLUME 94, NUMBER 3

NEWS	5
LETTERS	38
IN THE FORUM	74
ANNOUNCEMENTS	80
\$75,000 SHOWCASE	97
New equipment and ideas for living in a Hollywood version of the model house, by Fritz Burns.	
REPORT FROM EUROPE	105
Each devastated nation seeks its quickest way to reconstruction.	
BERTRAND GOLDBERG PORTFOLIO	107
A young Chicago native designs beautiful as well as functional homes and a service station built from the top down.	
HOUSING'S WHITE KNIGHT	116
A handsome "blonde with brunette economic ideas."	
STEINBERG VISITS A MOVIE PALACE	120
THE NAVY BUILDS	121
An historical record of the Navy's huge \$8 billion wartime construction program: drydocks . . . shops . . . storage facilities . . . airbases . . . housing . . . recreation . . . hospitals . . . chapels . . . training. (Layout by Arnold Roston).	
BUILDING PREVIEWS	137
Shopping center, by Berla & Abel . . . Power board and municipal building, by Gill & Bianculli . . . Rural school, Freeman, French, Freeman, Architects.	
LANDSCAPE GARDENING II: Community Planting	141
Garrett Eckbo turns his talents to the benefit of the community.	
G. I. JOBS	158
REVIEWS	167
Exhibitions . . . Chicago city planning competition . . . Paul Klee . . . Housing in the U. S.: Problems & Policy . . . Housing Goals.	
PRODUCTS & PRACTICE	187
A new look at the kitchen II . . . new British construction methods . . . sandwich construction material . . . photographic transfer methods.	
TECHNICAL LITERATURE	216
Insulation . . . school construction . . . chimneys and fireplaces . . . safety film.	

Cover photo: G. E. Kidder-Smith

*Entrance C-1701, designed by
George W. Stoddard, Architect*

*Entrance C-1742, designed by
George W. Stoddard, Architect*



*Entrance C-1724, designed by
Cameron Clark, Architect*

*Entrance C-1733,
designed by
H. Roy Kelley, Architect*



Announcing

the NEW Curtis Woodwork!

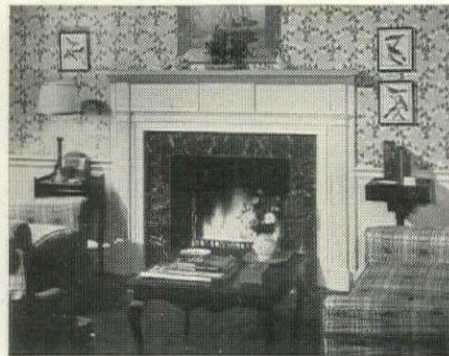
Yes—welcome to a whole new world of beauty—authentic styling—distinctive quality—for the homes you plan and build! Carrying on its 80-year-old tradition of fine craftsmanship in stock woodwork, Curtis now announces new and beautiful woodwork designs in wide variety—designs that bring distinction to any size and type of home—at low or moderate cost. These new woodwork styles embody the best thinking of nationally-known architects—the finest

construction and precision manufacture for which Curtis is so very well known.

Only a few examples of the new Curtis Woodwork line can be shown here. You'll want complete illustrated information—and it's yours for the asking. You'll also want to see the new Curtis Catalog and the big, new Curtis Style Book at your Curtis dealer's office. Stop in soon! He has lots to tell you about the new Curtis Woodwork and the new Self-Fitting Silentite Window.



The bowed fascia of this Curtis mantel accentuates its simple charm. One of the many new Curtis designs, it follows the tradition of the 18th Century. Design C-6074, by George W. Stoddard, Architect.



Finely molded detail creates dignity and refinement in this new Curtis design. Like all Curtis mantels, quantity production lowers cost. This is C-6040, designed by Cameron Clark, Architect.



Derived from an unusual mantel in the ballroom of the old Indian King Inn, near Haddonfield, N. J., this mantel design, C-6059, is a fine piece of cabinet-work. Willis Irvin, Architect.



Made up of Curtis stock parts, this fine Colonial stairway combines unusual beauty with sound construction. Precision workmanship assures accurate fitting of parts—lifetime satisfaction.



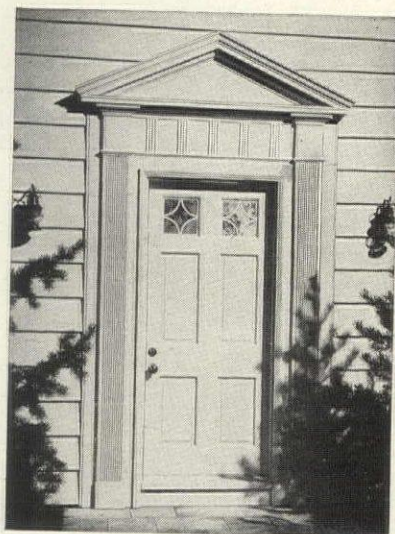
New England influences inspired this fine cabinet. It is C-6522, a design from H. Roy Kelley, Architect. It is made for both rectangular and corner installations. Also made with upper glazed door.



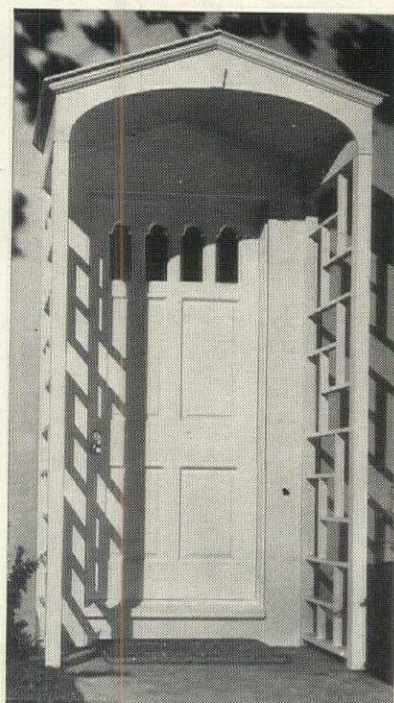
Built-in furniture—such as this Curtis cabinet C-6558—adds permanent value to any home. This style is available either for corner or flat-wall installation. It is a charming design by Cameron Clark.



Here is another beautiful china closet by Cameron Clark. It is a formal and dignified design that is best suited to large rooms. Also made with open front. For corner installation only. Design C-6505.



Correct proportion and harmonious detail contribute to the marked individuality of this Curtis Entrance, C-1721. Reminiscent of old Salem, it is suitable either for large or small homes. Designed by Willis Irvin, Architect.



Like informality in an entrance? Then you'll fall in love with this hooded Curtis Entrance "Knoxville," enhanced by its interesting lattice panels. An entrance as useful as it is charming. Another Cameron Clark design from the new line of Curtis Woodwork.



The wide variety of the new Curtis line offers unlimited possibilities for designing and building homes of outstanding beauty and character. The stairway on the left is an excellent example of the beauty of Curtis design.



In Canada:
W. C. Edwards & Co., Ltd.
991 Somerset St., West
Ottawa, Canada

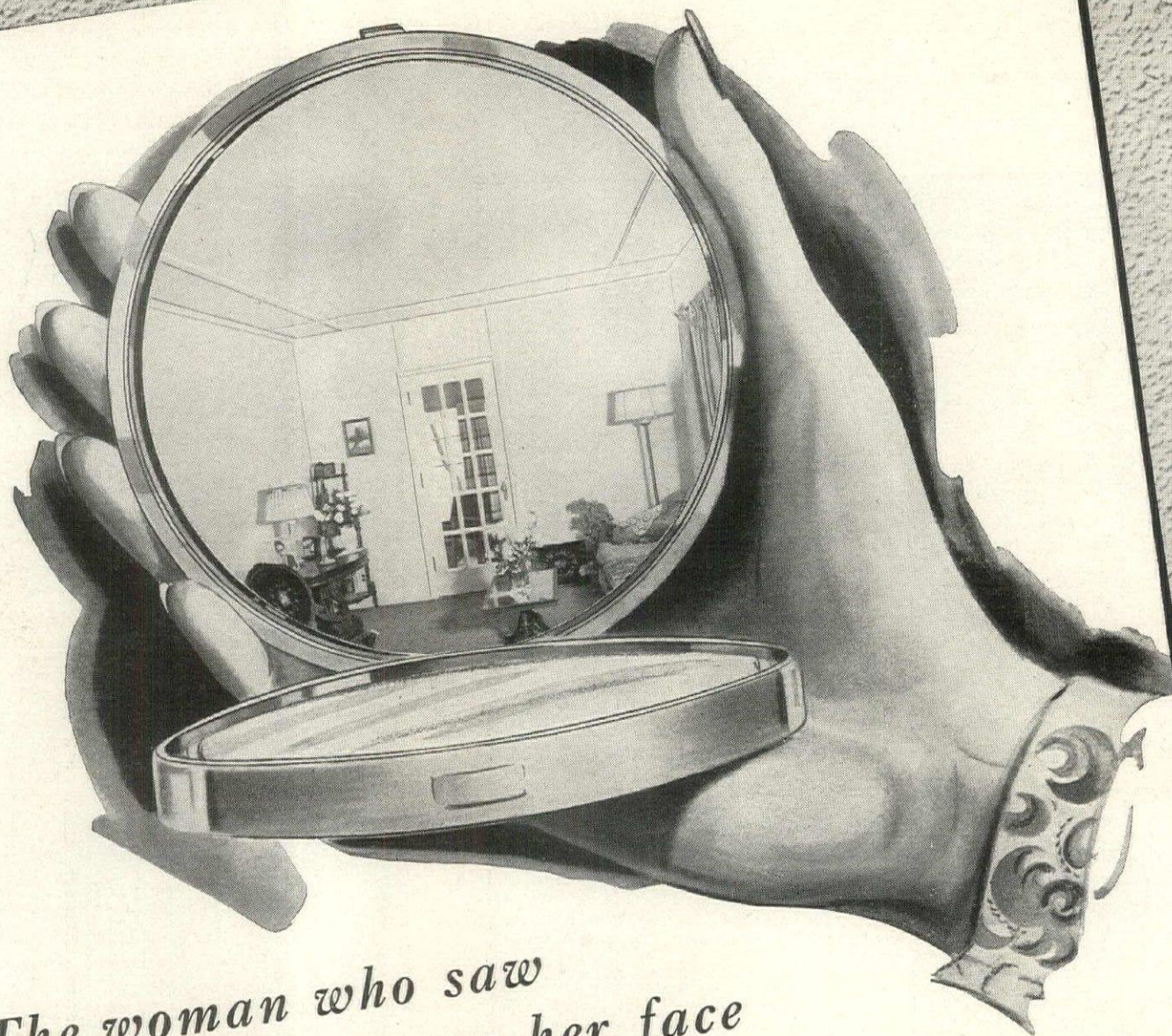
CURTIS COMPANIES SERVICE BUREAU
Dept. AF-3W, Curtis Building
Clinton, Iowa

Gentlemen: Please send me your booklets on the new Curtis Woodwork line and your dealer's name.

Name.....

Address.....

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



The woman who saw beyond the nose on her face

This woman wasn't satisfied with old-fashioned construction methods.

She was tired of walls that cracked—ceilings that were old before their time—finishes that defied cleaning. And she couldn't see waiting weeks for plaster to dry, either.

So she said to her architect, "Isn't there a better—a more modern way when I build?"

And there will be—Upson Panels!

One of these days, when Upson Strong-Bilt Panels and Upson

Kuver-Krak Panels are available, she will be happy in a home with walls and ceilings that are *permanently* beautiful . . . because Upson Panels are strong, *crackproof*—trouble-free. She will be in her home weeks sooner, thanks to the speed of modern, dry-wall construction.

She will be more comfortable, too . . . because Upson Panels have efficient insulation value . . . and are delightfully warm to the touch.

And she will do less work, because

the rich, beautifully pebbled surface of Upson Panels—painted in her favorite colors—cleans easily with a damp cloth.

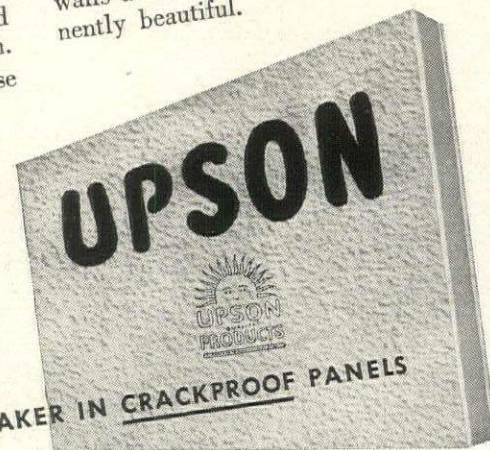
Today, millions of women like this one want these beautiful, modern, war-tested walls and ceilings. And the fortunate ones willing to wait until Upson Panels are again available will be happy indeed with walls and ceilings that are *permanently* beautiful.

THE UPSON COMPANY, LOCKPORT, N. Y.

Upson Products are easily identified by the famous *Blue-Center*

LOOKING TO THE FUTURE—As you know, deliveries on most building materials are delayed and difficult. Restrictions on many materials are still effective which hamper production of the full Upson line. We are hopeful that these conditions will improve in the months ahead.

Right now, in common with other manufacturers of building materials, we ask your continued cooperation and patience.



NEWS

HOUSES

Will Wyatt's program mean
housebuilding revolution?

p. 6-7

CITIES

Short-cuts to permanent house-
building

p. 11

Office space hog

p. 12

Building code progress

p. 12

MATERIAL

Incentive price plan fails

p. 12

Stalled houses

p. 14

BUILDING MONEY

Rochester banks have plan for
low-rent housing

p. 16

LABOR

New York signs pact, but three
big unions refuse

p. 16

Houses from shipyards

p. 20

MARKET

Assessor's records show price
climb

p. 24

Realty brokers unite with cus-
tomers

p. 28

JOBS

VA to build skyscraper hospi-
tals

p. 32

BUILDING MONTH. New housing boss Wilson Wyatt's emergency program had blotted out—in more ways than one—every part of the Building picture but the emergency job: houses for veterans. March would bring a stop-building order, which will ban virtually all construction except moderate-priced houses for veterans. Other building will go ahead, if at all, by special dispensation. The building ban will be tight for at least three months, be gradually relaxed as materials supply improves. Present plans class construction to be postponed in two types: deferrable and non-essential. Schools, for example, might be considered deferrable, but would get clearance before, say, a beer tavern or bowling alley, which would be considered non-essential. Outlook: construction already started (which will probably mean materials actually incorporated into the structure) will be permitted to go ahead.

Commercial construction will be hit hardest by the new building ban. Industrial construction that will provide new jobs will get clearance as soon as possible. Public works construction will also be sharply cut back—but probably not more than it has been already by boosts in building costs, which have meant big retrenchments in municipal plans. Building projects sponsored by veterans—even though they may fall into the non-essential classification—will probably be given automatic clearance.

The stop-building order had already drawn a sharp protest from the New York Building Congress, which also said tartly that Wyatt's program would be more likely to obstruct than to promote housebuilding. The Congress feared that the ban on everything but housebuilding would throw the whole industry out of kilter by "preventing labor and material from being used in any type of building except housing and by throwing out of work a large number of veterans who are building construction men and shop workers."

Housebuilders' chief Joseph E. Merrion was also unconvinced. Said Merrion: "If Mr. Wyatt continues to wait for the passage of a bill before he takes action to break the bottlenecks and cut the red tape hampering the housebuilding industry he will be somewhat responsible for any increased housing shortage."

As homebuilders assembled in Chicago for their annual convention, one big question topped all the other big questions about the emergency housing program: can we build a \$6,000 house? Most said no, and there was plenty of evidence available outside the industry to support their stand. In Illinois, the state FHA director was at work on a "veteran's special" to be built in Chicago, but found that even a three-room minimum model would run somewhat over \$6,000. In Detroit, a study turned in by the Department of Buildings showed that residential building costs are up 67 per cent over 1940 levels, the highest mark reached since 1920, peak cost year.

Prefab was in the spotlight as never before and, despite certain reservations on the part of established producers, promised to move up briskly in the U. S. housebuilding picture. As Wyatt promised government funds to bolster the prefab market, a dozen dream houses—the Kaiser house, the aluminum Dymaxion, the Reynolds aluminum house, the Tournalayed concrete house—

vied for attention. Congressmen gazed dreamily at a prefab house set up in the rotunda of the House Office Building.

In Washington, veterans hoping to purchase the big government-built apartment development, McLean Gardens, under a co-operative ownership plan got help from an unexpected quarter. Evelyn Walsh McLean, who once owned the land where the project was built, took full-page ads in Washington papers to urge the Federal Public Housing Authority to sell the project to the anxious vets.

As New York's first shipment of Quonset huts were delivered by an LST, Senator James Mead moved to push his bill adding \$250 million to the \$190 million already appropriated by Congress for the job of moving and re-erecting war housing in cities where needed. The new appropriation means that 100,000 more demobilized housing units can be put to new use. That many more would be needed was plain in requests on hand for 140,000 such houses from colleges and universities alone.

In Dallas, an alert advertising agency plugged hard for garage apartments to relieve the pinch, with permanent houses to be added later on the front of the lot. In Des Moines, an emergency housing committee found itself obliged to locate prefab houses outside the city because they are banned by the building code. In Pittsburgh and Chicago, citizens went to work on out-moded codes.

All in all, February was a brief, breathless month—not until the year's job of 1,200,000 houses was well started would the industry get its breath again.

PREFABRICATION

PREFAB PROMISE

Aluminum and steel houses in the spotlight with federal aid in offing.

Like many another houser before him, new housing boss Wilson Wyatt was obviously charmed by the promise of prefab. As his plan to use government contracts to bolster prefabers' markets resounded throughout the industry, scarcely a producer could resist telling exactly what miracle he had up his sleeve.

Wyatt himself, with abundant enthusiasm, took a close look at some of the miracles. In Washington, R. G. LeTourneau, the Peoria, Ill. manufacturer famous for bulldozers and lay preaching, showed him pictures of an enormous ma-

(Continued on page 3)

2,700,000 HOUSES TO START BY 1947

HOUSING BOSS WYATT OFFERS BOLD PLAN WHICH MAY MEAN SWEEPING CHANGES IN HOUSEBUILDING INDUSTRY

"The great thing about Wilson Wyatt," one housing expert said, "is that he is so new in the housing field he doesn't know such a program is impossible. He doesn't know it can't be done so maybe he can do it." On this question—will Wyatt's program work—hung 2,700,000 desperately needed houses. How the question is answered may reshape the whole structure of the U. S. housebuilding business and radically affect every contributing industry.

Wyatt's proposals to get practically all the U. S. under some kind of roof by 1947 have the faint but unmistakable smell of revolutionary dynamite. At a maximum, they may mean sweeping and unpredictable changes in an industry whose basic pattern has not been changed for several centuries. At a minimum, they may not work at all, and the political explosiveness of this dismal possibility can scarcely be overestimated. Already veterans' organizations are focusing and amplifying the demand for housing-in-a-hurry—with demonstrable effect on municipal action and on state and federal legislation. Next to the price-wage struggle, housing need—and the widespread demand for government action to meet that need—has become the nation's hottest political issue. If the Wyatt program flops—and many a seasoned Building man said it was sure to do so—the pressure for government housebuilding will probably be irresistible.

Wyatt, of course, did not set out to revolutionize housebuilding. He was simply told to produce a workable plan that would break the back of the housing shortage within a year and get things somewhere close to normal within two years. He must also obviously have been told to make a plan that would operate by stimulating the private housebuilding industry to its highest possible level of production—rather than by relying to any extent on government building.

NEW COMPETITION

While the industry might have been expected to welcome this basis of operations, it was also glaringly obvious that large amounts of federal funds could not be poured into private housebuilding production without influencing, for better or worse, its whole character. Most of all, the Wyatt plan—if it works at all—means the appearance of new competition. Conventional housebuilders feared that, with a federal boost, prefabricators might walk away with both materials and market. Established prefabricators feared that federal dollars would open the way for newcomers—the chaps who talked about turning out aluminum—or steel—or plastic—houses by the millions. Materials manufacturers eyed dubiously the plan to spend some \$200 million in what some called a wildcat scheme to get new and untried materials on the market.

Along with their natural wish to protect their own interests, the industry put a question that was equally in the public interest: would federal subsidies get the materials out, get the houses up? Or would federal funds be dissipated on glittering but unworkable schemes, while the operating body of the industry stalled on hampering con-

trols—or on the uncertainty of what new control might be introduced tomorrow. The answer to this central question would only come with the actual operation of the Wyatt program. If sensibly amended in the light of industry experience and ably administered, it might well hit the target.

PREFAB BOOST

The target itself was of a spectacular size to an industry whose maximum output had never been more than 937,000 houses (1925) and whose output last year shrank to the lowest level of a decade (150,000 houses). Over the next two years, Wyatt said, 2,700,000 houses must be built. The target breaks down like this:

	units
1946	
Conventionally-built houses	700,000
Permanent prefabs	250,000
Temporary houses (demobilized war houses, panelized and moved with the help of federal funds—trailers, Quonset huts, etc.)	250,000
Total started	1,200,000
1947	
Conventionally-built houses	900,000
Permanent prefabs	600,000
Total started	1,500,000

The breakdown showed that housing boss Wyatt was looking to prefabricators for the biggest boost in the U. S. housing supply. (The conventionally-built totals, especially when translated from "starts" to "finishes" were not much higher than pre-Wyatt estimates of what the industry could be expected to produce.) He proposed that the RFC offer contracts that would guarantee manufacturers' markets (one part of the program for which no additional legislative sanction would be needed). This means that the government would promise to buy whatever houses the producer fails to market within a reasonable period after production.

Operating prefabricators were by no means unanimously enthusiastic about this bonanza. In the first place, few established prefabricators anticipate the slightest difficulty disposing of 100 per cent of output in the present hungry market. But, more important, some of the biggest prefabricators objected to the plan on the ground that it would mean a continued identification of prefabrication with "emergency" housing; 2) the price limits imposed are too low to permit production of sound housing; 3) almost no prefabricator could show a distribution system on the scale required by Wyatt's proposal. Said one big producer: "A distribution system can't be set up overnight. It takes longer to set up than a plant."

Conventional housebuilders looked jealously at the boost for prefabrication. Some argued that advanced methods of site fabrication should get the same advantage of federal assistance as plant fabrication.

WHAT WILL LABOR DO?

But the biggest block for prefabrication—and indeed for the whole Wyatt program—might come from organized labor. To be sure, the program had AF of L chief William Green's official blessing. But there was nothing in AF of L history to show that the virtually autonomous building trades—their equally independent locals—would fall obediently into line. Would AF of L workers agree to erect prefabricated houses? Would AF of L plumbers install prefabricated bathrooms? Would the unions open their ranks to the apprentices needed to expand the labor supply?

Washington chieftains said a cautious yes. But carpenters' boss William Hutcheson gave the FORUM a more revealing statement: "I quite agree with the thought of Wyatt's emergency housing program for the construction of homes as quickly as possible. However, I do not see the need of federal funds to underwrite the market for prefabricated houses other than the provisions already in existence for the federal government to assist returning servicemen in obtaining homes for themselves. The greatest handicap at this time is lack of material and there would be no need for increased building trades apprentices unless there is ample building material to carry on construction work."

Already there were charges that CIO planned to use the emergency program as an entering wedge for its long-rumored invasion of the building trades. CIO continued to deny that it planned any drive to organize building labor. But a go-ahead for prefabrication would inevitably mean a boost for CIO labor in the housebuilding industry. The CIO fight might come, not with AF of L building trades, but with the

venturous International Machinists Union, reportedly about to be suspended from the AFofL council because of its sponsorship of Buckminster Fuller's aluminum prefab.

PREMIUMS AND INFLATION

Basic in the whole program is increased output of materials. To meet Wyatt's target, flow of materials into residential building would have to be increased five or six times the 1945 level. Premium payments are expected to encourage existing producers to boost their output as well as to encourage the manufacture of new materials not now on the market. Manufacturers would be promised a bonus for all production above a selected base period level. Procedure will be to deal separately with individual producers. RFC will get the job of making premium payments, while the base period will probably be set by OPA.

The plan is an attempt to keep increased costs of production from being passed on to the house customer. But some critics argued that the long-range effect of the plan might be more inflationary than outright increases in price ceilings—especially since the costs it would subsidize would be a "hidden" inflationary factor. Wyatt countered with the argument that premiums could be withdrawn as soon as volume production and a freely moving market could cover manufacturers' costs. The producers complained that the premium plan would penalize the more efficient plants, provide small incentive for cost-cutting. Some manufacturers, who believed that the plan would pay premiums for new materials, threatened unlimited, permanent competition, virtually financed by the Federal government, said they were cancelling expansion plans to increase their own production. Premium payments would not, however, eliminate wage-price ceiling adjustments, in line with the President's steel formula. Some price ceiling increases will be permitted where necessary to increase production, and especially for materials which do not bulk large in the total cost of a house.

CAN WE BUILD A \$6,000 HOUSE.

No matter how carefully they read these hopeful plans to keep building costs down, housebuilders were almost to a man agreed: it is next to impossible to build a \$6,000 house in most U. S. cities. Wyatt apparently intended to reduce the ceiling for HH priorities from \$10,000 to \$6,000, with special adjustments in areas where absolutely necessary. Builders said flatly that meant practically the whole urban U. S.

On the whole, Congress liked the Wyatt program. It was no longer necessary to persuade most members that good housing was good politics, and outlook was that Congress would give Wyatt most of the legislative authority he needs—maybe within a month. Exception: price ceilings on existing houses and on lots, to which most Congressmen are still firmly opposed.

WYATT'S 11-POINT PROGRAM

1. MORE BUILDING MATERIALS. Production of conventional materials would be expanded with the help of some \$400 million in federal "premium payments" (subsidies) to cover difference between production cost and return under present price ceilings. Production of new-type materials would be encouraged by \$200 million in federal funds to underwrite sales at prices that will cover development costs. More rapid amortization of new building materials plants for tax purposes would be authorized. Federal funds would provide credit for plant expansion where necessary.

2. HOUSEBUILDING PRIORITIES. Biggest part of materials supply is to be channeled into houses to sell for not more than \$6,000 or to rent for not more than \$50. Veterans are to have priority on all houses. In high cost areas, houses up to \$10,000 may be permitted under priorities.

3. STOP BUILDING ORDER. Non-essential and deferrable construction including high-priced houses to be banned by new building freeze order, expected in latter part of February.

4. MORE HOUSEBUILDING LABOR. Housebuilding's labor supply to be tripled by a large-scale apprentice training program, by labor recruiting programs, by increase of abnormally low wages. Where necessary, wage increases are to be covered by premium payments to stimulate production. Right now 650,000 workers are employed (both off-site and on-site) in producing houses. By mid-1947, 2,150,000 workers must be on the job—1,150,000 actually building houses and 1,000,000 producing materials.

5. FACTORY PREFABRICATION. Government purchase contracts assuring full capacity operation are to be offered to prefabers. This means that the government will promise to buy whatever houses the producer fails to market within a reasonable period after production. To qualify for such a contract, a prefaber must agree to 1) produce to government standards; 2) sell houses at a top price (f.o.b. plant, not including cost of erection and land of \$3,500 for a one-bedroom model, plus \$500 for every additional bedroom; 3) produce a specified number of houses in the first year after the date of his contract; 4) have an effective plan for distribution and assembly of houses.

6. MORE HOUSEBUILDING MONEY. Re-enactment of FHA Title VI (war housing insurance) is recommended to provide 90 per cent loans on low cost homes direct to builders and to allow for more liberal appraisals, based on current costs.

7. PRICE CONTROLS More effective price controls on building materials, ceilings on both new and existing houses and on building lots (new legislation would be required), and a continuation of rent control are called for.

8. TEMPORARY HOUSING. Congress is asked to appropriate \$250 million to take care of the job of panelizing, moving and re-erecting demobilized war housing.

9. COMMUNITY ACTION. Cities are urged to set up emergency housing committees, who will assist in assuring preference to veterans on existing houses, develop home-sharing programs, help to secure modernization of local building codes to open the way for prefab and other new building methods, discourage black markets, etc.

10. LARGE-SCALE LAND IMPROVEMENT. The Federal government would assist local communities in improving enough lots to provide for the big housebuilding job.

11. PERMANENT HOUSING PROGRAM. Early adoption is urged for S. 1592, the Wagner-Ellender-Taft bill, which frames the first comprehensive federal housing program, providing, in addition to funds for public housing, a variety of new federal aids for private building enterprise.

chine which can lay a four-room concrete and steel house in 24 hours. LeTourneau had as yet nothing to say about the cost of the machine or the estimated cost of the houses it would build, but said it will go into production at a plant which he expects to build immediately at Longview, Texas.

In his home town, Louisville, Wyatt saw the first experimental model of the aluminum house which Reynolds Metals may produce. The five-room bungalow was hastily erected in the Reynolds plant in time for Wyatt's visit. Based on a method originated by General Building Units, Inc., Dayton, O. (who first used steel), the system calls for aluminum shapes, given rigidity by cement poured on the job, and aluminum sheet for siding. While considerable work remains to be done, Reynolds thinks the house could be built for \$5,000 or \$6,000, exclusive of site, expects to put up an experimental batch in Louisville. This plan, based on standard shapes, is intended to leave room for maximum flexibility in design of completed house.



LE TOURNEAU MACHINE maneuvers on to building site on 12 ft., pneumatic-tired wheels, turns out a concrete house in 24 hours. Machine is as wide as a highway, is called Tournalayer.

Says Reynolds: "The designer's only limitation would be 1½ in. in any direction." Reynolds would make basic aluminum parts, sell them through regular building materials dealers. Biggest obstacle: lack of aluminum—Reynolds already has enough orders on hand to require all its supply for the next two years.

Henry J. Kaiser, full of praise for the bold proposals of the emergency housing program, repeated his pledge to build 10,000 California houses this year—first batch of thousands to come. At a hastily called press conference, Kaiser whisked reporters through the first Kaiser Home at Emeryville, Calif., but refused pictures. Not a prefab house, the Kaiser house incorporates a number of prefab elements—notably a preassembled steel bathroom, built by the Briggs Co. Among the other marvels on display: aluminum-sheathed gypsum board; plastic glass planks; cement and sawdust planks; a "soft" concrete floor. Right now Kaiser's hydraulically operated dish-washing sink is made of



REYNOLDS ALUMINUM HOUSE experimental model is erected in factory at Louisville. Painted aluminum siding and conventional design makes aluminum house look just like frame cottage.

aluminum because he can't get steel. Eventually he may have abundant steel if the RFC takes up the bid he has just placed on the giant Fontana plant in Utah. Aluminum for his houses will probably come from Northwest surplus plants on which he has also placed bids.

Other prefab answers were not far ahead. The Butler Manufacturing Co., Kansas City, Mo., (grain bin house) was hard at work on a new steel house, expected to have development studies finished in 90 days. Butler thought it could produce the shell for the basic one-bedroom house for about \$700; the erected unit, they figured, might be marketed for as little as \$1,800-2,000. The first life-sized, furnished model of Buckminster Fuller's round, aluminum Dymaxion stood complete at last in Wichita, Kansas. First pictures would be unveiled to a waiting public at a mid-March press conference in New York.

PRICE CEILING BOOST

Prefabers get OPA to recognize current costs.

Prefabers' bundle of news was generally good last month. From the Office of Price Administration came word that the long-petitioned revision of ceiling prices on prefab houses would be effective February 25. Prefabers are the only part of the house-building industry whose end product is covered by federal price control. Until now, retail prices for prefab houses have been based on material and labor costs at 1942 levels. The new ceilings permit ceilings to be established on the basis of current material and labor costs. No increase in mark-up is allowed for: mark-up remains at 36 per cent at manufacturers' level and at 10 per cent at retailers' level. OPA observed that the new ceilings would compensate manufacturers for increased costs, but also mean that buyers will have to pay higher prices for prefab houses.

PREBUILT GETS SET

Pioneer prefabricator back in production.

Under housing chief Wyatt's plan to underwrite sales of prefabricated houses, established companies—whose production is already organized and whose distribution

systems are already set up—may stand to profit more than revolutionary prefabrication newcomers (see above). Few of these established manufacturers would need any special boost from federal funds in order to make a go of it in the present hungry market. But with the extra bonanza of a government promise to buy all houses now sold through the producer's regular channels, manufacturers can afford to venture expansion capital and to shoot for the sky on production.

One such old-line prefabricator, after extensive reorganization and refinancing, was back in production last month. The Prebuilt Co., Boston



President Marion

Mass. said it would be turning out 300 houses a day by May 100 a day by next September.

First organized a Pope and Cottle Co. in 1905, Prebuilt has for years specialized in a precutting system

of frame construction. Starting production again with the basic house it produced in 1941, Prebuilt expects to deliver (by truck) a two-bedroom Cape Cod cottage that will cost contractors \$3,400, final purchaser \$5,600, and net a five per cent profit to the company.

New financial backing came from the Boston banking firm of Burgess and Leith. Presently capitalized for \$1,020,000, Prebuilt expects ultimately to require the \$10,000,000 which the bank is prepared to invest. All stock—60,000 shares of preferred and 700,000 shares of common—has been subscribed.

Well on its way to licking its biggest current problem—lumber, the company bought all capital stock of the Nashua (N. H.) Milling Co. for \$200,000, getting



Vice-President Smith



PREBUILT basic house (above) was designed by Royal Barry Wills. Like the traditional New England house, this low cost unit designed to expand by adding ells.

in the deal between 2 to 3 million bd. ft. of lumber on the plant site and 30 acres of standing timber. Prebuilt is also making arrangements to buy large quantities of Russian spruce and is currently considering purchasing the Navy's Hingham Bethlehem shipyard to receive this lumber.

Prebuilt's president Gardner S. Marion began experimenting with prefab in 1921, joined the firm in 1938. Last month Prebuilt announced two new officers: Howard Leland Smith, resigning as chief architectural adviser to the Federal Housing Administration, will be vice-president in charge of architectural design and production. Maurice R. Massey, formerly an FHA assistant zone commissioner, becomes executive vice-president and treasurer.

DESIGN

LONG ISLAND MODERN

Operative builder introduces functional plan for 60-house development.

One cold Sunday in February several hundred New Yorkers drove out to the south shore of Long Island for a chance to gaze blissfully at a half-dozen houses under construction. In the current housing famine, this was not news. Nor was it news that about 50 applicants were already on the waiting list for the first house to be finished.

But the half-dozen Long Beach houses, first of a projected job of at least 60, were radically different from anything ever seen before in Long Island operative building (see cuts, left).



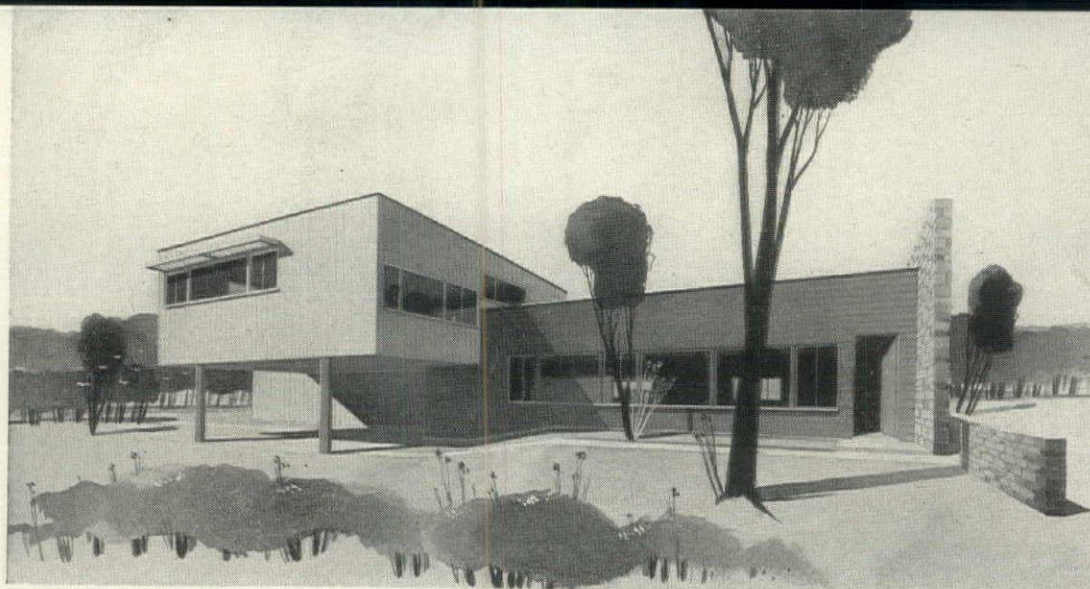
Architect Nemeny

Builder Gordon B.

Roth, who has put up more Long Beach houses than he can remember for the last quarter century, not long ago started work on a fairly expensive custom-built house. It was the first example of modern design he had ever turned a hand to. But after only his brief acquaintance, builder Roth declared himself ready to go all-out for modern. Part of his abrupt conversion from Long Island Colonial was due to the consistent evangelism of modern architect George Nemeny, who has spent a large part of his career in persuading operative builders to see the error of their

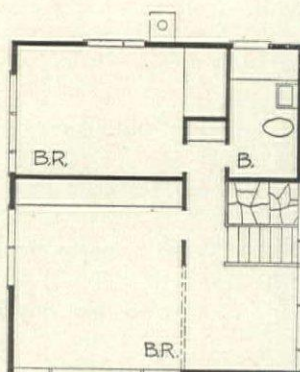
additional ways (FORUM, Jan. '45).

Nemeny's missionary operations are all based on a single text: modern design pays. He is a past master at demonstrating exactly how a functional plan will add up to construction economies for the builder, and greatly increased space for the buyer. On the Long Beach job, Nemeny had the word of problem in which he delights. Starting with the standard 40-ft. lot, he tried to salvage as much land as possible for outdoor living. His solution: a three-level house, whose open plan provides a spacious interior and whose orientation almost doubles the normal usability of the lot.

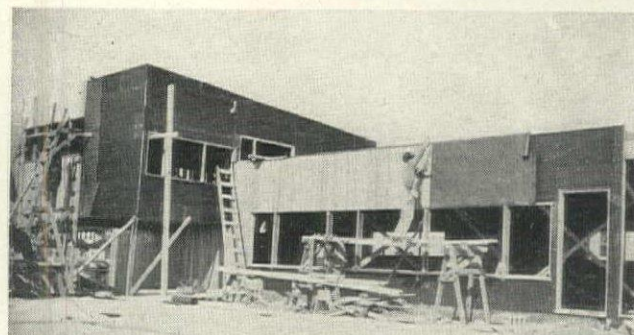


Rendering by C. Rieger

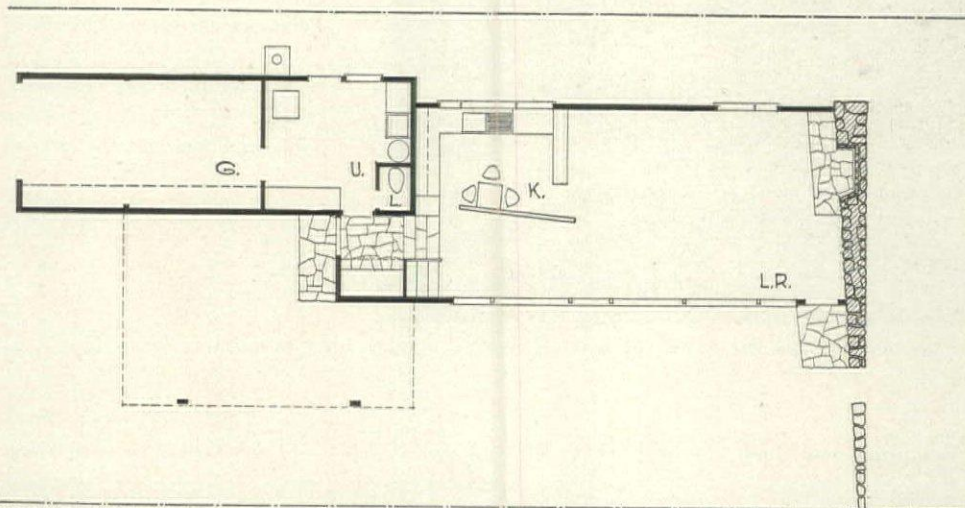
THREE-LEVEL DESIGN takes maximum advantage of a small lot. Large glass area links outdoor space with living room. Post-supported bedroom floor increases available usable land space by providing both a covered entryway and shaded area.



2nd FL.



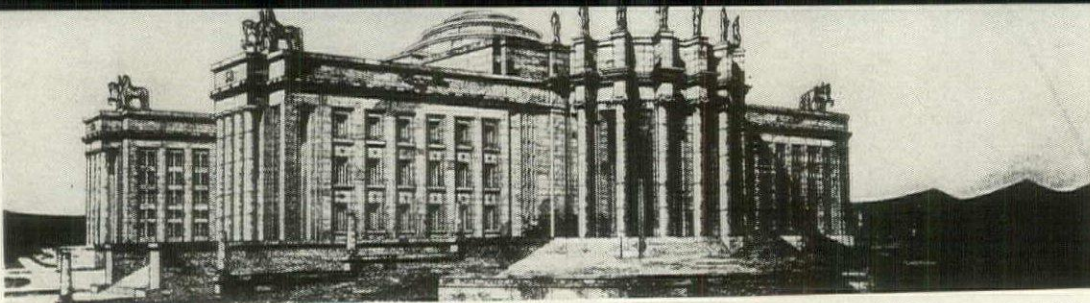
GROUND LEVEL garage and utility room open onto service yard. House is entered by four steps up to second level, which is main living space. Bedroom floor is half-flight above living room and at right angles to the lower levels.



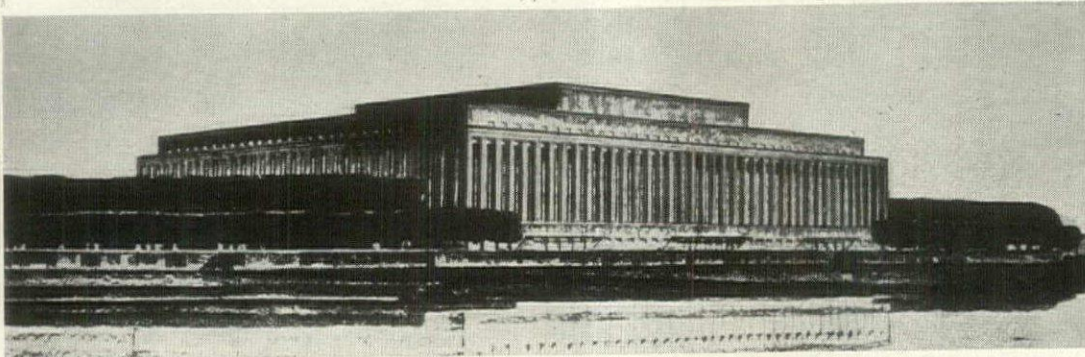
SCALE: 1/16" = 1'-0"

LIVING, dining and kitchen areas are combined as one large space. Kitchen is screened from living area by an oblique partition and from the dining area by two-way dish storage unit. Picturesque rubble stone wall forms east wing.

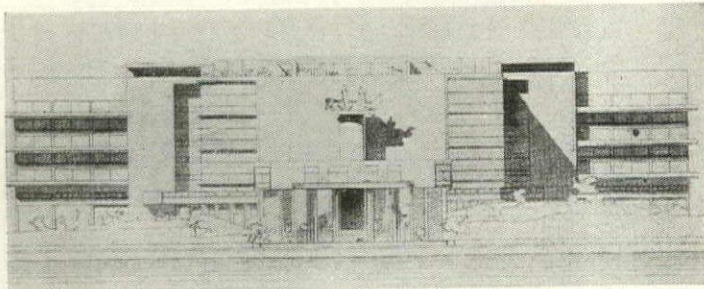




Italian architects' rococo design won in League of Nations competition



Mausoleum-like German design also won a prize



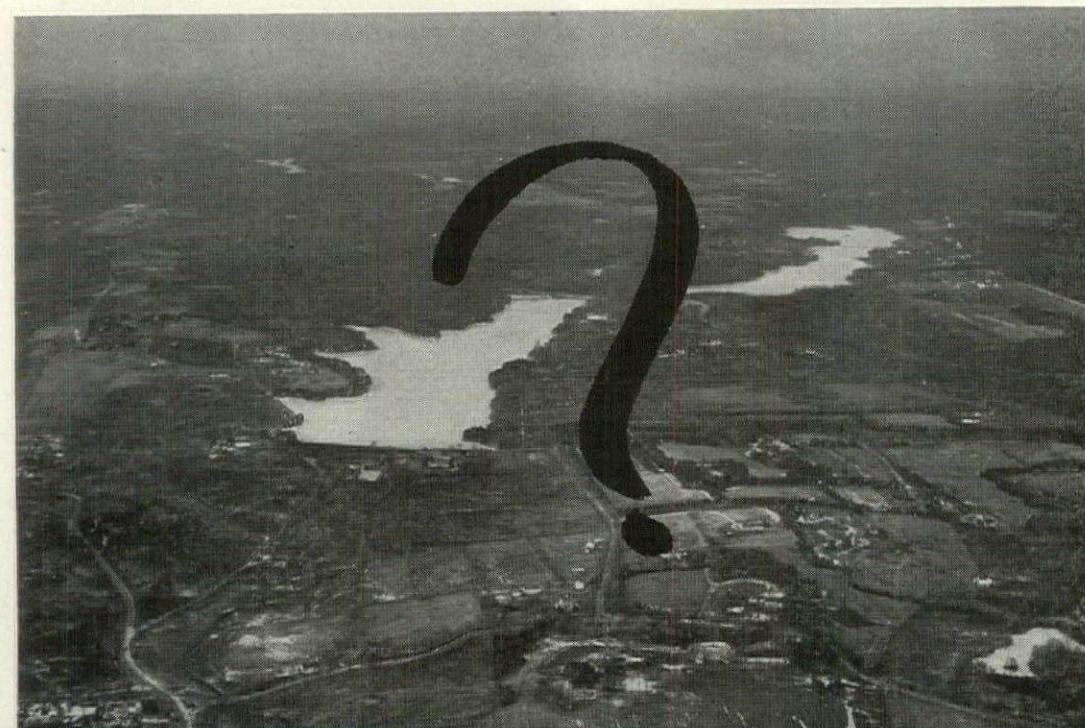
Jury split between Le Corbusier and Jeanneret plan (left) and more pompous designs, finally awarded nine first prizes . . .



Palace commission finally went to four of these prize winners, who combined their talents on monumental building (left) . . .

Abandoned League Palace may become a convalescent home for concentration camp victims . . .

Architects plug competition but hope design for new site (below) will not repeat Geneva fiasco.



SECOND CHANCE

Will UNO design repeat Geneva fiasco?

Unocity, seat of a world's accord, hovered in controversy over a 42-mile tract straddling New York State and Connecticut. Among the displaced persons would be a sirloin slice of millionaire homeowners. Among the displeased was newly-turned Stamford builder Gene Tunney (FORUM Jan., '46.)

Actual construction of what may be the first world capital was obviously at least two or three years off. In the meantime UNO, like many a homeless family, looked for a temporary stop-over. Dickering for lodging in New York City, UNO was reported to look with favor on the 102-story Empire State Building.

Already U. S. architects were urging plans which, they hoped, would avoid the League of Nations design fiasco. The American Institute of Architects came out resoundingly for an international competition. "We are assiduously interested," the A. I. A. said, "in seeing that physically the new UNO capital shall measure up to the objective of UNO."

In every way, Unocity would be a challenge of far greater dimensions than the League of Nations palace. It would be a much more elaborate special community of permanent residents whose housing and social needs would be part of the planner's responsibility. Land acquisition alone for so large a swatch of high-priced land would run from \$20-70 million.

Like the A. I. A., New York's Museum of Modern Art touted an international competition. With the pious hope that what happened last time might not be repeated, the Museum hung prize-winning designs submitted in the 1926-27 international competition for the League headquarters (see cuts, right).

The League competition jury, hopelessly split between academicians and a determined minority who favored the design submitted by Le Corbusier and Jeanneret, awarded nine first prizes. (The Le Corbusier plan was the only one among the nine winners to stay within the cost limit of \$2,500,000 stipulated by the program.) The task of final selection was finally turned over to a committee of diplomats who compromised by awarding the design commission jointly to four of the most tradition-bound designers.

The ornate League palace, which cost \$7,500,000, was not opened until 1939—the year when the guns started firing again in Europe. Observed the Museum: "The competition failed. The Building failed. The League failed."

This time the Museum hoped that UNO would choose "an international jury of honest men, sensitive to the modern spirit in architecture, strong in their conviction to select buildings which will not be meaningless shells, but vital parts of the living organism which the UNO must be."

MERGENCY PLANS

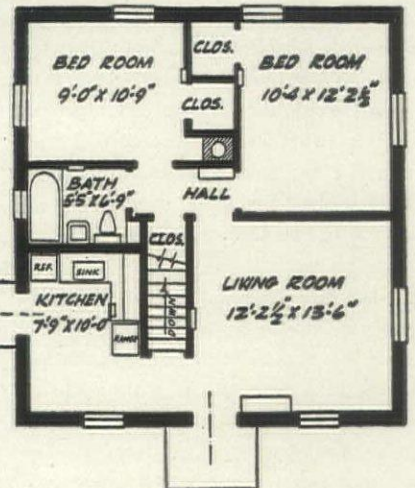
How to build quick but permanent houses is problem tackled by many.

Whatever the program, the housing crisis could not be solved entirely in Washington. That much was clear to all concerned. Housing boss Wyatt had emphasized that the cities themselves must take the lead in action to break housebuilding bottlenecks. He urged them to set up emergency housing committees to see the job through.

Many a city had already set up such a committee. In many another, industry groups were getting together on ways and means to get homeless veterans under a roof as soon as possible. Last month from three cities came varying answers to a tough question: how to build permanent houses in minimum time at minimum cost.

St. Louis Moines, where an emergency housing committee has been hard at work for the past month, looked at a standard plan for a permanent house which may be built for \$5,000. Paring costs to a minimum, the plan for the one-story, five-room house called for tile walls without plastering, millboard ceilings, concrete flooring. Low bids ranged from \$5,335-\$5,420—without garage, sidewalks, landscaping, etc. The committee worried that even this figure could be too high—especially for veterans trying to live on \$90 a month educational grants. The committee hoped that the city could make veterans a present of the lots freed from tax delinquent properties.

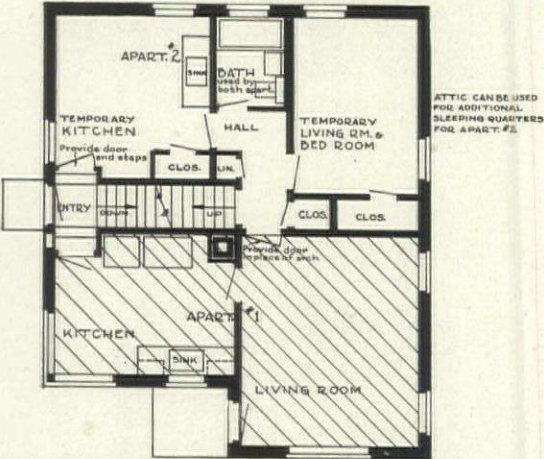
Meantime, sites outside the city limits are being prepared for prefab houses, produced by the Fox Bros. Co., St. Louis. Planned by the city building code, which



ST. LOUIS backs a \$5,335 masonry house for veterans. House is 26 by 26 ft., has basement, first floor and attic. City may contribute lots from tax delinquent property.

Plans for wood, brick, tile or concrete walls, or Cemento-walled prefabs, although they must meet FHA mortgage insurance requirements, must be built on the city outskirts. These two- and three-bedroom houses sell for \$2,500 f.o.b. plant. Erected, with lot and basement, they sell for about \$5,000. Minimizing basement and using a floor

heating unit reduces the cost by \$500. **Milwaukee** debated a "two for one" plan authored by builder Frank Kirkpatrick. Intended to divide a single-family house



MILWAUKEE builders' proposal is to build a one-family house, temporarily divide it for occupancy by two families. Plaster board would be used for temporary interior finish. Bath would be shared.

for temporary occupancy by two families, the plan had already run into trouble with (a) the building code and (b) zoning regulations.

In the first place, Milwaukee's building code says that a combined living room and bedroom must have at least 220 sq. ft. The proposed plan for two-for-one housing doesn't have that much space. Pushing the plan, builder James R. Baer, president of the Milwaukee Builders Association, built a two-for-one house, installed furniture, invited dubious aldermen out for what he hoped would be an approving look.



Second big obstacle was a citizens' petition from one city ward urging the city council not to change zoning regulations to permit two-for-one houses. Petitioners said the plan would depreciate their property, be a risk to public health, be unfair to the veteran. But builder Baer already had 40 veteran applicants for the house he was finishing last month.

Other builders who plan to put up divided houses are: R. A. Lainey, Fred Mikkelsen, Charles W. George and Roth and Taplin. If the city council approves, these men, with Baer and Kirkpatrick say they will put up enough divided houses to shelter 500 families.

Cleveland architects Richard Hawley Cutting and Anthony S. Ciresi turned in a solid piece of work on a low-cost house. They got plenty of applications from builders who want to use their patented plans. The Cutting-Ciresi house is based on careful studies intended to salvage every inch of usable space and to cut every possible dollar off construction cost.

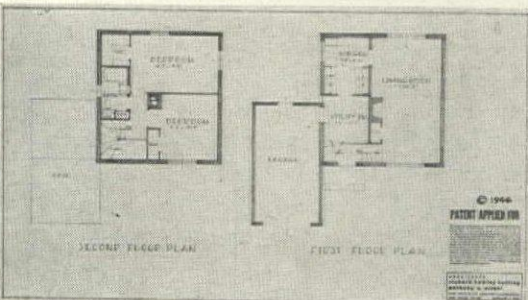
When basic plans were finished, bona fide bids supplied the basis for exact price estimates based on current costs. Totaled up, these amounted to: \$6,968.25 for a two-bedroom house with garage; \$6,813.75 for a three-bedroom house without garage; \$7,290.25 for a three-bedroom house with garage.

To hit these prices, Cutting-Ciresi had ticked off these construction economies:

- ▶ No trench excavation. First floor placed below grade level, with excavated material terraced around exterior to protect foundation.
- ▶ Site-fabricated light wood roof trusses.
- ▶ Stock lengths of lumber and framing used wherever possible.
- ▶ Solid plaster partitions used throughout, except for one bearing wall.
- ▶ Stair-landing used as an entrance vestibule.
- ▶ Same exterior shell used for both two- and three-bedroom houses.

They pointed to these bonuses: automatic radiant panel heating system in first floor, factory-built kitchen cupboards, overhead steel garage doors, living room fireplace.

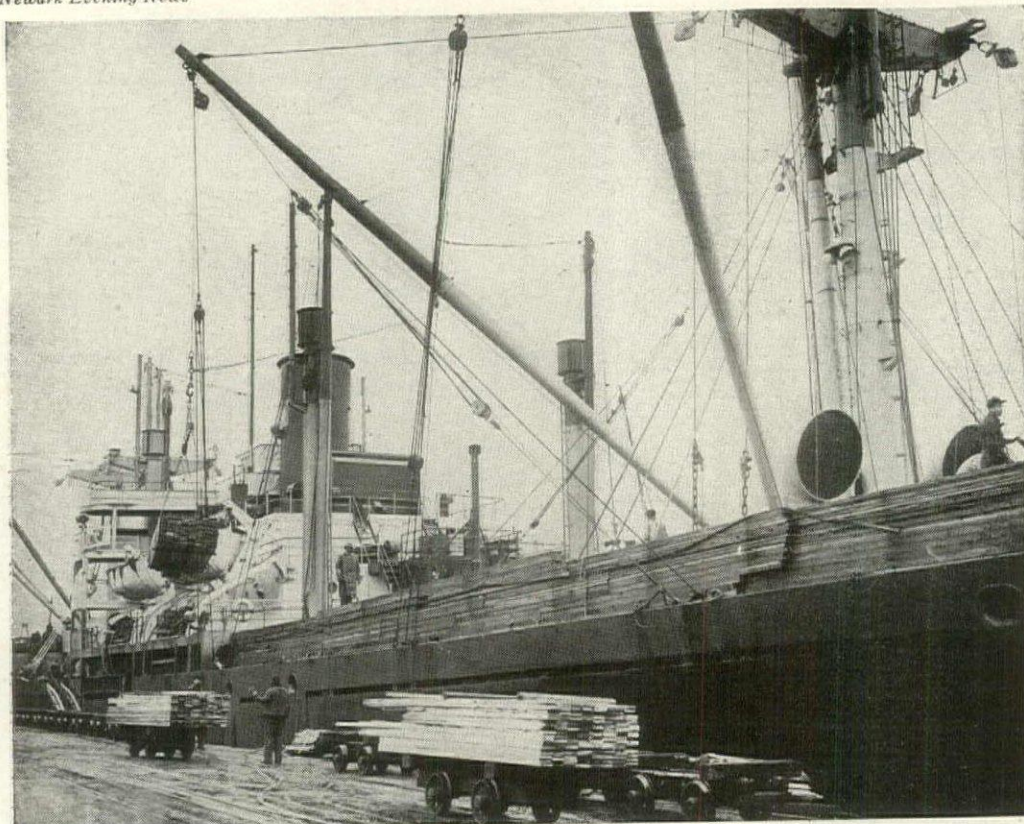
Cutting and Ciresi planned to organize operations for quantity production and precutting of as many materials as possible—to be delivered in a package at the site at the same basic cost to all participating builders. Three builders were already negotiating for large sites in Cleve-



CLEVELAND architects Cutting (left) and Ciresi plan two-bedroom house for \$7,000 to be built in concrete block, brick masonry or frame construction. Many builders want to use patented plans.

land to build the patented houses, a several hundred unit development was planned at Ashland, Ohio, while the architects had nearly 500 inquiries from Clevelanders who say they would like to buy one of the houses.

Dallas scanned a plan carefully developed by a local advertising agency, Tracy-Locke Co., Inc., who took a marked but non-commercial interest in solving the house-building problem. The agency proposed what it called "studio apartment homes," which would contain a good-size combination living, dining and bedroom plus bath and a small kitchen. Units would be built at the rear of lots, later become garages when owners build a larger and permanent house. Lots would have separate zoning for front and back portions.



FIRST LUMBER SHIPMENT from West Coast arriving in Newark, N. J. marks resumption of intercoastal shipping, suspended since the outbreak of the war. This cargo of 3 million bd. ft. of fir and hemlock, aboard the S. S. Malden Victory, was consigned to the Weyerhaeuser Timber Co. The line-up of would-be buyers matched Nylon hosiery ques. But entire shipment had already been bought by 250 dealers.

DILEMMA

Federal government hogs office space.

San Francisco, like many another city, heartily wished that the federal government would go home again. Nobody could start in business because nobody could find office room. Checking up, a Board of Supervisors committee found to its dismay that federal agencies are occupying 21½ per cent of all the city's office space.

Moaned the *San Francisco Chronicle*:

"During the war there was nothing to be said about the wholesale taking over of space by government agencies. But now, when most of these bureaus have been reduced in personnel and activity, every instance where one holds on to the same office space it occupied at the height of its war-time bustle constitutes an outrage on this city."

But in Washington, the *Post* worried about the desperate housing shortage, made one big recommendation:

"The government can help by delaying the return to Washington of federal agencies moved out for want of space during the war. It would be extremely short-sighted to bring these agencies back now in the face of a housing crisis."

CODE PROGRESS

Cities open way for quick building.

Two cities last month took the first big step toward housing-in-a-hurry. Chicago and Pittsburgh started at last to update hamstringing building codes.

Housing chief Wilson Wyatt had made it

plain that the housing job would stumble on a hundred outworn codes—unless the cities move quickly to bring them up to date. Prefab construction, a major part of the Wyatt program which will be backed by federal funds, would be banned by most existing building regulations. Such prefab elements as the Ingersoll bath-kitchen unit (FORUM, Feb., '46) would be unable to meet code standards in many cities—simply because the iron-clad codes were framed before anybody thought of a packaged house utility unit. Many codes, written in terms of exact material and structural specifications instead of performance standards, would block the introduction of the new materials which Wyatt hopes will be produced with government encouragement.

In Pittsburgh, a citizens' committee, to the tune of loud cheers from the Home Builders Association, got to work on a thorough overhauling of the building code—unrevised for 20 years. They found it full of such costly antiquities as the requirement that closet lights must have a separate switch instead of a pull chain, guessed they would be busy for a good long time.

In Chicago, the aldermen who compose the code revision committee took a look at the sweeping amendments recommended by the Pierce Foundation after a year's study. The revision job they saw was so big that they decided to take a short-cut, promised to come back to the big job later. Like many another city, Chicago adopted a temporary war housing regulation (essentially FHA minimum requirements) to open the way for emergency war building. To meet this second and almost graver emergency, the aldermen decided to make

use of the war housing ordinance, amend it by replacing war substitutes with standard items. But builders and buyers wondered how the city council would act on the ticklish matters of frame construction and wall board—both permitted for war workers' houses but banned by the code.

State FHA director Edward J. Kelly told the committee how urgent it was to get rid of costly code provisions. Chicago costs are up 46 per cent over 1941, he said, and a 3-room frame house, planned for two additional bedrooms later, may be all that the veteran can afford. He said FHA was at work on such a model, shaving a few dollars wherever possible. Even at that, the cost of the "veteran's special", with lot, would be \$6,200-6,500.

Keen buyer interest in the matter of code revision was apparent in the appearance at the public hearings of spokesmen for all national veterans' groups. The veterans demanded approval of every type of construction offering a promise of quick volume building. Sample: the Veterans of Foreign Wars promoted pneumatic concrete construction and, in response, the Board of Standards and Tests ordered a sample wall set up for demonstration.

MATERIAL

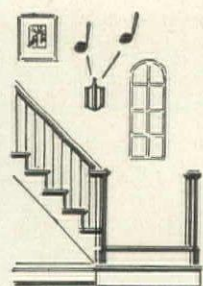
PORTENT?

OPA's try at incentive pricing fails.

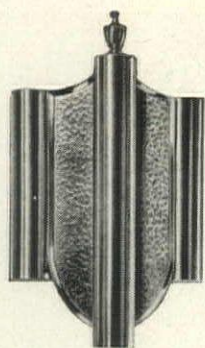
"Premium payments" (subsidies) to help step up production of short building materials are spotlighted in the emergency house-building program. If Congress approves, the government will offer manufacturers premiums as an incentive for increased production. While government payments to absorb the extra cost of sharply boosted production are a distinctly new step, the Office of Price Administration has already explored the complex business of using a price ceiling increase as an incentive for increased production. Last month OPA's first big try at incentive price increases in the building materials field fell flat on its face.

The plan had looked good to the price specialists in Washington. Late in January the Office of Stabilization Administration authorized OPA to grant an average price increase of \$3.25 per thousand bd. ft. in mill prices for Southern Pine lumber. The increase was not to become effective until May 1 and then only upon the condition that total shipments of Southern Pine lumber for the first three months of 1946 equal a goal to be established by the Price Administrator. OPA was also expected to establish production goals for each following quarter (basing them on hoped-for 1946 production of Southern Pine lumber amounting to nine billion bd. ft.). According to the incentive price plan, the ceiling increase was to be withdrawn if lumber

(Continued on page 14)



ELEGANT COLONIAL
—the NuTone Mount Vernon. A 2-door chime in beautiful hammered brass design. As lovely to hear as it is to see. Sounds two stately tones for front door, one for rear. $7\frac{1}{8}$ " wide, $11\frac{1}{2}$ " high.
List. \$6.95

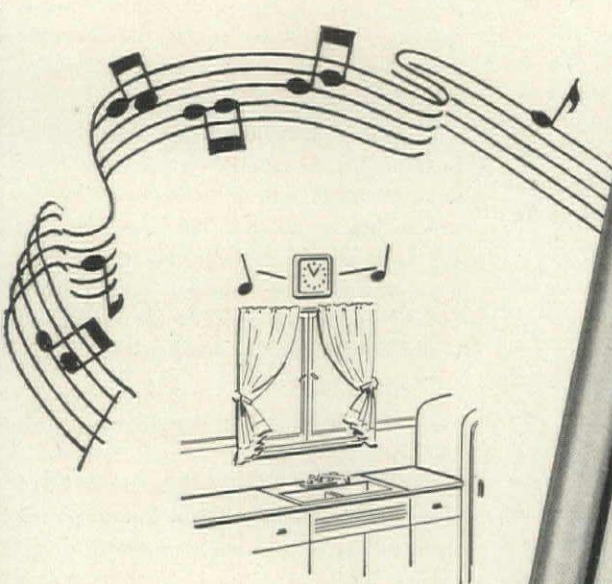


SOMETHING NEW!—the NuTone Whatnot Door Chime, a rich-toned 2-door chime concealed behind a handsome wall shelf. Mahogany-finish Chippendale or maple-finish Colonial. $8\frac{3}{4}$ " wide, $15\frac{1}{2}$ " high.
List. \$10.95



You solve two design problems...

with this one NuTONE TIME-CHIME!



IT SAVES YOUR TIME, simplifies design... it's a fine new Telechron electric kitchen clock and NuTone Door Chime—in one! ONE unit to plan for, to wire for.

LOVELY TO LOOK AT—The NuTone Time-Chime's legible, $6\frac{3}{4}$ " square dial and smooth, sleek lines in chrome and white blend well with most backgrounds.

LOVELY TO HEAR—sounds two well-pitched, yet penetrating tones for front door, one for rear.

EASY TO INSTALL—even easier if kitchen is wired for installation as in several large prewar building developments which employed this Time-Chime's predecessor.

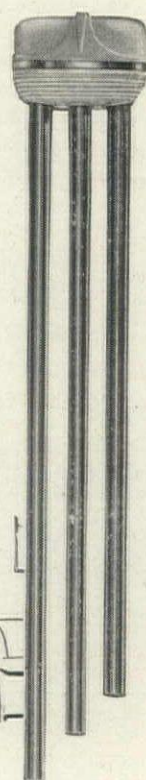
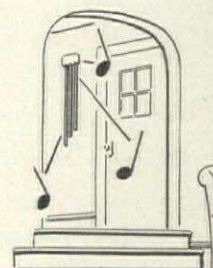
ENTHUSIASTICALLY RECEIVED at the recent Chicago Housewares Show by housewares buyers, those who can't afford to misjudge the popular taste.



Write today—get all the facts on the NuTone Time-Chime that lists at approximately \$12.95. Address your nearest NuTone office. NuTone, Incorporated, Merchandise Mart, Chicago 54, Ill.; 200 Fifth Ave., New York 10, N. Y.; or 931 East 31st St., Los Angeles 11, Calif.

NU TONE
TRADE MARK
DOOR CHIMES

LONG-TUBE BEAUTY
—the NuTone Continental. Three gold-lacquered tubes. Rich ivory plastic cover tastefully trimmed in satin brass. Two tones for front door, one for rear. $7\frac{3}{4}$ " wide, 42" high, overall.
List. \$9.95



Born with a
2000-year-old reputation...



EAGLE Ready-To-Use WHITE LEAD PAINT

Preferred painting material of American planners and builders since Thomas Jefferson's day, the 2000-year-old white lead formula is unmatched for durability, beauty and economy.

Now you can specify a new, convenient form of pure white lead. It's more useful to your clients, easier to use for painters. We give you Eagle Ready-To-Use White Lead Paint, in gallon form, ready to open, stir and apply.

White lead protection that's extra smooth!

The research staff of Eagle-Picher has given this marvelous paint a new plus—greater brushability, greater smoothness—and until you try Eagle RTU yourself you can't possibly know what we mean. It covers evenly, leaves practically no brush marks. Its flexible film clings fast despite wear and weather. It dries to a brilliant white gloss that doesn't crack or scale, but chalks gradually, actually preparing the surface for eventual repainting.

Eagle Ready-To-Use White Lead Paint comes in two forms: Primer Sealer Coat and Outside White Finish Coat. One, two and five gallon pails. Made by a company with 103 years of experience. You can recommend Eagle RTU with full confidence.

THE EAGLE-PICHER COMPANY

Cincinnati (1), Ohio

Member of the Lead Industries Association



EAGLE PURE WHITE LEAD



TWO FORMS:
Ready-To-Use,
and Paste
ground in pure
linseed oil



production fell below the goal in any quarter.

When Southern Pine producers glimpsed this directive, their howls of protest were loud enough to echo forcefully in Washington. "Utterly unsound, wholly impractical, and ineffective," they snorted. The plan, they said, would certainly not increase production. "To the contrary, it will reduce production and certainly, under the conditions set forth in this directive, there will not be any price increase for this distressed industry. The suggested basic goal of nine billion ft. for 1946 is absolutely impossible of attainment under the directive..."

By mid-month OSA had made an abrupt policy flip-flop, said mill producers could have the \$3.25 price increase regardless of output. But OSA added one warning note: The price increase will be effective until about August 15. If production goals for the first six months of the year are not met, it may be withdrawn.

DUE IN PORT

Overseas building surplus comes home.

Twenty-three ships full of building materials will soon show up at West Coast docks. The returning ships, which have been idling in Pacific ports, are another sign that the War Department is at last hurrying to unload surplus building materials.

The ships' cargo, which will be immediately placed on sale, was enough to make a builder's mouth water. Two ships are loaded with lumber—seven million bd. ft. of it (or enough to finish all the 500 houses stalled in Denver, see below). Others carry bathroom fixtures, pipe fittings, roofing paper, construction equipment. Also on board: 677 prefab huts and some 2,000 crates of barracks which could be used for temporary housing.

To the Senate (Mead) National Defense Investigating Committee went the credit for speeding the return of these needed supplies. Since September the Mead Committee has been busy tracking down loaded ships lying idle in the Western Pacific and needling the War Department about them. Most of the ships will be back sometime next month, the Committee said triumphantly.

STALLED HOUSES

Some may be permanent step-children of HH priority program.

While 10,000 Detroit citizens volunteered to make a house-to-house canvass to find shelter for veterans, Detroit builders said 2,500 houses were stalled for lack of materials. The builders agreed that price ceil-

ings are still the biggest bottleneck. They pointed to one current horrible example: while houses waited for bathtubs, a manufacturer was forced to store more than 7,000 tubs until OPA could make up its mind about the ceiling price.

Rodney Lockwood, executive secretary of the Detroit Builders Association, figured that OPA could allow manufacturers at least a 50 per cent raise in the ceiling price of fiber sheathing and that the cost of the home would still be less than it is now.

"That doesn't mean," Lockwood said, "that manufacturers are asking for this much of an increase. It simply means that the substitutes which builders are being forced to use are costing that much more."

In Denver, 500 houses had been stalled for almost three months for the lack of one or two items of material. Construction was proceeding on another 500 houses and on 399 apartment units—but nobody knew for how long. Denver builders lugubriously figured up exactly what would be needed to finish this badly needed housing.

Their estimate:

►4,979,866 bricks—but Denver brickyards were operating at only 15 per cent of capacity. The brickyards claimed that OPA price ceilings were still too low to permit them to pay high enough wages to attract needed labor.

►3,657,734 bd. ft. of dimensional lumber.

►3,242,256 bd. ft. of rough lumber.

►1,372,067 ft. of flooring.

►12,281 doors—not one door was available in Denver.

►940 bathtubs.

►28,730 ft. of soil pipe—but Denver was receiving only about 10 ft. of soil pipe per day.

Stanley C. Brandenburg of the Denver Association of Home Builders mourned that many of the 500 completely stalled houses might be permanently stymied. Started before the HH priority program, some of them were already contracted for by non-veteran buyers. Others were planned to cost more than the \$10,000 ceiling permitted under HH priorities. It seemed clear that first purchasers would have to trade their rights to veterans and that high prices would have to be whittled—or hundreds of the stalled houses would remain stalled indefinitely.

Colorado's Governor John C. Vivian (Rep.) took a look at the whole tangled picture. Like many a builder, Governor Vivian was sure he recognized the villain of the piece. Angrily he wrote Price Administrator Chester Bowles: "Give industry

(Continued on page 16)

Achieve the Distinctive

WITH

"The Finishing Touch—"



KIN-TRIM

ESSENTIAL METAL MOULDINGS

KINTRIM affords greater freedom for your creative designing along modern, sweeping lines . . . enables you to build more "face value" into your interiors. For KINTRIM—the lustrous metal mouldings of *enduring beauty*—has the structural precision *you need* and want for more attractive, practical use of colorful, serviceable coverings. Indeed, wherever you install linoleum, wall- and floor-coverings, KINTRIM smartly enriches and accents your design.

As experienced, leading contractors recognize—KINTRIM Stainless and KINTRIM Alumilited sections surpass ordinary metal mouldings in protective service. They're precision-made, in a complete range of gauges, to fit specific weights of covering materials. And, to protect hands and clothes against snagging, every KINTRIM Stainless section embodies Kinkead's special *Safety Rolled-Edge*.

Let KINTRIM beauty and utility serve you as *the finishing touch* that adds more "face value." Address us, Dept. 3A, for reprint of KINTRIM showing, Architects' File, 1946 Sweet's Catalog.

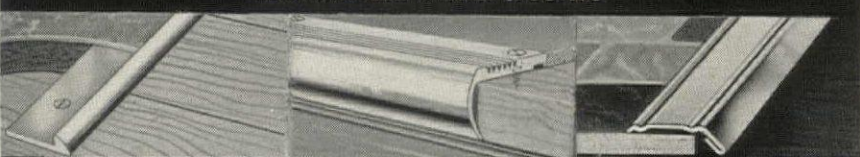
FACING for Counter and Table-Tops, Shelves, Cabinets, Sinks



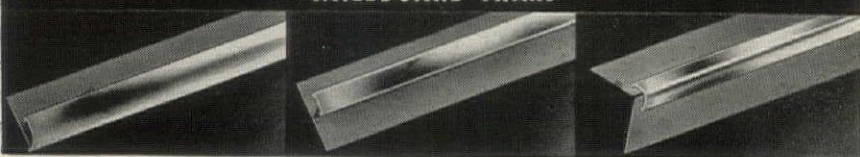
CAP and COVE for Counters, Sinks, Wall-Coverings



EDGING and STAIR NOSING



WALLBOARD TRIMS



kintrim
TRADE MARK



KINKEAD INDUSTRIES

INCORPORATED

440-450 W. SUPERIOR ST., CHICAGO 10, ILL.

Designed for the
Finest Homes...



yet priced for
Low Cost
Housing

**PAINE
REZO
DOORS**

U.S. Pat. 1,887,814—The exclusive inter-locking grid core within the Rezo door allows constant air circulation, adds extra strength and provides greater rigidity.

THE beauty of Paine Rezo doors is visual. You can see instantly the "lift" they give to interiors . . . how they make small rooms appear lighter and more spacious. Yet unseen are the basic factors that make Paine Rezo America's largest selling flush door. Beneath the matchless surface of this 1 3/4 inch door is a patented, inter-locking air-cell core that checks shrinking and warping, while it adds great strength to light weight. In addition, this best engineered door is pre-fitted, cut to size, easily hung and quickly finished. Its installed cost is no more than that of an ordinary door. No wonder more than one million are in service today in every type of building everywhere.

Manufactured by the

PAINE LUMBER CO., Ltd. Oshkosh Wisconsin

ESTABLISHED 1853

the green light, allow individual initiative and enterprise to operate in its natural way, and the law of supply and demand soon will find a common level for competition to open up a free market . . .

"Healthy competition will regulate prices far better than man-made regulations of a bureaucratic system. You cannot successfully control our economy through regulations and directives. The inflationary trend in which we find ourselves is the direct result of this unconscionable and unwarranted meddling of the bureaucratic order."

In Illinois, Governor Dwight Green (Rep.) saw another villain, of a brand calculated to get him headlines in the isolationist *Chicago Tribune*. Shrieked the *Tribune*: "Governor Lays Housing Crisis to Lend-Lease." According to the *Tribune*, Governor Green thinks the present housing shortage exists because "material stocks have been depleted by lend-lease exports and production is stagnated by the confusion of attempted price and wage level stabilization."

BUILDING MONEY

BANKS BUILD

Eight Rochester banks find way to supply low-rent housing for veterans.

In Rochester, N. Y. eight banks found an answer to one of the biggest gaps in the emergency housing program—how to supply moderate-priced rental housing. The banks said they planned to get together on a non-profit corporation to build enough apartments to accommodate 150 veterans and their families. The corporation will borrow equally from its eight members (five commercial and three savings banks) at a low rate of interest for the financing needed to put up a garden-type apartment development. The plan marked the first banking step outside New York City to take advantage of the new state law under which banks are permitted to make direct housing investments, and the first example of commercial bank participation (in New York, savings banks have teamed together to plan a number of rental projects).

Late in January Rochester's housing pinch had exploded at a mass meeting where anxious citizens demanded emergency government housebuilding and urged that all nonresidential construction in the city be banned. The meeting started the bankers thinking. Within a few days they had a plan. Said one member of the corporation: "This is our attempt to meet the threat of public housing. We believe that if there must be some subsidization of low

cost rental housing, it should be on the part of the community itself and not by the federal or state government."

The banks' project is, however, planned to pay its own way without any subsidy except the absence of profits. If profits should loom up on the books, the corporation plans to turn them over to the Community Chest. The Community Chest will eventually take title to the property, and the corporation itself will dissolve as soon as its investment has been amortized. Total cost may be reduced by the rumored likelihood that the city will donate a tract of land for the development.

While exact figures have not yet been announced, the banks are expected to invest about three-quarters of a million dollars in the project. They hope to protect their loan by FHA insurance and have already submitted a plan for FHA approval. Rents will probably be about \$10 per room per month, with most of the apartments to have four rooms. Buildings will range from two-family to twelve-family units, fronting on a central park and play area. The plan has been prepared by architect C. Storrs Barrows, who is chairman of the Mayor's advisory committee on housing.

Full endorsement from the Rochester Home Builders Association and from the City Planning Commission means that the banks' plan has plenty of support. All work will be done by local building contractors with local labor. Special attention will be given to using substitutes for critical materials wherever possible, but backers emphasize that construction will be of a "high quality, permanent type", while the character of the project will be protected by zoning, thorough landscaping, etc.

With approval from the Rochester Clearing House Association and from the State Banking Commission expected before the month's end, backers felt safe in talking about fall occupancy—a promise that was the first tangible piece of good news Rochester's homeless had yet heard.

LABOR

PROMISE OF PEACE

New York signs pact after two years of trying, but some unions stay out.

One sign of how far labor will go along with the building speed-up needed to meet the housing emergency came from New York City. As a sample of what labor's attitude may be, it was not encouraging. New York's Construction Trades Council and Building Employers' Association finally put

(Continued on page 20)

This is the first of National Gypsum's new, full color advertisements in the Saturday Evening Post creating greater appreciation for new ideas among your clients. This house, designed especially for National Gypsum by Perry Duncan and rendered by Charles Kaiser is an excellent example of how you can Build Better with Gold Bond! National Gypsum Company, Buffalo 2, New York.



You'll build or
remodel better with
Gold Bond

Ask your Gold Bond lumber and building material dealer how to have a home like this. He is headquarters for new building products and ideas.

In your house "skin deep" beauty isn't enough!

SOME day soon you'll build that house you've been planning and longing for. It may be modern, as the one above. Or it may be colonial or stately Georgian. Or it may be a simple "Cape Codder" nestled in among tall trees. Whatever its style—you want it. You'll build it. And you'll love its every nail and board and stone! And, because your home is so important, you should know now the essentials that make the difference between flimsy construction and sound, between a bad investment and a good. Take walls and ceilings, for instance, but don't take them for granted! It's easy—for a few months or years—to hide cheap, second-rate quality in walls and ceilings. But today, thanks to Gold Bond's years of research in this specialized field, it's just as easy to build walls that will last forever. That will be firesafe, and crack resistant. That will add

tremendously to structural strength at no extra cost. That will turn away summer heat and retain heat in the winter. That can be beautiful in any color with a marvelous paint that dries in one hour!

You can get these advantages and many more by demanding the six Gold Bond features shown below. Backing them up is a complete line of 152 building products, produced in 23 modern plants, and sold through 10,000 leading lumber and building material dealers. When you start thinking about new building or modernizing, see your Gold Bond dealer first. He can bring you the latest in building products and ideas. He can help you get more than "skin deep" beauty and value for no more than the cost of ordinary construction.

National Gypsum Company, Buffalo 2, New York.

Over 150 tested Gold Bond Building Products for new construction or remodeling add greater permanency, beauty and fire protection. These include wallboard, lath, plaster, lime, sheathing, wall paint, insulation, metal and sound control products.

**DEMAND
THESE SIX
GOLD BOND
FEATURES
IN YOUR
NEW HOUSE**

**GOLD BOND FIREPROOF
GYPSUM SHEATHING**



Big, weatherproofed panels of Gold Bond Storm Sealed Gypsum Sheathing add structural strength and built-in fire protection. Cost less than old-style sheathing.

**GOLD BOND
FLOATING WALL SYSTEM**



A new way to build plaster interiors with "floating action" to withstand normal structural strain. Longer-lasting beauty. Greater fire protection, less room-to-room noise.

**GOLD BOND FIREPROOF
GYPSUM LATH**



Gold Bond Gypsum lath is the perfect plaster base. Can't warp, expand or contract. Available with insulating vapor-seal, metal back as a barrier to condensation.

**GOLD BOND FIREPROOF
PLASTER AND LIME**



Micron-sized Gold Bond Gypsum Plaster plus specially processed pure white Gold Bond Finish Lime build new beauty and lasting satisfaction into walls and ceilings.

**GOLD BOND FIREPROOF
ROCK WOOL INSULATION**



For greater year 'round comfort in new and old homes. New. Extra-efficient. Waterproof. Fireproof. Verminproof. Cuts heating costs as much as 30%.

**GOLD BOND—SUNFLEX
1-HOUR WALL PAINTS**



Dries in one hour with no objectional painty, after-odor. Easier to apply. This modern decoration is now available at your dealer's in a full range of colorful tones.

Modern now ... bu

Tried ... Proved ... SUCCESSFUL

From Boston to San Diego ...
... From Bismarck to Miami

The Servel All-Year Gas Air Con-
ditioner is already operating suc-
cessfully in hundreds of installations
from coast-to-coast. Some have been
running for more than four years.
The equipment is tried, tested ...
and approved by users everywhere.



"NO. 5 JEFFERSON LANE"—a home for
good living designed for *Good House-*
keeping Magazine by architect
Cameron Clark of New York City.
One of a group of landscaped scale
models in *Good Housekeeping's*
"Homes America Wants" exhibit.

Will your new homes stay that way?

You can offer clients *lasting* modernity
with Servel *All-Year* Gas Air Conditioning

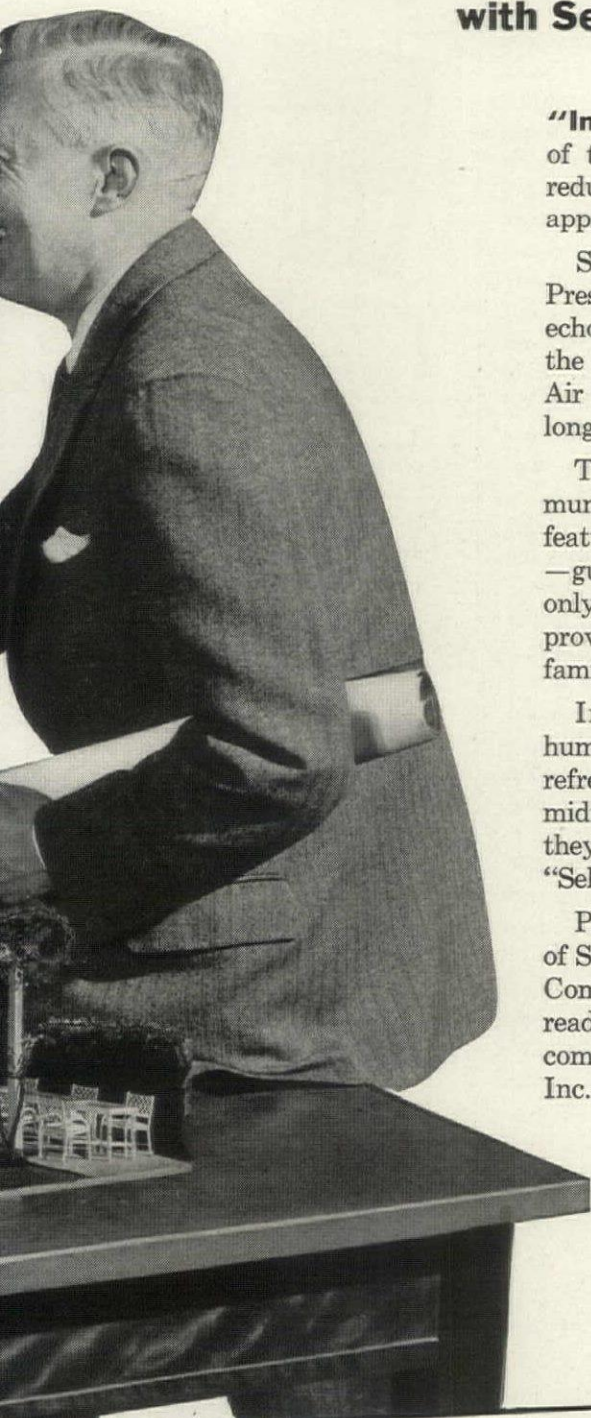
"In addition to providing comfort every day of the year, *All-Year* Gas Air Conditioning will reduce the obsolescence rate of homes and add appreciably to their value."

So says Mr. F. A. Ferroggiaro, Executive Vice President of the Bank of America. His opinion is echoed by leading mortgage loan officers all over the country, who agree that Servel *All-Year* Gas Air Conditioning will definitely keep homes modern longer.

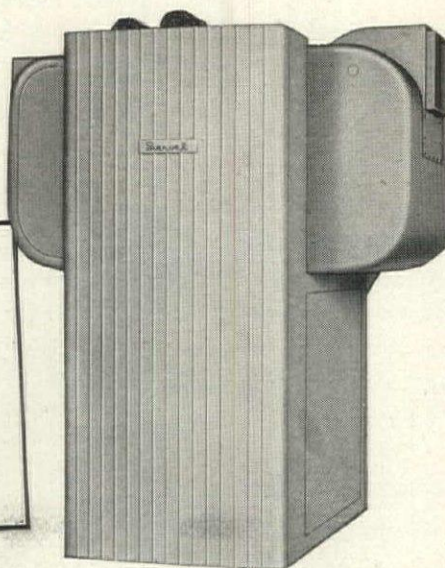
They point out, too, that homeowners get maximum "use value" from the Servel equipment. Many features considered essential in the modern home—guest room, laundry, extra bathroom—are used only intermittently. But the "new quality of living" provided by the Servel unit is enjoyed by the whole family every day in the year.

In winter they luxuriate in clean, properly humidified, draft-free heat. In summer they are refreshed by cool, clean air, freed from sticky humidity. The year round they choose the climate they want indoors with a touch of the central "Selectrol."

Plan now to offer clients the *lasting* modernity of Servel *All-Year* Gas Air Conditioning. Your Gas Company has trained air conditioning engineers ready to help you specify and install the unit. Get complete information from them, or write to Servel, Inc., 2603 Morton Avenue, Evansville 20, Indiana.



Servel
All-Year GAS AIR CONDITIONER





The challenges of War confirmed what experienced architects and builders have long known... *Homasote is completely weatherproof*—whether used for interiors or

exteriors. In steaming tropical bases—in Arctic, Temperate and Antarctic areas—Homasote always gave the same dependable performance.



Now the big sheets of Homasote—in sizes up to 8 feet by 14 feet—are again available for private construction. Use them for interior finish, for exterior finish, for sub-flooring, roof sheathing or sidewall sheathing. Take advantage of the various sizes to avoid unsightly batten strips and unnecessary wall joints.



Here are top insulating efficiency and top structural strength in a single board—a board that is permanently crackproof. Here is the perfect surface for either paint or wallpaper.



We welcome the opportunity to send any architect or builder a copy of our new booklet, illustrating some of the many uses of Homasote Insulating and Building Board. The book gives physical characteristics, performance charts, specification data and application instructions. We invite you to write for your copy today.

HOMASOTE COMPANY, Trenton 3, N. J.

their signatures to an industry-wide, five-year agreement which gave at least the promise of increased output and of labor peace. But three key trades—plasterers, electricians and bricklayers—had flatly refused to sign up. Their biggest reason: the agreement calls for a standard 7-hour day.

The reluctance of the traditional 6-hour trades to lengthen their working day was baldly expressed by Saul Heisler, business manager of the plumbers' union: "We want to spread the work. Of our 3,800 New York members, 1,000 are currently out of work, 500 more are still in the armed forces. We want to be sure there will be jobs for them when construction starts." But by month's end, the plumbers apparently had overcome their opposition to a 7-hour day and were reported ready to sign.

The bricklayers' "no" was final, according to secretary Andrew Lawler. Said Lawler: "We'll negotiate for ourselves. We don't want to be tied down. We have our own arbitration tribunal and we don't need a master agreement."

In exchange for pay increases ranging up to 25 cents an hour and for the guarantee of wage renegotiations every year, the unions who did sign up agreed to ban strikes and lockouts and to accept the decisions of a permanent arbitration board. They also agreed to a standard work schedule, a hopeful effort to end the job losses resulting from varying trade shifts. The standard schedule calls for: a work-week of 35 hours; a 7-hour day from 8 a. m. to 4 p. m.; seven legal holidays. On their part, building employers agreed to finance a welfare program by paying a tax based on 3 per cent of payroll.

The present agreement is the second attempt New York's building trades and building employers have made to stabilize their working relations. A similar plan was tried in the bad year of 1932—but workers were forced to accept a 25 per cent wage-cut as part of the agreement. Because of this "poison-clause", the plan soon died.

HOUSES FROM SHIPYARDS

Union says five million could be produced by shipbuilding methods.

Housing chief Wyatt's emergency program had called for 850,000 prefabricated houses by the end of 1947. Last month the International Union of Marine and Shipbuilding Workers of America (CIO) touted a plan which, they optimistically calculated, would produce five million houses in 12 months. Their scheme, the shipyard workers said, would keep war-built shipyards busy. It would also provide jobs for hundreds of thousands of skilled sheet

(Continued on page 24)

Specify Sparkling Clean Hot Water

with
SMITHway PERMAGLAS

WATER HEATERS



There's Only ONE Permaglas

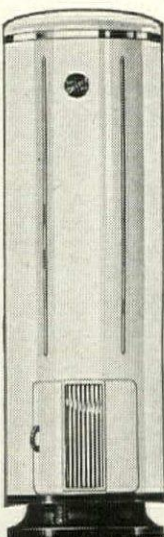
23,000 test-years went into the perfecting of this truly modern water heater... the heater that "packages" hot water in glass! The heater that resists all rusting and corroding in the tank under any water conditions.

When you specify hot water the Permaglas way, you can promise:

1. The glass-lined tank — Permaglas — the sparkling blue, mirror-smooth glass-fused-to-steel.
2. Tank as clean as a sparkling drinking glass.
3. Freedom from all rusting and corroding in the tank.
4. No tank corrosion in the bath... no "tank spots" on clean laundry.
5. Hot water as clean and pure as the source.



Send today for full information... ask for the booklet, "The Inside Story of Permaglas."



A.O. SMITH Corporation

NEW YORK 17 • PITTSBURGH 19 • CHICAGO 4
TULSA 3 • HOUSTON 2 • DALLAS 1
LOS ANGELES 14 • SEATTLE 1
INTERNATIONAL DIVISION: MILWAUKEE 1
In Canada: JOHN INGLIS CO., LIMITED

SMITHway
Permaglas
GLASS-FUSED-TO-STEEL
WATER HEATERS

Everything looks better through an
ADLAKE WINDOW!



Adlake Aluminum Windows offer many advantages for so little more. Elimination of excessive air infiltration, finger-tip control, no warping or sticking—thanks to an exclusive combination of nonmetallic weatherstripping and serrated guides. What's more, they're beautifully designed for lasting architectural appeal and efficiency. We believe you'll find it well worth while to get full information about Adlake Windows before specifying or detailing *any* window.

THE ADAMS & WESTLAKE COMPANY

ALSO WINDOW MAKERS TO THE TRANSPORTATION INDUSTRY

ESTABLISHED 1857

ELKHART, INDIANA

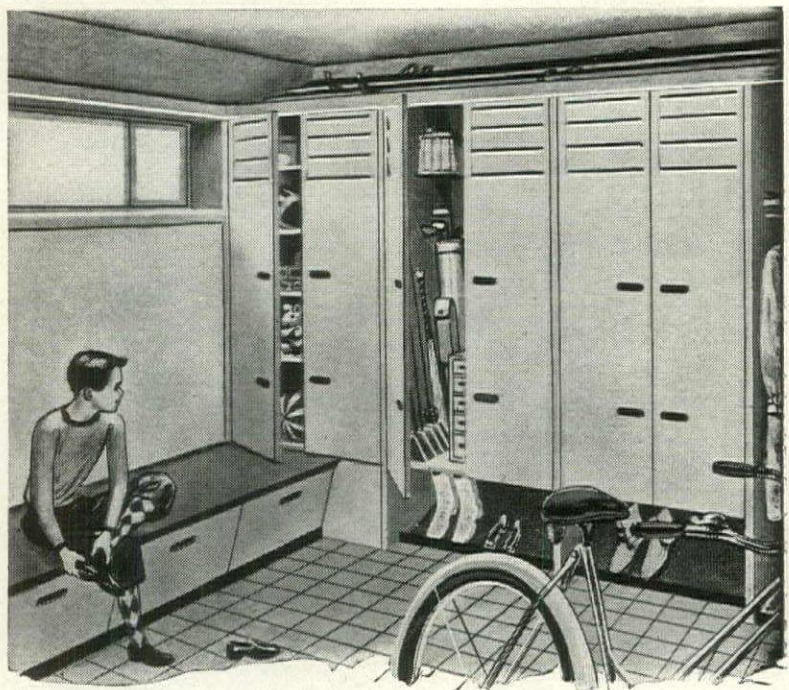
NEW YORK • CHICAGO

What about a

MUD ROOM?

- Call it whatever you like—its purpose is always the same: a room where the family (especially the children) shed their wet and muddy outdoor clothes, sports equipment and toys—instead of spreading them through the house.

- Space need is small. Location: at or near the door that gets the most use—maybe front, maybe back. As a remodeling problem, you may make it out of a porch, big vestibule, or some space available nearby. Dry walls, cabinets and shelves are easy and quick to build of Masonite* Presdwoods. They're unusually resistant to moisture and wear—they clean easily—they can be finished as you wish.



- Also from George Daub and Associates, comes this hobby room plan below, using existing basement space. Compact and well separated are Father's shop, a miniature for Junior, and Mother's gardening "shed." Tough, smooth Masonite Presdwoods make excellent work surfaces, backboards and cabinet panels. They're easy to work and apply over old construction. Grainless and dense, they resist basement moisture conditions very satisfactorily.

- Write for data on the Masonite building materials to Masonite Corporation, Dept. AF-3, 111 W. Washington Street, Chicago 2, Illinois.



"Masonite" is a trade-mark registered in the U. S. Pat. Off., and signifies that Masonite Corporation is the source of the product.



MASONITE
BRAND PRODUCTS
PRODUCTS OF THE STATE OF MISSISSIPPI

SYLVANIA NEWS

ARCHITECTURAL EDITION

MARCH

Published by SYLVANIA ELECTRIC PRODUCTS INC., Salem, Mass.

1946

WIDE TREND TOWARD STORE FLUORESCENT LIGHTING SHOWN IN SYLVANIA SURVEY

Latest National Survey Finds Drug Stores Ahead in Modern Lighting

According to the latest, nationwide commercial lighting survey, made for Sylvania Electric by one of the country's largest market research organizations, there is a potential fluorescent lighting market of 4,263,000 commercial establishments in the country.

This vast field for fluorescent lighting installations is largely a result of

the wide trend among store owners of modernizing to attract customers and enhance their merchandise.

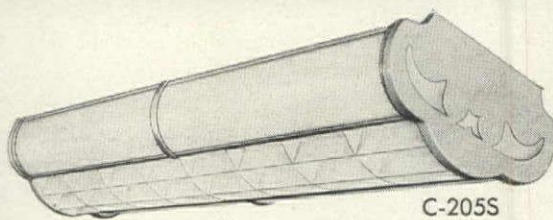
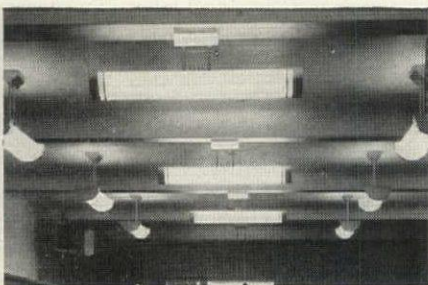
The survey is the first of a continuing series of commercial lighting surveys, conducted in cities of 2,000 population and over from coast to coast. It covers retail stores, wholesale establishments, service stores and miscellaneous commercial and public places.

SURVEY FACTS

Of this broad commercial field, it was found that among the leading users of fluorescent lighting were drug

stores; 64.2% of the country's 58,000 drug stores are now using this modern lighting. Other top users of fluorescent lighting are apparel, automotive and general merchandise stores—55.4, 54.3 and 45.7 per cent, respectively, using that type of lighting.

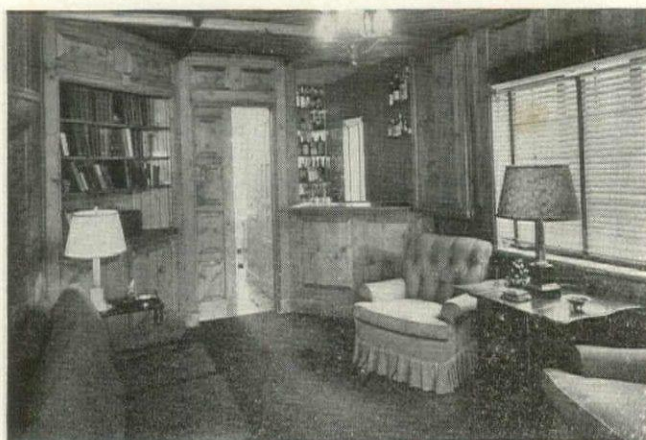
Here are actual facts indicating the national trend toward fluorescent lighting in stores of all types. Much of this and other information from these surveys is assuring you, as architects, that Sylvania Electric will have the proper fluorescent lighting equipment to fit into your latest plans.



Sylvania Electric makes a complete line of fluorescent fixtures for commercial use, designed to fit into any architectural plan.

SYLVANIA ELECTRIC

MAKERS OF FLUORESCENT LAMPS, FIXTURES, WIRING DEVICES; ELECTRIC LIGHT BULBS; RADIO TUBES; CATHODE RAY TUBES; ELECTRONIC DEVICES



Residence, McKeesport, Pa.

Alexander Sharove, Architect.

For beautiful floors that never need re-scrapping— **MINWAX** the SCRATCHPROOF finish

WHEN specifying the finish for wood floors, compare the outstanding advantages of the scratchproof MINWAX finish with the service offered by conventional surface-type finishes.

MINWAX Wood Finish is *scratchproof* because it is a penetrative stainwax finish that becomes part of the wood. It is soft—not brittle. The film of wax that protects the surface cannot chip and will not scratch white. An occasional waxing will maintain full serviceability of the finish.

Any traffic-worn areas may be completely restored without visible laps by the application of a little more MINWAX! The cost and inconvenience are negligible, whereas it would be necessary to re-scrap the *entire floor* if varnish or shellac had been used.

To this *scratchproof* feature should be added the fact that MINWAX Wood Finish brings out, enhances and protects the full *natural* beauty of the wood, rather than coating it with a brittle, glossy film. Today's owners—and tomorrow's—appreciate the convenience, beauty and economy of the MINWAX *scratchproof* finish.

For further information write to MINWAX Company, Inc., Dept. F., 11 West 42nd St., New York City 18, or refer to Sweet's.

For the 28th Consecutive Year

OUR COMPLETE CATALOG IS IN SWEET'S



metal workers, shipfitters, welders, electricians and ships' carpenters.

The union hoped to interest both private capital and the federal government in backing shipyard production of a steel or aluminum house. Shipyards, the workers urged, are a logical place to start turning out a really industrialized house. They have large forces of skilled workers available. They have war-tested methods of organizing production flow. They are all well located for easy transportation of the finished product. Little retooling would be needed: the metal house could be assembled on plattens just like marine bulkheads. "Compared to so vastly complicated a machine as a modern vessel, the house would be a plaything."

So far, the union had no specific house design to talk from. But Joseph M. Hettel, a Camden, N. J. architect whom they consulted, sketched an enthusiastic word picture: the house could be built in compact integral units. Each packaged room would have its own plumbing and wiring. Each would be a completely self-supporting member, making a bulky frame and joists unnecessary. Units would be designed to fit together, providing an indefinitely expandable house.

Dreamed architect Hettel: "Sheet metal workers could make the light metal sections and duct work, windows, kitchen cabinets, stainless steel plumbing fixtures—and even possibly the interior furniture. Shipfitters would be required to fit the wall sections together. Plate and angle work would be required on the structural forms. Welders would seam the house together..."

One big fact lent force to the union's proposal: more than \$1 billion worth of government-built shipyards (some of them giant-sized) are now on the war surplus market, and nobody seems to know quite what to do with them. But there was as yet no sign that housing chief Wyatt (whose plan to underwrite sales of prefab houses seemed primarily geared to the needs of existing producers) or anybody else was interested in pouring out money on the gargantuan scale necessary to launch the shipyard workers' gargantuan answer to the housing crisis.

MARKET

STILL BOOMING

Assessor's records show price climb.

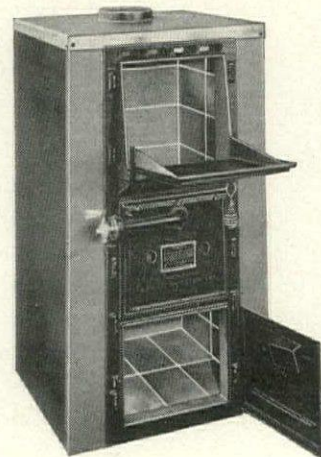
Like a lot of other people, the assessor for the city and county of Denver found himself floundering in the uneasy sea of current real estate values. Like many another con-

(Continued on page 28)



... and right here
we'll put the

KERNERATOR
INCINERATION



Of course you are recommending incineration to your clients and the KERNERATOR provides the best means for disposing of not only household but apartment house, shop and institutional garbage and waste. It's efficient, economical and unobtrusive, being installed out of the way in the cellar. It operates for years without maintenance.

Two general types of KERNERATORS are available: Bricked-In and Portable. The Bricked-In Type is usually connected to the furnace flue. The Portable Type can be connected to the flue or it can vent to the outside through the cellar wall.

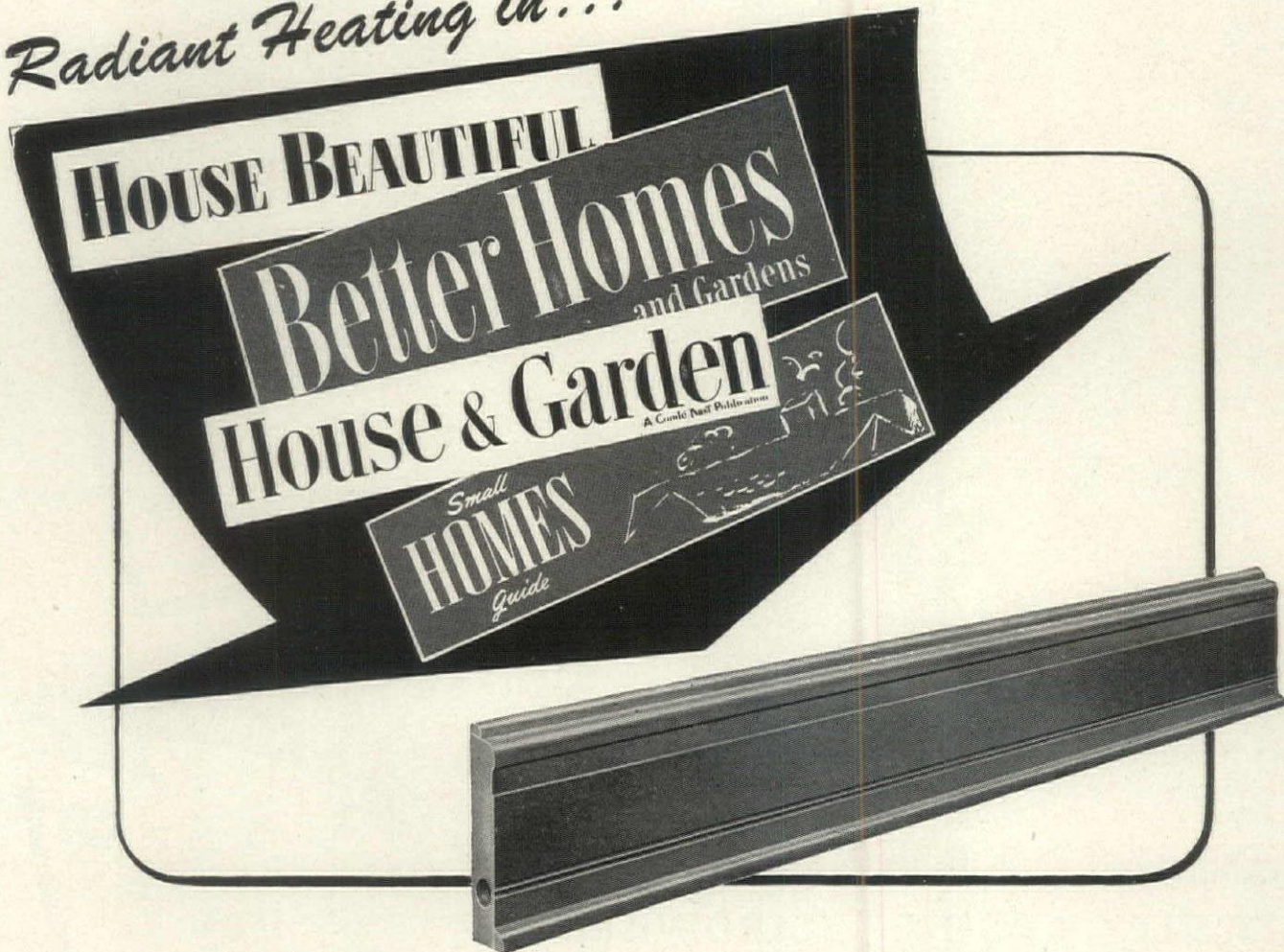
Our Bulletin 160 gives full details of KERNERATORS. Installation data are given to enable you to work the selected unit into your building plans.

Kerner Incinerator Division
**MORSE BOULGER
DESTRUCTOR CO.**

209-F EAST 42nd ST. • NEW YORK 17, N. Y.

BURNHAM'S NATIONAL ADVERTISING ON BASE-RAY

Radiant Heating in...



MEANS BUSINESS for You

For months now we have been telling your customers about the advantages of heating their homes with Base-Ray Radiant Baseboards.

The response has been terrific. Thousands of home owners all over the country have written us for further details and have received our literature on BASE-RAY.

There is already a huge potential market for this new and improved method of Radiant Heating — a method which is practically invisible, amazingly efficient and

so completely "out of the way" that rooms become 100% livable.

As an architect, you will require certain information before starting your specifications covering Base-Ray installations. To be fully informed, write for our special folder, "Ratings and Installation Guide on Base-Ray".

This illustrated folder gives a graphic, detailed description of Base-Ray — tells all you need to know in order to incorporate Base-Ray in your plans.

Burnham Boiler Corporation

IRVINGTON, N. Y., Dept. AF-36

Export Department

50 CHURCH ST., NEW YORK 7, N. Y.





Recommend Blue Ribbon Design STANLEY CABINET HARDWARE

Every girl is fussy . . . about her own kitchen.

That's why we took so very, *very* much care to make the new Stanley Cabinet Hardware line just exactly right. That's why, too, between the girls and Stanley, it's a case of love at first sight.

Actually, years of practical research went into this new line before a pencil was ever touched to paper. Then the most competent designers of the country were called in and given free rein.

That's why the new Stanley Cabinet Hardware is practical . . . doors latch when they're supposed to, open when they're supposed to . . . knobs stay trim and tight . . . latch handles, pulls and knobs have finger room to spare!

That's why the new Stanley Cabinet Hardware is beautiful . . . sparkling trim for any modern kitchen!

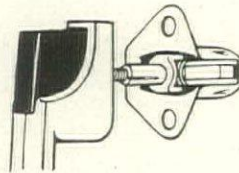
That's why the new Stanley Cabinet Hardware makes up a woman's mind fast . . . they love it!

And that's why you can recommend the new Stanley Cabinet Hardware with full confidence! Write for folder showing complete line. The Stanley Works, Cabinet Hardware Division, New Britain, Connecticut.

STANLEY

Trade Mark

Cabinet Hardware



*New! Self-fitting
latch—*

Pat. Applied For

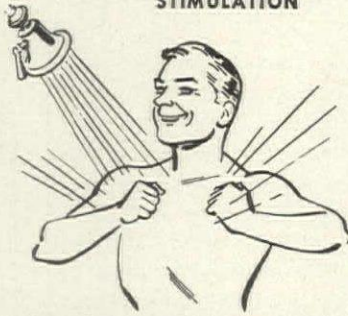
Unique new "trigger" latch has a friction sleeve which adapts itself automatically to doors from 3/4-inch to 1 1/2-inches thick. A Stanley "exclusive"!

*New! Jewel-like
Plastic Inserts—*

Latch thumb-pieces molded of sparkling, durable plastics—red or black—give modern beauty to this hardware.



A turn of the lever gives
**NEEDLE SPRAY for
STIMULATION**



or
**REGULAR SPRAY for
RELAXATION**



or
**FLOOD SPRAY for
NO-SPLASH RINSE**



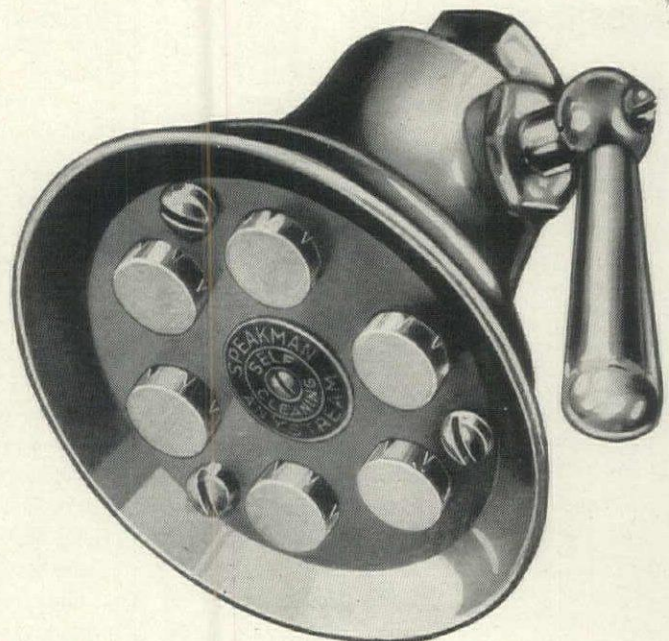
NEVER THIS! The Anystream is self-cleaning.



SHOWER HEAD FACTS FOR ARCHITECTS

- No other shower head provides the many features of the Speakman Anystream.
- The Anystream is really three showers in one, the type of spray being adjustable instantly by the user, as shown in the sketches above.
- The Anystream is self-cleaning. In the flood position, the Anystream passes off pipe-scale, rust and sediment which clog ordinary shower heads.
- The Anystream delivers 48 individual jets of water all of which adjust simultaneously with a turn of the lever.
- The Anystream is easy to install and is designed to harmonize with all modern bathrooms.
- The Anystream is precision-made for long wear and low maintenance.
- And when the plungers are extended (in open position) after use, the shower head is immediately drained, eliminating that annoying after-drip.

See Sweet's Architectural File for a condensed Speakman catalog, or write for further information.



SPEAKMAN

SHOWERS AND FIXTURES

"The best in brass since 1869"

SPEAKMAN COMPANY, WILMINGTON 99, DELAWARE

THE MODERN WAY to Dispose of GARBAGE and REFUSE

Majestic Fuel-less Home Incinerator

NO ODORS ESCAPE

In both new and modernized homes, the convenience that wins immediate approval is this odorless, safe and sanitary unit for reducing wet-or-dry rubbish and garbage to ashes. Compact and smartly styled, this ruggedly built *Majestic* Portable Home Incinerator gives lasting, carefree service. Costs nothing to operate. Uses only waste as fuel. Connects to any 8-inch furnace flue without draft interference. Unique downdraft through refuse speeds drying. *Majestic's* built-in type incinerator of similar design fits flush with wall in chimney recess of basement or utility room.

Write today for details!

The *Majestic* Co.
1062 ERIE STREET
HUNTINGTON, IND.

Majestic-built units of heavy-gauge formed steel proved so advantageous for wartime needs that this construction is now adapted to many *Majestic* Building Necessities.

Nationally Known and Advertised for 40 Years



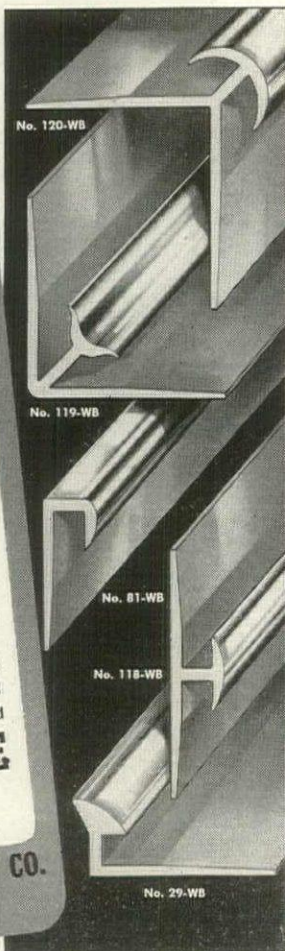
MATCHED DESIGNS for every wall job!

These typical, matching Chromedge trims prove again that, with Chromedge, you get a complete, balanced selection of shapes and sizes for every installation—a wide choice of designs for every part of the job! And Chromedge trims are designed by men with long experience in the actual use of floor and wall coverings—designed for easy, trouble-free installation and lasting, carefree service. For the biggest choice of the best trims, insist on Chromedge! See your distributor, or write us for his name.

B&T EXTRUDED
ALUMINUM
ALLOY TRIMS Trademarked
CHROMEDGE
REG. U. S. PAT. OFF.

Write
for new
pocket
catalog!

THE B & T METALS CO.
Columbus 16, Ohio



scientific expert, Denver's Frank Wilson tried hard to steer a straight course between "current prices" and "real values." After a few tries at 1946 valuations, assessor Wilson declared he was seasick.

He pointed to the law: "Assessors must assess at full cash value and maintain uniformity in fixing values." But what was cash value? As hungry buyers laid more and more cash on the line, house prices bounced higher and higher.

Wilson hauled out the records: "Here's a 10-room house built on two lots in 1906 for \$3,880. This house was sold in October, 1943 for \$6,500. In October, 1944, the same house sold for \$11,000 and in December, 1945, it sold for \$12,500. This house was assessed last year at \$3,800.

"Again, here's a 5-room frame house built in 1942 and assessed in 1943 at \$1,870. This little frame cottage sold in that year for \$4,000. It sold again in September, 1944, for \$5,000 and in 1945 for \$5,500."

Asked dismayed assessor Wilson, thumbing a dozen similar examples: "Now which is the real, which the inflated value of that house?" But nobody gave him a good answer.

HOME OWNERS, UNITE!

Realty brokers seek popular front with their customers.

As spokesman for real estate brokers, the National Association of Real Estate Boards has become one of the most formidable lobbyists in Washington. Recent tributes to NAREB's potency have ranged from bristling exposes in the liberal press to such tangible evidence as the revocation of building control order L-41 last October, a coup which the Association itself belatedly recognized as somewhat premature.

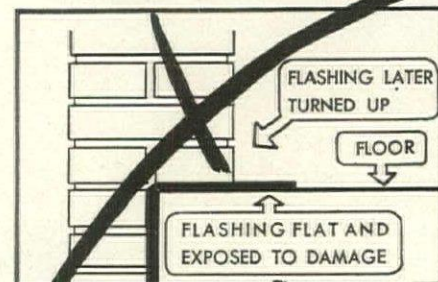
NAREB, whose multitude of well-funded enterprises are guided by adroit Herbert U. Nelson, has long hoped to amplify its already powerful voice (and, incidentally, fatten its already plump pocketbook) by an alliance with property owners. Last month Nelson happily let it be known that a formula for uniting the real estate trader and his market had been found. The new National Real Estate Foundation, he said, will "consolidate the 27 million property owners of the country into one organization in the interests of protecting property rights." Nelson did not announce an equally important fact: heavy contributions were already on



BINNS

(Continued on page 32)

Are YOU Still Using the OLD WAY?



Conventional method handling the flashing turn-up. Flashing brought through wall at floor line. Turn-up open and exposed to damage and debris during construction. Mortar has to be cleaned off afterward. Attempts to protect turn-up are not wholly successful, involve additional labor and expense. Later, flashing will have to be turned up.

*There's an Improved
New Way!*

Yes, a new way that absolutely protects the turn-up from damage and debris; that requires no additional labor or material—but actually saves both! Developed by engineers of the Wasco Flashing Company, the *Improved Method of Handling the Flashing Turn-up* is detailed in an ethical file-folder published by the manufacturers of Wasco as a service to the architects and building trades. Available without charge to architects, appliers, builders, etc. Write for your copy, there's no obligation.

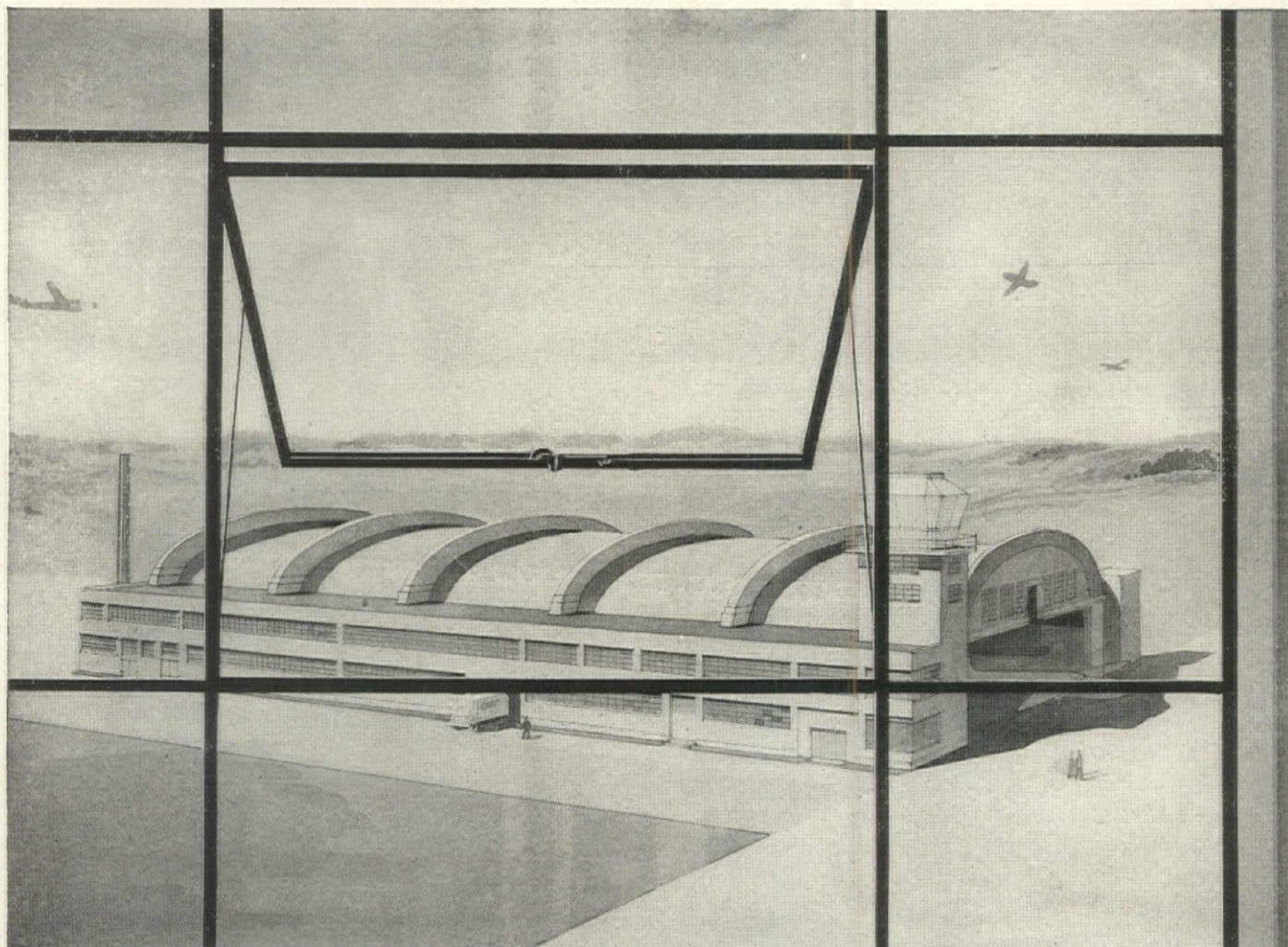
IT'S YOURS FOR THE ASKING!

*And Speaking of
Wasco—*

Wasco is pure, electrosheet copper (available in 2, 3, 5 and 7 oz. copper weight per square foot) insulated and pliacised between two layers of asphalt, impregnated fabric. Bonds perfectly with mortar. Use Wasco to replace heavy sheet copper flashing at a fraction of the weight and cost. Specifications, details and samples will be gladly furnished on request.

WASCO FLASHING COMPANY
CAMBRIDGE, MASS.

wasco COPPER-FABRIC FLASHING



Building for Flight Test Facilities. Architect: Marcus T. Reynolds, Albany, N.Y. Gen'l. Contractor: Corbetta Construction Co., New York, N.Y.

Steel Windows for Flight Test Hangar...

Lupton Windows offer the enduring service and modern design required in buildings of this type. Weather-tight. Easy to operate, either singly or mechanically in groups. Abundant daylight, visibility and controlled natural ventilation create pleasant, healthful work quarters. Lupton Windows are made in types to suit the varied requirements of modern building construction — Industrial Windows, Architectural Projected Windows, Casements.

See our Catalog in Sweet's

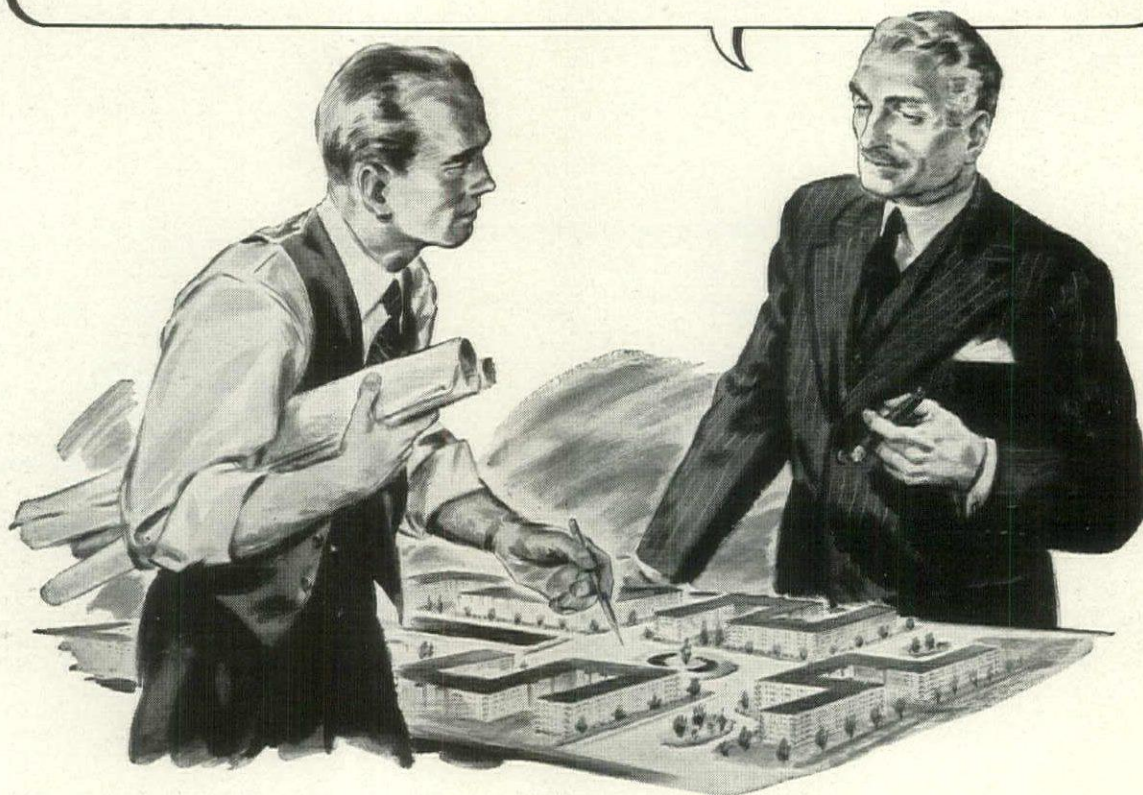
MICHAEL FLYNN MANUFACTURING CO.
E. Allegheny Avenue at Tulip Street, Philadelphia 34, Pa.

Member of the Metal Window Institute

LUPTON

METAL WINDOWS

*"How much will heat and power
cost in this development?"*



**...specify TODD Burners
for minimum fuel consumption**

THE problem of estimating future operating costs is restraining many business men from making decisions on building projects. A major item in operation is the cost of producing power and heat.

For more than thirty years, Todd has led the field in the development of combustion equipment with maximum power capacity coupled with min-

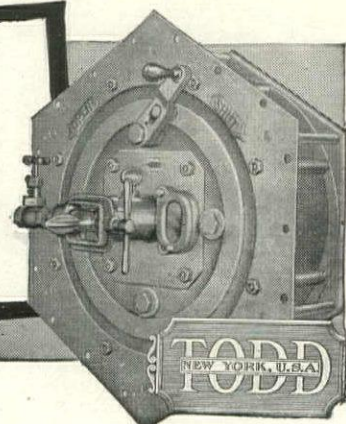
imum fuel consumption. There is an economy-proved line of Todd Oil or Gas Burners, fully automatic, semi-automatic, or manually controlled, to fit all requirements, regardless of the type of building or the power set-up. In addition, special equipment can be tailored to meet your exact specifications.

Before selecting burners for your new or remodeled buildings consult Todd Engineers. They will cooperate with you in every way in meeting the individual needs of your clients' power plants.

**COMBUSTION EQUIPMENT DIVISION
TODD SHIPYARDS CORPORATION**

601 West 26th Street, New York 1, N. Y.

NEW YORK, BROOKLYN, ROCHESTER, HOBOKEN, NEWARK, PHILADELPHIA, CHICAGO,
SO. PORTLAND, ME., BOSTON, SPRINGFIELD, MASS., BALTIMORE, WASHINGTON, DETROIT,
GRAND RAPIDS, TAMPA, GALVESTON, HOUSTON, MOBILE, NEW ORLEANS, LOS ANGELES,
SAN FRANCISCO, SEATTLE, TACOMA, MONTREAL, TORONTO, BUENOS AIRES, LONDON



free to architects!



New full-size details of both lines of Pittco Metal

HERE's a planning tool you're sure to find useful in the building and renovating days ahead. It's an A.I.A. file containing full-size details of the varied mouldings, sashes, sills, jambs, heads, bars, bands, transom bars, and awning bars in the Pittco De Luxe and Pittco Premier Store Front Metal lines. These drawings will bring your files up to date. They show how the pieces should be installed with various types of building materials and indicate some of the many attractive combinations in which they can be assembled. You can easily trace the shapes onto your own drawings.

Inquiries from architects and clients indicate a

great interest in both lines of Pittco Metal, not only for use in store fronts, but also in store interiors, hotel and theater lobbies and corridors, laboratories—wherever smart-looking metal trim is desired.

Whether you are using Pittco De Luxe—the distinctive metal for high quality installations—or Pittco Premier—the lightweight, moderately priced line of Pittco Metal, you will want the portfolio of drawings shown above. To get it, return the coupon below. There is no obligation.

PITTCO

STORE FRONT METAL



"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH PLATE GLASS COMPANY

Pittsburgh Plate Glass Company
2113-6 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, the free A.I.A. file of Pittco Store Front Metal details.

Name _____

Address _____

City _____ State _____

Available Now!

CHENEY FLASHING

3-Way Bond

16 OZ. COPPER

CHENEY FLASHING REGLET

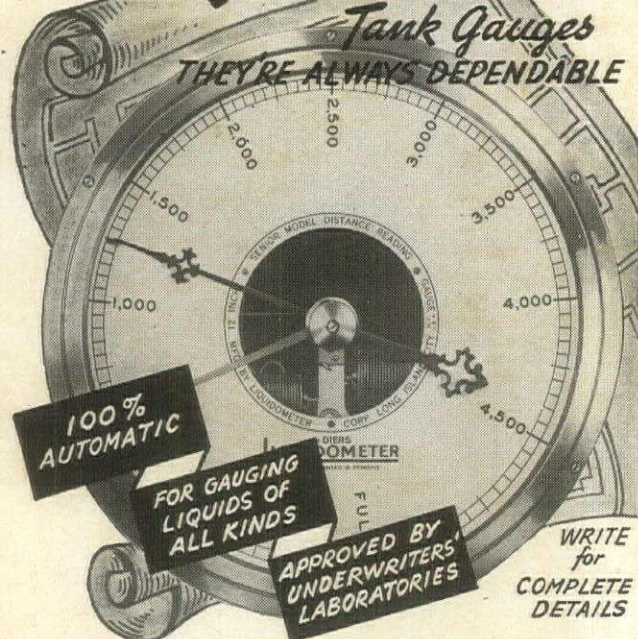
16 OZ. COPPER

WRITE FOR
DESCRIPTIVE FOLDER Dept. F

CHENEY INDUSTRIES, Trenton, N. J.

IN PLANNING AN INSTALLATION FOR
STORING VALUABLE LIQUIDS—

Specify **LIQUIDOMETER**



"LIQUIDS WORTH STORING ARE WORTH MEASURING"

THE **LIQUIDOMETER** CORP.

36-30 SKILLMAN AVE., LONG ISLAND CITY, N. Y.

hand from a key group of large property owners.

The new Foundation, its backers explained, will concern itself with the organization of all classes of property owners. But "emphasis will be placed at all times upon enlisting the support of small home owners, farmers and small businessmen." For president of the new Foundation, Nelson tapped Arthur W. Binns, a Philadelphia realtor famous for his pioneer demonstrations of how to produce low cost housing by remodeling and for his fight against public housing.

This popular front for home owners and big investors will be devoted principally to research and to impartial investigation of the many problems that beset property owners, its publicity releases said. But Boston reporters, listening to Nelson speak to local realtors, somehow got another idea. Next day Boston headlines said: "New Organization Formed to Fight Rent Control."

JOBS

150,000 BEDS

VA will build skyscraper hospitals.

Last month the Veterans' Administration launched what General Omar N. Bradley called "the most gigantic hospital building program in the history of the world." VA's plans called for 80 new hospitals, additions to 98 more at a total expenditure of nearly half a billion dollars. The job, General Bradley promised, would be done in 18 months, provide 151,000 hospital beds.

To meet his schedule, Bradley tossed the assignment to the speed-gear Army Engineers, who built hundreds of hospitals during the war. VA, he said, would not be able to do the job in less than three years under its own steam. Somewhat miffed, the Public Buildings Administration, which had expected to get the job, pointed to its wealth of experience, not only in design and construction of big public buildings, but also in operation and maintenance.

But with the Army Engineers as boss, private architects can expect to get a better-than-ever chance at this big design job. The Corps of Engineers operates almost entirely on a decentralized basis and leans heavily on private architects and engineers. As soon as projects can be set up, architects will be invited to take contracts. Three well-known hospital architects have already been appointed as advisers: Carl A. Erickson, Chicago; Addison Erdman, New York; Slocum Kingsbury, Washington.

Taking a cue from the Navy's towering Bethesda (Md.) medical center, VA will abandon the typical sprawl of its old hospitals for skyscraper buildings.

What Does
an
ARCHITECT
Have to
Do With
BOTANY?



What's the
Connection with
LAWNS?

An architect is expected to leave a job with a lawn that will be thick and thriving two years hence. How can he be expected to possess expert knowledge about soils, climatic conditions, growing characteristics of grass, weed and pest control, plant food and maintenance? On many important projects, such as the Williamsburg Restoration and Willow Run, the architects have drawn upon the specialized knowledge available from the Woodruff Grass Trials. These Trial Grounds are located in 8 different sections of the country, so that information about practical growing tests is related directly to your own jobs. There is no obligation in consulting Woodruff. Simply write the Grass Seed Division.

Have You Investigated

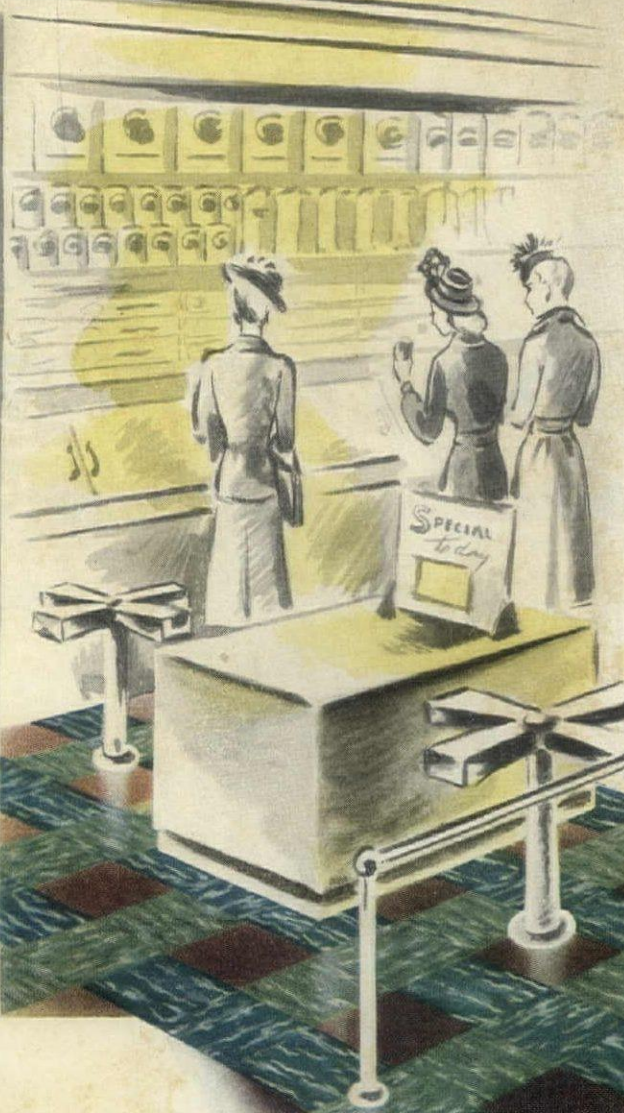
Flawn

the tightly-knit sod for
heavy-traffic areas

This semi-tropical lawn sod has been successfully applied as far North as Climatic Zone 3 for grass runways, golf course tees, playfields, and de luxe home lawns. Flawn grows with roots as tightly knit as a doormat. It is immune from Chinch Bugs and other soil vermin. It cannot be damaged by a skidding auto tire. It is self-weeding. It saves 75% of mowing time — mow only once a month. Write for particulars.

GRASS SEED DIVISION

F.H. WOODRUFF & SONS INC.
MILFORD, CONN., TOLEDO, O., ATLANTA, GA.
DALLAS, TEXAS, SACRAMENTO, CALIFORNIA



*A & P—Woolworth—United Whelan—
Safeway—and, the Pentagon Building,
for instance! There's 4 million square feet
of Kentile on those much-abused
Pentagon floors. And there's 20 miles of
corridor floors in Rockefeller Center
that have been Kentile-covered 14 years ago,
—and still show no signs of wear!*

WHERE THERE'S TRAFFIC—THERE'S KENTILE

If Kentile can take the toughest chain store and public corridor traffic, Kentile can answer your traffic problems, too . . . for it's the *same* Kentile . . . practically impervious to wear, shock-and-sound absorbing, easy to clean and easy on the feet! And, remember, Kentile is the lowest cost long wearing, resilient floor covering sold, foot by foot, every time! Nor is that all! It lasts infinitely longer. And when replacements or floor alterations are necessary, only that area need be changed—not the whole floor. If you haven't met this wonder flooring, send for our free booklet . . . or ask your nearest Kentile dealer.

unsurpassed for economy

muffles footsteps

cleans with soap-and-water mopping

comfortable for walking

non-skidding

limitless pattern possibilities

colors go clear through

KENTILE
Asphalt Tile
Trade Mark Reg.



DAVID E. KENNEDY, Inc.

80 Second Avenue, Brooklyn 15, N. Y.

208 Bona Allen Bldg., Atlanta 3, Ga.

200 Ulloa Street, San Francisco 16, Calif.

30 N. Michigan Ave., Chicago 2, Illinois

452 Statler Bldg., Boston 16, Mass.

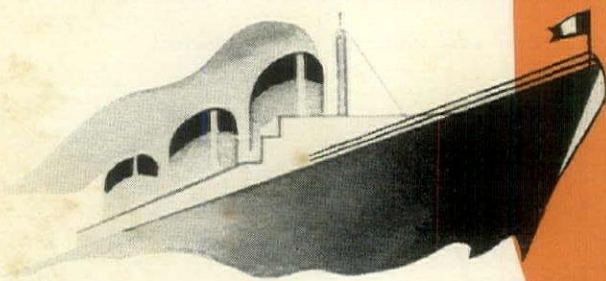
614 Olympia Road, Pittsburgh 11, Pa.

1211 National Broadcasting Co. Bldg., Cleveland 14, Ohio

DESIGN YOUR OWN! Kentile is sold—and laid—in squares of solid colors or marbled effects, permitting you an endless variety of color combinations, and border and panel designs. Which means, with Kentile, you direct traffic as you'd have it go—

THE WHOLE STORY! Altogether, Kentile offers 15 different advantages—all told in the new, full-color catalogue showing the Kentile colors and some of the countless patterns possible—plus full-color pictures of Kentile in use. Send for your copy today—no obligation.

FORMICA MEANS SUBSTANTIAL SAVINGS PER SQUARE FOOT

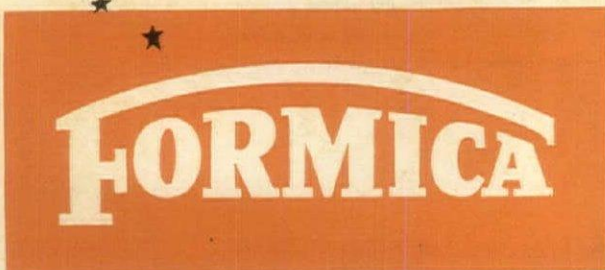


After having used Formica decorative plastic sheets on furniture, bulkheads, doors, and other surfaces in ships and having observed the results for several years the office of George Sharp, well known naval architect, declares that each square foot of surface covered with Formica in a ship will save many dollars in the course of twenty years.

This saving is made up of many factors. The surfaces never need to be re-painted or refinished. That saves labor, and also makes it unnecessary for the space to be withdrawn from use while the work is done. Formica is much easier to keep clean than many surfaces and there are important savings in cleaning time.

While other users of Formica may not have analyzed the situation as closely as the ship builders there is reason to believe that similar savings are possible wherever Formica is used—in hotels, bars, soda fountains, railway, bus, and train terminals, hospitals, public buildings, office buildings and stores.

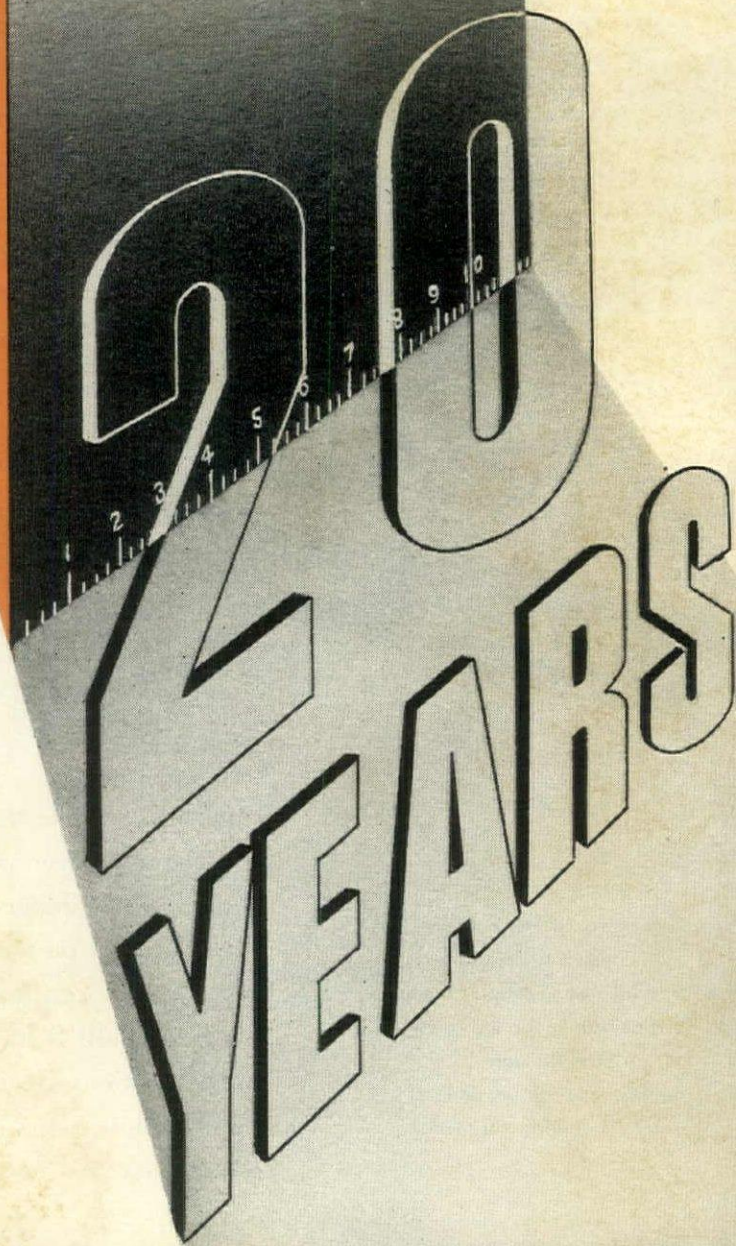
And of course, in addition to economy, Formica offers exceptional beauty of color and surface, characteristic inlays, Realwood surfaces—it is a thoroughly modern and strikingly attractive surfacing material.



THE FORMICA INSULATION COMPANY

4620 Spring Grove Avenue

Cincinnati 32, Ohio



Central Surety

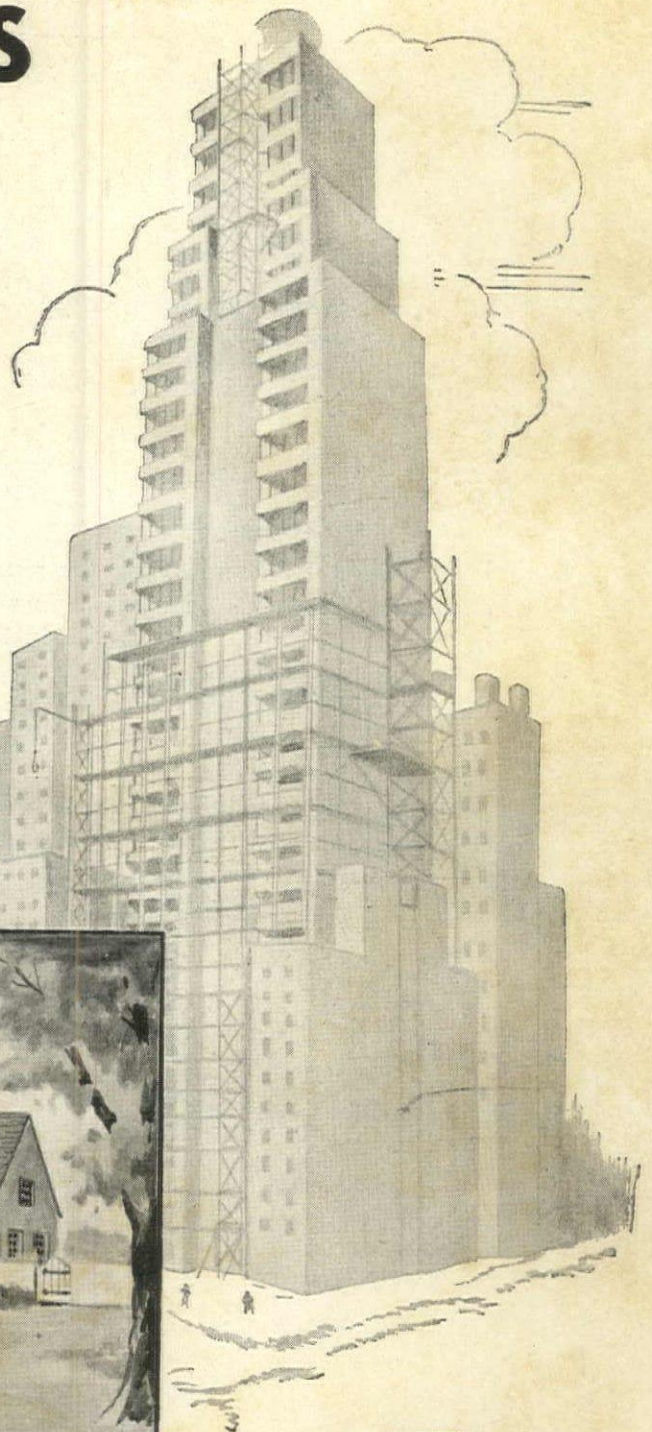
CONTRACT BONDS

*Assure Complete Performance
of Contracts According to
Plans and Specifications.*

Skilled contractors with good records for performance merit the confidence of architects and engineers. Protection against the unforeseen and unpredictable is of equal importance.

The cost of a Central Surety guarantee of complete Performance and Price is nominal—new rates are lower than ever.

Central Surety agents, active in all states, promptly furnish "Perform or Pay" contract bonds on all types of construction.



CENTRAL SURETY AND INSURANCE CORPORATION

HOME OFFICE KANSAS CITY, MISSOURI

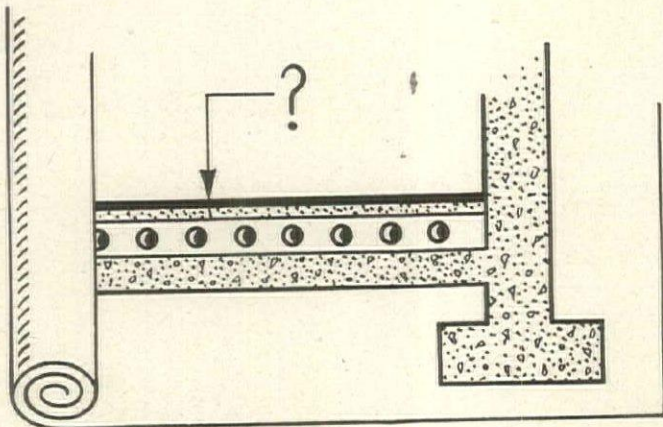
R. E. McGINNIS, President

SAN FRANCISCO

• CHICAGO •

NEW YORK

FLOORS TO USE WITH RADIANT HEATING

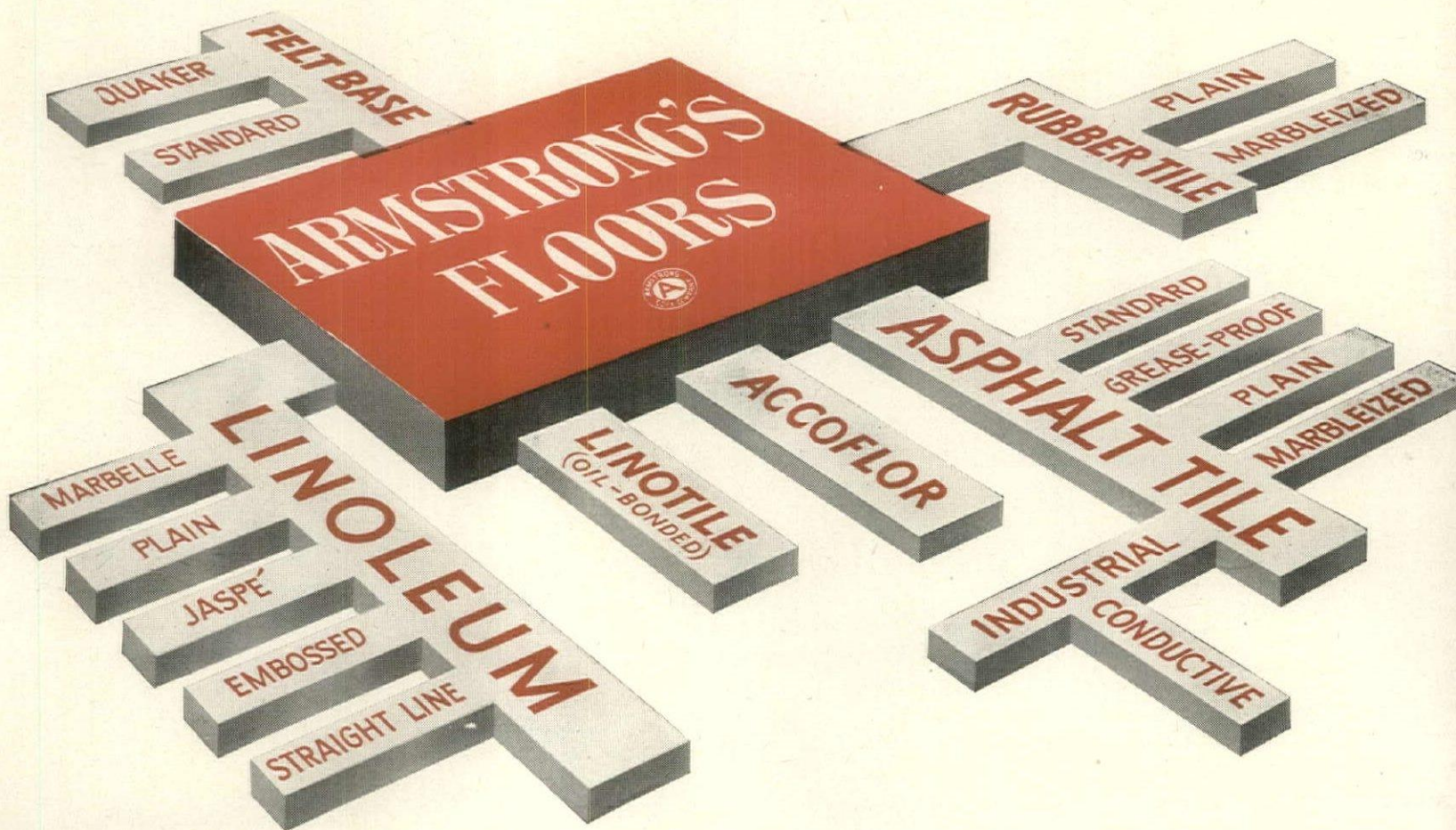


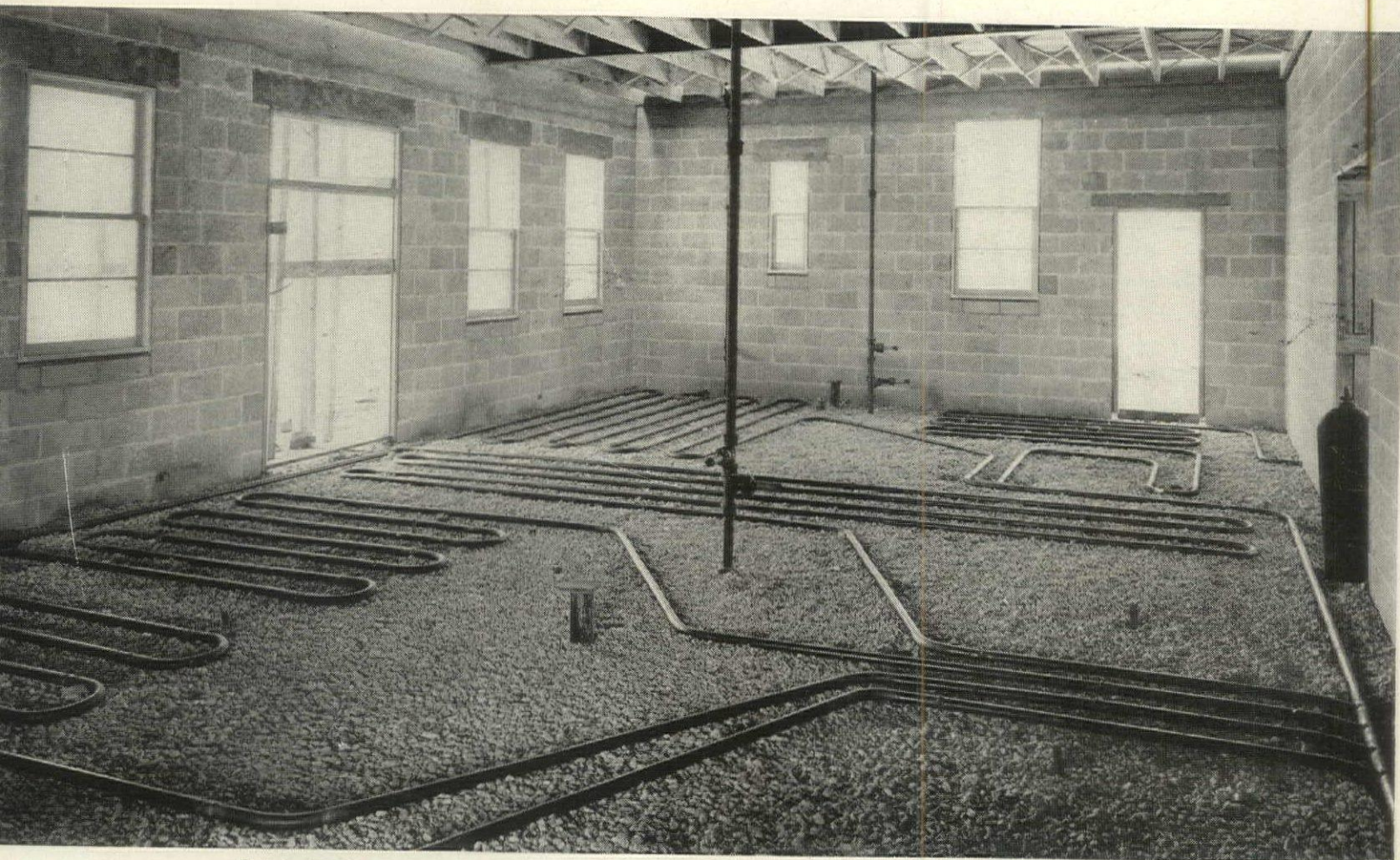
During the past three years, extensive research has been conducted by the Armstrong Cork Company on the subject of flooring materials for use with radiant heating. This relatively new type of heating, commonly consisting of hot water pipes or hot air ducts imbedded in a concrete subfloor, has aroused much interest as well as raised many questions in the minds of architects today.

In Armstrong's Research Laboratory in Lancaster, Pennsylvania, experimental radiant-heated floors have been undergoing severe tests for more than a year. Test floors were

built in four separate sections, each with different types of subfloor construction and each designed to test various types of resilient flooring materials under extreme conditions. For Armstrong's test constructions, a hot-water system of heating was used. The heating elements chosen were one-inch wrought iron, all-welded pipe, installed on 12-inch centers. Water is circulated through these pipes at controlled temperatures. Twenty-seven electrical thermocouples, imbedded at strategic points in the floor construction, record these temperatures at all stages of the experimentation.

Careful and continuous observations have been made of the effects of heat and moisture and the other possible effects of radiant heating on hardness, composition, and indentation of flooring materials. In addition to these laboratory test installations, many actual installations of resilient flooring in radiant-heated buildings have been observed.





This typical installation of radiant heating on a subfloor in direct contact with the ground shows the pipe arrangement just before the final layer of concrete was poured. The floor covering used was asphalt tile.

ASPHALT TILE FOR GRADE-LEVEL FLOORS

Since radiant heating is ideally suited for one-story structures with concrete slabs poured directly on the ground, the problem of surface moisture is of primary consideration in recommending a floor covering material. Moisture is drawn through the slab by capillary action, bringing to the surface alkali which attacks the binders of most floor coverings. In most climates, atmospheric moisture frequently condenses on the cool floor surface during the summer months. While it is possible, at considerable expense, to waterproof the concrete slab by using several layers of asphalt-saturated felt, each mopped with hot asphalt, it is still always practical to eliminate moisture from condensation. For concrete subfloors in direct contact with the ground, it is more practical to select a material which is not harmed by moisture. The flooring which meets that requirement is asphalt tile, which has long been specified for jobs installed on basement and grade-level floors. Armstrong's Asphalt Tile is especially formulated to resist the alkali which rises in moisture as it rises through the concrete slab.

LINOLEUM FOR FLOORS ABOVE GRADE-LEVEL

Even under the severe conditions of Armstrong's testing, linoleum has shown no signs of failure. Binders have remained strong and adhesives have held firmly. However, with radiant heating or any conventional type of heating, linoleum should be used only on suspended floors, not on grade-level floors with an 18-inch, well-ventilated air

space beneath them. Also, other resilient floor materials such as rubber tile and Linotile* (Oil-Bonded) may safely be recommended for radiant heating where the concrete subfloor is not in direct contact with the ground.

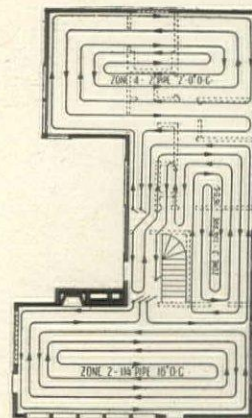
HOW RESILIENT FLOORS PERFORM OVER RADIANT HEATING

Because of the thermoplastic qualities of most resilient flooring materials, these floors tend to become slightly more soft when radiant heating temperatures run higher than normal. However, most systems deliver a normal temperature of 75 to 85 degrees F. at the immediate surface of the concrete. Since these temperatures are not so hot as those often resulting from direct rays of summer sunlight, the usually prescribed furniture-rest devices are considered adequate protection against indentation. The results of Armstrong's experimentation do not indicate that the use of radiant heating causes excessive drying action which might shorten the life of any resilient flooring material or presents any other unusual problems. It is therefore felt that resilient floor coverings can be chosen by much the same standards as those where other type heating is employed.

Research conducted on this phase of radiant heating is typical of that carried on by the Armstrong Laboratories in the entire field of flooring. Knowledge gained by constant research and long experience makes possible sound recommendations to those who have flooring problems.

For complete information on your particular flooring problem, contact any of Armstrong's district offices, or write directly to the Armstrong Cork Company, 2303 Duke St., Lancaster, Pennsylvania.

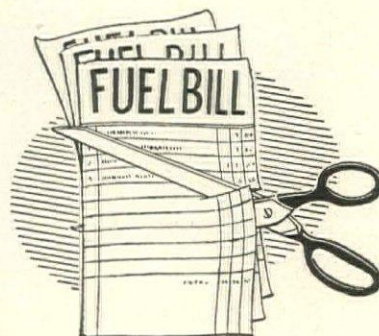
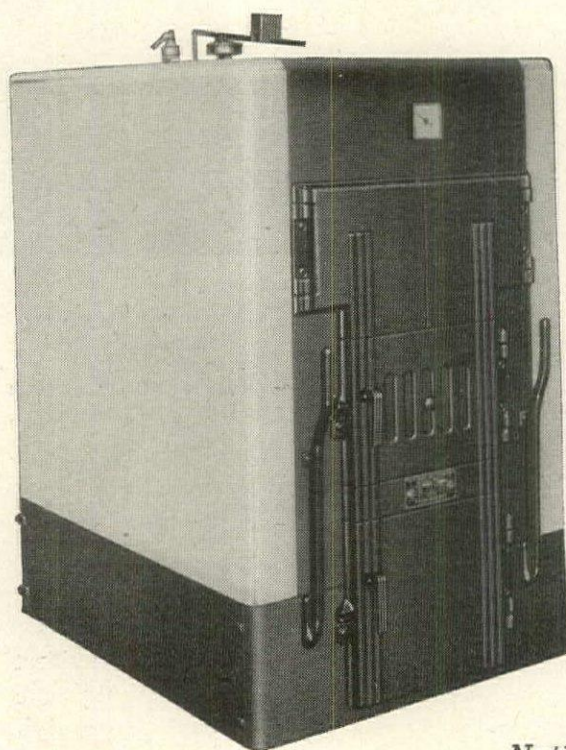
*REG. U. S. PAT. OFF.





Economical

IN **COST OF OPERATION**



*No. 3 in a series of
National Heat Extractor Boilers*

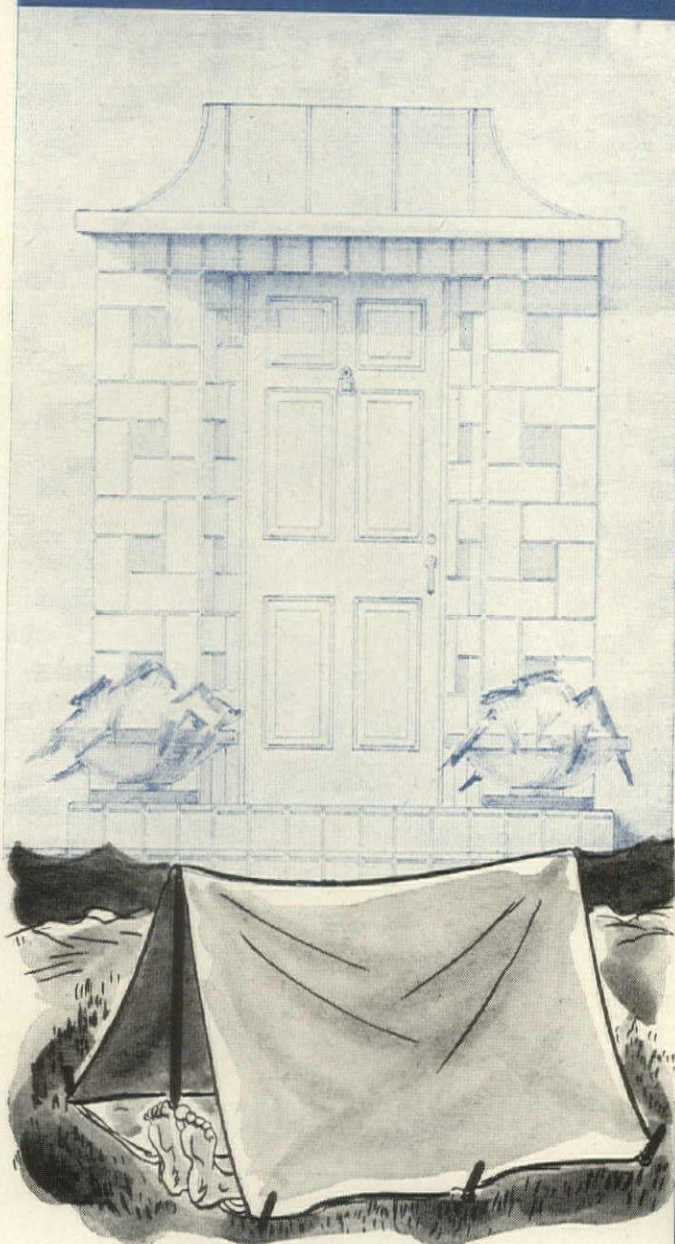
Typical of their engineering quality is the ability of National Heat Extractor boilers to deliver maximum heating comfort with a minimum of fuel. Comparable in performance when fired by coal, gas or fuel oil, National Heat Extractors are easily converted from one fuel to another.

The No. 3 Series Heat Extractor boiler illustrated is especially adaptable to large homes or commercial installations. Remember too—there's an NRC heating product to fit every building need!



The NATIONAL RADIATOR Company
JOHNSTOWN, PENNSYLVANIA

★ *What they dreamed about*



"He's happiest when he blacks out the battle-front and dreams of his postwar doorstep."

★ **WHAT THEY SAW...**

The doorstep a service man dreams about most is the one leading into his own home, sweet home. At the moment no other entrance can match its appeal. For a doorstep that is always a pleasure to approach, there is no smarter decorative material than Suntile. A Suntile doorway, with its graceful design and colorful charm, is attractive and inviting at all times. Weatherproof and colorfast, Suntile is permanently beautiful in any climate. Wherever it is used—indoors or out, Suntile creates a luxurious atmosphere at a surprisingly low cost. For original effects that are ever modern, always in good taste, specify Suntile in your plans now.



Suntile

When You Specify Suntile, You Specify Satisfaction

THE CAMBRIDGE TILE MFG. CO.

MEMBER OF THE PRODUCERS' COUNCIL
CINCINNATI 15, OHIO

★ THIS SERIES IS BASED ON AN IDEA SUGGESTED IN LETTERS WRITTEN BY CPL. LOUIS A. PERKOVIC OF THE ARMY ENGINEERS IN THE SOUTH PACIFIC. IN TALKING WITH A RETURNED WAR VETERAN, BE TACTFUL AND CONSIDERATE. TRY TO UNDERSTAND HIS FEELINGS AND GOVERN YOURSELF ACCORDINGLY.

Wright versus Michelangelo . . . Buenos Aires on Baldwin . . . Logs for Dr. Kirsche's fireplace . . . Filing the new FORUM.

MAN OF THE AGE

Forum:

After hearing for far too many years of the glory of the Bauhaus international green hills far away, it falls like a benediction on the soul to hear a public voice speak openly of the international greatness of an American architect. (FORUM, Jan. '46, p. 82)

To say as you do that in the light of future history Frank Lloyd Wright will "take on the stature of a Michelangelo" is perhaps a dubious compliment. Didn't Mr. Wright himself say somewhere something to the effect that the Renaissance was the sunset which everyone mistook for the dawn? Isn't it possible that had Frank Lloyd Wright been in Michelangelo's shoes, he might have saved posterity from the horrors of Roman revivalism, which Michelangelo had no scruples about perpetuating? As a measuring stick of Mr. Wright's greatness, the boys of the Renaissance are curiously inadequate.

Seriously, I do want to applaud your choice of Wright as the architectural man of the age.

T. H. ROBSJOHN-GIBBINGS
New York, N. Y.

Forum:

Rare (for any statement on Frank Lloyd Wright) is the accuracy, honesty and freedom from exaggeration of yours in the January FORUM. The first paragraph is a brilliant plunge to the heart of architectural meaning.

DONALD THOMPSON
South Charleston, W. Va.

Forum:

This is not criticism—I just think its funny. (see cut)

GEORGE C. RUDOLPH
New York, N. Y.

Wright's Spiral

Rudolph's Churn

Forum:

Just a line to compliment you on your new policy of illustrating new ideas with color. I also wish to compliment you on your method of illustrating Frank Lloyd Wright's latest creation, as his work has always been a real contribution to the cause of architecture . . .

STUART P. KNUTSON, *Architect*
Omaha, Neb.

HOPEFUL EXCEPTION

Forum:

The January issue of the FORUM (p. 20) . . . contains an article entitled "Labor," in which I find some statements which should be challenged.

1. "Not a single union has seen fit to adjust its traditional journeyman to apprenticeship ratio. Carpenters still train only one apprentice to every ten journeymen; most other trades limit apprentices to one for every five journeymen." The fact is that here on the Monterey Peninsula in California, the ratio is one apprentice for every two journeymen.

2. "Not a single union has taken steps to provide systematic crediting of army and navy skills." That, also, is not true in this locality and credit is given for these skills and the apprenticeship correspondingly shortened. In addition, some unions have waived initiation fees entirely and assess small dues to apprentices.

It seems to me that your writer should not have made such sweeping statements until he had wider information. If the rest of the article is as inaccurate as the statements I have quoted, then it is most misleading and unfair to labor unions.

MRS. JOSEPH SCHOENINGER
Carmel, Calif.

FORUM spoke nationally; Reader Schoeninger speaks for Monterey Peninsula.—Ed.

BACK TO BALDWIN

Forum:

"I declare, I wish to read and to subscribe to magazines whenever their editorial policies become compatible with a contemporary architect's work." As a contemporary architect's work, I understand, is work free of style prejudices, pseudo-traditional reminiscences; a work far from "Old Vacuity" and closest to "New Integrity."

When I read a professional magazine, I want to see in it an architectural, not an archaeological, policy; I want new and

fresh ideas, not a catalogue of Cape Cod and Dutch Colonial imitations as you published some years ago. In fact, I wish something that is the opposite of Mr. Baldwin's big ideas on modern architecture. If my opinion has any value for helping your present policy, I declare that FORUM is an outstanding and positive tool for the modern architectural worker.

JOSE M. F. PASTOR, *Architect*
Buenos Aires, Argentina

RESTRICTIVE COVENANTS

Forum:

Congratulations on the fine piece, "Good Neighbors," on p. 16 of your January issue. It is the first time to my knowledge that the issue of restrictive covenants has been squarely and liberally faced by a journal representing the building industry.

It is high time for architects, planners and builders to accept their large share of responsibility for the dangerous trend toward complete racial and economic segregation. We have been far too exclusively concerned with the techniques for "neighborhood planning," while ignoring the fact that zoning, restrictive agreements, and large-scale building enterprise (public as well as private) are rapidly pushing us toward a feudal social pattern which is the very antithesis of democracy.

CATHERINE BAUER
Boston, Mass.

LOGS FOR THE FIREPLACE

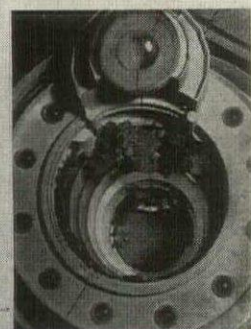
Forum:

I must write in protest against the attitude expressed in the letter from Dr. Renfreux Kirsche. (FORUM, Jan. '46, p. 38.) It is this type of thinking that is a threat to our civilization. It may very well be contemporary and mechanical, but is that enough? It seems to me that too many of our "modernists" in their desire to be "modern," in their effort to be functional, in their worship of the machine and science, have completely forgotten the essential nature of man.

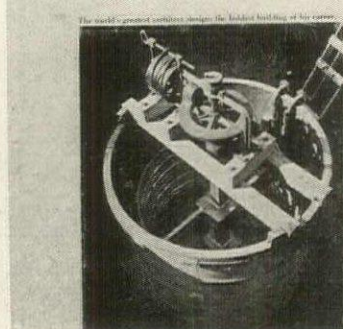
Now a fireplace may not be functional in this atomic age, but "modern" or old-fashioned, an open fire has certain universal aesthetic appeal and is an ageless symbol of hospitality, friendliness and warmth. A machine for living, streamlined to go 90 miles per hour, may be nice and precise, a bright and shining thing, but it seems entirely lacking in the human quality

(Continued on page 42)

FORUM



FORUM



THE FLINTKOTE COMPANY
INCORPORATED
30 ROCKEFELLER PLAZA
NEW YORK 20, N.Y.

STUART HARRISON RALPH
VICE PRESIDENT

FLINTKOTE INSULATING WOOL...

A NEW MEMBER OF A FAMOUS LINE

Flintkote takes pride in announcing the addition of Flintkote Insulating Wool to its long and well established line of quality building materials. Flintkote Insulating Wool, a "Fiberglas* Product", already enjoys wide consumer acceptance.

Flintkote Insulating Wool not only has great thermal insulating value, but in addition its almost microscopic glass fibres make it fire-retarding and incapable of absorbing moisture or odors. It cannot rust, rot, mildew or sustain vermin.

Available in batts and roll blankets, junior batts, and in shredded form suitable for pouring between rafters, Flintkote Insulating Wool is adaptable to both new and existing structures.

We know that our many friends in the Building Industry will welcome this new product, which is available for prompt delivery.



Stuart H. Ralph
Vice President

*Fiberglas is the trade name (Reg. U. S. Pat. Off.) of glass manufactured in any fiber or filament form by Owens-Corning Fiberglas Corporation.



It takes two to make a deal

...Especially the kind of deal Columbia gives you! First there are our mills which turn out only top quality window shades and Venetian blinds. (These days of restrictions we give you the very best we can with "what we have to work with.") Then there is the large corps of Columbia dealers who

make a specialty of installation and carrying out your specifications to the letter.

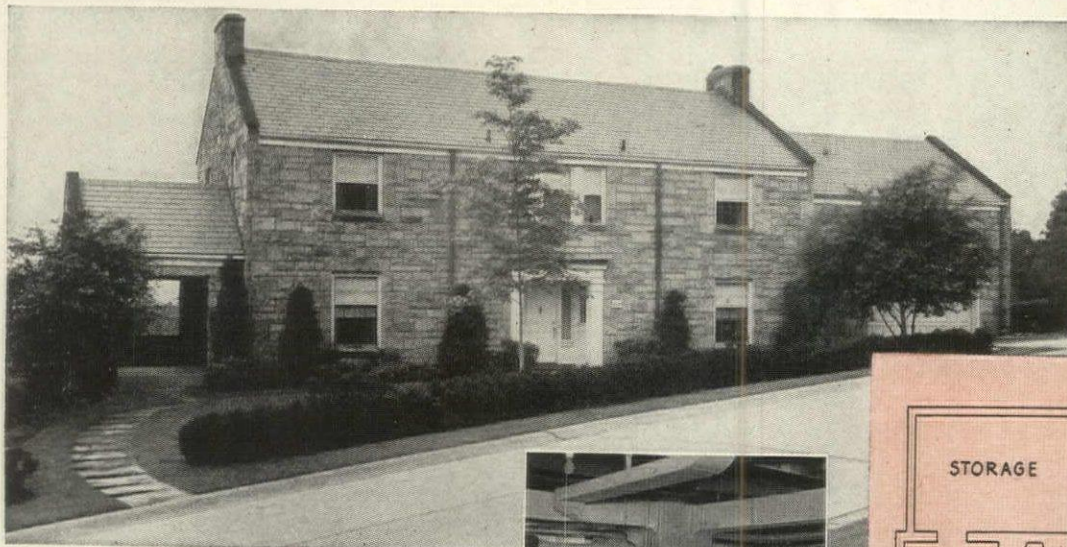
Some of our shade and blind lines are still limited, but there's no limit to the Columbia Mills' quality, and the Columbia dealer's service.

Columbia WINDOW SHADES
AND VENETIAN BLINDS

THE COLUMBIA MILLS, INC. • 225 FIFTH AVENUE, NEW YORK 10, N. Y.

YOU CAN GET *Uniform Temperatures*

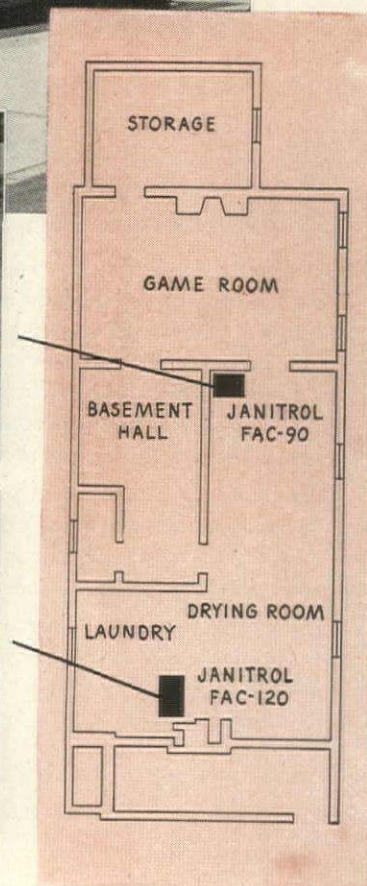
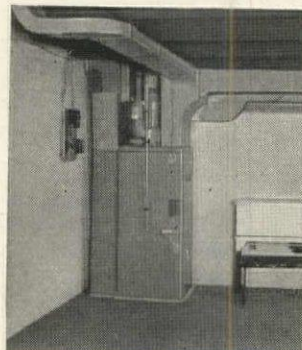
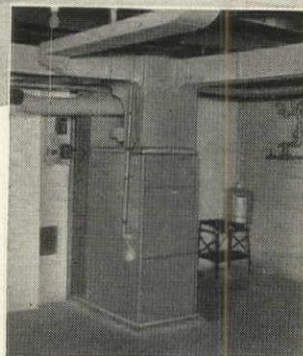
IN LARGE HOMES... This Clean, Low-Cost Janitrol Way!



HERE'S something that ought to be news but isn't. When a 90-foot long home has uniform temperatures throughout, even during high wind conditions, that would be *news* with most heating systems. But not with Janitrol. For the application of Janitrol Gas-Fired Winter Air Conditioners to get optimum heating results is the *everyday job* of the Janitrol heating engineer.

This home of P. C. McKenzie in Mt. Lebanon, Pa., for instance. To eliminate the need for extensive ductwork and place heat more directly where it is needed, *two* Janitrol furnaces were recommended—one in either end of the home. Results: reasonable installation cost, low fuel bills, and *solid, long-lasting heating comfort*. In the words of the owner—"We have enjoyed exceedingly uniform temperatures in this 90-foot long residence."

Whether you're planning to heat a large home like this one, a double home, a bungalow, or a small apartment, there's a Janitrol Gas Furnace for the job... and a Janitrol heating engineer who can help you select it. He may not be able to provide all the Janitrols you need now, but call upon him. He's anxious to help in any way he can.



SURFACE COMBUSTION CORPORATION, TOLEDO 1, OHIO

Janitrol

**GAS-FIRED
HEATING EQUIPMENT**



Winter Air Conditioner



Gravity Furnace



Conversion Burner



Unit Heater



Boiler



Floor Type
Blower Unit

Almost...
AS quick
AS A
WINK



to Install



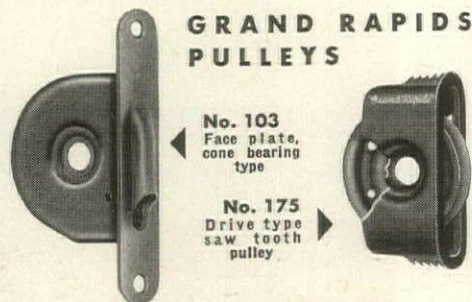
Just three screws, quickly and easily placed will install a Grand Rapids Invisible Sash Balance. This simplicity and ease of installation is but one of the more commendable features that will prove a great factor in the great building program that lies ahead. And a factor in profits, also.

No tapes or cables or exposed tubes. Actually, six simple steps to install. No odd sizes. Amazingly durable, smooth, quiet and dependable in operation.

The saving and extra satisfaction realized on Grand Rapids Invisible installations has already been fully substantiated by the experience of scores of leading contractors.

Send for Sash Balance Catalog

This catalog contains complete information on sash balance sizes, directions for installing, etc. — all fully illustrated.



NOS. 103, 175, 109 AND 110 COVER 95% OF ALL PULLEY REQUIREMENTS

GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS • MICHIGAN

of warmth. Or is that old-fashioned, too?

I do not know what Dr. Kirsche would have us do to bring our morals, ethics and emotions into tune with the Atomic Age. Perhaps he might care to elaborate. I'd be interested in knowing what contemporary and mechanical emotions are.

As for me, "Throw another log on the fire, my dear. Dr. Kirsche just went through and I feel that a chill remains in the air."

VELIMIR KHLEBNIKOV

Kansas City, Mo.
The Kansas City Art Institute

Forum:

With righteous indignation
I strove to keep my perch
While reading in your column
The note from Renfreux Kirsche.
It seems that Renfreux never had
A home to call his own,
Where the warmth and cheer of a fireplace
Could thaw his chilly bones.
He probably stood by a register
While the hot air oozed around,
And got his cheer from a bottle
When the snow was on the ground.
And furthermore, the cultural lag
Which Renfreux speaks about
Is due to his misinformation
And a case of atomic gout.
As for sentimental attachment,
I'm afraid he has me here;
Just give me a glowing fireplace
To gather my family near.
And now when I think it over,
I can understand his ire;
For perhaps, unlike most of us,
He cannot build a fire.
Or perhaps he was born before his time.
You know, it could possibly be.
So may I suggest that he leave this world
And come back—say, 5,000 A. D.

RICHARD W. NORMAN, Designer
Portland, Ore.

THE NEW FORUM

Forum:

The new FORUM looks wonderful—it would be fascinating to report that I greeted it frazzled and unnerved. I had only a quiet, confident gleam...

LEONARD LIONNI

Philadelphia, Pa.

Forum:

All this and colored pictures too!

L. MORGAN YOST, Architect
Kenilworth, Ill.

Forum:

... I believe that the increased size of the magazine is a mistake. It is now of a dimension that does not fit into either a loose leaf binder or a standard letter file.

Few architects, of my acquaintance, bind their magazines into volumes. Most prefer some personal method of segregating the material that makes broad subdivisions readily available for convenient reference.

It is my personal hope that you may find it desirable to return to a more standard size.

ALFRED W. JOHNSON, Architect
San Francisco, Calif.

Forum:

May I add my congratulations to the many you must be receiving on the new format and the fine editorial contents of your January issue.

HAROLD S. BUTTENHEIM, Editor
The American City
New York, N. Y.

Forum:

We received a few days ago the January issue of The FORUM but so far are still at a loss as to what to do with it. The new format looks well on the conference table but the plates do us no good for reference; the value of the magazine to us has been in the reference matter which of course is filed by subject and AIA reference, in standard letter size filing cabinets.

We are very much disappointed at the change in page size and we do not like it. Since we had our filing cabinets before we had the FORUM I am afraid we will have to keep the cabinets and look for file material elsewhere than in The FORUM...

FLEMING R. HURT, Architect
Waynesboro, Va.

Forum:

To the tower of congratulatory letters... add mine.

For the first time a "trade" publication assumes the stature and garb of a top-flight general interest magazine. Fitting it is that this should be in the nation's most important industry... interesting it is that so important an advance be by those who created TIME-LIFE-FORTUNE...

HOWARD G. KNOWLTON
Chicago, Ill.

Forum:

Please tell me how I am supposed to fit the new FORUM in my letter size files.

BRAHM WIESMAN
Montreal, Quebec

(Continued on page 46)

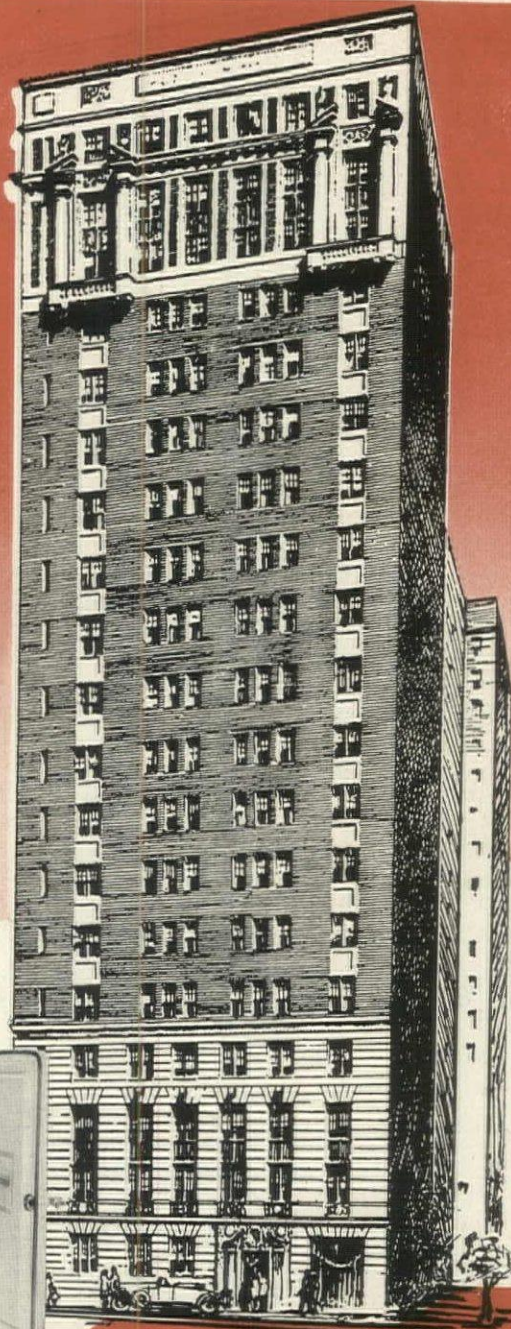
Refrigeration ... BY NORGE

Cooking ... BY NORGE

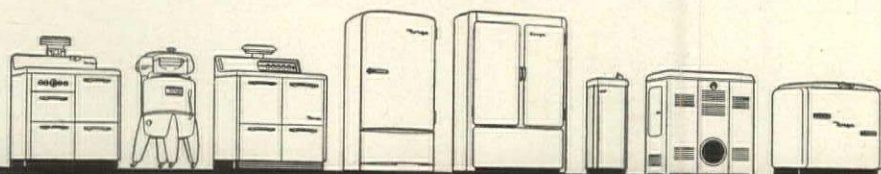
● The discriminating residents of 222 East Chestnut St., Chicago, have good reason to be well satisfied with their kitchen equipment — Norge Rollator refrigerators and Norge electric ranges take care of their refrigeration and cooking requirements "to the queen's taste." Rissman & Hirschfeld were the architects for this cooperative tenancy.

**NORGE DIVISION
BORG - WARNER
CORPORATION
DETROIT 26, MICHIGAN**

In Canada:
ADDISON INDUSTRIES, LTD., TORONTO, ONT.



See NORGE Before You Buy



**GAS RANGES • RO-TA-TOR WASHERS • ELECTRIC RANGES • ROLLATOR REFRIGERATORS
COMMERCIAL REFRIGERATION • WATER COOLERS • HOME HEATERS • HOME AND FARM FREEZERS**

NORGE HOUSEHOLD APPLIANCES



new lease on laundries...

Newest House & Garden blueprint is the
UPSTAIRS LAUNDRY.

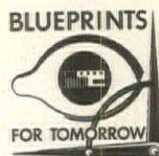
Planned to bring washday efficiency to a higher level.

Natural evolution of automatic washers,
automatic dryers, new postwar equipment.

The upstairs laundry is
just one of the practical and progressive ideas
in House & Garden's 1946 Building Program.

Each month, House & Garden anticipates a
blueprint problem... tells *your* customers how to
plan, what to BUY when they build.

House & Garden



THESE ADVERTISERS WILL
TELL HOUSE & GARDEN READ-
ERS ABOUT THEIR BUILDING
PRODUCTS IN EARLY 1946.

Acme White Lead & Color Works
Amana Society
American Brass
American Flange & Mfg. Co.
American Gas Association
American Radiator-Standard
Sanitary Corp.
Anchor Post Fence
Bruce Co., E. L.
Burnham Boiler Corp.
Cabot, Inc., Samuel
Case, W. A. & Son
Chamberlain Co. of America
Chase Brass & Copper
Chicopee Mfg. Corp.
Crane Co.
Curtis Companies
Cutler-Hammer, Inc.
Electromode Corp.
Electric Steam Radiator Corp.
Eljer Co.
Elkay Mfg. Co.
General Bronze
General Electric Co.
Grand Rapids Varnish Co.
Grenard Mfg. Co.
Harrison Steel Cabinet Co.
Haskelite Mfg. Corp.
Heatilator Co.
Homease Products
(Div. Bogue Electric)
Imperial Paper & Color Corp.
Inclinator Co. of America
Interchemical Corp.
Johns-Manville Co.
Kampak (Cinderella Dishwasher)
Kennedy, David E.
Kimberly-Clark Corp.
Libbey-Owens-Ford Co.
Lord & Burnham
Logan Co.
Martin-Senour Co.
Mesker Bros.
Meyercord Co.
Minneapolis-Honeywell
Modine Mfg. Co.
National Clay Pipe
Nurre Companies Inc.
Owens-Corning Fiberglas Corp.
Permutit Co.
Pittsburgh Plate Glass
Pittsburgh Paint
Ponderosa Pine Woodwork
Portland Cement Assoc.
Reynolds Metals Co.
Rocky Mount Mfg. Co.
Rolscreen Co.
Roper Corp., Geo. D.
Russell Co., F. C.
Rusticraft Fence Co.
St. Charles Mfg. Co.
Sedgwick Machine Works
Shepard Elevator Co.
Sherwin-Williams Co.
Southern Galvanizing Co.
Strahan Co., Thomas
United States Plywood
United Wall Paper Factories
Wendel, Inc., Rudolph
Weis Mfg. Co., Henry
Western Pine Association
Williams Oil-O-Matic
Wood Conversion Co.

© 1946, THE CONDÉ NAST PUBLICATIONS, INC.

FOR ALL THESE SERVICES...

Cut away view of a Walseal Tee showing ring of silver brazing alloy and completed Silbraz* joint.



specify

HOT AND COLD WATER circulating systems

BOILER FEED LINES

STEAM RETURN LINES

CONDENSATE LINES

LOW AND HIGH PRESSURE AIR piping systems

LUBRICATING OIL circulating systems where filters and coolers are used.

INDUSTRIAL GAS piping, such as oxygen, nitrogen, argon, helium, etc. throughout laboratories.

SOLVENT PIPING carrying solvent into process and away from process through recovery equipment.

VACUUM PIPING systems

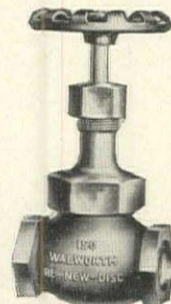
SILBRAZ ★ JOINTS

MADE WITH WALSEAL* PRODUCTS

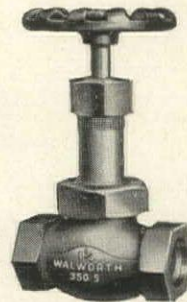
Yes, on tough jobs like these, where brass or copper pipe or copper tubing is used, Walseal bronze valves, fittings, and flanges do a two-fold job.

1. They make leakproof, trouble-free connections that are permanent... vibration-proof, corrosion-resistant — connections that will not creep or pull apart; that literally join with the pipe to form a "one-piece pipe line."
2. They eliminate the need for maintenance and costly repairs — especially important where lowered operating costs are imperative.

For these reasons more and more piping installations are being made with the modern Silbraz joints, using Walseal products. For complete details on Walseal products, write for a free copy of Walworth Circular 84.



No. 95WS — 150-Pound Bronze Globe Valve with Renewable Disc, Lock-on Disc Holder, and Walseal Ends.



No. 225PWS — 350-Pound Bronze Globe Valve with "500 Brinell" Plug Type Seat and Disc, and Walseal Ends.

Walworth also manufactures a complete line of bronze, iron, and steel valves and fittings. A detailed description of the entire line is included in Catalog 42. Write for your free copy today.

*Patented—Reg. U. S. Pat. Off.

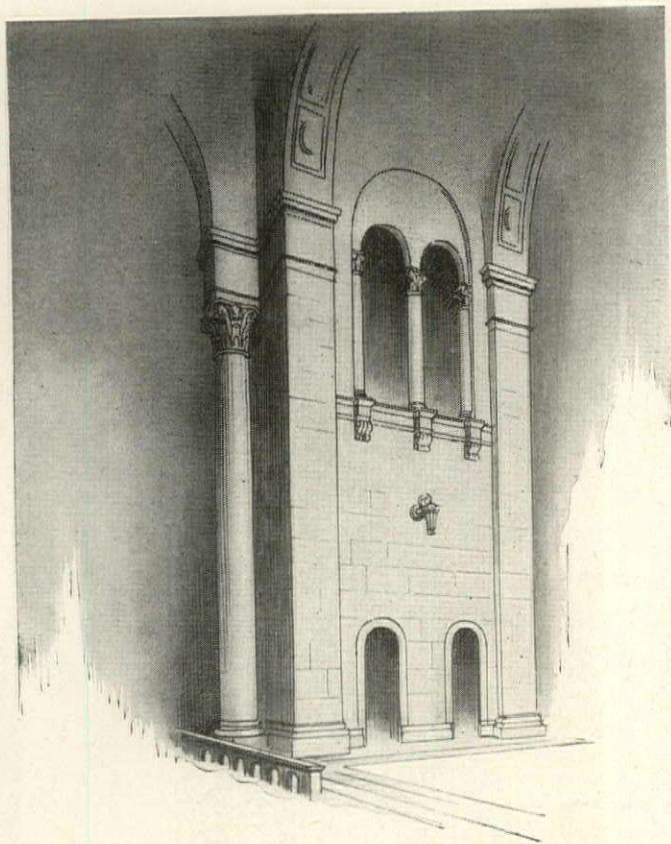
Make it a "one-piece pipe line" with WALSEAL

WALWORTH

valves and fittings

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

DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD



for Enduring Beauty

Architects, Craftsmen and Dealers who specify, apply and sell the original Ohio White Finish and its famous twin, Hawk Spread, know that the quality of these brands help to insure their reputation.

Both brands are scientifically processed from rock quarried from the heart of the world's purest deposit of dolomitic limestone . . . Both are always packed in distinctively striped Red Zig Zag Bags . . . the mark of enduring beauty for plastered walls and ceilings.



Forum:

Just a note of hearty congratulations on the new format of The FORUM. Your magazine has made such wonderful strides and does such an outstanding job that it is gratifying to see the more adequate scope provided by the increased page size, the use of color, etc. evidenced in the new get-up—no wonder you dominate.

New York, N. Y.

CHANDLER CUDLIPP

Forum:

I write to express my great regret at the change in size of The FORUM.

One of the greatest values of an architectural magazine to an architect is the pictures of buildings it presents. He takes the magazine apart and files these pictures under their suitable headings. His files have been built up over many years, and your new size is too large to be received in the normal file. Even if the file happened to be of a size large enough to receive them, the insertion of some plates of over-size type would be most inconvenient.

I recognize that you have become less and less interested in recent years in publishing preservable pictures. From the standpoint of the architect, that is unfortunate.

It is not for a subscriber to say whether your attempt to make the magazine interesting to the whole construction industry, rather than just architects, is desirable or not. Perhaps we need the kind of magazine that The FORUM is becoming. I am afraid, however, that the new size is another item in its decreasing attraction to the architectural profession.

CHARLES F. CELLARIUS, *Architect*
Cincinnati, Ohio

Forum:

Although I am not very good at fan letters, I simply cannot resist writing you to tell you how impressed I am with the new FORUM. At last we have a magazine capable of dealing on a noble scale with the potential greatness of the architectural vista spread before us. When paper and printing catch up with the grandeur of your intentions, the results will be wonderful . . .

Los Angeles, Calif.

ALVIN LUSTIG

Forum:

Congratulations on the new format of The FORUM.

For my own part I like large pages and big pictures. This new large size should give you plenty of opportunity to spread yourself.

More power to you.

EGMONT ARENS

New York, N. Y.

FORUM SIZE

Mixed with words of praise for the FORUM's new format are complaints (chiefly from architects) that the pages no longer fit into letter-size files. Acknowledging this truth, the FORUM stands pat for the larger magazine.

The old, small size, based on a one-picture-per-page formula, had outgrown its usefulness. Without resorting to a drastic and undesirable reduction in the size and clarity of photographs and diagrams, it was often necessary to present a picture on one page, a related diagram on another and, sometimes, the text on a third. Result was that the reader frequently had to engage in optical gymnastics to grasp a presentation in its entirety.

The new larger page allows the integration of text, diagram and illustration. Also, it permits the FORUM to continue its policy of presenting large, easily-read graphic material.

These obvious and important advantages seem to outweigh the fact that the new FORUM does not fit old files. However, to remedy this inconvenience to those architects who clip and file FORUM pages by subject, may we suggest: 1) a case with adjustable shelves; 2) a cabinet with legal size drawers; 3) a new, modern container for the new modern FORUM; or 4) if present material shortages preclude a new file, why not simply fold the pages to fit existing files?

Many architects and all other building professionals have greeted the new format with cheers. This is of paramount importance to architects. They at times overlook the fact that a principle aim of the FORUM is to expose the profession's most important clientele (some 40,000 of whom subscribe to the FORUM) to the best in contemporary architecture. We believe that it is good for the architects and the FORUM to enlarge this clientele's appreciation of contemporary architecture and those who create it.—Ed.

Forum:

Congratulations! The January issue is out of this world, even though I had a very hazy preview.

The blue smoke emanating from my nasal passages because of the lack of credit line on pages 89, 90, 91, 92, 93, 94, 95, 116 and 117 hardly permitted full appreciation of a grand job.

KENNETH A. HEDRICH

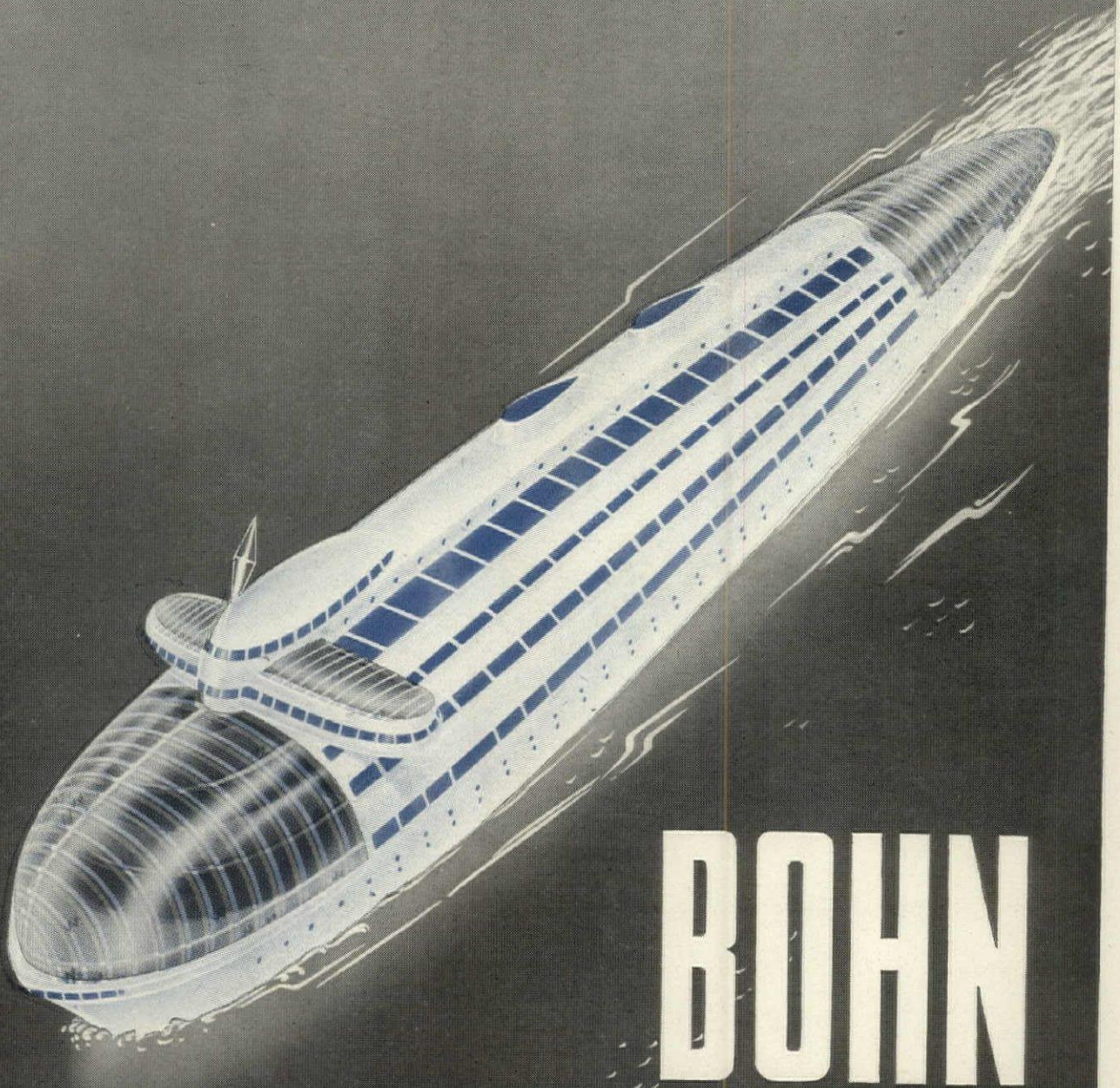
Hedrich-Blessing Studios
Chicago, Ill.

(Continued on page 50)

A NEW TRANSOCEANIC TREAT

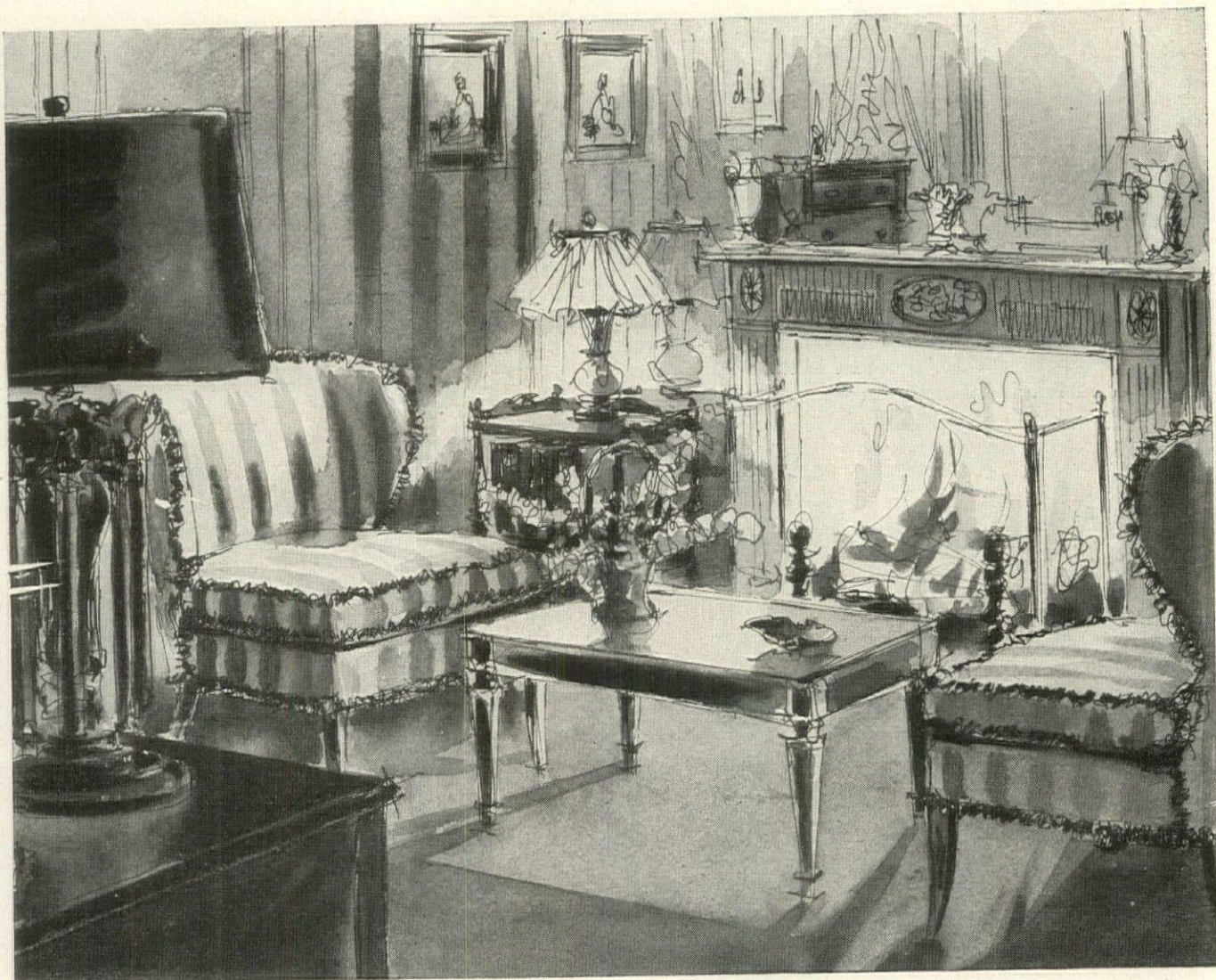
Almost wasp-like in its appearance and streamlining is this designer's conception of one of the transoceanic liners of the future. Perhaps—because it combines strength with lightness—Bohn aluminum would play a part in the construction as in this illustration.

It is the combination of these qualities—in both aluminum and magnesium — that assures their wider, more extensive use in post-war products. The Bohn engineering staff would be glad to consult with you on possible applications in your own product.



BOHN

BOHN ALUMINUM AND BRASS CORPORATION—GENERAL OFFICES—LAFAYETTE BUILDING—DETROIT 26, MICHIGAN
Designers and Fabricators—ALUMINUM • MAGNESIUM • BRASS • AIRCRAFT-TYPE BEARINGS



Decoratively Speaking Companionably Speaking...

... PAIRS OF CHAIRS

have so much charm to contribute to an interior plan. The groupings in our exhibits illustrate a diversity of designs ... and of ideas for unusual placement.

EXHIBITS

IN NEW YORK:
385 MADISON AVENUE

IN CHICAGO:
1666 MERCHANDISE MART

IN PITTSBURGH:
907 PENN AVENUE

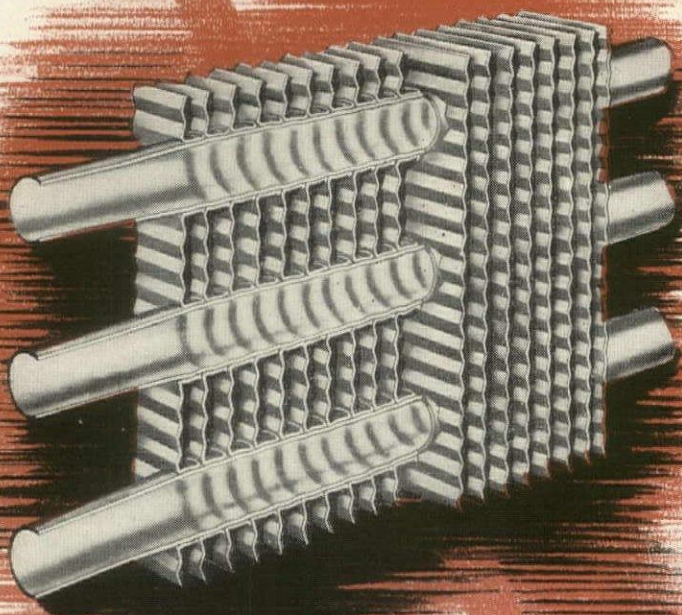
AND IN HIGH POINT,
NORTH CAROLINA



Furniture by
TOMLINSON

McQuay RIPPLE FIN COILS

for DURABILITY
and
EFFICIENCY!



ONLY McQuay gives you Ripple Fin coils and only Ripple Fin coils give you top performance. Look at these distinct advantages:

Ripple Fin coils have higher flexible strength with less air friction and cleaner operation.

Ripple Fin coils have greater heat transfer surface.

Hydraulic expansion of all tubes into fins having wide collars provides permanent mechanical bond.

Copper headers have strongest construction because of inherent flexibility to accommodate unequal contraction and expansion.

McQuay coils are proved and preferred — proved by service under the most rigid conditions and preferred because of their exclusive construction.

McQuay coils are available in a wide variety of styles and sizes, both standard and special coils for steam, hot water, cold water, brine, direct expansion and other applications. For complete information write McQuay Inc., 1600 Broadway Street Northeast, Minneapolis 13, Minnesota. Representatives in all principal cities.



McQuay INC.

AIR TEMPERING EQUIPMENT
ESPECIALLY DESIGNED
FOR INDUSTRY



Good Ventilation Can Be SIMPLE

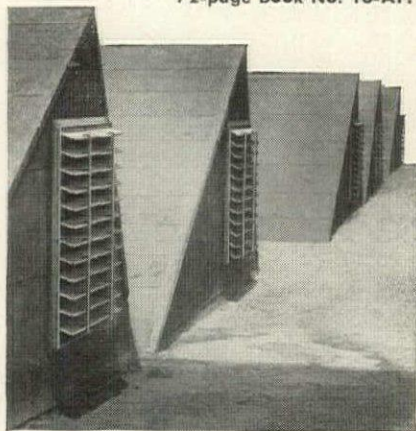
Good ventilation—plenty of clean, fresh air at the right places—means just one thing... *air movement*. It's not how much the equipment *costs*, or how *big* it is, that counts. It's *movement* that matters, and movement means operating efficiency.

PUTS WHAT'S INSIDE, OUTSIDE

Here is a saw-tooth roof installation at a plant which makes millions of closures per day for a food product. When ventilation equipment first installed *failed* to remove the smoke and fumes from hot waxing operations, seven Propellair fans were put to work. Performance has been so satisfactory that three *more* have since been added.

FOR WALLS, ROOFS, WINDOWS, DUCTS

For sure and simple solutions to your industrial ventilating problems, write for the name of your Propellair distributor, and for free 72-page Book No. 10-AF.



"MOVING AIR IS OUR BUSINESS"

PROPELLAIR
INC.
SPRINGFIELD · OHIO

Forum:

I have just received the January 1946 issue of The FORUM, which I greeted with mixed emotions. I have been waiting anxiously since the announcement of the new postwar size to see if the fear I felt from the first reading of the announcement would be justified. Well, it is!

For fifteen-odd years I have been filing my copies of the architectural journals, tearing them apart and filing the material according to an involved and complicated system I am *still* working on. For fifteen-odd years I have weathered the storms of vagary on the part of the publishers over the type of binding: glued sections, glued binding, two staples, three staples, glue and staples, and spiral binding (my favorite). I have been equal to and a good match for all comers up to January, 1946; but I must admit I have met my match in the new FORUM. Over the above-mentioned fifteen-odd years I have managed to acquire and nearly fill two three-drawer standard (or so I assumed) steel filing cabinets. Now, on the threshold of the postwar world, in which everything is supposed to be perfect for everybody, comes The FORUM: too long to fit the cabinet and too high to allow the index divider tabs to be seen.

My first thought, due probably to the shock of the tragedy, was to accuse The FORUM of pretentious display and of a show-offish attitude the minute the wartime paper restrictions were lifted. My next thought was that some obscure vice-president had let the thing slip by, or that it hadn't occurred to him that architects *do* save and file the excellent FORUM material. My last thought, as I sank into hopeless depression, was that I was at fault in being old-fashioned in my filing methods. I may have rationalized a little, but I told myself that mine is the most compact method of filing and a system used by nearly every office in the world. That made me feel better, and it also shifted the responsibility and the blame right back onto The FORUM, where I believe it belongs.

The format and the presentation of the material in The FORUM is excellent, and the basic (I almost typed 'baser') reasoning behind the new size is admirable and sound, but all that does not make The FORUM fit in my filing cabinets. I definitely do not want to forego the excellent and valuable material in each issue of The FORUM, and I won't; but if once each year I have to carry my FORUMS to the book-binder to have the margins cut off, you may be sure that some of the blackest thoughts imaginable will be whizzing

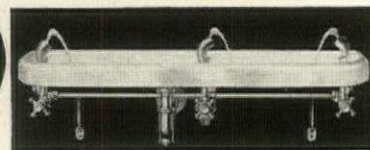
(Continued on page 54)

Protecting Their Health IS PART OF THE Job!



The education of the child is only part of the job at any school. In planning the appointments of the building or in remodeling, architects and school authorities face the factors of health, comfort and convenience as well. If you select Halsey Taylor Fountains, health-safety is definitely taken care of, and you can rely on their exclusive features to provide a welcome freedom from servicing troubles after they're installed. Get our latest catalog.

THE HALSEY W. TAYLOR CO.
WARREN, O.



**HALSEY
TAYLOR**

**DRINKING
FOUNTAINS**

5-2

O'BRIEN PAINTS

FINE FINISHES

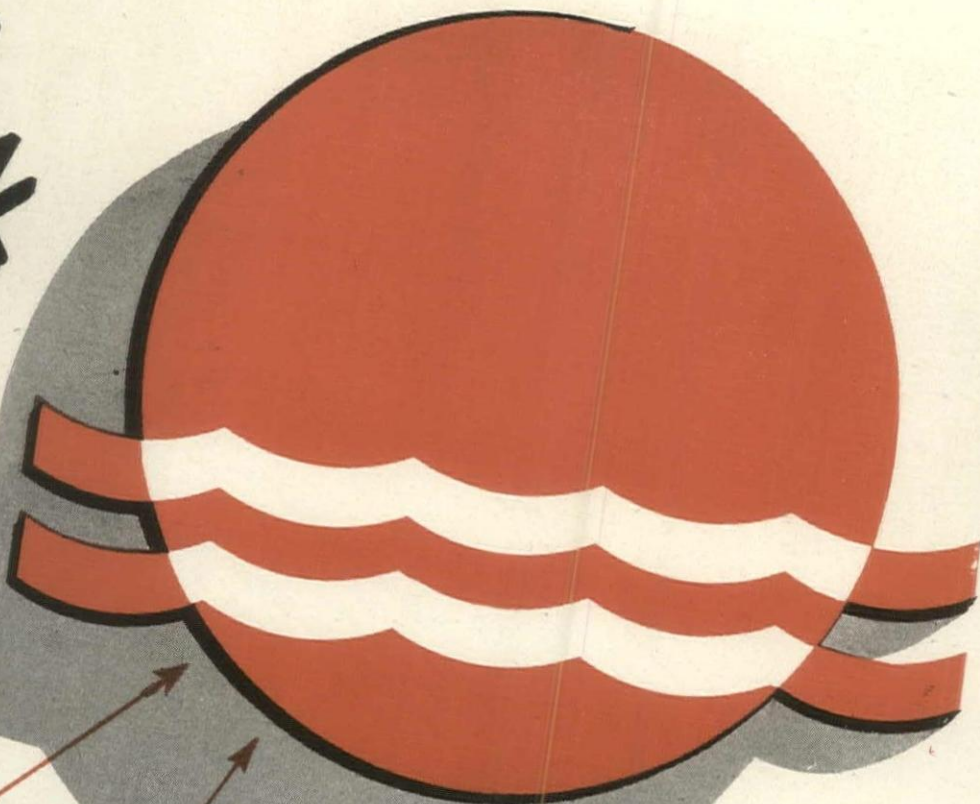
SINCE 1875

for every purpose—for
those who want the best

They Look Better Longer

See Sweet's for complete
information on all O'Brien
paints. O'BRIEN VARNISH
COMPANY, SOUTH BEND 21,
INDIANA.

This Mark of Merit



on heating equipment and plumbing fixtures
...is your assurance of satisfactory service



THIS easily recognized Mark of Merit now is being extensively advertised to millions of homeowners and builders as the dependable guide to the best in heating equipment and plumbing fixtures.

Like the "Sterling" mark on silver, this Mark of Merit on heating equipment and plumbing fixtures stands for the very finest. It identifies time-tested, performance-proved products which are backed by many millions of dollars spent in research. Products which have been Serving the Nations' Health and Comfort for

more than half a century.

Make certain of satisfaction by specifying American-Standard products. These products are styled, designed and engineered to fit the widest range of architectural and

structural requirements.

For information, contact your Heating and Plumbing Contractor.
American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

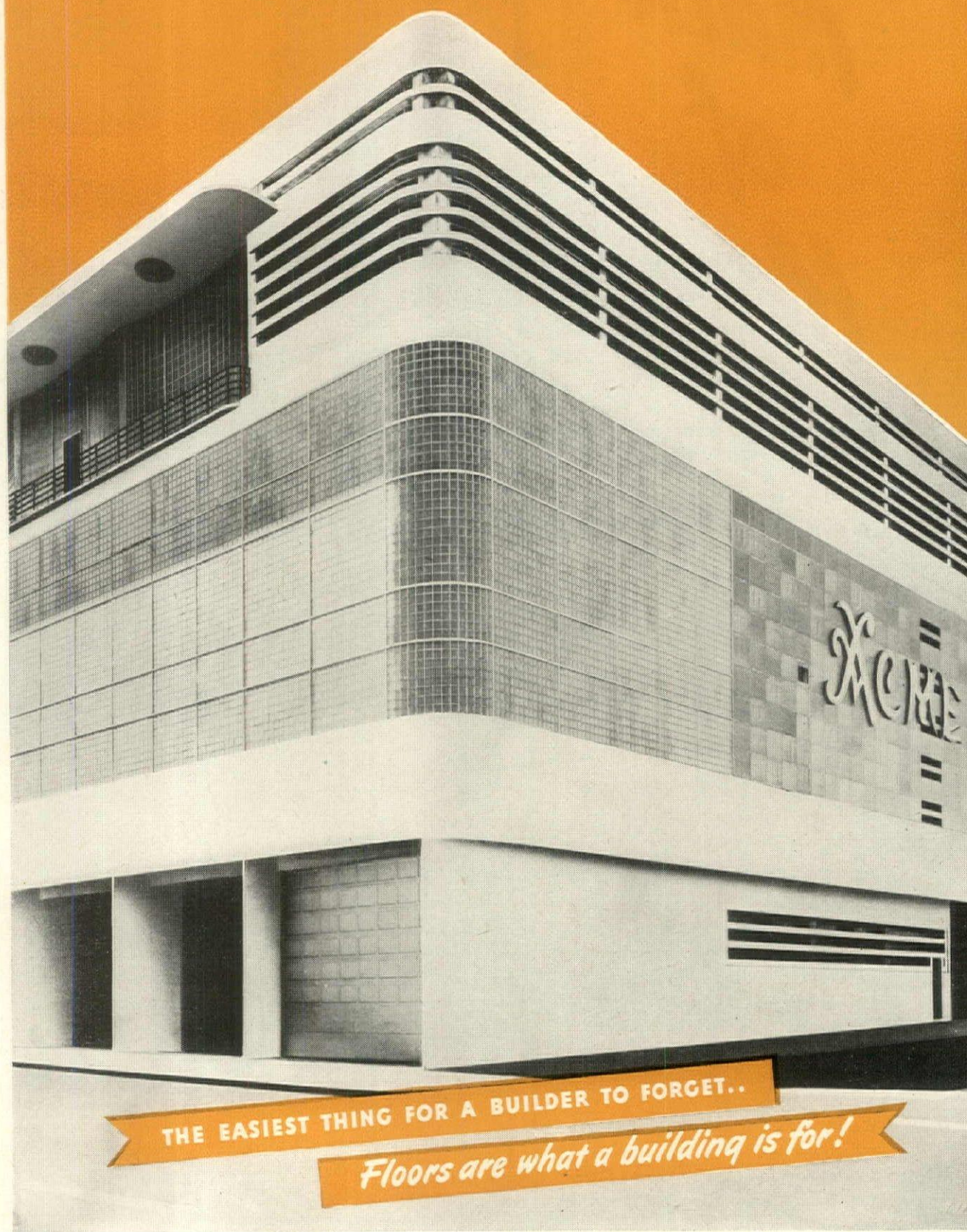
AMERICAN-Standard

HEATING  PLUMBING

Serving the Nations' Health and Comfort

ACME BREWERIES *built*

SAN FRANCISCO, CAL.



THE EASIEST THING FOR A BUILDER TO FORGET..

Floors are what a building is for!

with Q • FLOORS because..

THEY PROVIDED ENGINEER, JAMES M. SMITH,
unlimited electric availability

Owners wanted to anticipate at this building might have a change of occupant. Change is always a threat to any building. Q-Floor, however, takes all the guesswork out of changing electrical layouts.

The steel cells of Q-Floor are passed over by raceways. This construction makes it possible to tap up an electrical outlet on any inch area of floor. And it takes

an electrician literally only a few minutes. No trenches. No mess.

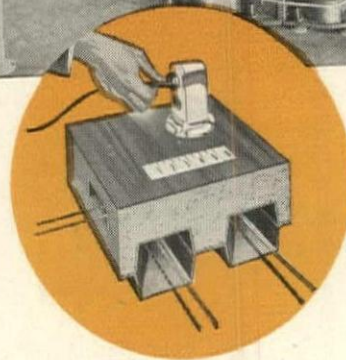
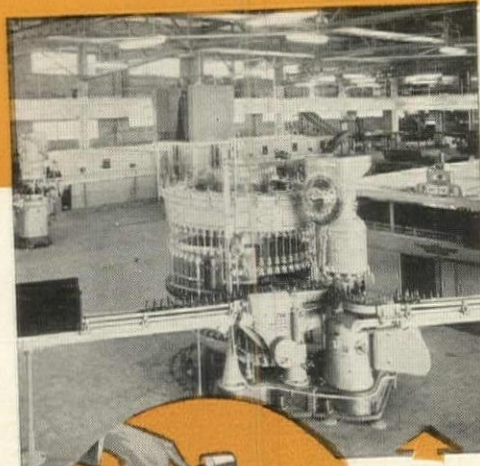
The floor under the Acme machinery could sprout a hundred office-type outlets overnight. The arrow points to hand-hole to main raceway. Any six inch area of the floor can be tapped for an outlet. You avoid all the grief of anticipating partitions and outlets when you specify Robertson Q-Floor.

AND THEY MADE POSSIBLE FOR R. J. H. FORBES, contractor

20 to 30% reduced building time

Construction features of Q-Floor appeal to every client, also. Two men can lay 32 sq. ft. in half a minute and the Q-Floor immediately becomes a clean, dry, noncombustible platform for all other trades. From thousands of installations, Q-Floors have been known to reduce building time to 30%. Time saved is easily interpreted to your client as money saved or earlier revenue. The noncombustible nature, light weight, the lack of

forms and shoring to cause accidents and fire are qualities which provide you fast construction with a variety of financial advantages that can be best summed up as greater client satisfaction. And don't have any illusions about cost. Q-Floors are made to sell and they sell well. Cost is right in line. For details, call a Robertson representative. For Q-Fittings see a General Electrical construction materials distributor.



THIS IS
1 SQ. FT. OF
Q-FLOOR



H. H. ROBERTSON COMPANY

2403 Farmers Bank Building
Pittsburgh 22, Pennsylvania



Offices in 50 Principal Cities
World-Wide Building Service

Q • FLOORS

PAINTERS START as Soon as the Plasterers are Through



When the owner wants quick delivery of his new or remodeled building and there's damp plaster to paint—use Luminall. It is a beautiful flat paint that is not damaged by dampness in new plaster. Luminall is a water-mixed paste casein paint. It has a porous film that permits moisture in new plaster to evaporate without damage.

Luminall is made in a wide range of colors—soft, lovely tints. Use wherever a flat paint is desired, from low-priced residences to biggest hotels, hospitals, and office buildings.

You'll like Luminall's speed, too—one coat covers—use a wide brush—dries in 40 minutes. Very economical.



LUMINALL



Ask for Your Copy

Send for "Painting for Light & Decoration" which gives complete data, information, and specifications on the use of Luminall in non-residential structures.

NATIONAL CHEMICAL & MFG. CO.
3612 S. May St., Chicago 9

through the ether from me to you.

In conclusion, may I plead with you that in one thing, and in one thing only, may we maintain the status quo of the complacent, unenlightened prewar world: the size of The FORUM.

Submitted respectfully and with feeling.

HENRY B. BAUME, *Architect*
Denver, Colo.

Forum:

I want to commend your alert editorial staff.

The attractive new format of The FORUM is a very real improvement and will, I am sure, increase the already widespread interest in your splendid magazine.

HUGH B. MITCHELL

United States Senate
Washington, D. C.

Forum:

The January issue hit me square between the eyes. It is a genuine achievement. I enjoyed it from cover to cover, even including the advertisements. You and your people merit real commendation.

PHILIP M. KLUTZNICK,
Commissioner, FPHA

Washington, D. C.

Forum:

A word of appreciation and congratulations to you on the new set-up of The FORUM. I think it is a beautifully composed format and bids fair to be even more stimulating than it has been in the past.

LEOPOLD ARNAUD

Dean, Columbia University
New York, N. Y.

Forum:

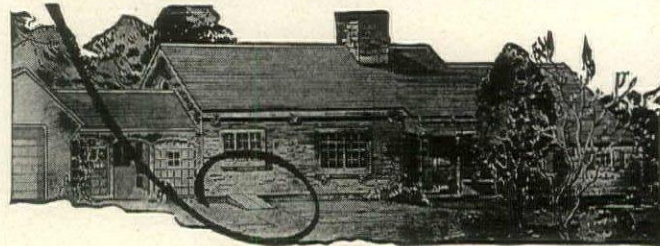
... By Gregory, what a whopper of a book you folks issued to your clientele this time! It will soon be "big as Life". Of course, trying to file a 12½ in. page into a 12 3/16 in. letter size filing cabinet drawer poses no difficult problem; just chop off the corner of an Air Terminal and stuff it in. And to preserve Mr. Hornbostel's country house for posterity (p. 101, January, '46), just toss Mr. Stafford's elementary school in the dungeon (or vice versa), and so on down the pages, ad infinitum.

Wouldn't it be lovely if your editorial staff published just one issue in which we architects could classify and file every bit of meat in it without having to resort to hair-pulling exercises in trying to decide which side of a page is the most important to us?

ROBERT ALLAN CLASS, *Architect*
Philadelphia, Pa.

(Continued on page 58)

A MARK OF QUALITY



in home cellar construction

If you want the convenience and safety of an accessible cellar . . . If you want a leak-proof, burglar-proof, termite-proof and permanently trouble-free cellar door which will always be a source of satisfaction to you . . . buy

BILCO

COPPER STEEL

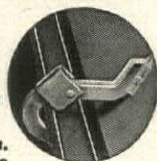
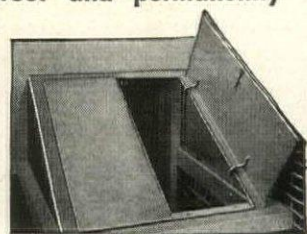
BULKHEAD DOORS

A Sound and Sensible Investment

ASK YOUR DEALER or write

BILCO MFG. CO.

162 Hallock Ave., New Haven, Conn.
SIDEWALK AND BULKHEAD DOORS • STEEL ROOF SCUTTLES



AUTOMATIC
SAFETY
CATCH

COOLSTREAM

Capacity
Counts

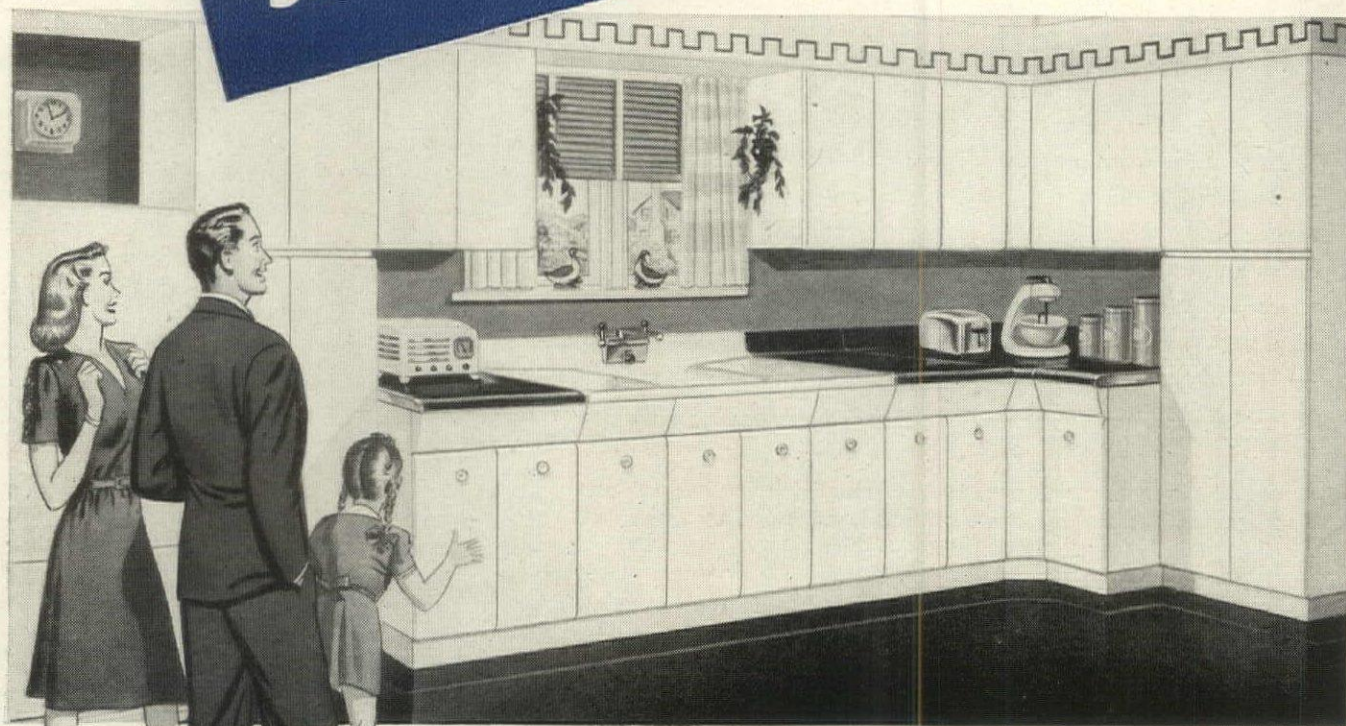
REVOLUTIONARY IN DESIGN
COOLSTREAM
ELECTRIC WATER COOLERS
have a capacity margin surpassing all previous water cooler performance. Add superlative engineering and design, low operational cost plus high efficiency and you have COOLSTREAM — the electric water cooler of the year.

SEND FOR
CATALOG



THE COOLSTREAM
CORPORATION
240 BUTLER STREET
BROOKLYN 17, N. Y.

**YOU, TOO, CAN
SAVE WORK . . .**



IN this **NEW KITCHEN**

The *NEW American* Kitchens save time and work for housewives. They can also *save time and work for you!*

This new line—designed by Loewy with the help of over 10,000 housewives—consists of sinks, base cabinets, wall cabinets, corner cabinets and “corner fillers,” in a variety of dimensions, so that they easily modernize any type or size of kitchen.

Whether it is a new house or a remodeling job, you’ll want to know how this new idea for kitchens simplifies your work and pleases your clients. Write American Central Mfg. Corporation, Connersville, Indiana, for complete, quick information.

NEW *American*
KITCHENS—

CABINETS • SINKS • DISHWASHERS • DISPOSALS

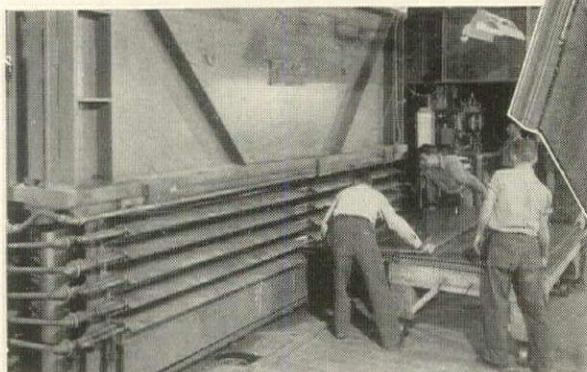
Now featuring **Roddiscraft** the world's finest doors .. in Michigan Maple .. the world's finest wood

IN Michigan Maple, Nature exhibits her finest handiwork, combining beauty and warmth — uniformity of grain and color — overall hardness.

In Roddis' own northern hardwood timber tracts, Roddis men select the finest of Michigan Maple — earmark it for the veneer mill, where Roddis craftsmen mold it into matching doors and wainscots — by the RODDISCRAFT process which welds the face veneer to the crossbanding and core, making a solid unit, immune to moisture — highly fire and sound resistant — durable as it is beautiful.

The combination of hard Michigan Maple face veneers, laid over RODDISCRAFT cores and crossbanding, glued under heat and pressure, is a guarantee of long life and lasting beauty.

Michigan Maple faces are available in selected white, or unselected for painting.



Consult your local millwork and fixture manufacturers — and lumber dealers



Roddiscraft WAREHOUSES

CAMBRIDGE 39, MASS.,
229 Vassar Street
CHICAGO 8, ILL.,
1440 W. Cermak Road
CINCINNATI 2, OHIO,
457 E. Sixth Street
DALLAS, TEXAS,
2615 Latimer Street
KANSAS CITY 8, MISSOURI,
2729 Southwest Boulevard
LOUISVILLE 10, KENTUCKY,
1201-5 S. 15th Street
LONG ISLAND CITY, N. Y.,
Review & Greenpoint Avenue
MARSHFIELD, WISCONSIN
MILWAUKEE 8, WIS.,
4601 W. State Street
NEW YORK CITY 18, NEW YORK,
515 W. 36th Street
SAN ANTONIO, TEXAS,
727 N. Cherry Street
DEALERS IN ALL PRINCIPAL
CITIES

Roddiscraft
RODDIS LUMBER
& VENEER CO.
MARSHFIELD, WISCONSIN

IT'S NEW
IT'S SMART
IT PLEASES!



Color on a white bowl

Want a decorating idea that is new and popular? Smart, yet inexpensive?

Backed by national advertising, Church colored seats on white closet bowls have won wide preference. They make it simple for you to style a bathroom, make it brighter and more cheerful, give it quiet beauty and decorative charm. The extensive selection of Church colors with pearl finish — such as black, green, coral, light blue, dark red, ivory, tan and orchid — make it easy for you to carry out just the right scheme for a particular bathroom, to harmonize tile, trim, paint and wall-paper with Church colored seats.

Include Church colored seats in your next specification and watch the pleased reaction of your client. Whether you use color or white, you can depend upon CHURCH Sheet Covered SEATS for beauty, durability, economy and consumer acceptance. Remember that they will not crack, chip, or peel . . . for the finish is a thick, tough plastic sheet — not paint or lacquer.

C. F. CHURCH MFG. COMPANY, HOLYOKE, MASS.

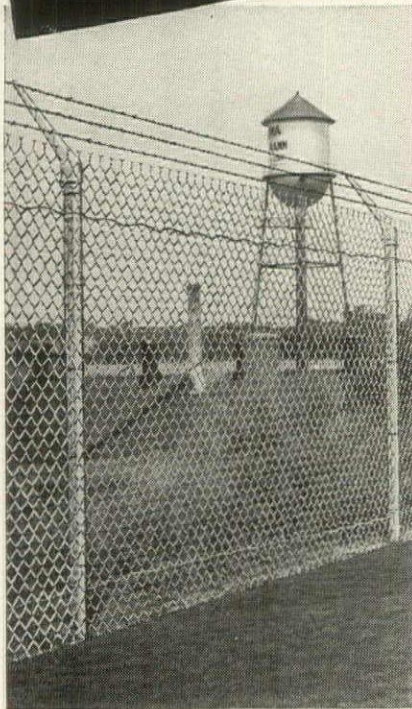
Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

CHURCH SEATS
"THE BEST SEAT IN THE HOUSE"



LETTERS

4 BIG ADVANTAGES --- All Exclusive



4 Big Reasons for Specifying ANCHOR

Anchor Chain Link Fence has earned a top spot on the "spec" list of many architects because its rugged construction and exclusive design insure long life and maximum protection. Credit for this performance belongs to four big features . . . 1. *Deep-Driven Anchors*, which hold the fence permanently erect and in line, in any soil, in any weather, yet permit easy relocation where necessary . . . 2. *Square Frame Gates*, amazingly free from sagging and warping . . . 3. *U-Bar Line Posts*, rust-free and rigid . . . 4. *Square Terminal Posts*, which increase strength and durability.

Get This Book for
A. I. A. File 14-K

"Anchor Protective Fences" is both a catalog and a specification manual. Shows many types and uses of Anchor Chain Link Fence . . . pictures installations for many prominent companies and institutions . . . contains structural diagrams and specification tables. Just ask for Book No. 110. You'll find it both useful and informative. We'll be glad to send you a free copy. Address: Anchor Post Fence Co., 6635 Eastern Ave., Baltimore 24, Md.

Anchor also makes a complete line of Anchor weld iron fences and gates. Send for Catalog 111 today.

Anchor Fence
Nation-wide Sales and Erecting Service

LEAD PIPE CLINCH

Forum:

I assume it was the shortage of trained journalists that forced such little country papers as the *New York Times*, the *Herald-Tribune* and the *Post* to omit any extended mention of an episode that had Grand Rapids a-(more or less)-gog recently. I might also say that since the episode had real significance for the profession, I would have thought that your little pamphlet might have said something about it. But no; it remained a secret between me, the Associated Press, a fellow named George Zarafonitis (that is too his name; I know him well), bureau head for the U. P. in Grand Rapids, and roughly 4 million people in Detroit, Grand Rapids and intervening settlements.

It seems one night a couple of weeks ago the minister of a church in suburban Grand Rapids was driving along the road in an automobile. Or rather he was being driven by one of the elders of his church. You got that all straight up to now? That's good, on account of this is the only thing clear about the whole matter. Shortly thereafter, the elder stumbled on foot into the living room of his residence, blood streaming down his face from a Technicolor cut in his scalp, and urged his wife to lock the door and pull down the curtains, as he had a feeling that somebody was attempting to do him harm. The elder is a man of strong powers of deductive reasoning, you can see that. And a couple of hours later, the minister's wife goes down the cellar and finds her spouse reposing on the cement floor with a tube from a small stove emitting gas in his general direction.

Both gentlemen were removed to hospitals and are now up and about. The elder's story is curt, clear, concise; he was driving along and all of a sudden, Clank! A very Timeworthy account, I must say. The minister's story is equally revealing; he was sitting in the car and suddenly everything went foggy. In quotes.

Naturally, I would not be directing your attention to this somber narrative were it not for two facts: (a) at the time these goings-on went on, the minister and the elder were on their way to call on an architect, and (b) it is the opinion of the sheriff's department that the elder was struck on the noggin with a piece of lead pipe, around which was wrapped a set of blue prints. As you can see, this brings the whole matter within our jurisdiction, and what do you propose to do about it?

Inasmuch as, by a curious freak of fate, I was *not* the architect they were about to call upon, I am able to survey the matter in

(Continued on page 62)

Add Comfort, Save Fuel with **CHAMBERLIN** Metal Weather Strips

A Complete, Nationally Available Service for
Architects, Contractors and Building Owners

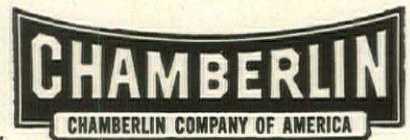
Chamberlin offers a complete, factory-installed Metal Weather Strip Service for commercial, residential, institutional and industrial buildings. Oldest and largest weather strip service in the world with 50 years' experience. Chamberlin Metal Weather Strips greatly improve storm window efficiency. All installations made by factory-trained mechanics, working under close factory-branch supervision. Proper installation is half the job and Chamberlin does it right. Chamberlin men study your needs as they would their own.

Free Survey—For free survey and estimate, call nearest Chamberlin office or write factory. Chamberlin Metal Weather Strips pay for themselves in fuel saved. Ask for further information today.



See insert in
Sweet's Catalog

Similar Service also available on Insulation,
Calking, Storm Windows and Screens



1343 LaBrosse Street • Detroit 26, Michigan

For exciting new . . . INTERIOR REMODELING

Before and after
views of theatre
lobby remodeled
with Structural
Bends



FOR ALL INTERIOR REMODELING

GENUINE **STRUCTURAL BENDS** ORIGINAL
OF TEMPERED MASONITE

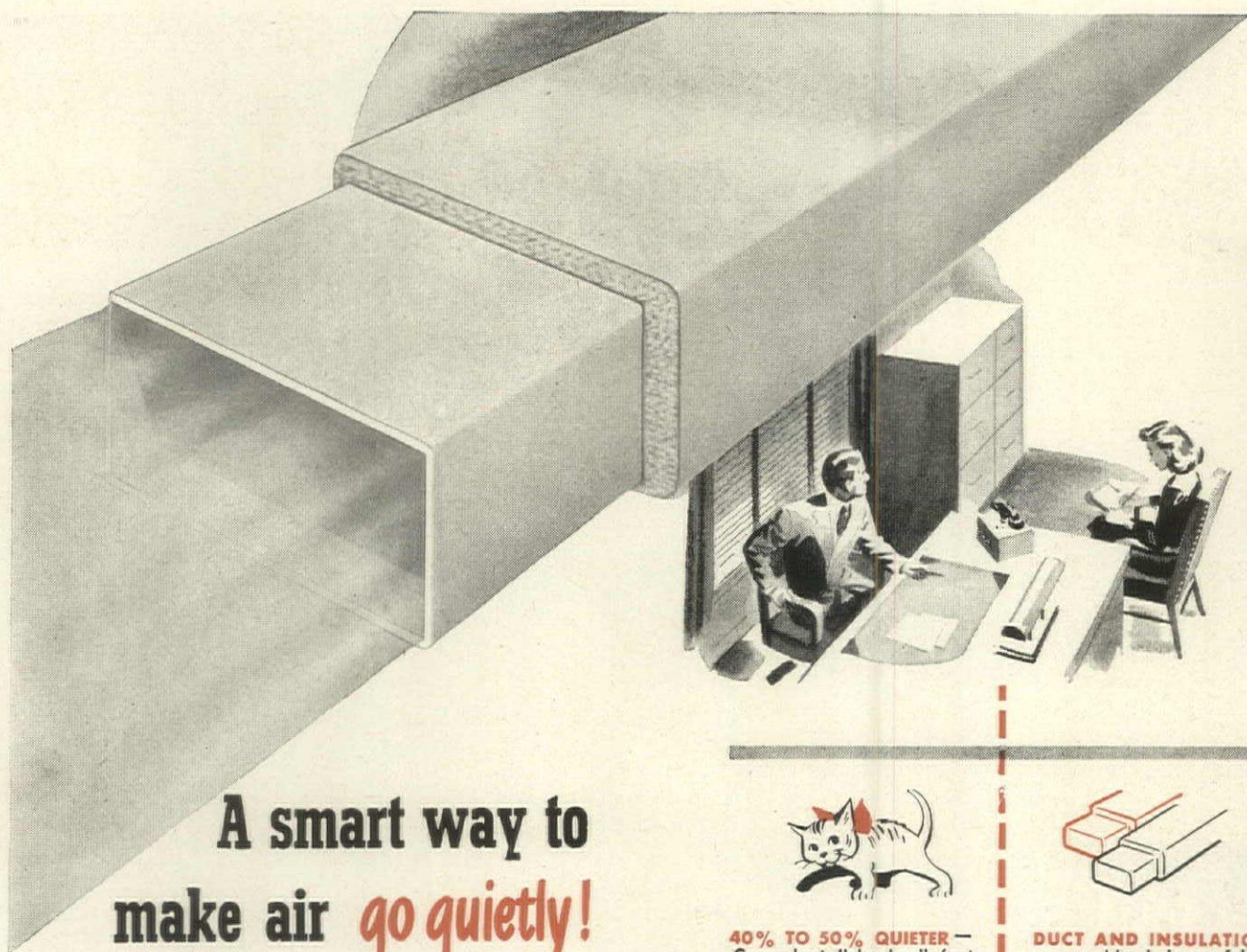
Made of strong tempered Masonite presdwood, Structural Bends are a practical, inexpensive material for creating modern effects in all interior remodeling or new construction. Smooth, graceful lines . . . interesting lighting becomes possible. Seventeen basic shapes, 8' and 12' lengths; any size area can be economically treated. Flexible . . . easy to cut . . . construct, finish and install. Time tested, durable, modern, they afford unlimited opportunities at low cost. In stock. WRITE FOR CATALOG . . . PLAN YOUR NEEDS . . . PLACE ORDER NOW.



Distributed Exclusively by

**W. L. STENSGAARD
AND ASSOCIATES, INC.**

346 N. JUSTINE STREET • CHICAGO 7, ILL.



A smart way to make air *go quietly!*

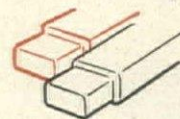
Carey duct gives air conditioning the "silent treatment" . . . no duct rumble and "telephoning" of fan and other noises. Because it's 40%-50% quieter, Careyduct can handle higher velocities than ordinary duct. Where the latter may have a maximum capacity of 1400 feet a minute, Careyduct of comparable size will easily handle 2500 feet a minute.

Wherever quietness is especially desirable, Careyduct will deliver it, along with other basic performance advantages.

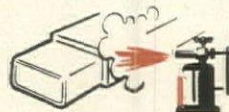
A Careyduct engineer is available to work with you, your architect and air conditioning contractor. Simply write —



40% TO 50% QUIETER — Careyduct "shushes" fast moving air.



DUCT AND INSULATION are combined in prefabricated units.



WON'T BURN — made of asbestos. Approved by Underwriters' Laboratories.



GOOD LOOKING — smooth streamlined surface takes any kind of finish.



FAST INSTALLATION by any qualified sheet metal worker.

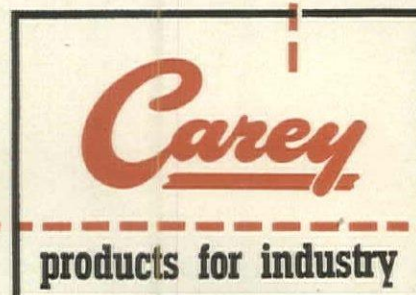


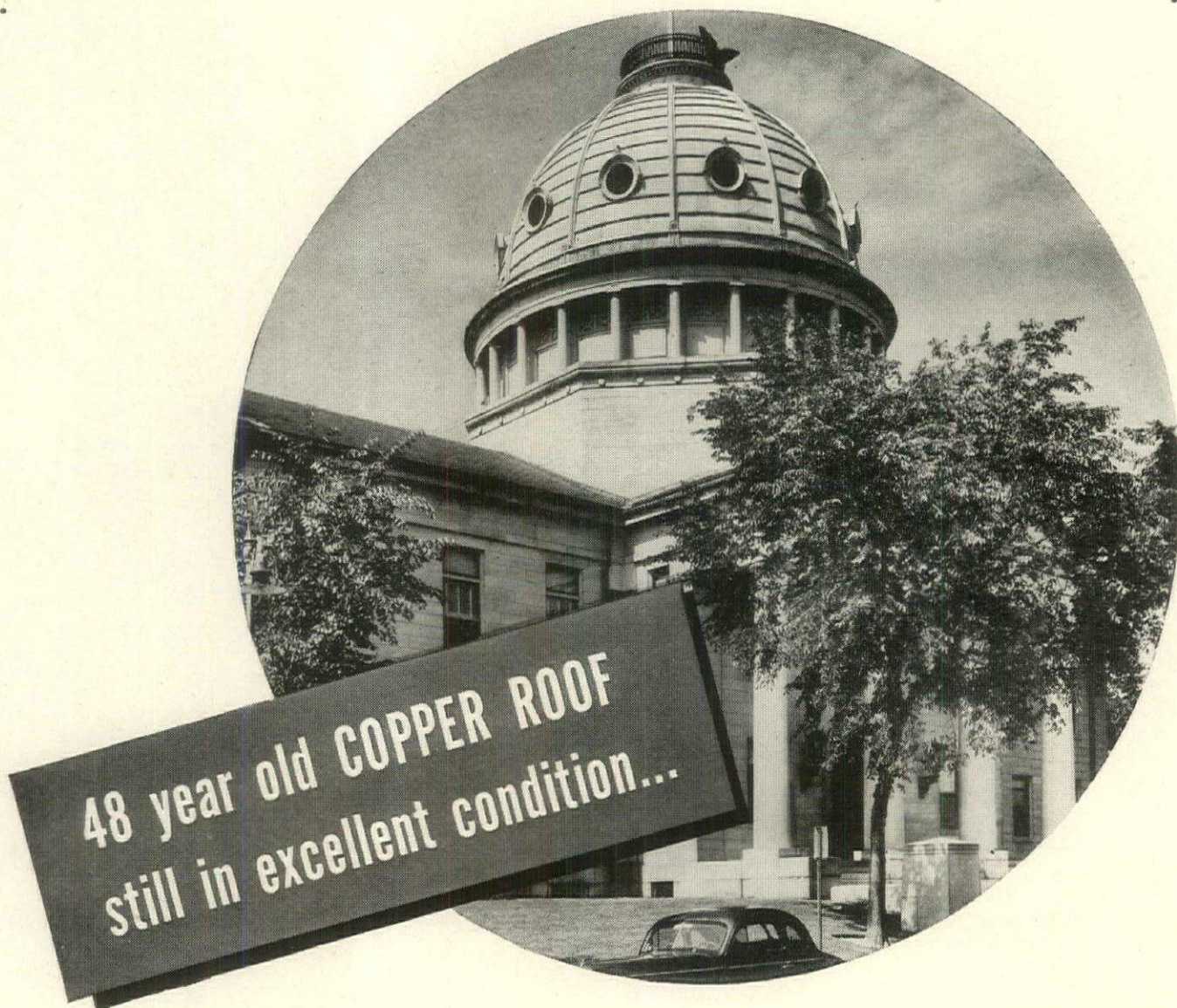
LEAKPROOF — special joint construction and seal prevents leaks.

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

IN CANADA: THE PHILIP CAREY CO., LTD. • OFFICE AND FACTORY: LENNOXVILLE, P. Q.

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





48 year old COPPER ROOF
still in excellent condition...

THE COPPER ROOF on this beautiful court house at Dedham, Massachusetts was installed about 1898... with copper supplied by The American Brass Company. A recent examination of the roof disclosed that the copper is in excellent condition. Records of maintenance are available only for the past 18 years, during which time no trouble has been experienced whatsoever.

For long-lasting roofs that increase in beauty with the passing years, consider the many advantages of copper.

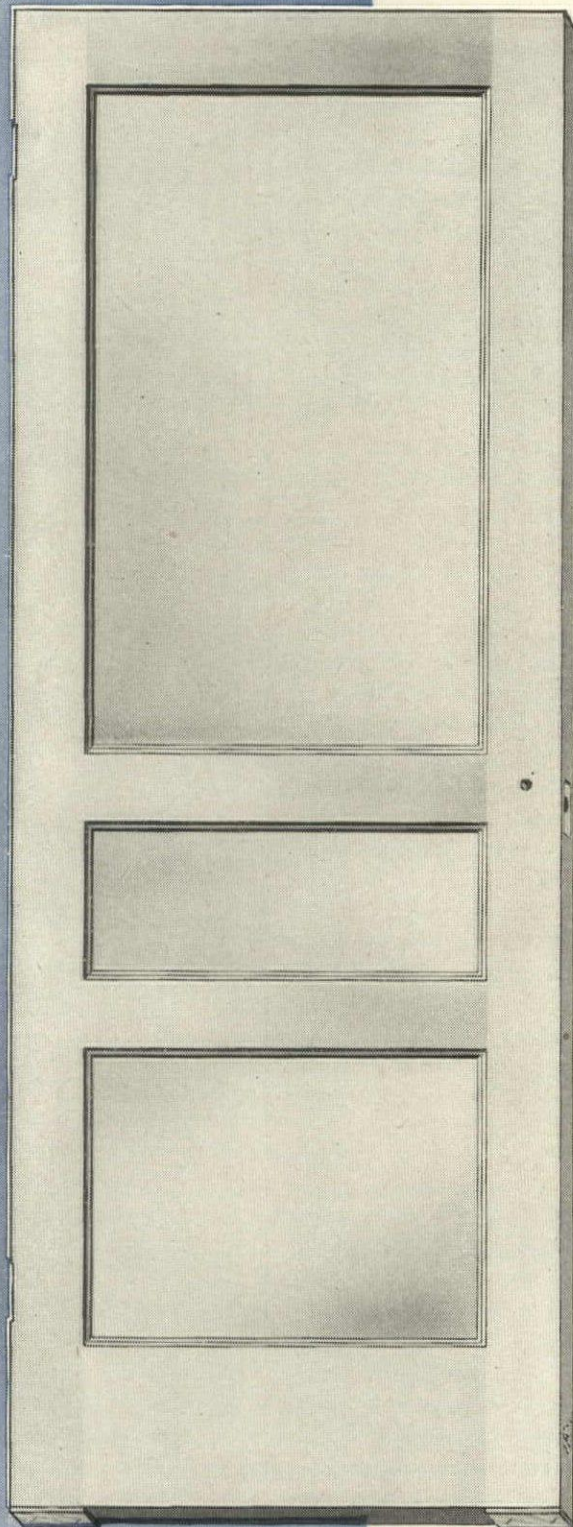
4559



Anaconda Copper

THE AMERICAN BRASS COMPANY—General Offices: Waterbury 88, Connecticut

Subsidiary of Anaconda Copper Mining Company • In Canada: ANACONDA AMERICAN BRASS LTD., New Toronto, Ont.



FACTRI-FIT Features Also Available

Douglas Fir Doors may also be ordered completely machined—gained for hinges and bored or mortised for locks.

FACTRI-FIT Gaining: 7" from top, 11" from bottom. Standard butt on 1-3/8" doors, 3-1/2" x 3-1/2"; on 1-3/4" doors, 4" x 4". Square corners. Center gaining for heavy construction, equi-distant between.

FACTRI-FIT Lock Bore: to center knob, 36" from bottom of door. Bore-in diameter, 15/16"; bore-in length, 3-3/4" from edge. Face plate, 1" x 2-1/4" x 1/16", square shape. Cross bore, 5/8" diameter on 2-3/8" center. Other machining to order.

SPECIFY THESE BETTER BOORS

Better Doors

PRE-SEALED

Douglas Fir Doors are better doors because they're available pre-sealed. This saves on-the-job finishing, eliminates the need for 1 prime coat, reduces moisture absorption and improves dimensional stability.

PRE-FITTED

Douglas Fir Doors are better doors because they're available pre-fit to exact net book sizes listed in U. S. Commercial Standard 73-45. Sawing and fitting-time is reduced, the danger of marring and "butchering" virtually eliminated.

COST LESS TO USE

Douglas Fir Doors are economical doors because these features save time and labor on the job. They're durable, too—made from sturdy, old-growth Douglas fir. Send for catalog showing the complete line of Douglas Fir Interior Doors, Tru-Fit Entrance Doors and new specialty items. Sent free to any point in the United States.

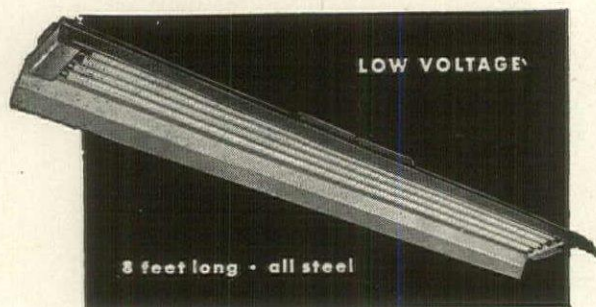
**Douglas Fir
DOORS**
FIR DOOR INSTITUTE
Tacoma 2, Washington

Remember!
NATURE MAKES
DOUGLAS FIR
Durable!

Durable Douglas Fir Doors
are made from all-heart-
wood, vertical-grain, soft,
old-growth Douglas Fir.

THE NATIONAL ASSOCIATION OF FIR DOOR MANUFACTURERS

*COLOVOLT COLD CATHODE INDUSTRIAL FIXTURES



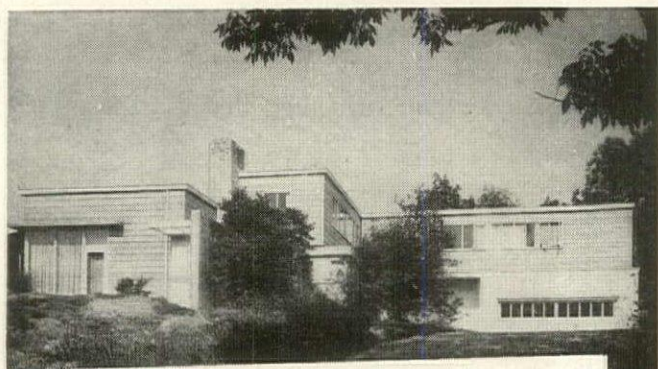
Here is the new Colovolt industrial fixture, one of a complete line of industrial and commercial "packaged" units. Equipped with the standard 93" Colovolt 10,000 hour lamp, Colovolt fixtures may be used singly or in continuous line lighting in multiples of 8 feet. Instantaneous starting, no flickering, guaranteed for 1 year except for failure due to breakage are extra advantages of the Colovolt Cold Cathode low voltage fluorescent lamp. The long life expectancy of Colovolt lamps may be realized even when constantly turned on and off, and pre-scheduled re-lamping, with no loss of production or time, is now possible with Colovolt installations.

Contact your electrical wholesaler or jobber, or write us for full details and prices.

*Trade mark registered U. S. Pat. Off.



GENERAL LUMINESCENT CORPORATION
612 S. FEDERAL STREET CHICAGO 5, ILLINOIS



What's The Best Wood Preservative Known?

The answer is Creosote. Creosote Shingle Stains contain from 65% to 90% creosote. That's why they penetrate deep and protect better. That's why they give long-lasting beauty—bring out all the wood's natural loveliness. They're available in brilliant hues or weathering grays or browns which give that authentic "old" look in a few months.

FREE BOOKLET "Stained Houses" gives complete information about Cabot's quality Shingle Stains. Send for your copy and color cards TODAY. Samuel Cabot, Inc., 1267 Oliver Bldg., Boston 9, Mass.



Cabot's Shingle Stains

an unbiased and judicial light. After thinking it over, I have decided that I disapprove of the whole thing.

My question, Mr. Anthony, is this: With shortages what they are, do you think people should be allowed to buy lead pipe for purely social purposes?

And in conclusion I cannot but think that it is a reversal of nature for a prospective client to get clipped *before* he gets to the architect's office.

ROGER ALLEN

Grand Rapids, Mich.

LITTLE DESIGNER

Forum:

It might interest you to know that while in Germany I found among other things copies of FORTUNE, FORUM and TIME.

I talked with several young engineers who had worked for the Light Metal Works in Hannover discussing some ideas I once had for using light metals in house construction. They had been working on the same project, as there is little wood for building in Europe; they use stone, brick and tile. The young men were tired of living cooped up like that and found themselves leaning toward metal. We all agreed it was a good thing they had such sturdy houses because they withstood the bombings so well in some cases, and provided little fuel for fires. My position was with the Infantry; I was a Platoon Leader with six 81mm mortars to bang away with. It was quite a job knocking down those houses and a bit ironic seeing that my life as a civilian was devoted to building, not destroying. Anyway, to get back to my original drift. I found the young people of Europe who lived in the city were very much in favor of modern type housing.

It seems the architects who should be the leaders have been the trailers. The little and poorly accepted designer has been trying to convince America that we should get away from the type of things our grandparents lived in, that we are to create a new world for ourselves.

I am just a little designer and am interested in doing little homes for America; I am not at all interested in the big name jobs. I am qualified for my job because I have my heart in it. I was very good at destroying Germans and buildings, and I shall put forth the same effort in building for America. I do hope you give the little designer a break by letting the country know about him.

NORWOOD D. TICHENOR, Designer
San Diego, Calif.

To all designers with full hearts and talents to match FORUM extends an open page always.—Ed.

(Publisher's Letter on page 68)

The demand
for Electric
WATER
HEATERS
is
GROWING FAST

Sharp Upward Trend Will Continue

In the 6 prewar years, sales of Electric Water Heaters almost tripled. And a 1943 contest conducted by McCALL'S MAGAZINE shows that 2.4 times as many women wanted Electric Water Heaters as now have them. They're "what women want," because they're:

SAFE—Flameless, fumeless.

CLEAN—Smokeless, sootless.

ADAPTABLE—Permit short hot water lines—Require no flue or vent.

TROUBLE-FREE as electric light!

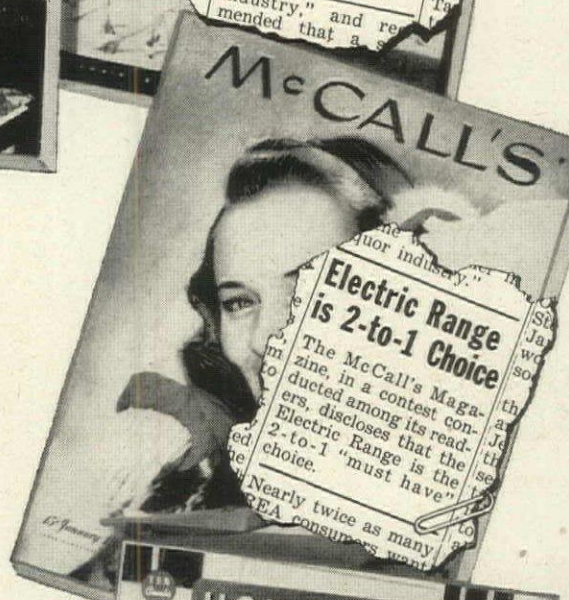
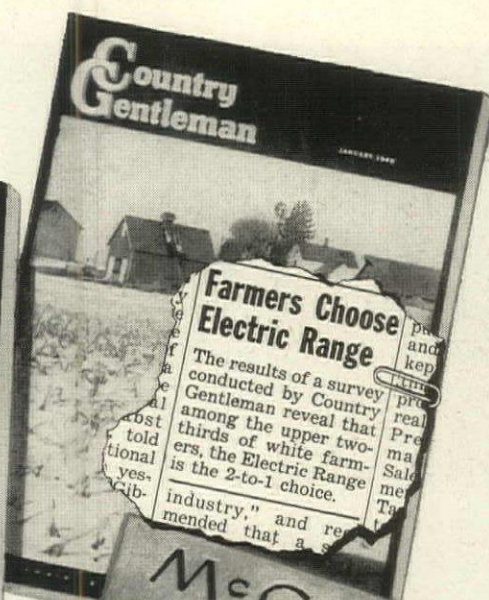
ECONOMICAL—The cost is low for plenty of hot water all the time.

Installing Electric Water Heaters in every house you build, means giving women what they want!

Electric Water Heater Section
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
ADMIRAL • B&F • CLARK • ELECTROMASTER • FOWLER •
FRIGIDAIRE • GENERAL ELECTRIC • HOTPOINT •
HOTSTREAM • KELVINATOR • MONARCH • NORGE •
PEMCO • REX • RHEEM • SELECTRIC • SMITHWAY •
THERMOGRAY • THERMO-WATT • UNIVERSAL •
WESTINGHOUSE

A House Wired For An Electric Range Is Already Wired For An

Electric
WATER HEATER!



Survey
after
Survey



Shows Women **PREFER**

Electric Ranges

Wire Your Houses For Electric Ranges

PROOF of the overwhelming trend toward Electric Cooking is found in survey after survey made by such leading national magazines as *Woman's Home Companion, *McCall's, *Household, *Successful Farming and *Country Gentleman.

Women prefer the convenience, cleanliness, dependability and economy of modern Electric Cooking.

Cash in on this growing demand. Wire the homes you build for Electric Ranges. Built-in, the cost of such wiring is negligible — the selling power tremendous.

Electric Range Section, National Electrical Manufacturers Association,
155 E. 44th Street, New York 17, N. Y.

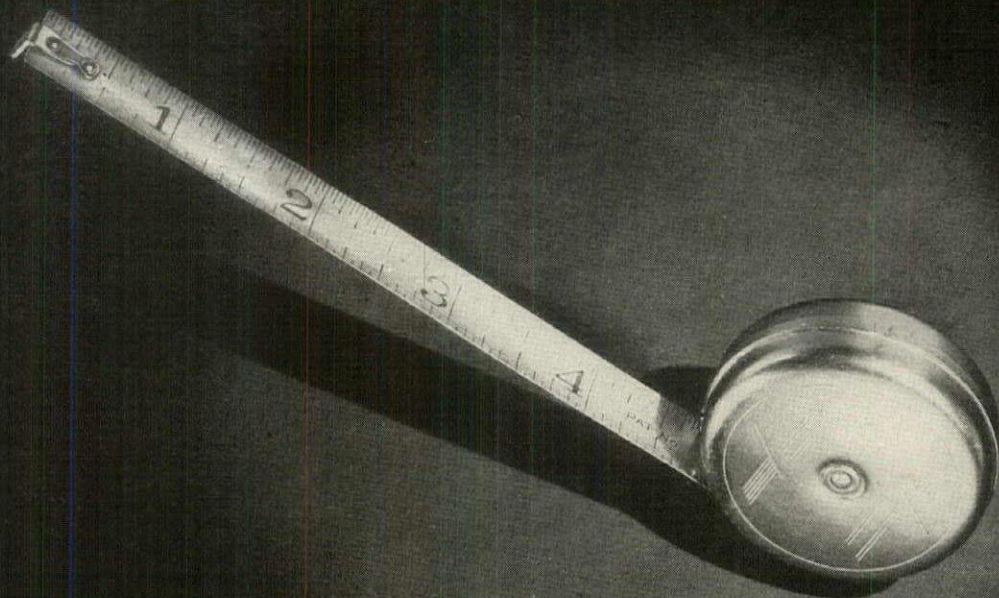
A-B STOVES • ADMIRAL • ELECTROMASTER • ESTATE HEATROLA • FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT
• KELVINATOR • MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

FOR EASIER SALES

Wire your houses
FOR ELECTRIC RANGES



Like a steel tape . . .



The Royal never needs adjustment



**SLOAN
FLUSH VALVES**

Because there's nothing to adjust

The *only* Flush Valve which eliminates regulation or adjustment is the ROYAL. Its simplicity of engineering design, *plus* precision manufacture, insure accurate and lasting performance.

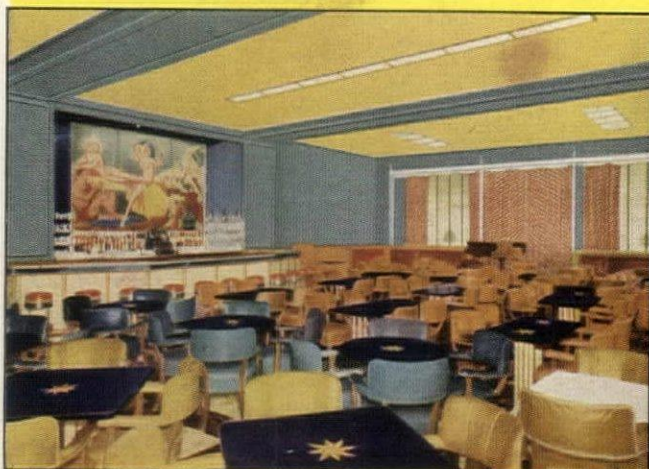
More than 4 million ROYAL Flush Valves are in daily service—including thousands of the first ROYALS installed over 36 years ago.

The ROYAL is "standard equipment" with discriminating builders and owners throughout the country. In fact, entire school systems, hotel chains, hospitals, industrial institutions, etc., use ROYALS exclusively.

For the best in Flush Valves specify Sloan—remember, there are more Sloan Flush Valves sold than all other makes combined.

SLOAN VALVE COMPANY

4300 WEST LAKE STREET, CHICAGO 24, ILLINOIS



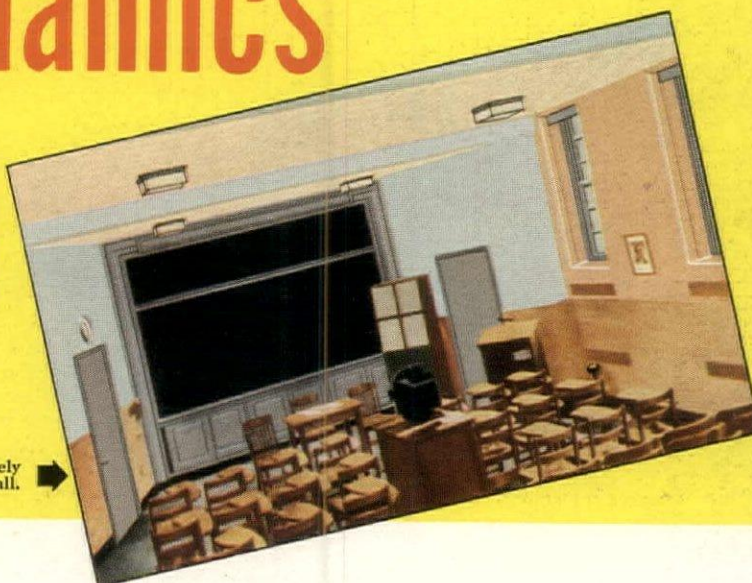
● Broad expanses of subdued wall color harmonize strong accent colors on ceiling and furniture of cocktail lounge.



● Buff walls of this private office contrast with cool colors of ceiling, drapes and rugs. Drop ceiling lowers its height.

Color Dynamics

Pittsburgh's exclusive painting method assures color combinations that promote health, comfort and safety—stimulate energy—increase efficiency—at the same time that they please the eye!



● Eye-rest focal walls of Blue-Green contrast effectively with warm side walls and wainscot of this lecture hall. ➔

**Here's How You Can Put the *ENERGY IN COLOR* to Work
... with Scientific Accuracy!**

Paint RIGHT with COLOR DYNAMICS Paint BEST with PITTSBURGH PAINTS!

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

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

WATERSPAR ENAMEL—for woodwork, furniture, metal trim—gives a china-like gloss which resists marring and abrasion.

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

EXPERIENCE has proved that people who work or live in surroundings painted according to Pittsburgh's science of COLOR DYNAMICS benefit in many ways.

Color is a source of power. It can stimulate or relax. It can help people to feel cheerful—or set their nerves "on edge" and cause them to be uncomfortable and depressed.

Properly applied, COLOR DYNAMICS can make your institution inspire trust and confidence by its appearance. It can lessen eye fatigue. It can increase efficiency, improve mo-

rale, promote cheerfulness and well-being. With COLOR DYNAMICS you can also make rooms seem more inviting and spacious, make them appear longer or wider, higher or lower.

You can now apply these principles of color energy with scientific accuracy. What you can do with COLOR DYNAMICS—and why—is told in our revised, profusely illustrated book, "*Color Dynamics for Office Buildings, Hotels and Restaurants.*" Write for your FREE copy. Pittsburgh Plate Glass Co., Paint Div., AF-3, Pittsburgh 22, Pennsylvania.



PITTSBURGH PAINTS

PITTSBURGH PLATE GLASS COMPANY, PITTSBURGH, PA.
PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS

design for lasting appreciation with **Dow Plastics**

*Screen
from*

SARAN

Long life—desired in any building installation—now is attainable in window screen, made from Saran (pronounced Sah-ran). This basic plastic material, produced by Dow and made into screen by skilled manufacturers, gives modern attractiveness and a wealth of new, practical advantages to homes, office buildings and industrial plants. Home owners welcome Saran screen because it can't rust and

won't stain or discolor painted window frames. It's flexible and easily installed. And it's quickly cleaned with a damp cloth. Office buildings gain with Saran screen because it lowers maintenance costs and admits more light. Factories benefit because Saran screen is impervious to moisture and resists corrosion and most chemicals, even acids.

Saran screen is only one example of the successful use of plastics in building. Saran and other Dow plastics afford new flexibility in design and decoration and in functional capacities. Look over their possibilities now!

Let's work it out together



Success in plastics is measured only in end products. It calls for the combined efforts of manufacturers, designers, fabricators and raw material producers. Dow is ready to do its part. Save time and money—call on Dow and *get the most out of plastics.*

PLAN WITH THESE DOW PLASTICS

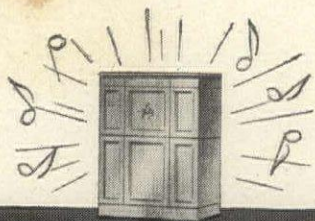
Saran for rustproof screen; plumbing parts and equipment; name plates; wire coating; paint brush handles. Styron for lighting fixtures; escutcheons; decorative objects and trim; insulators; food-handling equipment. Ethocel for modern window blinds; special extruded shapes for kitchen trim; rods, tubes and bars; flashlights. Properties of these plastics make them adaptable to still other uses now under development.

THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

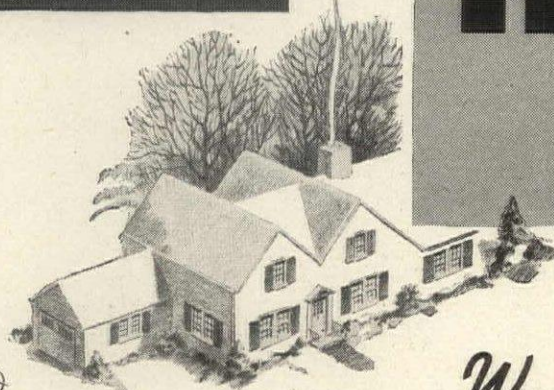
New York • Boston • Philadelphia • Washington • Cleveland • Detroit
Chicago • St. Louis • Houston • San Francisco • Los Angeles • Seattle

DOW
PLASTICS

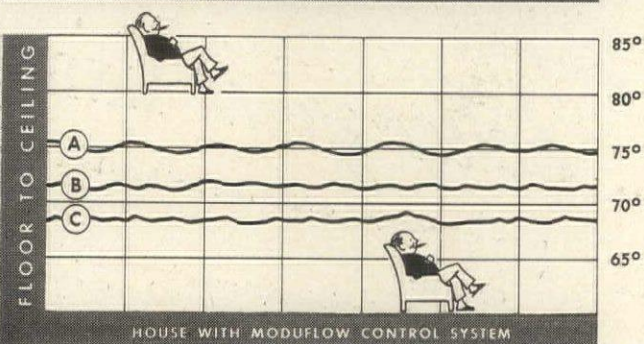
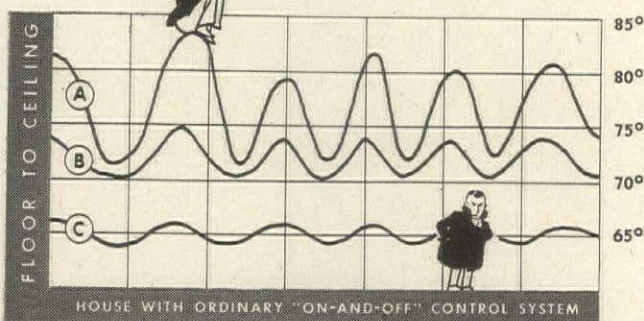
ETHOCEL • ETHOCEL SHEETING
STYRON • SARAN • SARAN FILM



Coming!
FM in
RADIO



Here! **FM** in **HEATING**



A—Temperature at ceiling. B—at five foot level. C—temperature at floor.

See how Moduflow smooths out the up-and-down temperatures caused by ordinary control systems. Without Moduflow, temperature varies as much as 20 degrees from floor to ceiling. With Moduflow there is comfort temperature from ceiling to floor.

We are all expecting great things of F-M in radio (Frequency Modulation). In heating, F-M—"Full Modulation"—is already here, and is being installed in thousands of homes throughout the country. The Moduflow system, an exclusive Honeywell development, provides continuous flow of heat for every room in the home at the comfort temperature desired. Moduflow "Full Modulation" banishes temperature gaps, practically equalizing ceiling and floor temperatures. Much of the heat formerly

wasted at the ceiling is used to heat the living part of the room; result, all-over comfort with improved efficiency in operation. And unlike F-M in radio, Moduflow can be installed on *present* automatic heating systems. Send for your copy of the "Engineering Guide of the Moduflow Control System for Home Heating and Air Conditioning." It shows how Moduflow works and how it can be easily installed to create a new high standard of home heating comfort. Mail coupon for your copy today.

Be sure to specify "Moduflow" in every home you design or build.

Tomorrow's Apartment will have Personalized Heat Control... with Moduflow

MINNEAPOLIS - HONEYWELL REGULATOR COMPANY
2601 Fourth Avenue South, Minneapolis 8, Minnesota

Send for this
FREE BOOK

Please send my free copy of the "Engineering Guide of the Moduflow Control System for Home Heating and Air Conditioning."

Address _____

Name _____

City _____

State _____

MODUFLOW

The New HONEYWELL Heating Control System



Better your home... better your Living

Success under your thumb . . . contentment and happiness within your grasp . . . fond dreams coming true, little ones and big ones — all these can be yours.

For you've got a HOME!

What the pioneer struggled for . . . what the soldier fought for . . . what they sing songs about — all can be yours.

For you've got a HOME!

"HOME!" There's a word that packs more dynamite, more wallop, more emotional appeal than anything else in the world. And it's your word — exclusively yours!

HOME is bigger than friendship because it means having a place for your friends, a place they warm up to and you're proud of, a place with welcome spread all over — home is your world. HOME is bigger than money — bigger than getting a raise or a new job, because it's the true reason, the right reason you want a few dollars more — home is your dream.

HOME is bigger than just having a baby . . . it's raising a

family and seeing your children raise families — home is your whole life.

OR IS IT?

Can you afford anything that makes home take a back seat in your whole life? Can you afford to think of it as just a house, or anything that doesn't recognize its bigger-than-anything-else value?

And don't fool yourself about that value. When your home comes first, your family comes first. You must guard that value.

So do this. Go into a store — any good store — and look at the rooms on display. Or pick up a home magazine and study its pages. Then start laying plans, figuring out budgets.

The point is — do something. Do something every so often for your home as long as you live — even if it's only to give it a reassuring pat with an end table or a new lamp. Do that instead of frittering away cold cash on unessentials.

Make your home count — and you'll always be counting on it!

HOME BEAUTIFUL

better your approach . . .

** better your* **Business**

advertisement launches a crusade — a crusade to make the home come first.
e Beautiful is sponsoring the crusade.

Based on the theme, "Better your home, better your Living," 1000-line newspaper advertisements like this, will be run regularly in 16 major cities from coast to coast (total circulation over 5,500,000).

The theme, "Better your home, better your Living" is supported by the full editorial force of House Beautiful. Each month page after page of our magazine will give vitality and weight to it.

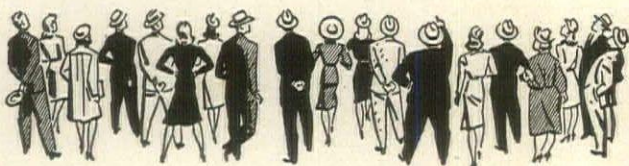
So whether you're a manufacturer, a retailer or an advertising agent, we urge you to join this crusade — to use our basic idea, our slogan, or any variation that appeals to you — to put warmth and emotion and weight behind your own concept of the importance of the home.



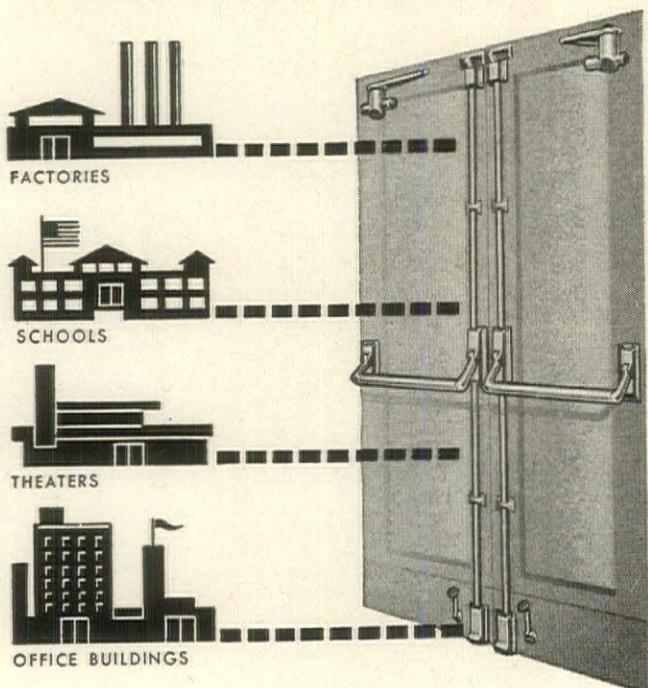
HOUSE BEAUTIFUL

MAGAZINE 572 Madison Avenue, NEW YORK 22, N.Y.

HEAVY TRAFFIC



calls for MONARCH PANIC EXIT DEVICES



The use of Monarch panic exit hardware is not confined to emergency exits. Today, this practical type of door hardware is being used wherever there is heavy traffic through a doorway.

In factories, schools, theaters, office buildings, department stores, restaurants, and hotels, Monarch Panic Exit Hardware provides swift, smooth door operation.

Monarch offers a series of quality panic exit devices, both mortise and rim types, in a variety of styles for a wide range of applications. Write today for details.

Monarch—long recognized for quality builders finish hardware—is now a division of Clayton & Lambert Mfg. Co.

CLAYTON & LAMBERT MFG. CO.
Monarch Hardware Division
2525 Hart Ave. • Detroit 14, Mich.

A LETTER FROM THE PUBLISHER

Dear Reader:

As the National Association of Home Builders convened in Chicago this year, they were faced by the greatest housing crisis in U. S. history. To cover this meeting, the FORUM moved in a staff of six people. And to make sure that the multiple convention activities were reported to the 4,000 or more builders quickly and accurately, we planned a daily paper—FORUM FINAL—which reached these gentlemen with their breakfast orange juice. This little assignment took more preparation than might be suspected. It also kept the staff up all night for three nights running. Staying up all night was no novelty for several of our journalists but never before had they practiced insomnia in such a good cause. * * *

The current commotion over the site for permanent headquarters of UNO raises the question—What will be done with it? It takes a lot of different kinds of buildings to wage war, as "The Navy Builds" folio (p. 121 this issue) so handsomely suggests. It will take many buildings to house the thousands of people who will work to keep the peace.

Obviously, no greater opportunity for creative architecture and planning could be imagined. It is a challenge which, we believe, should seek its answer through an international architectural competition. Should this proposal be adopted, who will write the program, who will judge the competition? Frankly, we have a number of candidates in mind. To anyone sufficiently curious to enclose return postage, we will send our list in a plain, sealed envelope. * * *

Among readers kind enough to pass along their comments on the new FORUM were several famous editors of famous magazines serving the house field. Because their views represent top journalistic opinion, as well as informed building opinion, we think you will find special interest in what they say—

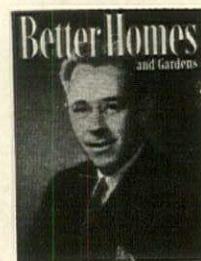
"I should like to tell you how very much I like the new format of the FORUM. Your page size is enough larger to give a much more dramatic presentation and color adds immeasurably."



Editor Austin

"Wright's gallery is exciting—and beautifully presented. My hat off to the FORUM!"

* * *



Editor McDonough

"The new FORUM is impressive. It's cleaner. It's uncluttered. And as we found out ourselves when we went to this larger page size eight years ago, the new size gives a particularly pleasing display and richness to architectural photographs. Congratulations!"

"If we were to question at all, it would be to suggest that the styling, is sometimes self-conscious and gets in the way, as on page 107. And maybe illustrations such as the one at the top of page 88 are hard for the architecturally untrained banker or realtor to understand."

"But these questions are minor. As a magazine for the building industry—for the architect and builder and banker and manufacturer—the new FORUM is outstanding."

* * *

"I am delighted to see full color and beautiful big pages and eye-taking layouts in the new FORUM. Big things like buildings require big pages to show them properly. I never could understand why technical and building trade magazines had to be depressingly dull and mousey in appearance, when they cover some of the most exciting and newsworthy material in the world today."



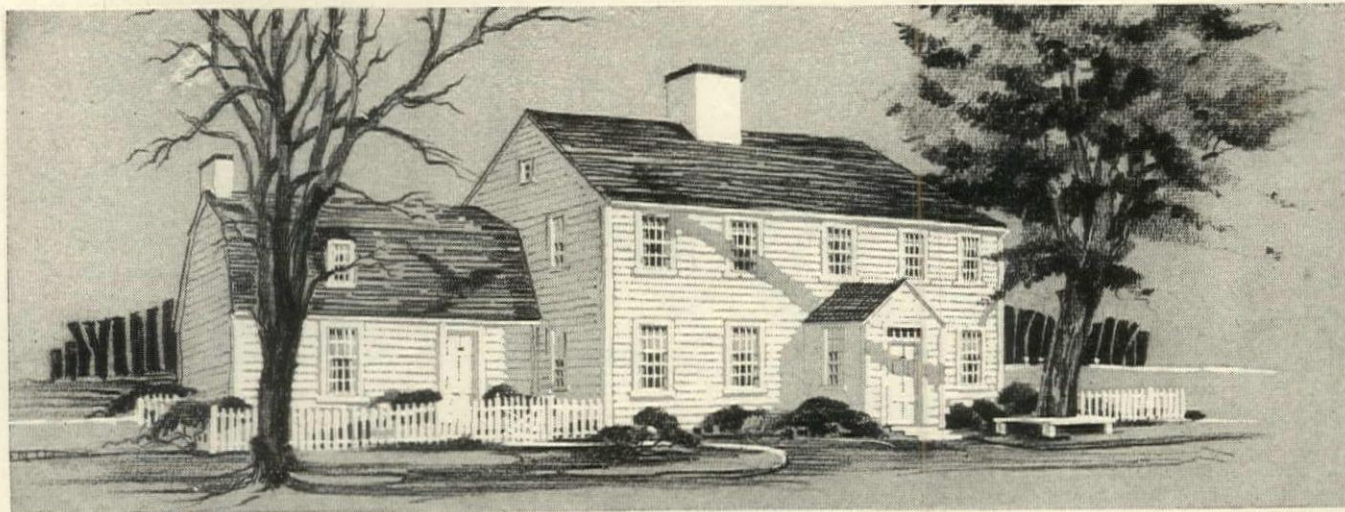
Editor Gordon

"Particularly interesting to me was your swell blast at air terminal design and your helpful analysis of prototype architectural design."

* * *

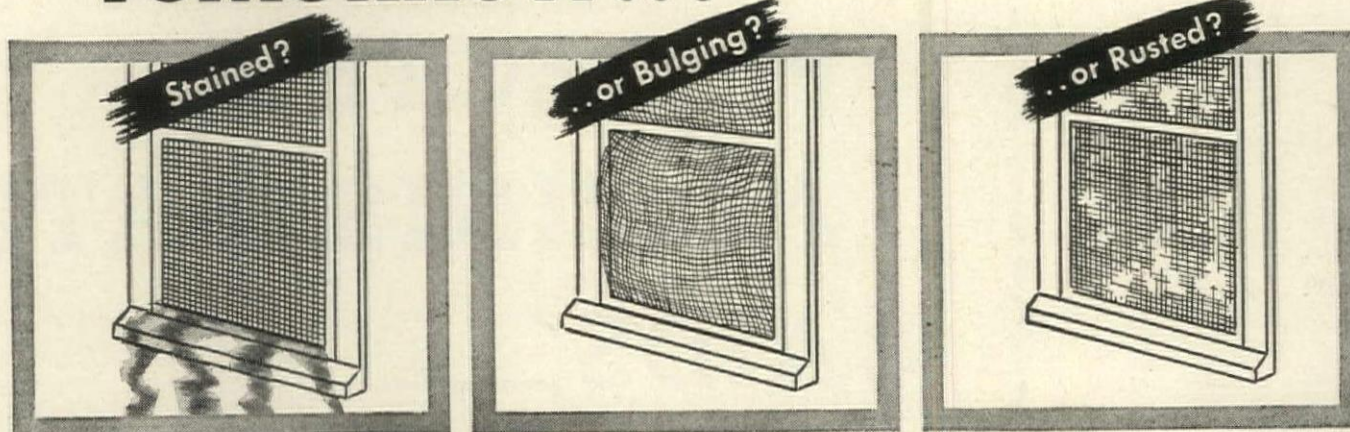
A few issues back we had occasion to note the arrival of a French Building mission. Now the mission has returned to New York after an arduous sweep around the U. S. M. Sive, the Chairman, reports that he and his colleagues like us; in fact, they are enthusiastic about what they saw and the unfailing friendly reception which greeted their appearance in each city. Except for the atomic bomb formula, the mission found one and all happy to share our secrets. H.M.

TODAY... *a beautiful home*



FROM "HOUSES FOR HOMEMAKERS" BY ROYAL BARRY WILLS

TOMORROW..?



**LUMITE ELIMINATES
ALL SCREEN TROUBLES**

• With a new house, one of the first things to show wear is the screens ... but *NOT* if they're made of LUMITE!

LUMITE* NEVER STAINS! Nothing ages a house faster than ugly, stained sills and sidewalls. But LUMITE *never* can stain! Never needs painting, either ... and cleans easily with just a damp cloth.

NO BULGE, DENT OR SAG! Of course LUMITE "gives" under pressure ... but snaps right back

to its original flatness in a matter of seconds ... without a single trace of bulge!

CAN'T RUST OR CORRODE! Amazing LUMITE cannot be affected by *any* natural cause ... not even year-after-year exposure to the worst enemies of the average screen: *salt spray* and *industrial smoke*! Nor do extreme heat and cold affect LUMITE at all ... truly an *all-weather* screen!

When planning your homes, specify LUMITE today...for the sake of many years of "tomorrows." Write for AIA-35-P descriptive folder and sample!

*Woven of Saran, Dow Chemical Co. product.

Lumite **PLASTIC
INSECT
SCREEN**



CHICOPEE MANUFACTURING CORPORATION—LUMITE DIVISION
47 WORTH STREET, NEW YORK 13, N. Y.

World's largest makers of Plastic Screen Cloth

AND FOR TOMORROW: Look for wonders with Lumite indestructible fabrics for home and car upholstery, luggage, footwear, handbags!

NOW

IBM

OFFERS NEW, PERFECTED ADMINISTRATIVE AIDS_____

IBM has always recognized its *one responsibility*—to furnish the finest, most modern administrative equipment for any type of project—whether for complex college or university, or the smallest school.

Today, IBM administrative aids are again available—new, improved, perfected. Available, too, are IBM representatives to work with owners, architects, engineers and contractors in helping to make each and every building a permanent asset.

Ask an IBM representative for his complete and fully responsible advisory service. It is yours without cost or obligation.

INTERNATIONAL BUSINESS MACHINES CORPORATION

World Headquarters Building • 590 Madison Avenue • New York 22, N



IBM

AUTOMATIC ADMINISTRATIVE AIDS

COMPLETE SERVICE... ONE RESPONSIBILITY

Self-Regulating Electric Time Systems

One time—throughout—eliminates disrupting confusion. All secondary clocks in the IBM system are automatically checked and, if necessary, corrected hourly through IBM's Master Time Control, a timing device of split-second accuracy.

Program Signaling Systems

Complex schedules of signals operate automatically in agreement with the indicating clocks or recorders. Schedule changes may be handled easily, quickly. Gongs, bells, buzzers, chimes, directional horns, whistles, may be specified.

Sound Distribution Systems

Central control is provided for reproduction, amplification and distribution, to widely separated assemblages, of sound originating from radio, phonograph or microphone. The system includes an IBM "return speech" feature permitting selective two-way communication at the flick of a switch.

Interior Telephone Systems

Instant intra-communication is provided by IBM Interior Telephone Systems. For both efficiency and economy, IBM Telephone Equipment may be incorporated with the IBM Program Bell System or Sound Distribution System.

Fire Alarm Systems

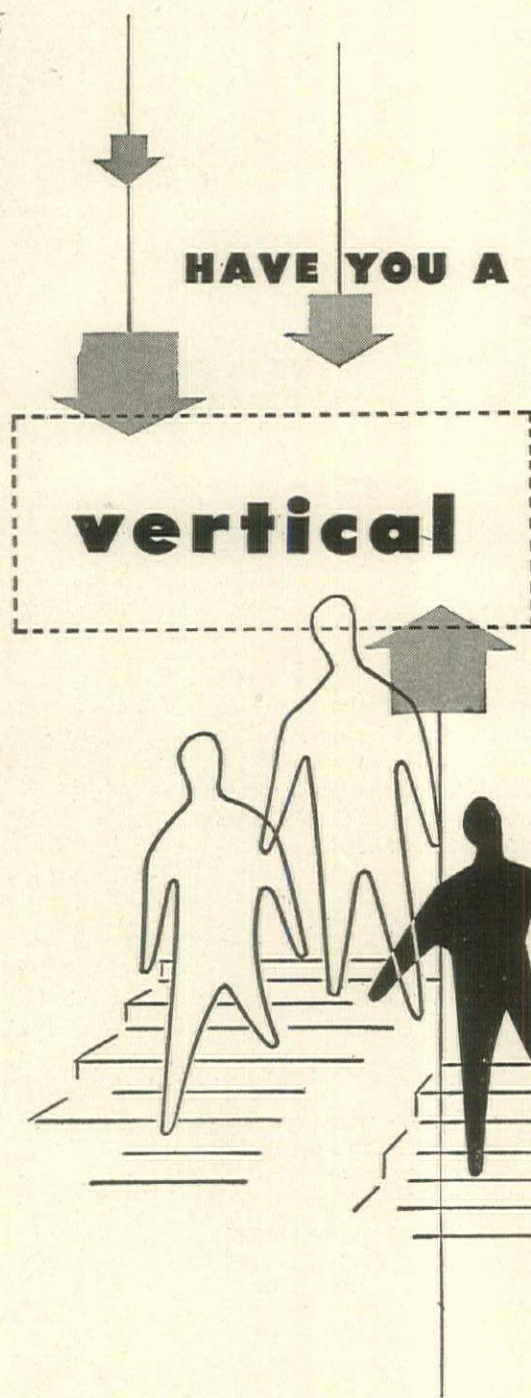
The IBM Fire Alarm Systems are designed to meet these necessary requirements: certainty of operation; simplicity in initiating alarms; certainty of alarm reception by persons at any location. These systems are approved by the Underwriters' Laboratory, Inc.

Laboratory Electricity Panels

Complete protection from accidental shocks is provided in IBM laboratory Electricity Panels, which deliver currents of all characteristics and voltages to the instructors' and students' tables or to any location where electricity is needed in scientific experimental work.

Time Recording Systems

IBM Time Recording devices are of many types such as Attendance Recorders; Time Stamps for noting receipt of correspondence; Door Recorders; Watchman's Clocks.



Otis elevators, Otis escalators, Otis trained men and the facilities of the manufacturers of more than half of the world's elevator equipment are all available to assist you or your Architect in solving any vertical transportation problem.

Otis Passenger Elevators with up-to-date dispatching methods are the recognized answer to congested elevator traffic conditions.

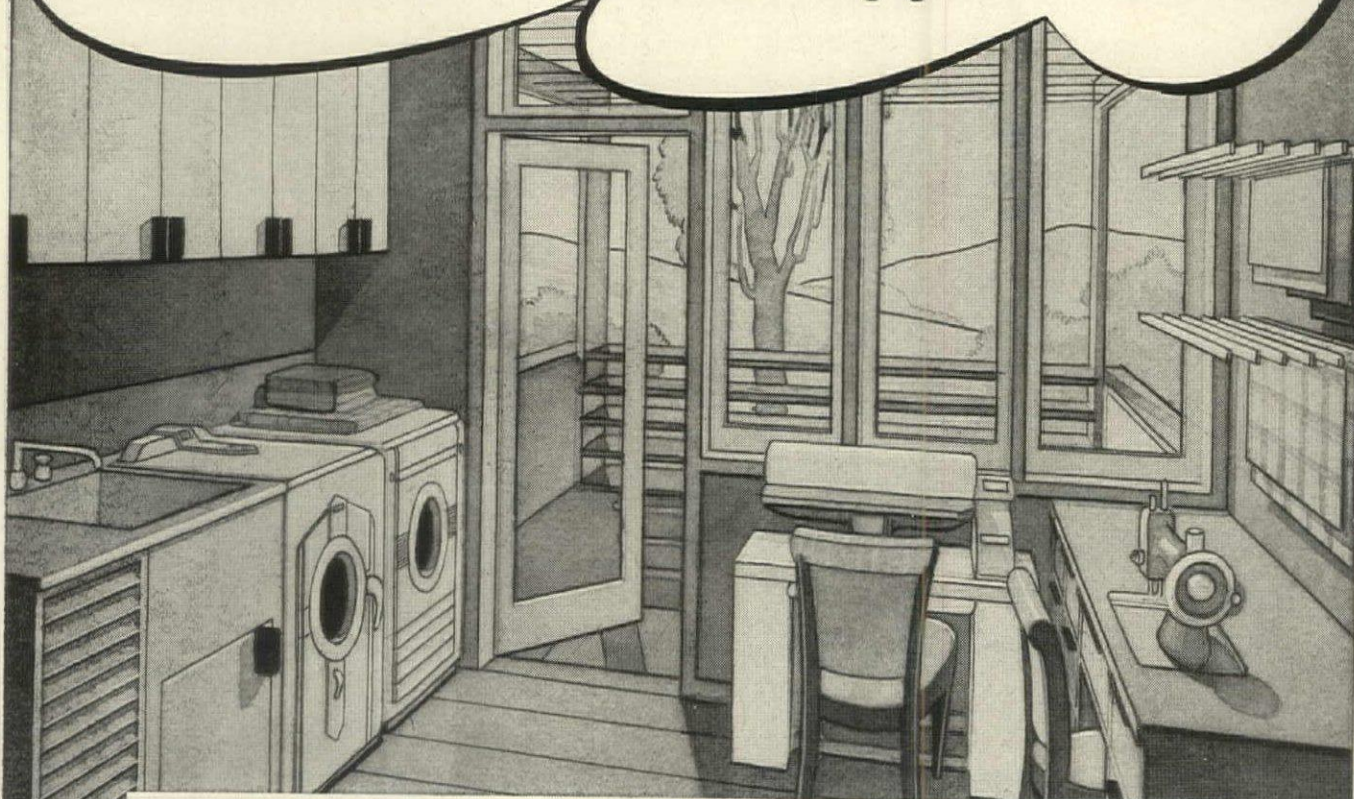
Otis Escalators are used where large numbers of persons are to be carried from floor to floor in comfort and without crowding.

Otis Freight Elevators with a variety of control systems are designed to satisfy the most exacting requirements of floor to floor freight handling.

For the most efficient and economical service in vertical transportation — for a few stories or many — call your nearest Otis Representative today.



Modern Second Floor Laundrys too, are more effectively planned around these **BENDIX^{automatic} Home Appliances!**

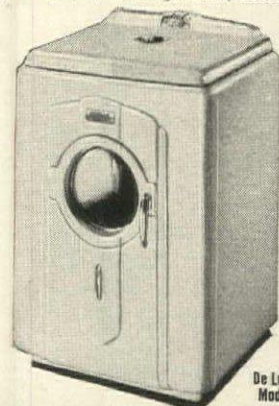


Basement, first floor or second floor—kitchen, bathroom, laundry or utility room—it makes no difference, when you plan around Bendix automatic Home Laundrys, Ironers and Dryers!

This "trio of tomorrow," is compact as it is streamlined and beautiful. The Bendix automatic "washer" takes but 4 square feet of floor space. Washes, rinses, damp-dries, empties, cleans itself, then shuts off, all automatically!

Soon to be available, the Bendix automatic Home Ironer, and automatic Home Dryer will make modern, practical home laundry planning complete. We urge you to consult your distributor or write us direct for full information.

Designed by L. Morgan Yost, A.I.A.



De Luxe Model

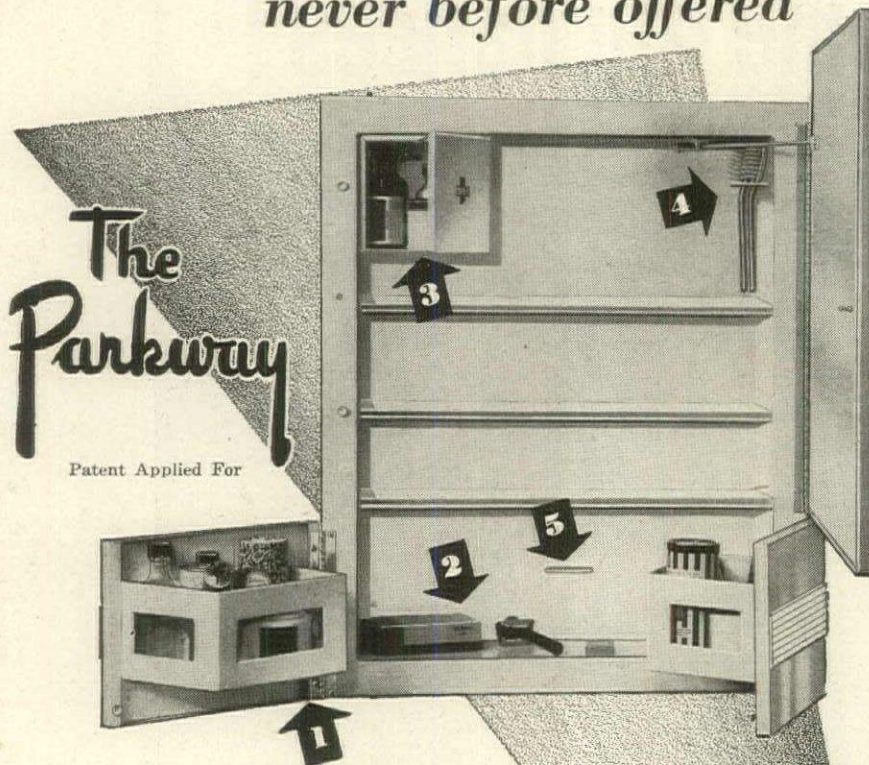
BENDIX^{automatic} Home Laundry

BENDIX HOME APPLIANCES, INC., SOUTH BEND, INDIANA • PIONEERS AND PERFECTORS OF THE AUTOMATIC "WASHER"



A New Bathroom Cabinet

with important features
never before offered



Patent Applied For

- 1** Two Personal Compartments for every day needs.
- 2** Utility Shelf, for cosmetics or shaving equipment when in use.
- 3** "Safe-T" Compartment, for poison drugs and other adult items . . . out of reach of children. Opens by pressing button on top of cabinet.
- 4** Tooth Brush Holder, inside the cabinet.
- 5** Razor Blade Disposal.

The Parkway has adjustable glass shelves, full-length piano hinges and a No. 1. polished plate mirror in chrome frame. The bonderized all-steel cabinet is zinc-coated, finished in white baked enamel; swinging panels, chrome with white enamel trim.

New home builders will appreciate the exclusive features of the Parkway. It is in perfect harmony with today's beautiful bathrooms. For remodeled homes, it's a tonic for jaded bathrooms.

Include the Parkway in your designs today for the homes of tomorrow. Circular and prices on request.

Faries Manufacturing Company
DECATUR, ILLINOIS

Overall dimensions, 19"x24"; wall opening 16 1/2"x20 1/2"; mirror size 18"x19"; shipping weight, 33 lbs.

Bertrand Goldberg's theory of architecture seems to be "the way to a man's house is through his stomach." The portfolio of residential jobs (p. 107) represents countless dinners with clients, a Goldberg method of taste-testing to insure compatible design. Once, in a burst of zeal when designing a mobile ice cream unit, he gained 12 lbs. tasting ice cream throughout the greater Chicago area. War put a brief halt to his gastronomic joys, however. For two years he devoted himself to such unpalatable projects as penicillin factories and army de-lousing units.

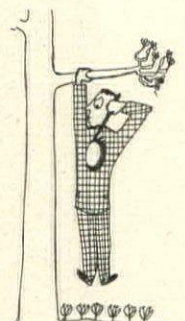


The review of Navy buildings constructed during the war (p. 121) is part of the gigantic program headed by Vice-Admiral Ben Moreell, wartime chief of the Bureau of Yards and Docks and organizer of the Seabees. As boss of the "can-do" boys, this soft-talking, tough-acting man traveled the globe from Guam to

Sicily, inspecting front-line construction. Justifiably proud of his recruits who were much older than the average enlisted man, he recalls the Marine slogan they inspired: "Never strike a Seabee—he might be your grandfather!"



Modern architects of our acquaintance often display a deplorable tendency to live in colonial cottages or old-fashioned farmhouses. To these traitors we now add Garrett Eckbo, California landscapist who doesn't have a garden (p. 141). The strikes against him are two self-willed offspring who have taken over the yard, and the further fact that he is too busy in other people's backyards to tend his own. His idea of the full, rich life would be to live atop a manzanita and have time to take more baths.



Fritz Burns, whose colossal, stupendous model house is a test case for postwar gadgetry (p. 98), is the salesman's salesman. On his first job he sold so much so fast that his commissions topped \$100,000 a year and he soon became president of the company. Handsome and hearty, he opened morning meetings

with calisthenics, designed, no doubt, to add power to the sales technique. It is disconcerting, therefore, to find his latest venture crammed with labor-saving devices—even to the decadence of an electric toothbrush. Is Burns going soft, or is he just trying to soften up the customer?



"conclusive evidence of service..."



STIX, BAER & FULLER
*"America's Largest" meat case
 Plant St. Louis (1) Missouri*

November 17, 1945

York Corp.
 117 South Eleventh Street
 St. Louis, Missouri

Attention of Mr. C. G. Skinner
 Gentlemen:

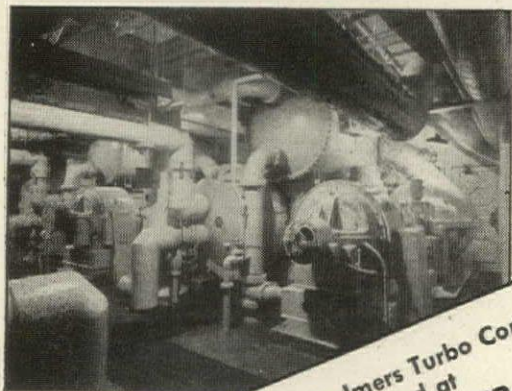
The sixth season of operation of the two 600 ton York centrifugal water cooling systems installed for us in 1940 is just drawing to a close.

Other than a few minor adjustments, we have not had to make any particular repairs on these compressors, and they have given us complete satisfaction in their operation.

The fact that we have just recently placed an order with you for the third compressor of this type is probably the most conclusive evidence of the service that these machines have given us.

Yours very truly

W. O. Bode
 W. O. Bode
 General Superintendent



The YORK Allis-Chalmers Turbo Compressors
 as installed at
STIX, BAER & FULLER CO.
 St. Louis, Missouri



OUTSTANDING FEATURES of the YORK ALLIS-CHALMERS TURBO COMPRESSOR

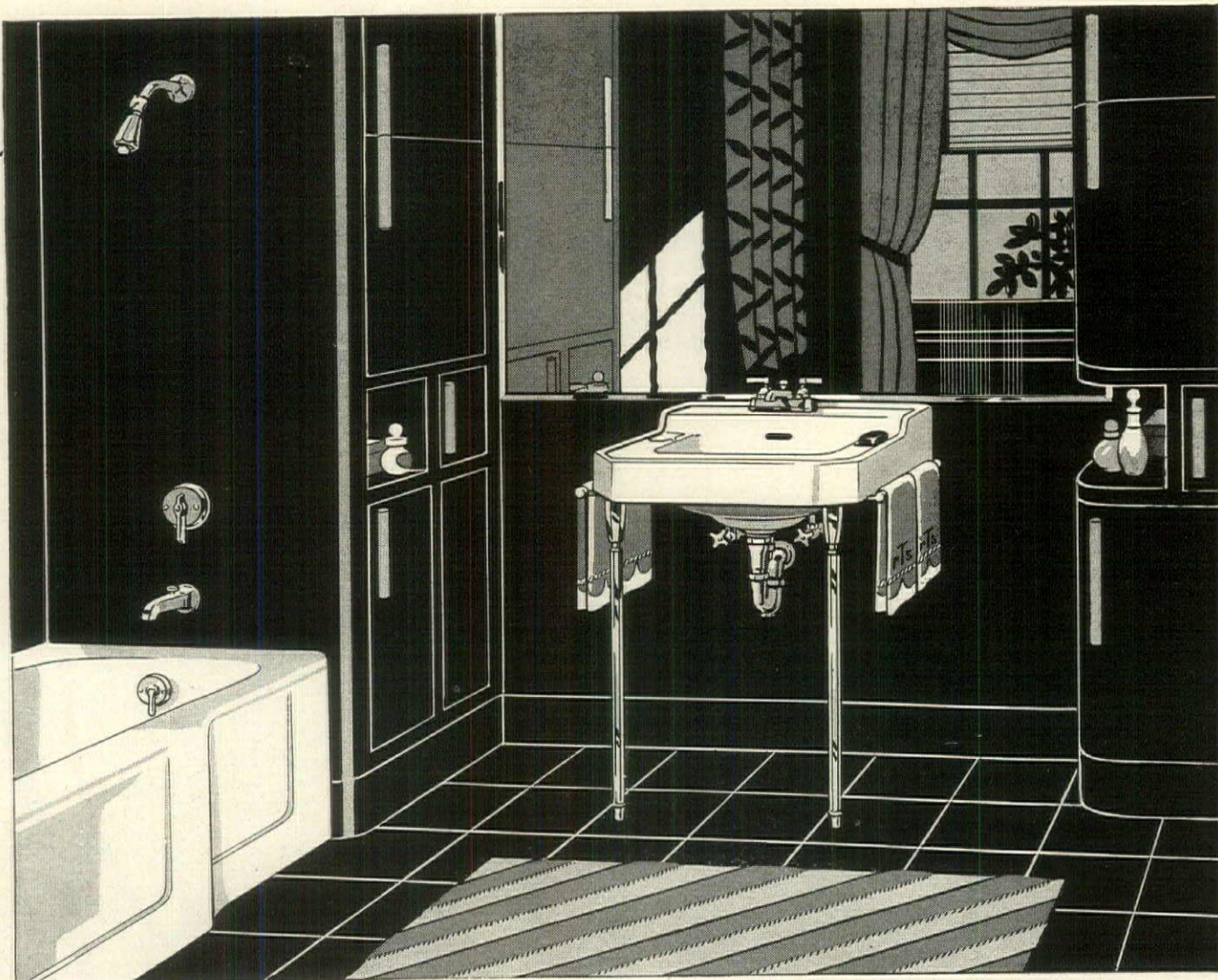
1. Low center of gravity of compressor—permitted by trough type cooler—cuts vibration, provides accessible operation.
2. Stainless steel impeller blades resist erosion and corrosion assuring perfect wheel balance. Blade rivet heads are eliminated to provide unobstructed gas flow.
3. Balance piston to equalize wheel thrust makes necessary only a positioning thrust bearing, and results in less bearing friction losses.
4. Pre-rotation vanes permit greater capacity reduction (down to 10%).
5. Permanently silver-sealed condenser joints.
6. Simplified refrigerant shaft seal.

York Corporation, York, Pennsylvania.

YORK REFRIGERATION AND AIR CONDITIONING

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885





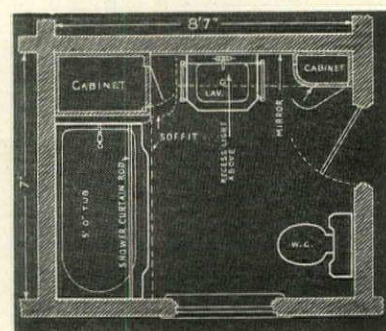
For a bathroom that's certain to please... specify KOHLER quality in fixtures and fittings

THE name Kohler is a mark of quality known to home-owners. They recognize the importance of such a safeguard—with its assurance of precision-made working parts that are both durable and convenient; of styles that harmonize; and of lustrous, hard surfaces that won't yield to hard use. Kohler plumbing not only adds to living comfort, but makes a home easy to rent or sell.

The conveniently arranged bathroom illustrated above shows the Chesapeake vitreous china lavatory, with its handy ledge for toilet articles, roomy basin, and efficient Centra mixer-type fitting. The closet is the quiet, smooth-functioning Wellworth.

The Cosmopolitan Bench Bath, made of enameled cast iron for strength and reliability, is equipped with the easy-to-control Triton shower mixer.

Kohler quality is now a 73-year old tradition. Important in maintaining the high Kohler standards is the fact that Kohler production is concentrated in one great plant, where unity of supervision is constant. Write for any information you need on Kohler products now available. Kohler Co., Dept. 3-AF, Kohler, Wisconsin. Established 1873.

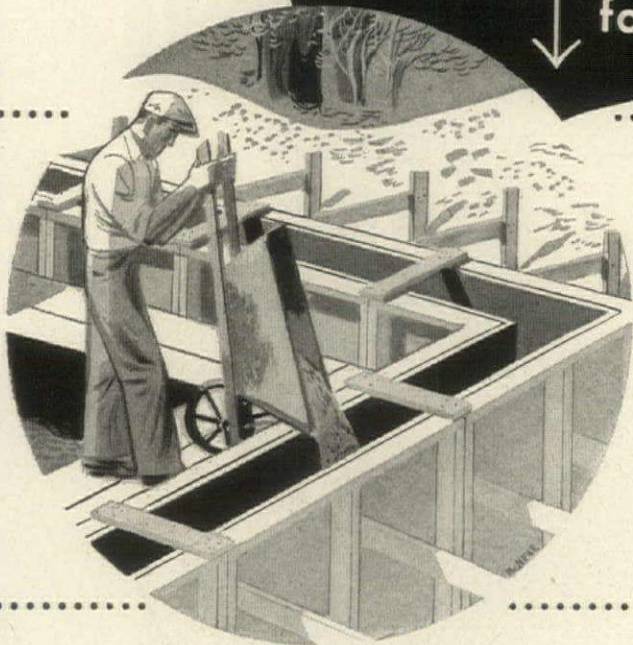


KOHLER OF KOHLER

PLUMBING FIXTURES AND FITTINGS • HEATING EQUIPMENT • ELECTRIC PLANTS

Facts about Kimpreg*

↓ The new plastic armor
for plywood



SCUFFPROOF; WEATHERPROOF—Plywood with the character of plastic! That's the wonder-working material produced by surfacing plywood with Kimpreg.* It's weatherproof—unaffected by temperature extremes or moisture. And durable—*Kimpreg makes fir plywood up to 5 times more resistant to wear when dry and 33 times when wet.*

WASHABLE—Kimpreg is as washable as enamel. It's colorfast—color is fused in. It's stainproof. It's unaffected by weak alkalis or commercial solvents, completely impervious to alcohol. And Kimpreg-ed plywood is *25 to 30 times more resistant to moisture than ordinary plywood.*



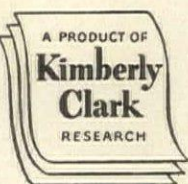
READILY WORKED—Kimpreg plastic surfacing provides a finish of flint-like quality. Yet Kimpreg-ed plywood is flexible—can be cut, formed and fastened readily with the same techniques used for ordinary plywood. Find out more about this wonder-working new material. Mail the coupon today.



Kimberly-Clark Corporation, Neenah, Wisconsin

Please send me free booklet and names of manufacturers making plywood surfaced with Kimpreg.
AF-346

Kimpreg
REG. U.S. PAT. OFF.
PLASTIC SURFACING



Name _____
Firm _____
Type of Business _____
Address _____
City _____ State _____

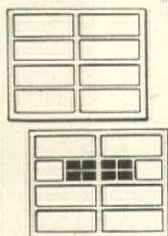
YOU CAN SPECIFY AND INSTALL THE NEW

Craw-Fir-Dor
SELF-ENERGIZING • ONE PIECE • OVERHEAD TYPE
GARAGE DOOR

NOW!

ATTRACTIVE

Beautiful new designs. Prefit to standard size.



EASY-TO-INSTALL

Hardware 85% pre-assembled. Can be installed in an hour.

MINIMUM HEADROOM

Requires only 2" of headroom above openings and 2" of sideroom.

NEW AUTO-TYPE LOCK

Smart, durable, easy-acting auto-type lock is exclusive equipment.

STURDY DOUGLAS FIR

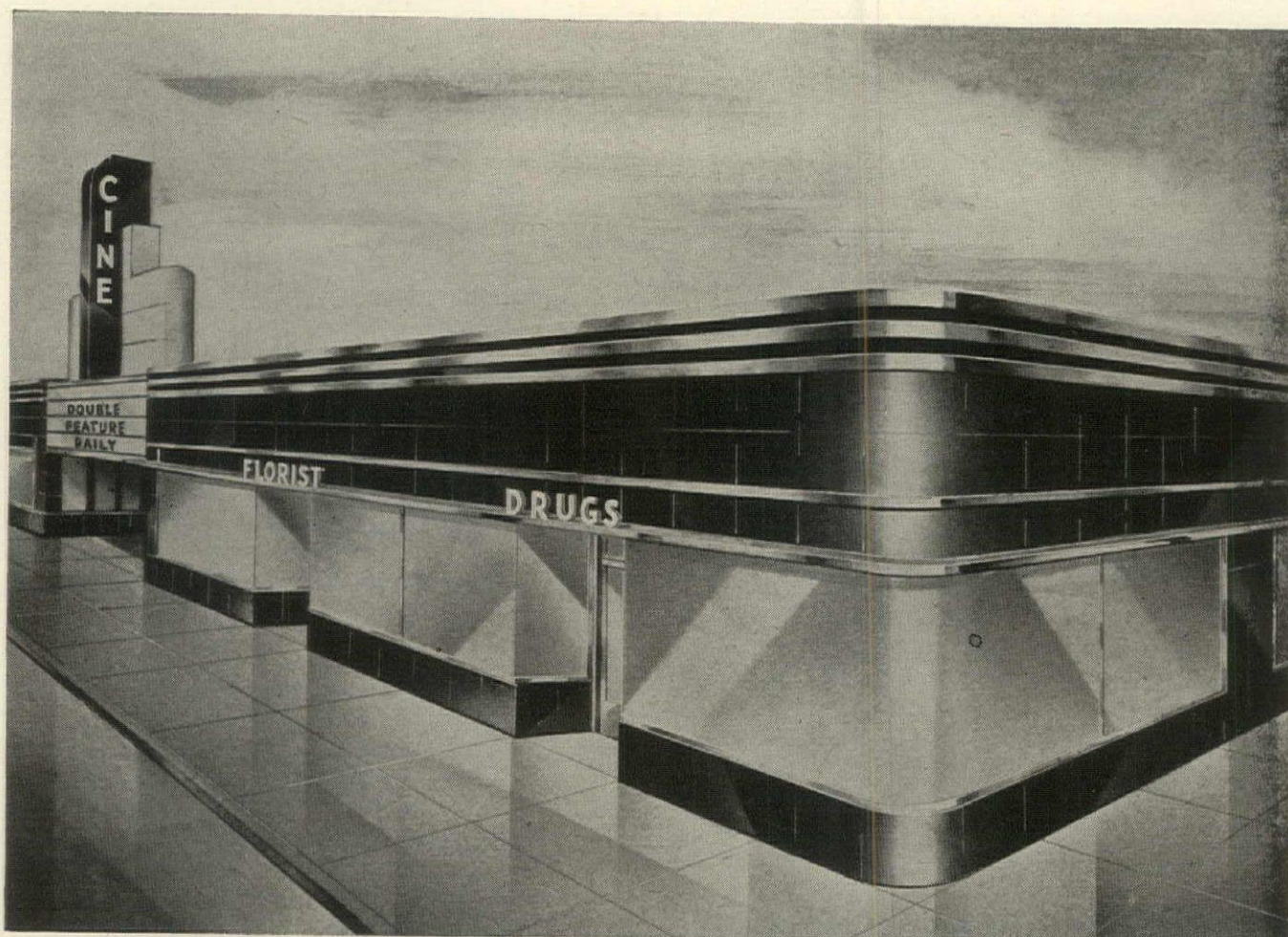
Craw - Fir - Dor is strong. Made of durable Douglas fir. Exterior (waterproof) panels

Yes! Craw-Fir-Dor — the low-priced, upward-acting, overhead-type garage door — is available NOW. Better than ever, too, with improved hardware, improved performance, improved appearance. Contact your lumber dealer NOW.

FIR DOOR INSTITUTE

Tacoma 2, Washington

The National Association of Fir Door Manufacturers



This design for a modern commercial building suggests interesting possibilities for contrasting the rich colors of porcelain enamel with gleaming Stainless Steel.

THE FINISH WITH IMAGINATION

Porcelain enamel keeps pace with inspiration. It frees design from the restraints imposed by older and less adaptable building materials. Its strength, light weight, rich colors and variety of surface textures make it ideal for the sweeping curves and distinctive effects favored by imaginative modern designers.

Architectural applications of porcelain enamel are almost unlimited. It lends colorful allure to shop and theater fronts . . . spick-and-span luster to highly individual interiors.

And the beauty of porcelain enamel lasts. Its glass-hard surface is practically scratch-proof and wear-proof. It resists weather stains and laughs at corrosion. Its original brilliance is quickly restored by washing with soap and water—and of course porcelain enamel is fire-proof.

The base metal used by many leading fabricators of architectural porcelain enamel is ARMCO Enameling Iron. This special-purpose sheet was developed by Armco and is today the most widely used for this exacting

purpose. We'll be glad to put you in touch with a competent porcelain enameler in your locality. The American Rolling Mill Company, 351 Curtis Street, Middletown, Ohio. Export: The Armco International Corporation.

SEE SWEET'S CATALOG for uses, advantages and specifications of these Armco special-purpose sheets:

Galvanized ARMCO Ingot Iron

ARMCO Galvanized PAINTGRIP Steel (also available with ARMCO Ingot Iron or copper steel base)

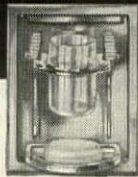
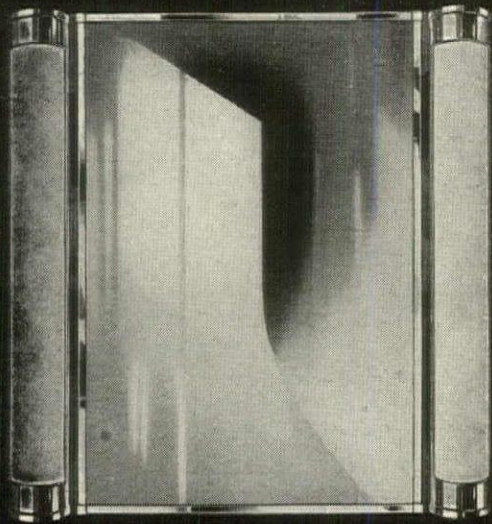
ARMCO Stainless Steel

THE AMERICAN ROLLING MILL COMPANY

Special-Purpose Sheet Steels



ANNOUNCEMENTS



Look to **HALL-MACK**

TRADEMARK REGISTERED

**FOR THE NEWEST AND SMARTEST
IN BATHROOM ACCESSORIES
AND MEDICINE CABINETS**

Production has started. With expanded facilities, we are making every effort to catch up with the demand. You'll find quality HALL-MACK accessories and cabinets are worth waiting for because you can count on them to please your most discriminating customers. Distributed through plumbing, tile and hardware dealers everywhere.

ILLUSTRATED ABOVE:

Medicine Cabinet FL-P1826 has a seamless porcelain on steel interior, a half pillar of fluorescent light at each side. Mirror door and light fixtures are trimmed with brass beautifully chromium plated.

Concealed Lavatory Unit No. 338 holds soap, tumbler and toothbrushes on a revolving panel which conceals these utilities when not in use. Made of brass, chromium plated.

HALL-MACK COMPANY

(FORMERLY HALLENSCHEID & McDONALD)

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

THE UNIVERSITY OF CALIFORNIA, recognizing a current shortage of manpower in the architectural field, is completing arrangements in Los Angeles for a sequence of special courses to relieve the situation. Endorsed by the Southern California chapter of the AIA, the University extension program is designed to meet the training problem on three fronts. It will retrain personnel formerly employed in related fields during the emergency, offer a review for those trained in architecture who have been dissociated from the field for a period of time and will prepare those already employed in an architect's office to qualify for positions of greater responsibility. Courses will be presented in the evening, thus permitting students to continue in their present occupations. In order to insure quality of instruction comparable to University standards, practicing architects, preferably members of the AIA, have been nominated as instructors. Information concerning the courses is available at the Hill Street center in Los Angeles.

A SEMINAR IN HOUSING, sponsored jointly by The Graduate School of Design and the Graduate School of Public Administration, Harvard University, Cambridge, Mass., is to be conducted by Catherine Bauer, during the spring term, on Tuesdays, from 4 to 6. This seminar will be concerned with the nature and extent of the housing problem; the background and achievements of the housing movement in Europe and America; and the issues involved in the formulation of a comprehensive national housing policy. The purpose of this seminar is not so much to provide specialized training in any one aspect of the housing process as to demonstrate the variety of disciplines and interests which must be resolved in any effective housing policy. The participation of students with varied professional viewpoints, including architecture, city planning, and the social and political sciences, should in itself contribute substantially toward this end. Send applications to Room No. 3, mezzanine, Hunt Hall, Harvard Univ., Cambridge, Mass.

THE CALIFORNIA LABOR SCHOOL has established a full-time Industrial Arts Program which will prepare students for jobs in the fields of plastics, ceramics, photography, industrial design, product design, furniture design and graphic arts. Teaching methods are based on experimentation with materials and analysis of them. For those veterans who need it, low-cost housing will be provided. For more information, write to Veteran's Dept., California Labor School.

THE HOUSE I WANT, series of six lectures on architecture and related subjects

and problems is presented by the Woman's Architectural League, sponsored by the San Francisco Museum of Art and the Northern California Chapter of the AIA. The scheduled lectures and speakers are: March 7, Gardner A. Dailey, Thomas Church and Maurice Sands; March 14, John Bolles and Raymond D. Smith; March 21, Paul R. Williams; March 28, Pietro Belluschi; April 4, Frances Elkins and Dorothy Liebes; April 11, Edward A. Williams and William Clement Ambrose. Sessions will be at 10:30 A. M. at the Twentieth Century Club, Berkeley and 12:30 P. M. at the San Francisco Museum of Art, San Francisco. Series tickets at \$6.00 each for the series of six lectures can be ordered through the Woman's Architectural League, 730 Montgomery St., San Francisco, Calif.

DR. JOHN G. DEAN is now with the Development and Research Division of the International Nickel Co., Inc., 67 Wall St., New York, N. Y. as Senior Fellow-in-Absentia of Mellon Institute of Industrial Research, Pittsburgh, Pa.

EXHIBITION

THE INTERNATIONAL LIGHTING EXPOSITION convenes in Chicago's Stevens Hotel next April 26. Attention will be focused on the need for a fuller and more enlightened use of lighting in industry, business, stores, farm, home and schools. Through a series of four morning conferences, the Exposition Committee will seek to make known the practical applications of the newest developments in illumination. Tickets to the conferences are available to architects, electrical contractors, wholesalers, industrial executives, illumination engineers, schoolmen, businessmen, public officials, railroad officials, and all other industrial and commercial officials concerned with lighting. The conference program is as follows:

- April 26: 9:30-12:30—"New Lighting Trends and Methods"
- April 27: 9:30-12:30—"Lighting Sales Forum for Electrical Contractors"
- April 29: 9:30-12:30—"Industrial Conference on Lighting Service and Lighting Sales Training"
- April 30: 9:30-12:30—"Lighting Application Forum"

About 60 lamp, lighting equipment and paint manufacturers and other producers which are directly related to illumination will use the Exhibition Hall of the Stevens Hotel to display their products. Exposition hours, 12 noon to 6 P. M.

APPOINTMENTS

INDUSTRIAL & ARCHITECTURAL DESIGN & ENGINEERING, 230 North Michigan Ave., Chicago 1, Ill., announce the appointment of Robert Sidney Dickens as design coordinator. (Continued on page 84)



Typical of the many modern, well-planned homes built by Mr. Duke. The cheerful, convenient Youngstown Kitchen is at the left.

RALPH S. DUKE, Realtor and Builder in University City, Mo., knows the many advantages of installing Youngstown equipment.



"They please the public . . . and help on costs"

RALPH S. DUKE, University City, Mo.

"BUILDERS always have to watch costs," Mr. Duke writes, "and at the same time install the kind of equipment the public wants."

"Youngstown kitchens help us do both those things. Your all-steel units are a real help to us in planning the kind of homes people like, at prices they can afford to pay."


"We of the National Builder's Association welcome all of this kind of help we can get, because we believe that through such cooperation private enterprise can take care of the housing needs of the nation."

Hundreds of experienced builders agree with Mr. Duke.

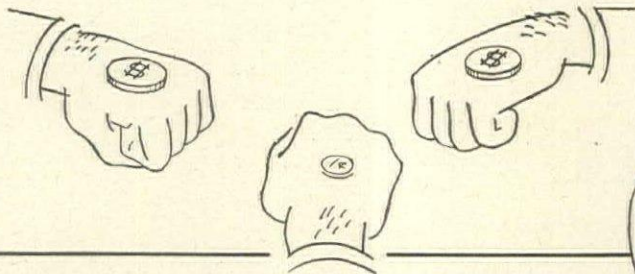
They know Youngstown Kitchens appeal to every woman, save time on the job, and cost no more than wood construction.

If you are not familiar with these sales-building kitchens, let us send you the booklet, "The Builder's Kitchen." It describes Youngstown units for homes of every size and type, and tells what other builders have done with this modern equipment.

MULLINS MANUFACTURING CORPORATION, Warren, Ohio
Porcelain Enameled Products—Large Pressed Metal Parts
Design Engineering Service

 *Youngstown Kitchens*
BY MULLINS

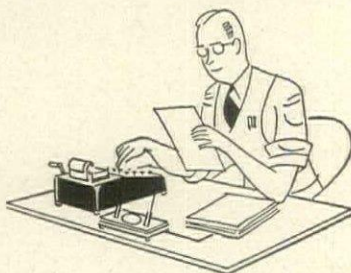
What's the CENTS of Air Filtering?



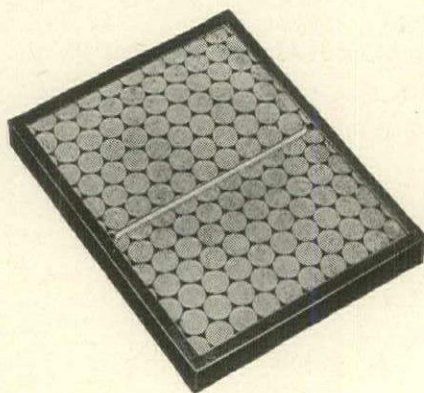
It makes sense to obtain the advantages of filtered air *economically*. Air filtering is an important part of many manufacturing processes. It makes the difference between profit and loss for countless commercial concerns. It assures greater comfort and cleanliness for millions of people. And when DUST-STOPS* are in the heating and air conditioning systems, it is a clear indication that filtered air is being obtained at both low initial and low maintenance costs.

PENNIES FOR DOLLARS

Where filtered air has a dollar value, architects, heating and ventilating en-



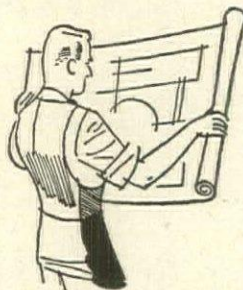
gineers specify DUST-STOPS and the complete ready-to-assemble steel frames as a sound investment.



The widespread preference for these replacement-type filters is based on their ready adaptability to any system, regardless of the cfm requirements; on flexibility of installation; easy access to filters; and the low cost of this part of the system.

WIN ON INITIAL COST

DUST-STOP Air Filters are highly efficient—are readily available at low cost from near-by suppliers.



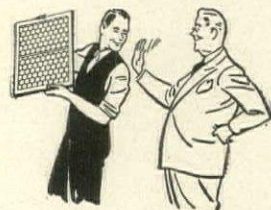
DUST-STOPS are constructed of packs of glass fibers (Fiberglas*) coated with an adhesive and bound on the edges with a fiberboard frame.

The Fiberglas fibers, packed to proper density, form an exceptionally

effective medium for air filtration. Being glass, they are inorganic, chemically stable, resistant to heat, corrosive vapors and being glass, they do not absorb the nonodorous, non-evaporating adhesive with which they are coated. Each impinged particle of dust is quickly soaked, acting as a wick to carry adhesive to other particles. Thus, the adhesive remains effective until the filter is so heavily loaded with dust that resistance to air flow calls for replacement.

WIN ON MAINTENANCE

Maintenance and replacement are accomplished with a minimum of man-



power and time. DUST-STOPS can be quickly obtained from near-by suppliers. And replacement requires no special tools or experience.

If you do not have complete information on DUST-STOP Air Filters, or typical installation details, see Sweet's Files or write: Owens-Corning Fiberglas Corp., 1830 Nicholas Bldg., Toledo 1, Ohio

In Canada: Fiberglas Canada Ltd., Oshawa, Ontario.

DUSTSTOP AIR FILTERS

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

—a FIBERGLAS product

WOOD + GLUE + IMAGINATION = New Markets for You

Here's Proof. A recent advertisement we ran in *Fortune* magazine, describing a new method of making molded plywood, drew hundreds of replies: the number, importance, and variety surprised both the publisher and ourselves.

What It Means to You. This response proves a vital interest *today* in wood—in new ways of using it—in products made from it—and in new, simplified, less-expensive methods of manufacture

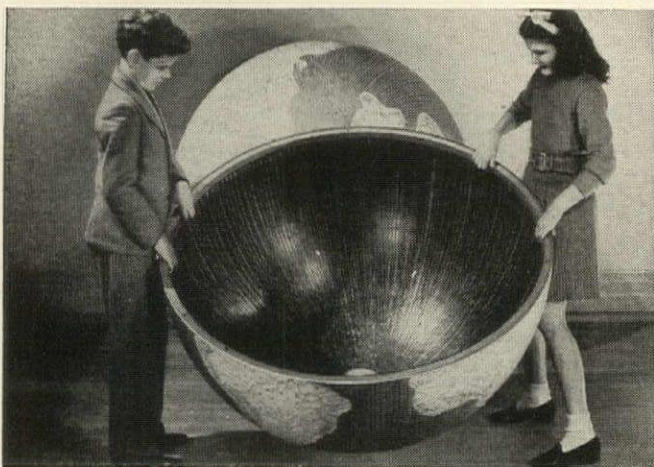
made possible by new synthetic-resin adhesives.

A Suggestion. To architects, builders, and contractors, we say:

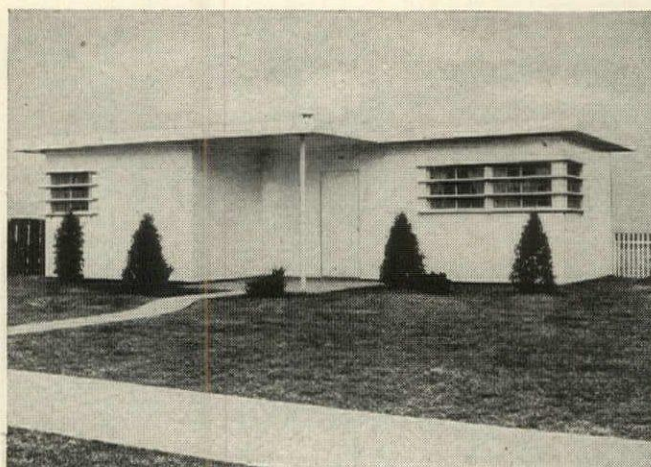
Set your sights high—plan for greater and more novel uses of wood in the construction of homes and industrial plants, for plywood panels, built-in furniture, sashes, floors, flush doors, trim, laminated beams and arches, and all those products which can best and most na-

turally be made of wood.

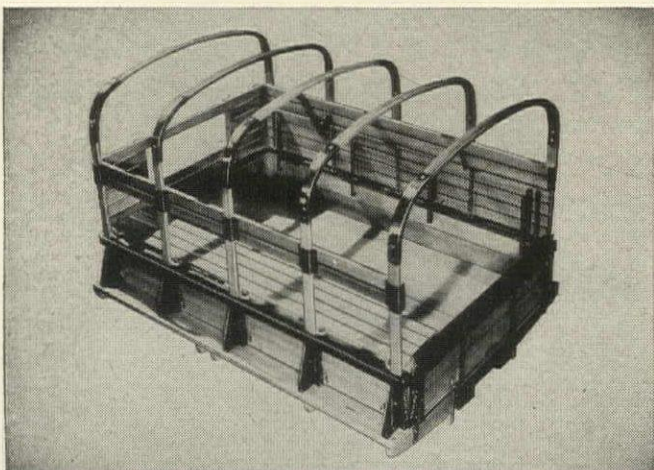
Let Us Help You. Since the manufacture of a large number of these products will employ new molded-plywood manufacturing techniques and new, modern synthetic-resin glues, let us help you with information on these modern techniques and adhesives and how they can be used to build new products of outstanding beauty and utility. Mail the attached coupon today.



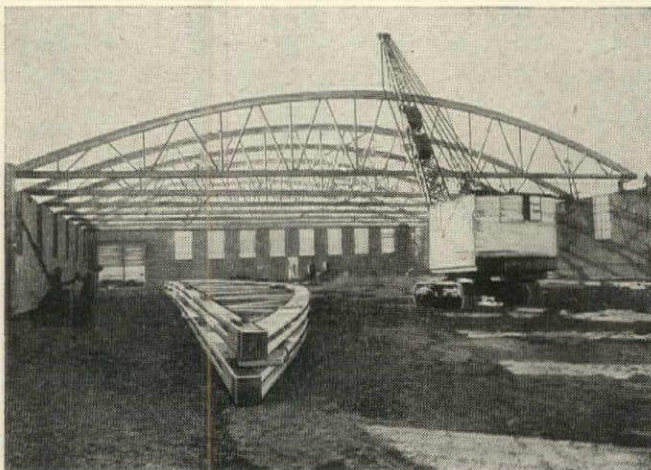
Globe represents new techniques in molding plywood. Lightweight, strong, and economical.



House built in 1938. Durability of resin glue proved by complete absence of glued joint failure to date.



Truck body laminated from 1" boards with urea-resin glue.



Glue-laminated roof trusses offer quick assembly and great strength—plus fire resistance.

Casein Company of America

DIVISION OF THE BORDEN COMPANY

350 Madison Avenue, New York 17, N. Y.

Casein Company of America, Dept. AF-36
Division of The Borden Company
350 Madison Avenue, New York 17, N. Y.

Please send me your bulletins:

"War Developed Adhesives and Gluing Processes Have
Many Post-War Applications" and
"Lap-ply, A New Technique in Molded Plywood."

Name & Title _____

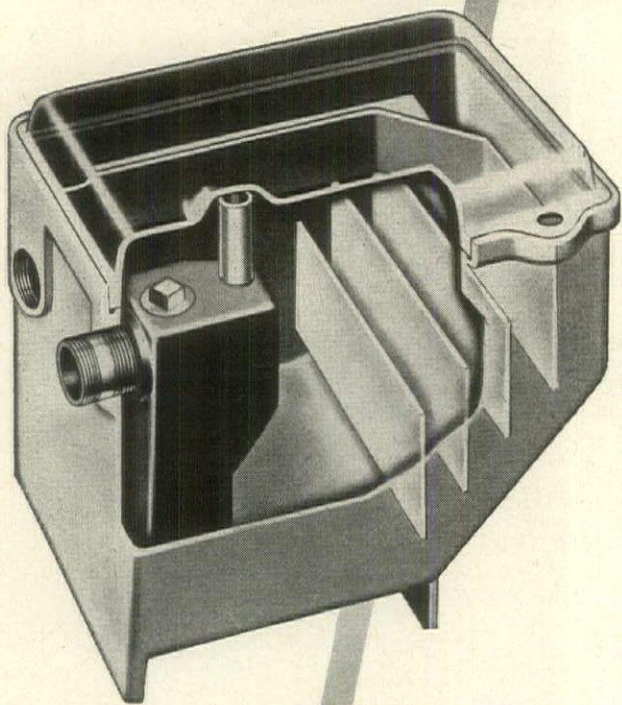
Company _____

Address _____

We make _____

ANNOUNCEMENTS

Now! Positive Protection with **Boosey** Air-Away **GREASE INTERCEPTOR**



Here's a grease interceptor that positively prevents siphoning of contents if waste vent line becomes clogged. Patented Boosey Air-Lock and Internal Air Relief features control surging within the interceptor when waste water is discharged from sink fixture—preventing grease from escaping to sewer. Remarkable internal design together with air-tight and gas-tight cover, maintains a constant air-cushion, keeping liquid level uniform at all times, with greater grease holding capacity in proportion to size. Easy to clean—unnecessary to remove baffles for normal cleaning. No odors at fixture. Self-clogging feature warns operator when cleaning is needed. Guaranteed operating efficiency over 90% at rated capacity. Send for special Sink and Dishwashing Machine Sizing Chart compiled from actual field tests.

NORMAN BOOSEY
Manufacturing Co.
DIVISION OF

General Sales Offices:
420 North La Salle St.
Chicago 10, Illinois

AMERICAN SKEIN and FOUNDRY COMPANY

FACTORY: RACINE, WISCONSIN

ESTABLISHED 1900

COMMISSIONER HERMAN T. STICHMAN of the New York State Division of Housing announced today the appointment of Charles F. Rand as senior housing consultant in the Division's community development service and William G. Ernst as assistant to the supervisor, Leonard F. Hubbard. Mr. Rand joins the Housing Division following his recent resignation as executive secretary and project manager of the North Tonawanda Housing Authority, North Tonawanda, N. Y. Since the founding of this housing authority and its construction of Nor-Ton Courts, a 200 family State-aided war housing project for defense workers, Mr. Rand played a leading role in its planning, development and management. The project is soon to be changed from a defense worker development to a low-rent housing project. Mr. Ernst assumes charge of a newly formed building materials unit to study, under Governor Thomas E. Dewey's State-wide housing program, the supply, availability and transfer of urgently needed construction materials to help the state of New York, municipalities and private enterprise solve both the emergency and permanent housing bottlenecks. Commissioner Stichman stated that the building materials unit will assist municipalities, builders and other groups in the housing field in locating home building necessities.

AWARDS



THE JURY OF AWARDS in the Chicago Tribune's \$24,000 Chicagoland Prize Homes Competition (see FORUM Sept. '45, p. 174), studies one of the 938 home designs entered in the contest. Identifiable as tallest in the group is Paul Gerhardt, Jr., president of the Chicago chapter of the AIA and chairman of the jury. Other members of the jury, left to right, are: John C. Merrill, J. E. Merrion, A. N. Rebori, Irvin A. Blietz, John R. O'Connor, (back to camera), John W. Park, Arthur E. Fossier, Philip B. Maher, and Boyd Hill, professional advisor of the competition.

LT. RAY STUERMER, worked on his drawings during his spare time aboard ship and is a winner of two of the 24 awards of \$1,000 each. Problem No. 1 called for a design of a house of a maximum floor area of 1,100 sq. ft. suitable for a father, mother

WELLS N. THOMPSON, formerly vice president in charge of engineering of the H. Ferguson Co., has been promoted to head the eastern office of the company in New York.

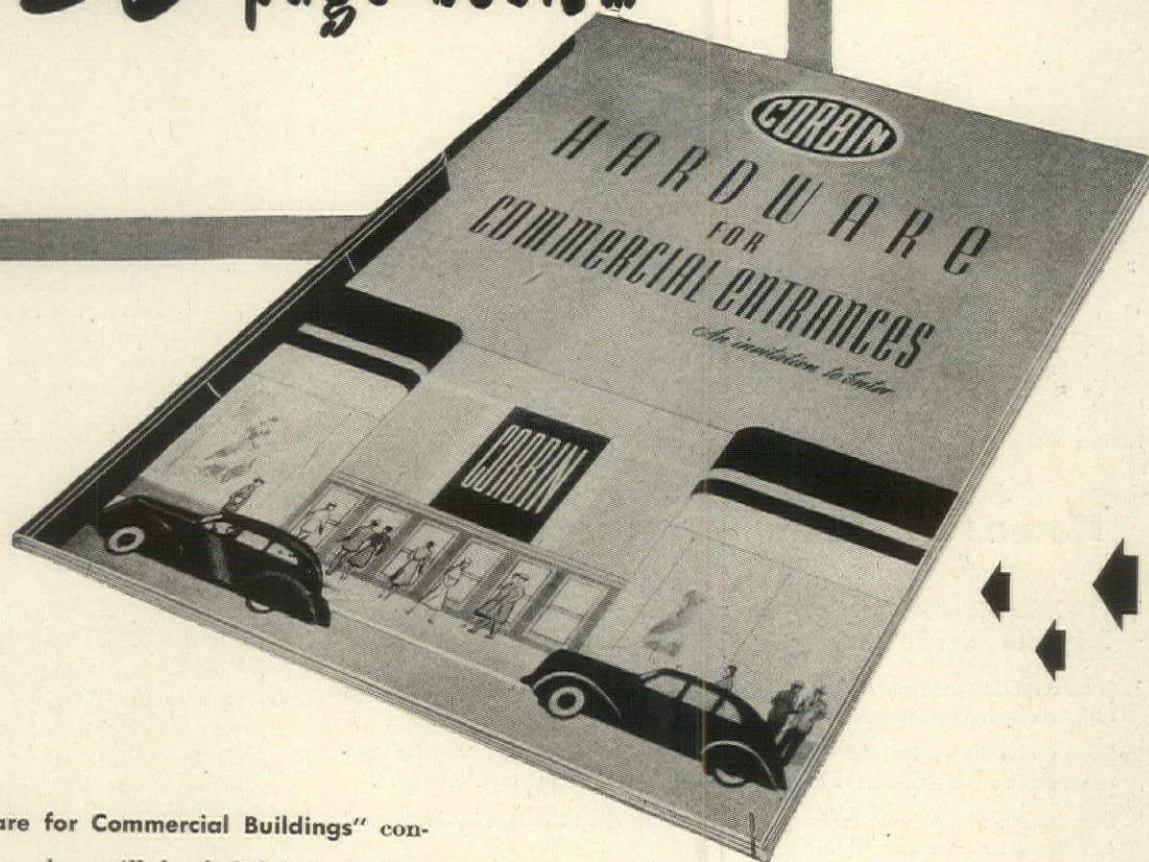
ROLAND J. MCKINNEY, for six years Art Director of the Los Angeles County Museum, has been engaged by the Walt Disney Studio as Art Counselor. Mr. McKinney was responsible for assembling the exhibit of contemporary American art at the San Francisco World's Fair in 1939. Mr. McKinney will make his headquarters in New York. He will contact established artists in the interests of Disney and will search for outstanding young talent which can be indoctrinated in the Disney manner. Some of the pictures Disney has in the development stage are "Alice in Wonderland," "Peter Pan," "The Lady and the Tramp," "The Little People," "Midnight and Jeremiah," "The Emperor and the Nightingale," a Hans Christian Andersen story and others. The two in work for 1946 are "Make Mine Music" and "Uncle Remus."

EUGENE HOLLAN, former president of the Florence Stove Co., has been elected president and a director of the Masonite Corporation.

ROBERT E. DAVIS has been promoted from director of production to vice president and general manager of Jordanoff Corp.

and 6 year old son. Winners are D. Code Taylor, Capt. Arthur Sackville-West, Charles Schroeder, Walter Thies, Lt. Cust Woolford, Ensign Ralph Peterson, Jr. (joint), J. F. Yewell, George Klinkhar and Lt. Stuermer. (Continued on page 8)

you are welcome to
a copy of this
36 page book..



"Corbin Hardware for Commercial Buildings" contains information that will be helpful to anyone concerned with building or modernizing shops, stores, restaurants or office buildings.

A wide range of Corbin hardware for well-appointed doors is illustrated; i.e. locksets, handles, push and pull bars, door pulls, push plates, kick plates, door checks, hinges.

The coupon is for your convenience. The catalog will be sent promptly.

*"Good Buildings
Deserve Good Hardware"*



P. & F. Corbin

NEW BRITAIN, CONN. • SINCE 1849
Division of the American Hardware Corporation

P. & F. CORBIN
New Britain, Conn.

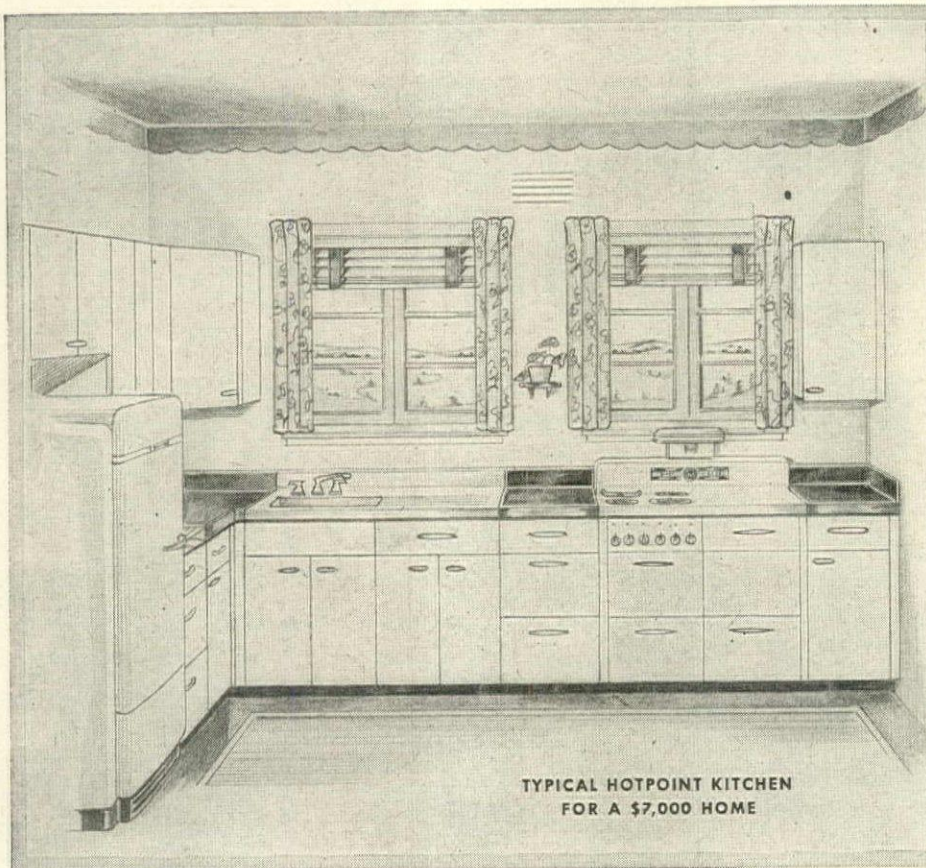
Gentlemen:

Please send a copy of "Corbin Hardware for Commercial Entrances" to

COMPANY _____

ATTENTION OF _____

ADDRESS _____



TYPICAL HOTPOINT KITCHEN
FOR A \$7,000 HOME

RECOMMENDED EQUIPMENT

ITEM	QTY.	DESCRIPTION	CAT. NO.
1	1	RANGE	37" WIDE
2	1	REFRIGERATOR	6 CU. FT.
3		DISHWASHER-SINK	
4		DISHWASHER	
5		DISPOSALL	
6		CABINET SINK	
7	1	SINK CABINET	48" WIDE
8			
9	1	BASE CABINET	15" WIDE
10	1	" "	18" "
11	1	" "	24" "
12			
13			
14	1	COR. BASE CABINET	42" WIDE
15		UTILITY CABINET	
16	2	WALL CABINET	15" "
17	1	" "	30" "
18	1	" "	18" X 36" "
19			
20			
21	1	COR. WALL CABINET	24" X 24"
22	1	FILLER	B M F 34
23	1	"	B S F 34
24	1	"	W S F 30

Hotpoint KITCHEN PLANNING SERVICE

COMMERCIAL ENGINEERING DIVISION

DRAWN *E. Elizabeth Goetz*

APPROVED *Raymond*

DWG. NO. *AYL45600* DATE *8-31-45*

EDISON GENERAL ELECTRIC APPLIANCE CO., INC.
3000 WEST TAYLOR STREET CHICAGO, ILLINOIS

Homes with complete *Electric Kitchen* will sell faster!

POWERFUL promotional advertising is firmly establishing the popularity of electric kitchens. This trend has been created by:

1. Over a million and a half dollars spent by Hotpoint in national advertising to intensify interest in all-electric kitchens.
2. Scores of articles in leading magazines and newspapers that focused attention on the electric kitchen as the No. 1 room of the modern home.
3. Distribution of over two million booklets "Your Next Kitchen by Hotpoint" to home owners who will build or remodel.

As a result, the housewife of today generally considers her kitchen as the hub of her home. For that reason, architects and builders will choose electric equipment for their kitchen designs to give her the best service.

For their convenience, Hotpoint has available a *Portfolio of Personalized Kitchen Plans* that has plans for all types and sizes of kitchens. Send for your copy of this Portfolio, with its wealth of information and planning guidance. Attach coupon at right to your letterhead and mail to us today!

HOTPOINT REGIONAL SALES OFFICES. EASTERN: 570 Lexington Ave., New York City 22, Plaza 3-9333. SOUTHERN: 304 Red Rock Bldg., Atlanta 3, Walnut 2959. CENTRAL: 1456 Merchandise Mart, Chicago 54, Superior 1174. WESTERN: Western Merchandise Mart, 1355 Market Street, San Francisco 3, Underhill 2727.

In most states, all Hotpoint kitchen equipment can be included in F.H.A. insured mortgages.

PLAN KITCHENS FOR THE 77%

"More than seven out of ten modern homes will cost \$3,000 or over," predicts the United States Chamber of Commerce. That means 7 out of 10 builders can afford, and will probably demand, an all-electric kitchen.

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

Without obligation, please send me your *Portfolio of Hotpoint Personalized Kitchen Plans*. This offer available in United States, Territory of Hawaii and Alaska.

Name _____

Firm Name _____

Address _____

City _____ State _____

Copyright, 1946 Edison General Electric Appliance Co., Inc., Chicago

Hotpoint
ELECTRIC KITCHENS
DEPENDABILITY ASSURED BY
40 YEARS EXPERIENCE



Refrigerators



Ranges



Water Heaters



Home Freezers



Clothes Washers



Flat Plate Ironers



Dishwashers



Disposalls



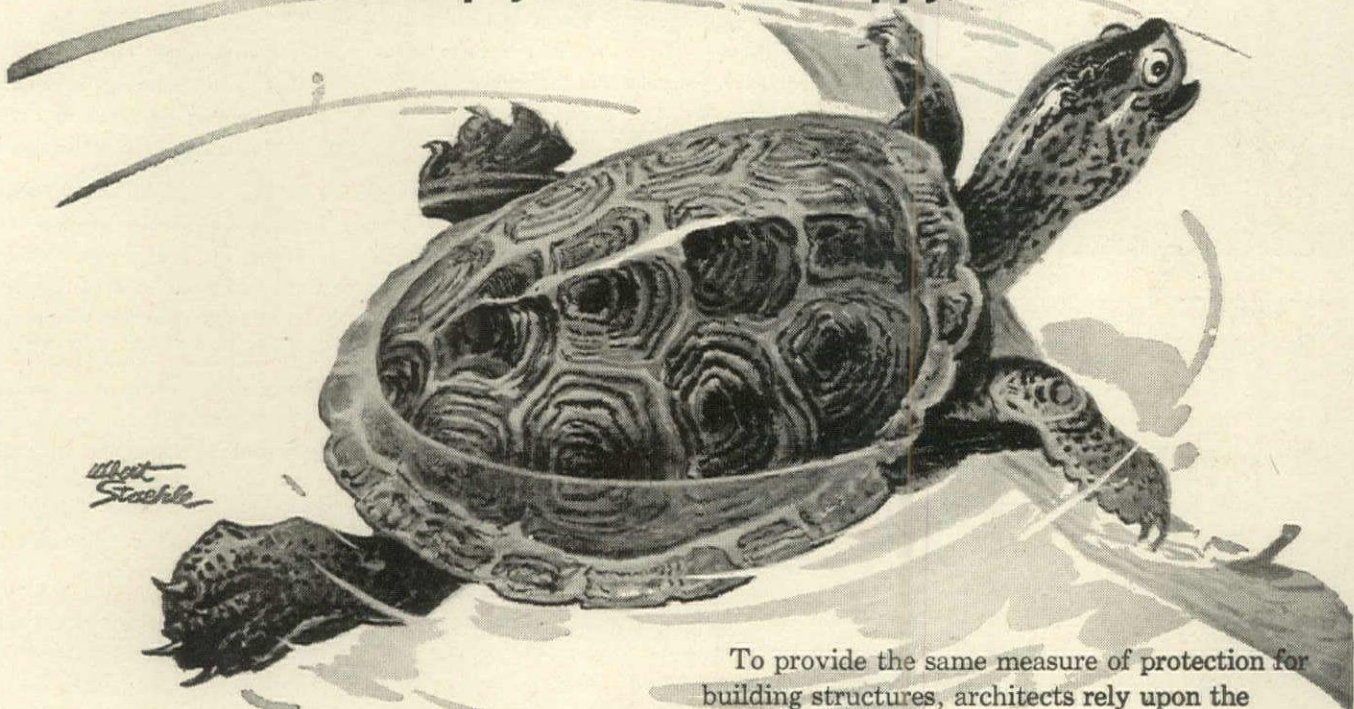
Cabinet Sinks



Steel Cabinets

THE Turtle lives under the same roof for about 200 years with nary a drop of unwanted rainwater ever seeping into his house. Mother Nature solved his roofing problem for keeps. She gave him an armored wearing surface.

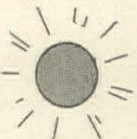
What keeps the turtle feeling tops can keep your clients happy, too!



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



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



2-It provides protection against the sun's actinic rays which otherwise dry out the essential oils of the bitumen.



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



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

To provide the same measure of protection for building structures, architects rely upon the Barrett Specification* Roof, with its armored wearing surface of gravel or slag.

Built up of alternate layers of coal-tar pitch and felt, topped with a heavy pouring of pitch to hold the gravel or slag wearing surface in place, it is the strongest, longest-lasting built-up roof made—waterproof, sun-resistant, fire-safe and armored against mechanical damage. No wonder it can be bonded against repair and maintenance expense for 20 years.

Many of America's most famous buildings are Barrett Specification Roofed. You can do your clients no greater service than to specify this roof on the buildings you design.



*Reg. U. S. Pat. Off.

THE BARRETT DIVISION

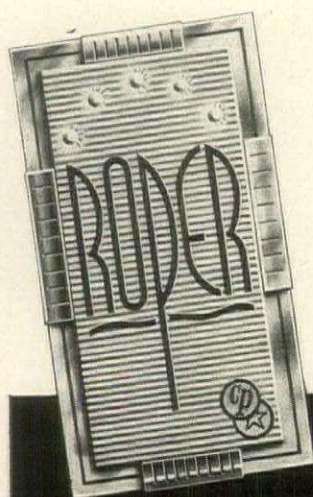
Allied Chemical & Dye Corporation

40 Rector Street, New York 6, N. Y.

2800 So. Sacramento Avenue
Chicago 23, Ill.

Birmingham
Alabama

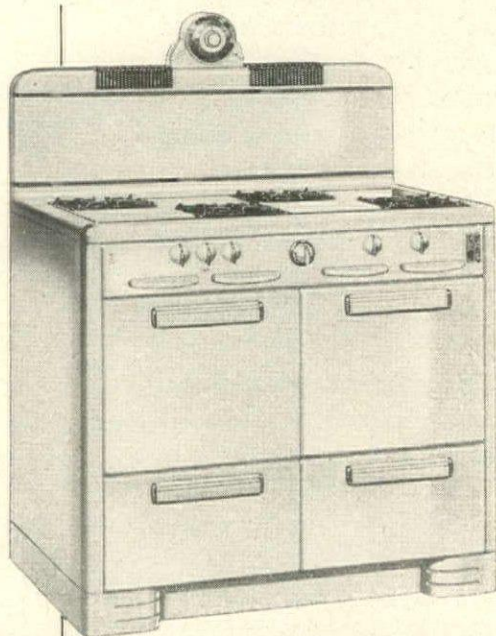
In Canada: The Barrett Company, Ltd.,
5551 St. Hubert Street, Montreal, Que.



Jewels of Cooking Performance BY "AMERICA'S FINEST GAS RANGE"

- ⊗ "STAGGERED" COOKING TOP
- ⊗ "SIMMER-SPEED" BURNERS
- ⊗ LARGE "3-in-1" OVEN
- ⊗ "GLO" BROILER
- ⊗ "SCIENTIFIC" COOKING CHARTS
- ⊗ "INSTA-FLAME" TOP LIGHTER
- ⊗ "INSTA-MATIC" CLOCK CONTROL
- ⊗ "SEAL-TIGHT" DOORS

**YOUR CLIENTS WILL WANT
THESE "JEWELLED" FEATURES**



GEO. D. ROPER CORPORATION, Rockford, Illinois
Offices and warehouses in principal distribution centers.

Problem No. 2 allowed the designer 1,400 sq. ft. and a building site 50 by 150 ft. but required that provision be made for a family consisting of parents and two children—a son, 12 and a daughter, 8. Winners are Herbert Hanson and Henry Martorano (joint award), Eric Wenstrand, Carl Cederstrand, Frederick Sloan, Edward Glidden, Jr. and Eben Finney (joint award), Mrs. McKirahan, Heidt Associates, Lt. (j.g.) W. R. Burns, Jr.

Problem No. 3 called for a dwelling of not more than 1,700 sq. ft. floor area practicable for a lot 75 by 150 ft. and suitable for a family consisting of the parents, two daughters, 6 and 16, and a son 12. The winners are Arthur Myhrum,* Howard Uebelhack, Raymond Garbe, Edward Hanson, Edward Burch, Jr., Joseph Gora, Merwin H. Freeman and Lt. Stuermer.

AWARDS

First prize in the competition for a group of three new dormitories at Smith College has been awarded to Norman C. Fletcher, Jean Bodman Fletcher and Benjamin Thompson, associates of Walter Gropius in Cambridge, Mass. The contest, which opened in Sept. and closed Dec. 10, was conducted under the auspices of the Museum of Modern Art and the magazine, *Progressive Architecture*. An exhibition of the winning drawings will open at the Museum of Modern Art on Feb. 6 and will be shown until April 7. Second and third prizes were won respectively by Sarah Harkness and John C. Harkness, of Cambridge, Mass., also associated with Gropius, and Julius Stein, Roy S. Johnson and Fred M. Ginsbern and Associates, New York. The first prize amounts to \$2,000, as an advancement toward the fee of the winner, the second \$1,000 and the third \$500. Further awards of \$100 each were made to the ten winners of honorable mention: Marcel Breuer, Sigurd Ellison, Richard Filipowski, Percival Goodman, Robert W. Kennedy, Robert A. Irigoyen, Carl Koch, Alfred Parker, Robert Little and Ann Halle Little, Ieoh Ming Pei and S/Sgt. John N. Sill. The jurors were William Allan Neilson, President Emeritus of Smith College, Kenneth Reid, editor of *Progressive Architecture*, Mrs. Alan Valentine, trustee, Philip Goodwin, architect, Morris Ketchum, architect and Mrs. Elizabeth Mock, curator of architecture at the Museum of Modern Art. Richard Bennet, professor of Design at Yale University, acted as professional advisor for the competition.

NEW OFFICES

COMMANDER WILLIAM PLATT, U.S.N.R. and MAJOR GEOFFREY PLATT, A.U.S. having been released from active duty, announce the reopening of the office of William &

Geoffrey Platt, Architects, 101 Park Ave., New York 17, N. Y.

CAPT. JERRY A. FREEMAN, former director of Public Relations for the Veterans of Foreign Wars, who served in the U. S. Army Engineers for 2½ years; Robert H. Clawson, engineer, who was engaged in writing technical manuals for the armed services; and Frederick R. Gruger, Jr., technical illustrator, have organized the firm of Technocopy, Inc., with offices at 30 Vesey St., New York 7, N. Y. Technocopy, Inc., "designers of manuscripts", offers a service for the compilation of all types of technical manuals, parts catalogs, direct-mail presentation literature and technical theses.

LT. COMMANDER PAUL E. KOHLER, JR., wishes to announce the reopening of his office for the practice of architecture at 253 Worth Ave., Palm Beach, Fla.

J. NORRIS BARNARD, architect and ALDEN B. WILSON, industrial designer, announce the opening of their office, Allied Planners, for the practice of architecture and industrial designing at 1611 Sansom St., Philadelphia, Pa.

MUNROE W. COPPER, JR., ROBERT V. WADE and RUSSELL R. PECK wish to announce the formation of a partnership under the firm name of Copper, Wade & Peck, architects, with offices in the Heights Rockefeller Bldg., Cleveland Heights 18, Ohio.

AARON COLISH and CHARLES G. ETTER announce the formation of partnership under the name of Colish & Etter, architects with offices in the Architects Building, Philadelphia 3, Pa.

CHANGE OF ADDRESS

SAMUEL A. LIEBERSON, architect, announces the removal of his office to 356 Fulton St., Brooklyn, N. Y.

BRITSCH & MUNGER, architects, have moved their offices from 1025 Nicholas Building to 531 Nicholas Building, Toledo 4, O. John Macelwane and Mark Stophlet are associated with the firm and M. DeWitt Grow has been made a junior partner.

MORRIS LAPIDUS, AIA, announces the removal of his offices from 1841 Broadway to 256 E. 49th St., New York, N. Y. The move will be effective about March 15th.

NATHAN A. SEIDERMAN, architect, has located his office at 154 Nassau St., New York 7, N. Y.

STUYVESANT VAN VEEN, mural artist, after 2½ years of military service, has removed his studio from New York to 2428 Cliff St., Cincinnati, O., for murals of all types, public or private.

NOW — Seventeen NEW *Balsam-Wool* data sheets!



• Yes—Balsam-Wool research is constantly at work to keep you up to date on insulation application. Today, there are seventeen new Balsam-Wool Data Sheets, bringing the entire series up to thirty-two. You'll want this series as a handy, authoritative guide to correct practice. Mail the coupon for your set—there's no cost or obligation.

Balsam-Wool

SEALED INSULATION

BALSAM-WOOL • Products of Weyerhaeuser • NU-WOOD

WOOD CONVERSION COMPANY

Dept. 147-3, First National Bank Building
St. Paul 1, Minnesota

Please send me a complete set of Application Data Sheets.

NAME.....

ADDRESS.....

CITY..... STATE.....

Fortune

JANUARY 1946



VOL. 1 OF a new era

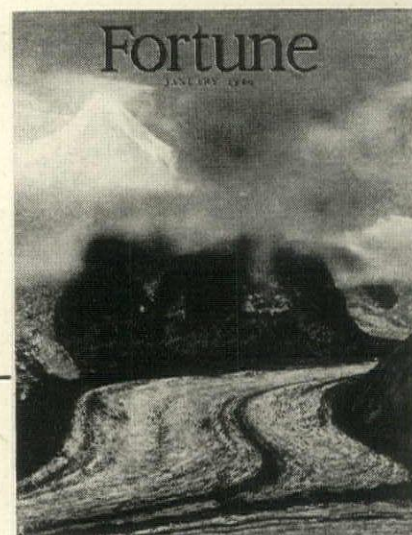
THIS IS THE YEAR we've been waiting for — since Pearl Harbor . . . since Dunkerque . . . since Munich . . . since Manchuria. Since further back than that . . . since The Bonus March and The Crash . . . since the very year that FORTUNE was born.

For 15 years, it's been one damn thing after another — all spelled out in Cosmic Capitals: Depression, Aggression, Appeasement, War. Each New Year has meant at best good riddance to the old, a desperate emergency to be dealt with in the new.

But 1945 was something else again: V-E, V-J, Peace, UNO and Bretton Woods. The Atom. Whether for the jobs finished or the jobs begun, the newest old year was truly great — it doesn't owe us a thing.

Now we have entered a new year, and begun a new era — the era that FORTUNE thought, 15 years ago, it was born to observe and born to report. And FORTUNE, welcoming, at last, its chance to be a very special reporter of this Great Adventure, will contribute its share to making it an Adventure not only into Prosperity, but into something we shall not be ashamed to call Civilization.

Fortune



**Spanish in design
"Modern American" in Comfort**



Reflecting the old Spanish influence so characteristic of Santa Barbara architecture, this edifice nevertheless is "modern American" in equipment. ★ PAYNE gas warm air heating . . . selected for advanced engineering, quality construction and unfailing dependability . . . assures comfort in any weather. ★ Architects and builders are urged to investigate the many applications of PAYNEHEAT to commercial and industrial jobs and public buildings. Consult your nearby PAYNE Dealer or your gas company. . . or write to us. ★ PAYNE factory engineering service "tailors" the installation to the job. Consultation is invited.

PAYNEHEATED Unitarian Church
Santa Barbara, California
Architect, E. Keith Lockhard



**PAYNE
ZONE-CONDITIONING**

*Successor to old-fashioned
central heating*

Circulated winter warmth,
summer ventilation with
forced-air models . . . controlled by "zones" (suites)
or individual rooms.

**WRITE FOR FREE
BOOKLET**



PAYNE FURNACE COMPANY
(One of the DRESSER Industries)
BEVERLY HILLS, CALIFORNIA

PAYNEHEAT
OVER 30 YEARS OF LEADERSHIP





but Too Tough for HEAT or COLD

Cotton Insulation for your home is one new postwar comfort you may have NOW.

This amazing new insulation weighs only four ounces per square foot—40% to 90% less than other home insulating materials. It comes in convenient rolls so light that you don't even need help to install it. You can do the job yourself, in an average home, in one evening.

Government tests have proved that Cotton Insulation is 4% to 36% more efficient than the ten other leading commercial insulations. It's flame proof. It won't settle or pack down. It lasts a lifetime.

Read the story yourself, in a 38-page booklet which gives you detailed accounts of government tests, and contains fully illustrated facts about what Cotton Insulation will do for you.

Free!



- ★ NATIONAL COTTON COUNCIL OF AMERICA
- ★ COTTON INSULATION ASSOCIATION

NATIONAL COTTON COUNCIL, Dept. P, Box 18, Memphis 1, Tenn.
Please send copy of booklet "Cotton Insulation"

Name _____
Address _____

**SEND THIS COUPON NOW FOR YOUR
FREE COPY OF "COTTON INSULATION"**

Going to Your Customers POST-haste!

THIS dominant advertisement in the March 16th issue of The Saturday Evening Post will carry to 3,500,000 home owners and prospective builders the story of an amazing postwar comfort they can have right now. Cotton Insulation is a profitable job you can sell right now!

Your copy of this booklet is ready now. It contains all the amazing facts about Cotton Insulation.

**NATIONAL COTTON COUNCIL
OF AMERICA**

**COTTON INSULATION
ASSOCIATION**

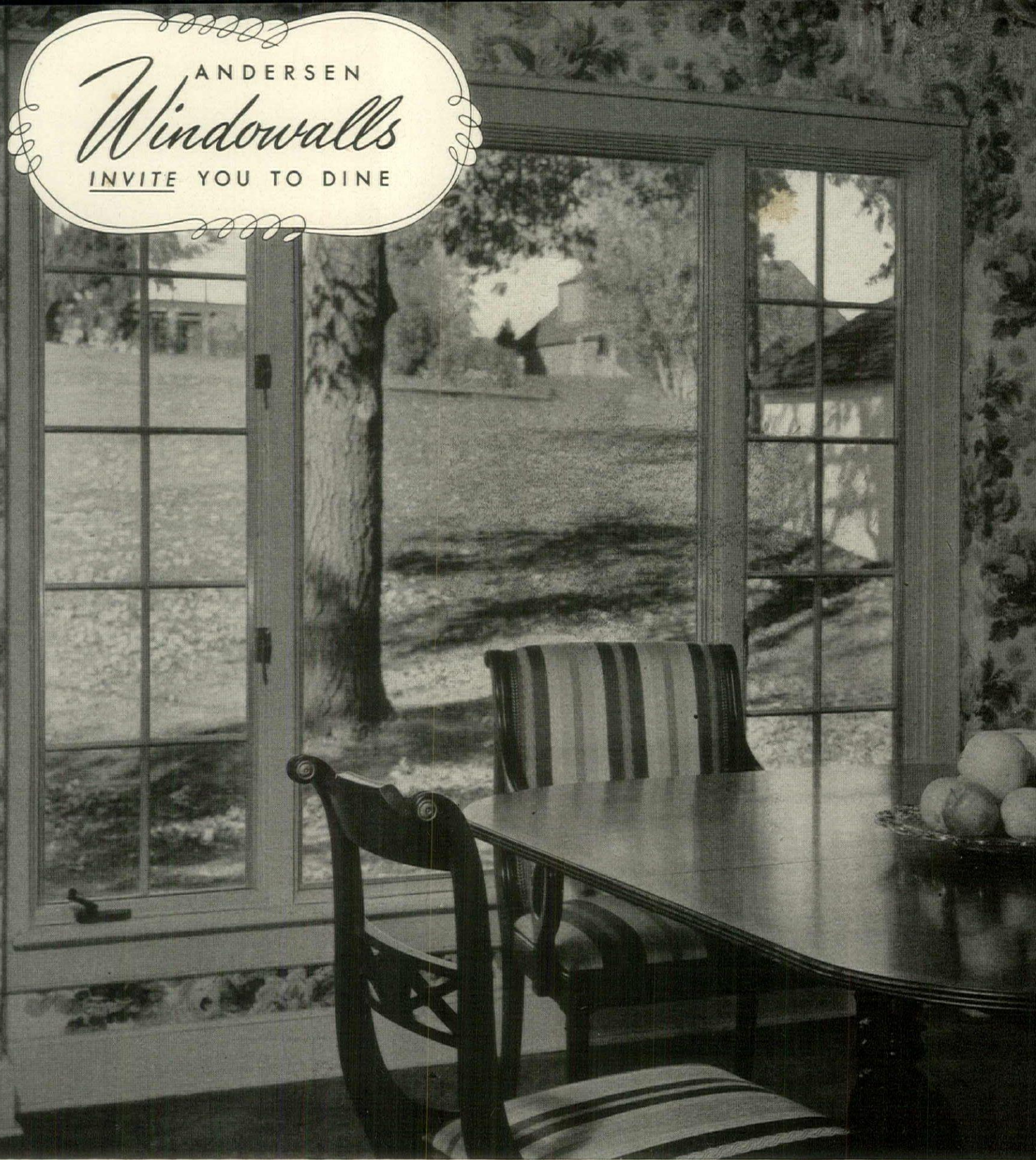
NATIONAL COTTON COUNCIL
Box 18, Dept. F
Memphis 1, Tenn.

Please send booklet, "Cotton Insulation."

Name _____

Address _____

ANDERSEN
Windowalls
INVITE YOU TO DINE



THE airy, sunny, view-enclosing background in this charming dining room is an Andersen Casement Picture Window Unit—a WINDOWALL that functions both as window and as wall.

Such a broad expanse of glass needs the insulating and weatherproofing engineering that goes into all Andersen Window Unit construction—engineering that promises a

lifetime of efficient, trouble-free operation. The unit is a stock item, a complete unit except for center glazing.

The unit pictured here was specified by Architect Magnus Jemne for a home in St. Paul, Minnesota. To duplicate it, specify Andersen Casement Picture Window Unit, Number 552; overall sash opening size, 6' 5 $\frac{1}{4}$ " x 5' 2 $\frac{9}{16}$ ". Complete details in Sweet's Architectural File.

Andersen Corporation • BAYPORT • MINNESOTA

**... WORTHINGTON
GIVES YOU ALL THE
FACTS ABOUT ITS
1946
SELF-CONTAINED
AIR CONDITIONERS**

WORTHINGTON *Self-contained Air Conditioners*



MODEL SCY-300 SERIES-3 HP
MODEL SCY-500 SERIES-5 HP

Packaged Air Conditioning in its most perfected form. Designed especially to provide controlled air conditioning for commercial and small industrial applications where requirements are within unit design capacities.

Write For Your FREE Copy of This Booklet

Whatever your interest in packaged air conditioning units... specifying, selling, buying, installing, or maintaining them... you'll want to read this new booklet.

You'll want to learn all the facts about this latest development in air conditioning, attractive self-contained units that give you real air conditioning in the most economical and perfected form. You'll want to see how such compact cabinet units provide year-round air conditioned comfort... cool, invigorating air in summer... warm, filtered air in winter. You'll want to learn why these units for commercial and small industrial applications where space is limited, make possible an economical first cost and low operating cost.

Write for your copy of this 8 page booklet on Worthington Self-Contained Air Conditioners today... and learn why *there's more worth in Worthington*. *Worthington Pump and Machinery Corporation, Air Conditioning and Refrigeration Division, Harrison, N. J.* Specialists in air conditioning and refrigeration machinery for over 50 years.

WORTHINGTON



A I R C O N D I T I O N I N G



HOME OF MR. JOHN BORMANN, GLENDALE, MO.

HARRIS ARMSTRONG, Architect, St. Louis, Mo.

Large photos by Tom Leonard, New York City; initial photo by C. A. Lorenz, Kirkwood, Mo.



THIS home of a building contractor, on a limited suburban lot, with its simple main floor, provides what the owner specified: complete living facilities for himself and wife, with guest rooms and storage above, and garage and recreation spaces below.

The handling of the roof lines and windows assures privacy from the street on the north, intimacy with nature on the south.

Commenting on the house, Mr. Bormann says:

"We are pleased with the ingenious conservation of space throughout. The overhanging roof captures the warmth of the sun in winter and keeps the rooms cool throughout the summer. We need no gutters or downspouts the grass, flowers, shrubs and trees get the benefit of this arrangement."

Here, as in many homes from coast to coast, Pratt & Lambert Paint and Varnish serve to enhance the architectural design inside and out. Their distinctive, authoritative colors lend charm to homes however



modest or pretentious they may be. The P&L Architectural Service Department offers prompt, helpful aid in color counsel and decorative planning.

PRATT & LAMBERT-INC.

Paint & Varnish Makers

NEW YORK : BUFFALO : CHICAGO : FORT ERIE, ONT.

PRATT & LAMBERT PAINT AND VARNISH



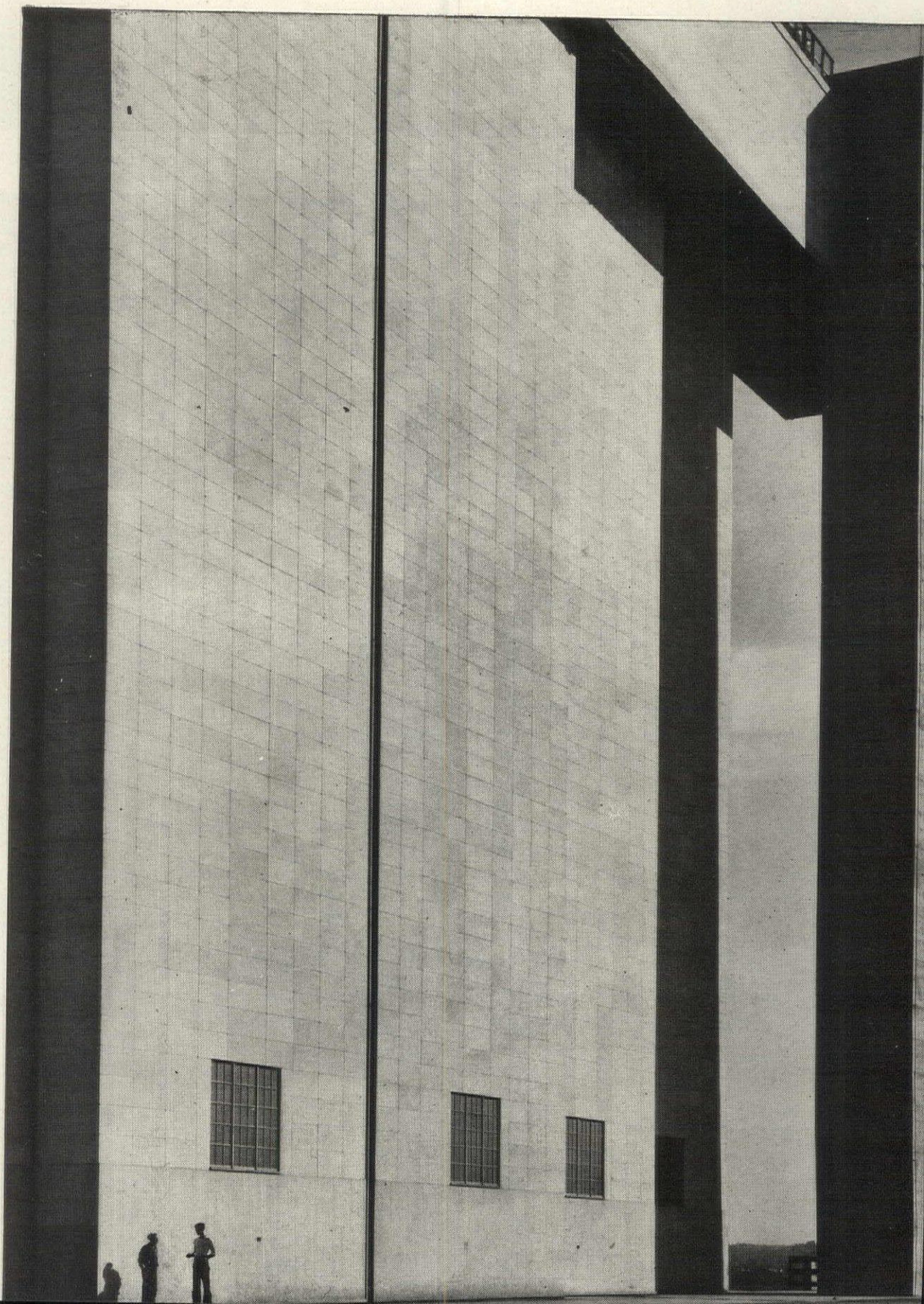
The Architectural

FORUM

Magazine of Building

HUGE TRANSITE DOORS
OF NAVY-BUILT BLIMP
HANGAR SLIDE SECTIONALLY

Official U. S. Navy photo





DESPITE LIBERAL USE OF MODERN DETAILS, STREET FACADE LACKS COHERENCE. LAVISH LIGHTING EXPRESSES SHOWCASE FUNCTION



\$75,000



THE POSTWAR HOUSE MAKES A SHARP BREAK WITH LOS ANGELES TRADITION—EVEN THE UBIQUITOUS PATIO GOES MODERN

HOWCASE on a glamorous Los Angeles lot features new equipment and 100 ideas for living. Fritz Burns stages first big check of postwar home-buying public in a Hollywood version of the model house.

Completely unawed by its proximity to Los Angeles' Miracle Mile, completely in the colossal vocabulary of nearby Hollywood, Home Developer Fritz B. Burns unveils this month the most shrewdly conceived, most expensive and most dramatically presented model house a bug-eyed public ever saw. Burns, long a successful practitioner of the make-no-little-plans school, has made a whopping and doubtless winning bet on what glamour-glazed Southern Californians expect of their postwar house, particularly one born of Maestro Burns. It is more than a model house, and at the same time less, because it will never be sold—it is a \$75,000 look-see for the public and gives Burns a chance to check people's reactions to new equipment, including mock-ups of some things-to-come. Such novelties as these stud the interior:

- In the bathrooms—a hair drier, an electric shaver and an electric toothbrush on cords which pull out from the wall and go back into place when not in use; a silent flush toilet which is operated by merely leaning back.
- In the kitchen—a rear-burner range which makes for easy disposal of cooking odors and keeps hot pots out of children's reach; a console type of refrigerator with drawers instead of doors; a built-in sewing machine; cabinets with roll-up plastic doors.
- Elsewhere—an electronic device for removing dust from the air; a silk-upholstered, neon-lighted linen closet; space for a helicopter.

Although Builder Burns' accountants are still totaling up final figures, cost of the medium-size, five-room house will come close to \$75,000. Lavish as they seem, such figures are in keeping with the scale of Millionaire Burns' building operations. One of the nation's most prolific house builders, he has often been called "the Henry J. Kaiser of the West Coast building industry"—a title he earned long before mass-producer Kaiser teamed up with him last May to build communities of low cost houses throughout the country.* Such a builder might be expected to vary the usual model house theme. He did. Cost of the house alone sets it apart from other model houses; so do its location and probable disposition. While most model houses are built in residential subdivisions and eventually offered for sale, this one occupies a commercial site on a heavily trafficked street and will neither be sold nor duplicated. Its ultimate fate is probably demolition.

The purpose of Burn's house, however, is like that of any model house. Advertised as a demonstration of new developments for the benefit of the building industry and the public—it is also front-page promotion for Burns. Besides publicising his resumption of peacetime house building, it will enhance his already good reputation as a builder, alter the

local impression that he can build only small, low cost houses and give him advance notice as to what the public wants him to include in the thousands of houses he plans to build for sale.

Decision to erect the Postwar House was made early in the war when everyone was speculating on what wonderful new equipment and materials would make their appearance with peace. Burns felt that the answer lay somewhere between the wild predictions of "fervid futurists" and the short-sighted pessimism of "cold reactionaries." To find out he established the Fritz B. Burns Research Division for Postwar Housing, selected Salesman Joseph H. Schulte to direct the division's work. As energetic and enthusiastic as his boss, "Joe" Schulte spent more than a year canvassing some 200 manufacturers of building materials and equipment, wheedling from them their postwar plans and dreams.

As Schulte's research began to produce unexpected results, Burns' conception of the project expanded. He originally intended to spend only \$20,000 but soon the sky became the limit. Costs took an abrupt turn skyward last spring when he purchased for \$75,000 a lot which he was unable to obtain on a short-term lease. Ideal for exposition purposes, the site is on Wilshire Boulevard, which contains the famous "Miracle Mile" and is one of the most heavily traveled streets leading to downtown Los Angeles seven miles away.

* Postwar House is all Burns'. Henry J. Kaiser is in no way connected with it.

Shortly after V-E day the many preliminaries were complete, ground was broken and, with the aid of special priorities from the War Production Board, construction began. Fortnight ago the job was about finished, and the surrounding high board fence was to be knocked down. Soon Los Angeles, attracted by more publicity than usually introduces a screen star, would flock to see Burns' house.

In return for a modest admission fee which will discourage curiosity seekers, the public will be escorted through the house and depart with a single piece of literature—a booklet describing the house and its contents. No effort will be made to sell anything. Trained guides, rather than manufacturers' representatives, will explain the various items of equipment and their operation. Burns, on the other hand, will obtain visitors' reactions through interviews, questionnaires and judicious eavesdropping. He does not intend to

compile a prospect list with visitors' names.

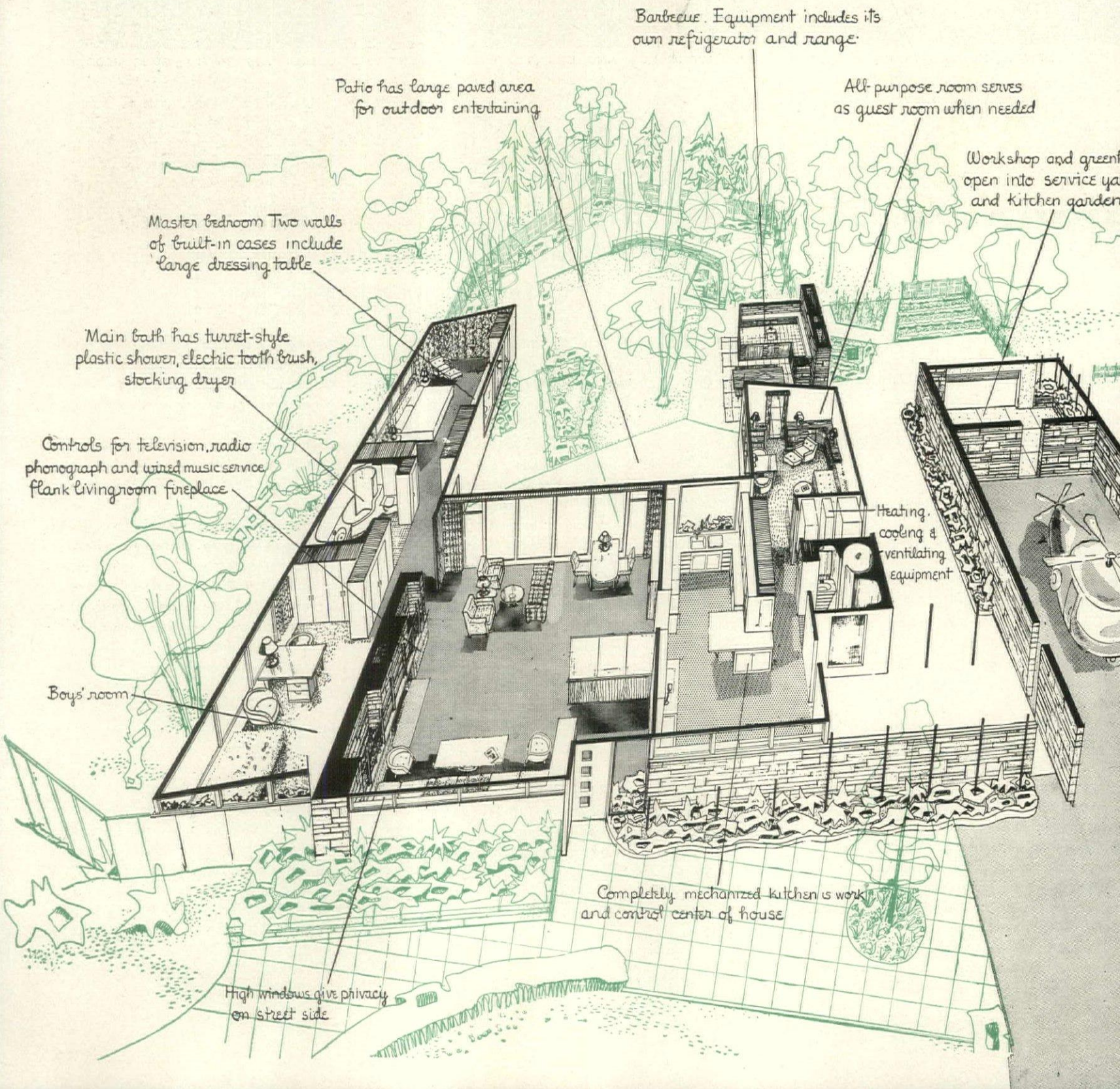
Prediction is that close to 1 million people will inspect the Postwar House before it closes two years from now. If 750,000 do and if Burns decides to charge them a dime apiece, he will recoup the \$75,000 he put into the house. Appreciation in the value of the land (already reported to have doubled since its purchase) may cover the \$2,000 a month he expects to spend on the operation and maintenance of the project. Additional return on the investment will be less tangible, measured in terms of increased good will for the industry and bigger business for Burns.

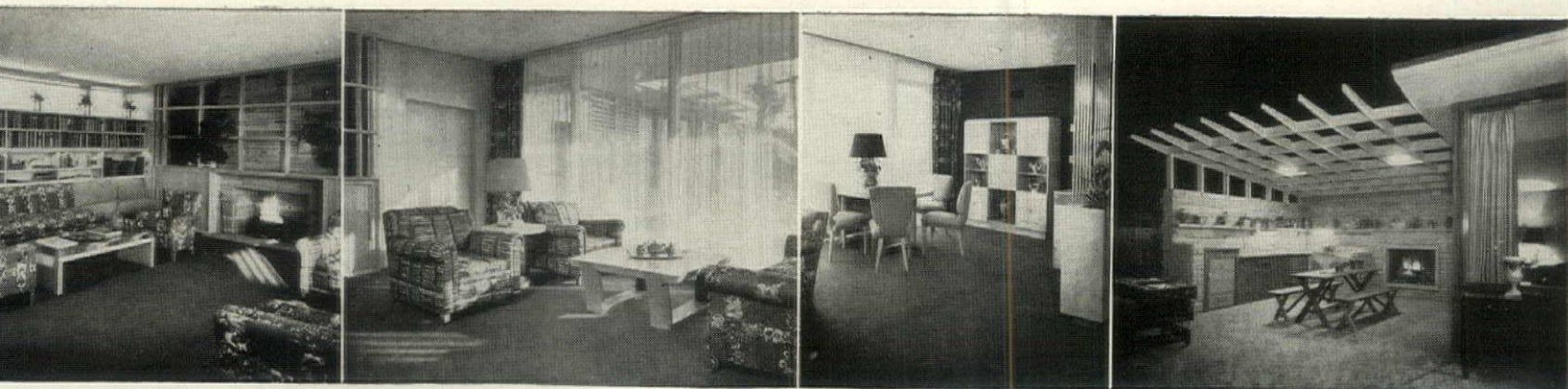
Design bows to progressive trend

In appearance, Fritz Burns' project—like most model houses—hits what might be called a high level of average taste. This is partly a reflection of Burns' desire not to overshoot the public, partly the inevitable result of

crowding more features into one package than would ever occur in real life. Architecturally, the house marks the final collapse of the California stucco idiom; its emphasis on natural textures, horizontal lines and large glass areas must be reckoned an advance over the still-born attempts to import the Cape Cod salt box and the Louisiana plantation house into the West Coast. In sponsoring this design, builder Burns has given tacit proof that he feels prospective home owners in the City of Angels are as ripe for a change as those elsewhere.

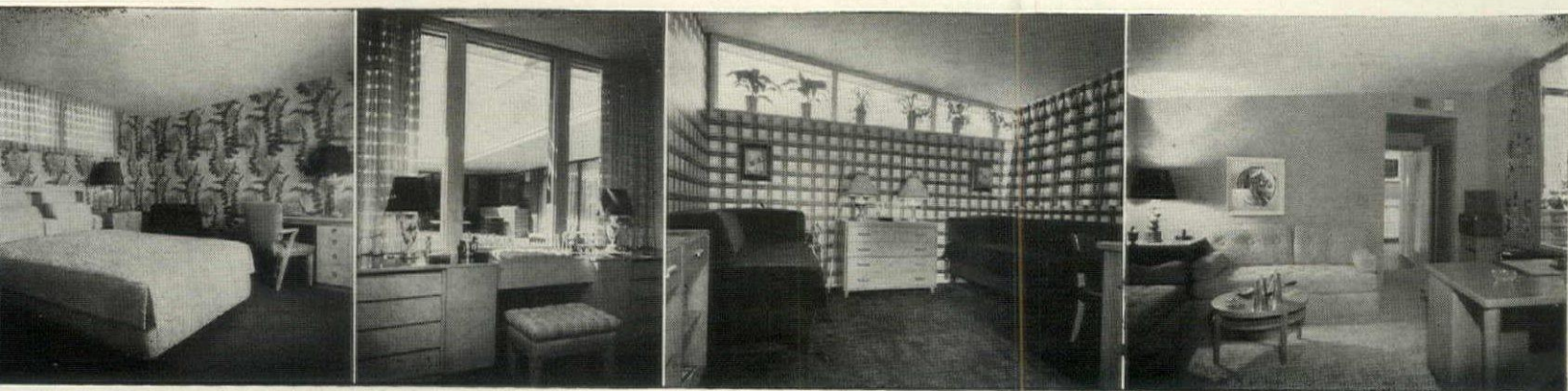
There has probably never been a house with more gadgets in it and the chances are there never will be. No salesroom could adequately convey to the layman the *performance* of all these varied items. They have to be seen in action to be understood. Collectively and in action, they make a staggering array of mechanized operations and individually many of them are debuts of genuinely-needed items.





LIVING Like the house itself, the interiors are dedicated to the display of as many novelties as possible. As for the decor, it is best described as exuberant. Television and radio sets flank living room fireplace (left, above). Barbecue (extreme right) yields a handsome, well-equipped and serviceable outdoor dining area.

SLEEPING A monster bed, with disappearing Pullman arm rests and quilted cover, dominates the main bedroom (left, below). Facing it is a 10 ft. dressing table—a new high even for Hollywood. Walls in this room and boys' room are hung in fabric specially treated for washability and stain resistance.



Deceptively large in appearance, the Postwar House is actually five rooms wrapped around a patio.

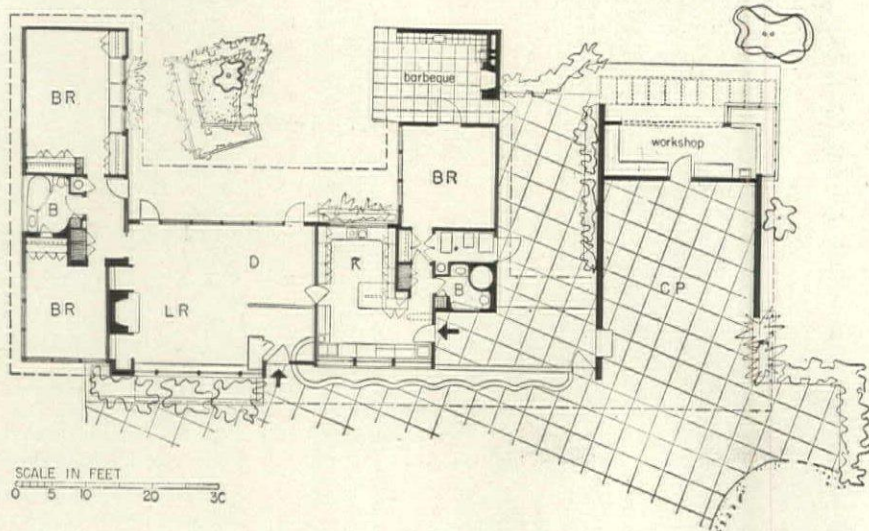
WURDEMAN AND BECKETT, Architects

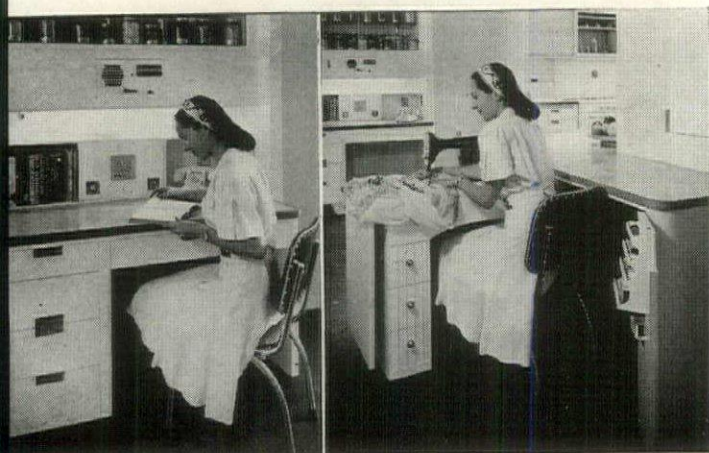
ECKBO, ROYSTON & WILLIAMS, Landscape Architects

DOROTHY AMES of BULLOCK'S, INC., Decorator

FRITZ B. BURNS, Builder

Designed for a family of two adults and two adolescent boys, the house represents a canny approximation of what building professionals expect the public to demand. Although not designed for actual use, it has only one or two weaknesses—the front door is a long way from the kitchen, only internal access to the all-purpose room is through the kitchen. This all-purpose room can be used for sleeping a guest, as a retreat for parents fleeing their children or vice-versa, or as a sickroom close to the housewife's base of operations. The large and handsome outdoor living space, with its completely independent cooking facilities, is a feature which most families would relish. And the workshop and garden room behind the garage—with one wall of aluminum electrically-operated to roll up against the ceiling—would be a life-saver for garden-conscious parents or model-building sons. In addition to such multi-use rooms, the house includes every space and labor-saving device which its sponsors could lay hand to. All storage space is built-in, with special hardware and interior illumination.





Planning center (left) puts controls at housewife's finger tips. Complete facilities for sewing (right) are added feature.



Corner space utilized by revolving shelves for utensils and tools.



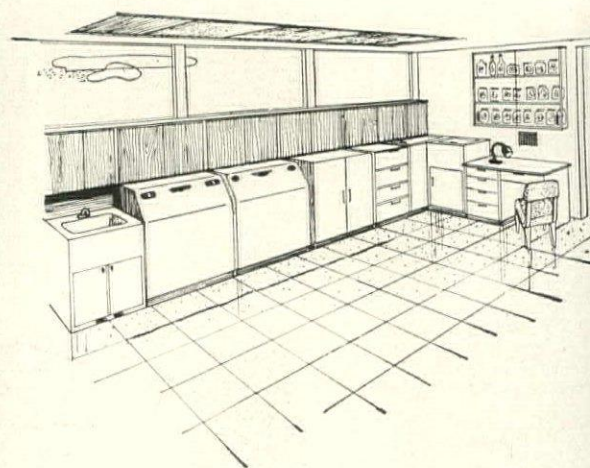
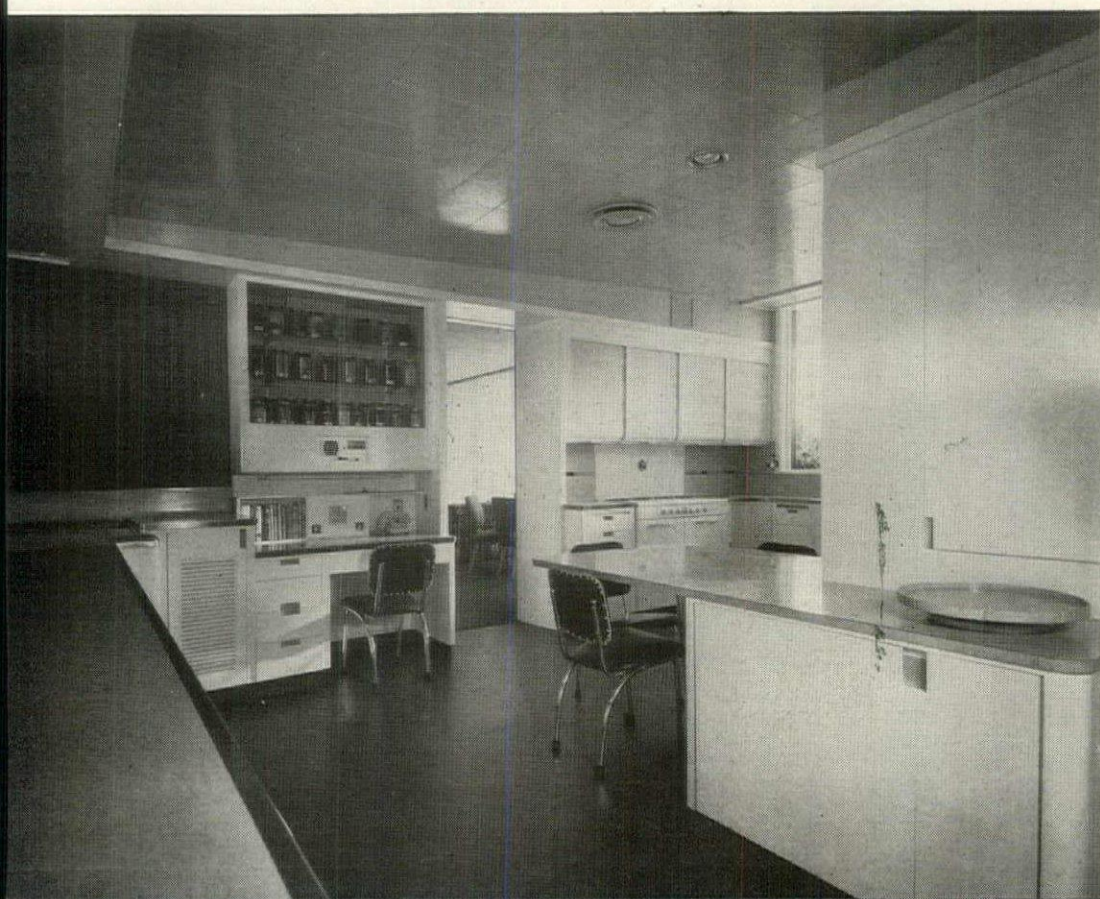
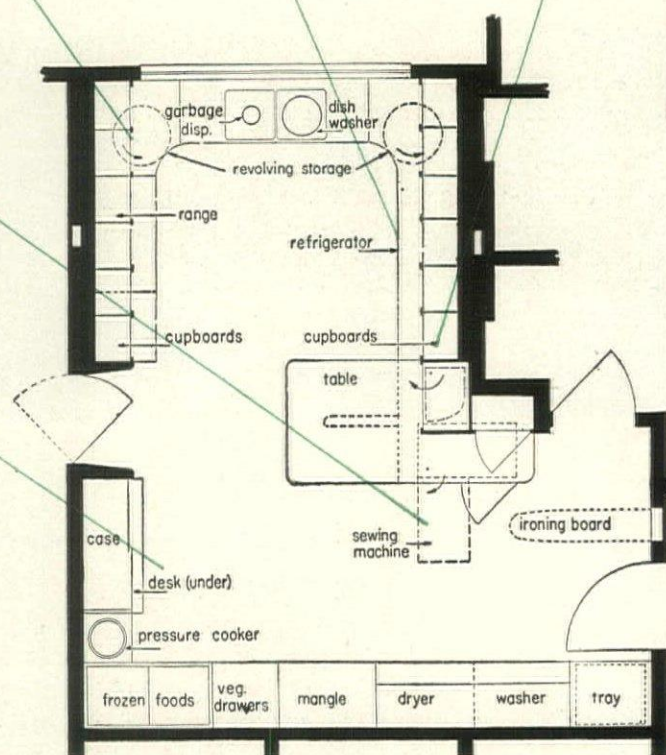
Refrigerator is compartmentalized—more efficient and handier.



Roller-type doors reveal slots for storing platters.

The kitchen incorporates most features most housewives have dreamed of.

Mr. Burns was able to assemble his kitchen almost entirely of actual products—i.e., of equipment which, if not already on the market, shortly will be. In size, plan and equipment, it probably represents an accurate synthesis of current opinion on the subject. It is large in size. It is organized into separate work centers. And it is packed full of as many mechanized items and controls as a B-29. Moving clockwise from the living room door, it boasts: an independently vented stove whose burners are arranged in one row across the back; an electro-chemical garbage digester and an hydraulic dishwasher, both of them served by a self-retracting, low-pressure hose instead of a faucet; corner cupboards with revolving shelves; a large counter-height refrigerator with drawers across the bottom and tip-out bin type doors across the top; a large table (for eating, food preparation or sewing and cutting) lighted by a down-light built into the ceiling. Beyond this table is a sewing machine which swings out and up; an ironing board which drops out from wall. Along the front wall of the kitchen is a complete laundry in 4 units; a specially-ventilated metal drawer cabinet for storage of fruits and vegetables; a low-temperature frozen food storage unit; and a built-in pressure cooker. Commanding the entire room is the desk and control center.



All cabinets are metal, with specialized storage compartments, plastic doors that roll up like window shades. Continuous strip lighting along the under side of wall cabinets gives shadowless lighting of counter.

And the house is studded with structural and mechanical innovations.



BURNERS IMPROVE SAFETY, SPACE, VENTILATION

Next to the kitchen, the bathrooms have the greatest concentration of gadgets. There are, for instance, a round mirror framed with a recessed circular mirror, concave in section and back lighted by a circular fluorescent light; a sun-tan lamp in the ceiling above to give the husband a treatment as he shaves with the built-in electric shaver; a hair drying lamp (also in ceiling) for the wife; and an electric toothbrush. Toothbrush and shaver are on cords which pull out for use and snap back when idle. There is a panel ray auxiliary bathroom heater which emits infra-red rays to dry the bather. There is a magazine rack, radio and ash tray beside the automatically flushing toilet (lean back and it flushes) which is of the tankless silent-flush type. There is a stocking-drying cabinet with heat lamps below.

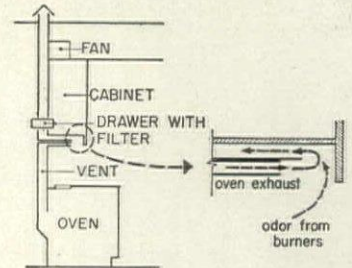
A revolving turret-type shower door of plastic converts one end of the tub into a circular shower stall, the curved door suspended from a circular track in the ceiling. Behind tub and sink is a curving sheet of opaque plastic, lit by a window in daytime and by fluorescent tubing between wall and plastic at night. All illumination, artificial and natural, thus comes from the same side of the room.

It is as the result of deliberate aforethought that the bathrooms give the appearance of something stamped-out like an auto body or a refrigerator case; something offered in various "models;" something mass-assembled and sold prepackaged in cellophane. All corners are rounded; all surfaces are continuous—even the ceiling; finishes simulate enameled metal. All equipment appears to have been stamped out of the same piece at the same time—sink, toilet, tub—all are integral parts of the single whole. It is a water-proof "mock-up" of a 1950 bathroom.

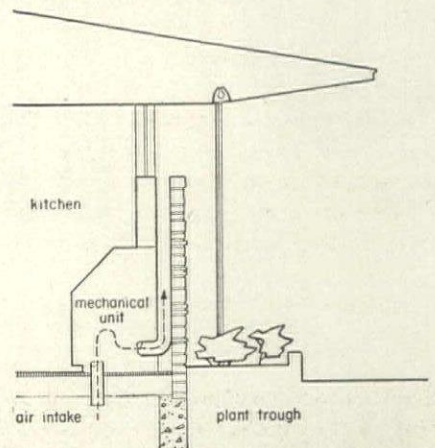
STRUCTURALLY, the house is not extraordinary. The reasons for this are largely practical—if Burns had waited to have his streamlined bathroom stamped out of metal in one piece, he might well have had a long wait. Similarly, he had the house largely constructed of conventional materials—they were available and

"shingle" which should be as effective as it is novel—a 1 by 8 ft. unit consisting of sheet aluminum formed around an insulating board core and laid in horizontal shiplaps, like clapboards.

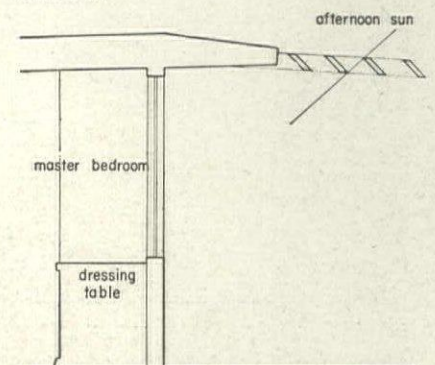
In such details as ventilation, the designers have faced and mastered some characteristic problems. The house is, of course, a sealed envelope: but a local ordinance requires provisions for natural ventilation in case of air conditioning fail-



ure. This has been met by louvered wall panels in each room. In the kitchen there was the tricky problem of isolating waste gases of the range and various motors from the main air-conditioning system. The range, whose burners are at the back, has an independent forced draft vent directly to outside. In the other equipment, air from under the floor passes over the motors and is exhausted through a long horizontal vent on the outside of the kitchen wall.



Although they were not after a "solar house," the Los Angeles laymen will learn a lot from the architects' orientation and insolation. Wide eaves protect windows from summer sun and skylare; sealed double glazing is used throughout, the outer layer of heat absorbing glass in east and west windows; and a louvered sunshade protects the window of the master bedroom.

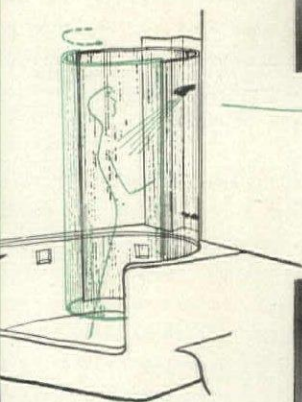


Concave reflector lights mirror

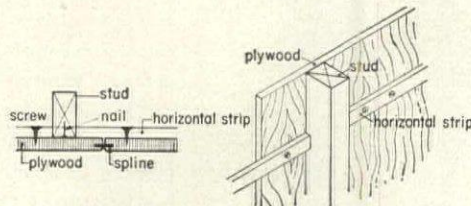
Mechanized toothbrush and razor on snap-back cords



Plastic turret-type shower door slides on circular ceiling track

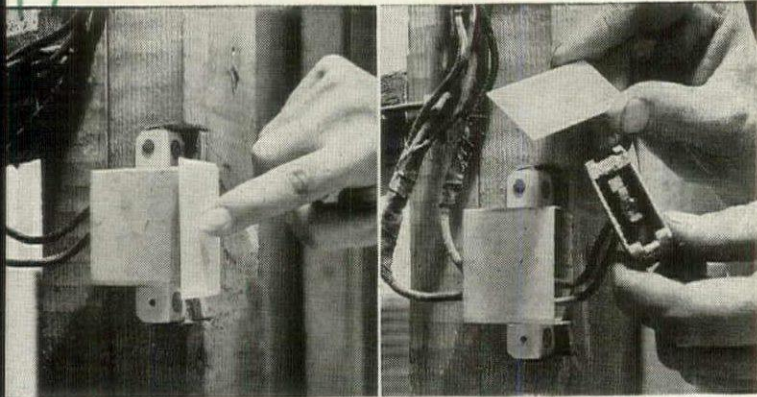
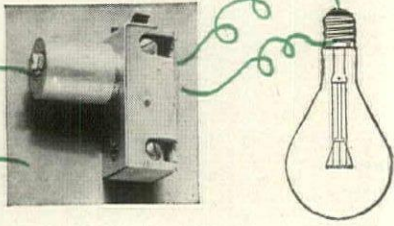


Opaque plastic wall is back-lighted by window and fluorescent lighting

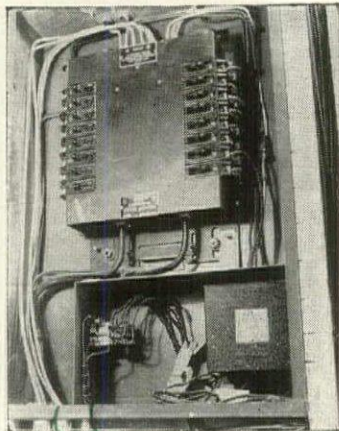


the postwar ones were not. Yet even within these limits, the architects have incorporated many valuable details. They have evolved a technique for attaching exterior plywood panels to the wood frame so that no nails or screws perforate the outside surface. They have used a roof

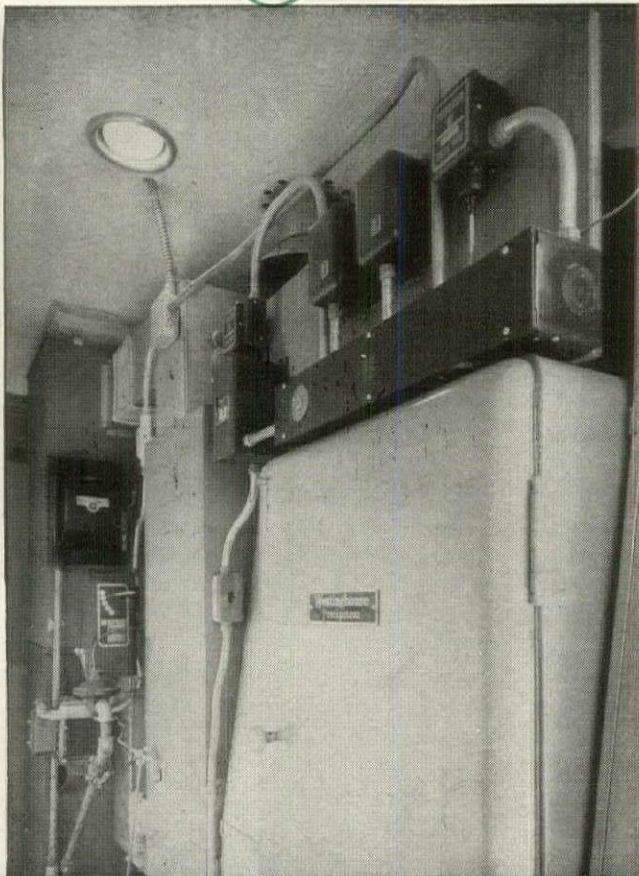
Watch out for the buttons! An extraordinary network of electronic devices laces the structure



Remote control of all switches is achieved by a small lighted push plate. Impulse is relayed to solenoid which actually operates the switch, which may thus be located at fixtures.



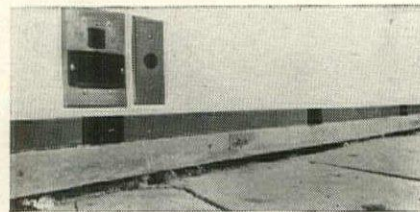
Wiring between control station in master bedroom (left) and rest of house is simplified by relays (right). Electrostatic air filter (below) is one of first such installations in a small house.



The electrical system falls into three broad sections—one for lighting and powering household appliances; one for the complex sound and communication system; and one for various independent mechanisms such as the lawn sprinklers, overhead doors and air-conditioning apparatus. Controls for these three systems are centered at two points—in a bedside stand in the master's bedroom and in a panel over the desk in the kitchen.

THE LIGHTING SYSTEM is operated by a new control device which replaces the conventional push button or toggle, a small plate of back-lighted translucent plastic is the operating mechanism. Pressure on this plate (by finger, elbow or shoulder) activates a 24-volt AC impulse relay to a solenoid-controlled ratchet in the switch proper. According to its inventor, W. W. Brockway, it has several advantages over the conventional switch. It permits the switch to be located at the fixture instead of the control point. Because of the low voltage involved, no conduit between control point and switch is required. Switches can be wired in parallel for multi-point operation at minimum cost. By multiple wiring of all light switches to a common relay, a master control is obtained more economically than in conventional wiring. All push plates are continuously illuminated but their tiny bulbs use less than 9 watts for a 24-hour period.

Instead of individual base plugs, a continuous strip outlet is built into all rooms



just above the baseboard; in the kitchen this strip is located just above the counter.

In keeping with its showcase function, the house—inside and out—makes lavish provisions for lighting. All of it is built-in and most of it would be standard for good commercial work. The wide eaves of the entrance front and those surrounding the patio are studded with downlights and floods. The kitchen has continuous strip lighting over the counters—concealed in the bottom of the cabinets. The cases have built-in fluorescent lighting. Bacteriocidal ultra-violet lamps are built into the specially-designed drawers for silverware.

THE TELEVISION RECEIVER in the living room is only one aspect of the

house's sound and communication systems. For sound, there are five radio sets—a large AM and a large FM hooked into the house-wide system and three independent small sets in the master bath, all-purpose room and workshop. There is an automatic, record-changing phonograph and a complete recorder—also hooked into the main system. Finally, the house is equipped for a wired music service over the telephone lines. All these sources of canned music are hooked together in a network of loud speakers and remote control selectors in such a way as to serve the living room, both bedrooms, kitchen and barbecue. They are wired up so that both radios, phonograph and wired music can be controlled at any of these points; and the system is so designed that two different programs may be heard simultaneously at different points!

ASSOCIATED WITH the sound system is a talk-back inter-room communication system. It serves master bedroom, kitchen, living room, barbecue, hobby shop, front door and service door. However, there are only two master control stations—master bedroom and kitchen. In other words, communication is possible only between stations selected at one of the master control points. Each station both receives and transmits and can signal the master stations that communication is desired. Standard telephone instruments are located at both master stations but there is no connection between the house system and the public one.

There are many less spectacular features which further complicate the electrical system as a whole. Part of these merely serve built-in or mobile appliances—the mechanized toothbrushes and razor in the bath, the sewing machine in the kitchen. Part of them power the air-conditioning apparatus and its thermostat controls. And some of them operate the electro-chemical garbage disposer and the sprinklers in the lawn.

AIR CONDITIONING system provides complete year round control. All equipment is concentrated in a small utility room off the kitchen. Here fresh air from the outside is mixed with returned air and passed through an electrostatic filter. Then, depending upon the weather, it is either heated or cooled and de-humidified. Delivery of the conditioned air to the rooms is near the ceiling line, returns are all at the floor. Except for the doors and the special kitchen and bathroom vents, the system is thus entirely closed. In the kitchen, the conditioned air inlet is a ceiling fixture with concentric circular fins to diffuse the air in a flat stream across the ceiling.

REPORT FROM EUROPE

EUROPE today is in chaos. Switzerland, Sweden, Norway, Belgium and Denmark are tiny islands in one vast floundering morass of misery. How deep that morass, how real the misery, cannot be conjectured any more than one can "imagine" a toothache.

In the early stages of my trip, I naively assumed that one might ignore the obscure niceties of national and international politics. Certainly, I told myself with typical American logic, one can (and must) study the problems of reconstruction on the lofty aseptic levels of techniques, planning, statistics. It was all so easy.

And so, in France, I began. There initially, and later in Germany, Italy, Switzerland and England, I discovered that the first step towards comprehension must be an analysis of the political picture. Nothing is divorced from it. Incongruous as it may seem, the Potsdam Treaty may have enormous indirect influence on all European architecture.

Europe's accident toll is high today. Her people are underfed, weak; their eyes are dull, reactions sluggish. Minor scratches suppurate and kill. Broken bones refuse to knit. As our scientists have found, continued under-nourishment produces lethargy. The mind is content to let the starving body merely breathe, exist. This must be kept in mind in measuring the speed of the continent's recovery.

FRANCE

In October, 1945, the French had their first national election in nine years. To stabilize and modernize their government, the French voted to revise their constitution. Thus, while facing economic ruin, French democracy is being reborn. But the accouchement will not be an easy one. Things have improved little since war's end and the people are impatient.

At any rate, until the political crises are decided, reconstruction will progress little. Raoul D'Autry, who had headed De Gaulle's Ministry of Reconstruction, has been replaced by Francois Billoux, Communist, and former Minister of Health. (This move brings housing and reconstruction close to Britain's set-up, where Aneurin Bevan, Minister of Health, is running the show.)

The proposed French reconstruction program is one part of a vast plan to re-shape France as a physical and economic unit. The French see the present plight of cities as the result of haphazard industrial expansion. An attempt is being made to decentralize industry, to control city size for strategic, economic and social reasons. To stop the trend from farm to city, the new France will attempt to lure workers back to the soil with movies, libraries, recreation facilities.

Like most of Europe, France faces bankruptcy. Needing our goods, she has no dollars

In Europe each devastated nation now seeks its quickest way to reconstruction. New methods, materials, design solutions will come out of this gigantic task. To orient FORUM editors and readers, Philip Kelly of our staff recently returned from a highspot survey of France, Germany, Italy, Switzerland and England. As an accredited representative of The FORUM, he enjoyed unusual access to responsible sources. This general review will be supplemented from time to time by detailed reports on individual countries.—Ed.

Pix, Inc.



to buy them. She has had 400,000 houses totally destroyed. When the last German troops withdrew, six million French were homeless. Today nearly all the affected towns (over 600) have been replanned, thanks to her indefatigable architects, who worked throughout the war. Yet despite this advanced planning, there is little construction in France yet because of material shortages.

The key to French reconstruction, in a materials sense, is coal. Without coal the production of such essential materials as iron, steel, cement, and glass, falters. In Le Havre I saw mud used for mortar in lieu of precious cement. And without coal French morale, at a dangerously low ebb after five years of hardship, drops even lower. Living in the comparative luxury of an army hotel in Paris we had hot water two hours daily. To most Frenchmen, this represented the height of opulence.

Even before the war, France lacked modern heavy equipment. Today, with factories blasted, bridges and railroads gone, and shortages of every conceivable type, reconstruction is hamstrung. A general Commissariat of Modernization and Equipment is attacking these bottlenecks. Manpower is short too. Several million Italian and Polish laborers are to be recruited to solve this.

Another major obstacle, both to agriculture and reconstruction, are the myriads of German mines. The French estimate that one hundred million still remain. They hope to get 1½ million German reparations workers for the dangerous work of removing them.

Feeling runs high between various architectural groups. One set wants to re-build the towns and cities largely as they existed. Opponents of this plan assail it as an attempt to erect a bogus culture, a clinging to the past. Even the modernists are divided into two schools. The International set headed by Le Corbusier, are opposed by the Regionalists, who wish to retain contemporary design but incorporate with it regional patterns. The erstwhile staid Ecole des Beaux-Arts, stronghold of traditionalism and classicism, now stresses contemporary design, I was told by Professor M. LeConte, formerly of Yale.

One bright spot looms out of France's dark sky. Her workers will face scanty rations (1,500 calories daily was the 1945 allotment; we get about 3,000) and privation. But there will be no unemployment problem for years. At least the war has seen to that.

GERMANY *Excerpts from a letter to the FORUM*

"It was raining and miserably cold, but we finally got away, ducking storms all the way up. In 3½ hours we were over Berlin's Tempelhof Airport. Like most of Berlin, its once imposing buildings are now bomb-shattered hulks.

"Of Berlin's actual appearance, mere prose can convey nothing. We flew for a half hour over miles of gutted ruins. The face of Berlin is scarred and pockmarked like a dreary lunar landscape. Incredible as it may seem, I have yet to see a whole block in this sprawling city. We bombed the center repeatedly, with awe-inspiring effect. Then the Russians came and circled the city. When the Germans continued to resist, they blasted their way in and what was left of Berlin got the works. Mile upon mile, block after block, only the shells remain. Berlin is one huge graveyard. And still they find bodies. The city and the people are crippled. Army reconnaissance cars patrol the city at night, there are frequent shootings. Berlin, and most German cities over 20,000 population, are kaput...

"As you know, like all Germany, Berlin is divided into four zones; U. S., British, Russian and French. A joint Allied Control Authority of twelve divisions (Transport, Economic, Finance, Legal, etc.) directs the growing German administrative activities. Work of the Control Council and Twelve Directorates is coordinated by a committee of four, with representatives of each Allied power.

"Under the Potsdam treaty, of course, all Germany was to be treated as one economic unit. Unhappily, there is quite a gap between announced policy and reality. Each of the four nations tries to run its own show, keep its cards close to the chest. Also, unhappily, we have no one trained and interested in occupying Germany. Roughly it can be said that Russia, France and Britain know what they

want for Germany and Europe. We apparently want nothing, but because of our economic and military power we occupy the key position. Everyone is looking at Uncle Sam, and he's looking homeward, angel.

"The whole basis of U. S. policy is to give Germany an eventual economy roughly "comparable to those of surrounding nations." In mid-1946 we hope to turn over almost all administration in our zone to selected Germans, let them de-Nazify themselves. Generally speaking, our policy as regards German reconstruction is that beyond basic necessities, we don't give a damn.

"Lack of clearly defined reparations terms is holding up German planning and rebuilding, as much as the virtual nonexistence of materials and manpower. In Berlin the head of an 800 man Building and Housing Council threw up his hands when I asked him what plans were shaping. "We do not know what kind of a city Berlin will be allowed to become," he said. "How can we plan?" Berlin's present 3,500,000 population may shrink considerably when they learn the industries aren't coming back.

"I question seriously whether much of Berlin is worth rebuilding. Chief housing problem is to fix one room in each house so it may be heated. I was told that it would take years to clean away the rubble. They have no picks, shovels, trucks, railroads—nothing.

"Clifford Strike, president of New York's F. H. McGraw construction firm, is Chief of U. S. Building Materials and Construction. As such he is responsible for production and allocation of all construction, and of 31 classes of building materials, forestry and timber production. Having surveyed all production facilities and stockpiles, his outfit then prescribes what to do with them. Strike said we had captured many valuable German records, which the Nazis had conscientiously filed and hidden with characteristic neatness. We also have many of the top men in the Organizations Todt and Speer. These men loosen up and talk with fellow technicians, especially after months in prison. Strike believes it will take 20 years for the Germans to get back to livable standards. After seeing Berlin, one can almost agree."

ITALY

Nowhere are the threads of international politics, national bankruptcy and reconstruction more hopelessly intertwined than in Italy. Yet despite the vicious black-market and a smouldering internal political crisis, nowhere are architects, planners and designers working more creatively.

Although the British and American Control Commission which really runs Italy has been relaxing controls more and more, Italy is far from self-governed. There are six major political parties and a score of minor ones in Italy today. The present Italian government represents these six parties, but its members are purely appointive. Representatives of the six parties have long wanted to throw out all remains of the old monarchy. But the Allies (especially the British) have insisted that a national plebiscite is needed for such a deci-

sion. Today, over two years since Italy surrendered, that national election has not yet been held.

Italy is becoming more and more a British show. Here, as elsewhere in Europe, we want nothing and the British, who have long regarded the Mediterranean as their colonial "life-line," are taking over. Many Italians, especially the strong leftist groups which formed the main anti-Axis partisan resistance, feel that Italy will never be regenerated until the British and Americans clear out and let the bubbling pot come to a boil. This group is opposed by a melange spearheaded by old monarchial and conservative adherents, who fear revolution and bloodshed if the Allies do leave.

Prior to the invasion of Abyssinia, the Fascists did plenty of building in Italy; much of it was grandiose, but some was progressive and not bad. Then, as the government began to convert to a war economy, a system of "thought" control began which in 1938 had culminated in a complete rejection of free expression. It was about this time that Il Duce returned from a seance with Adolf and announced that modern architecture was "decadent, Jewish and democratic." Accordingly the emphasis shifted to neo-classicism of a bastard type. Yet, try as they would to conform, some of the boys really couldn't shake off the clean pure lines of contemporary design so easily.

The ideological splits which keep Italians divided politically permeate the realm of architecture. The young group—liberal, democratic and anti-fascist—is fighting to set up the reconstruction program to serve the needs of the people. The other group, largely older men, want to stress monumental preservation, worry about keeping the picturesque character of the old towns. Even before the war there were only 33 million rooms for 45 million Italians. During the war, an estimated 7 million room units were destroyed. The young group maintains that the important task now is to house these shelterless millions now, worry about cultural patterns later.

Finally, facing all these problems and drastic shortages of food, clothing and building materials, the Italians also skirt bankruptcy. Although the lira is officially worth one cent, black market prices are about 400 lira to the dollar. (The lira has just been devalued, now officially stands at 225 for one dollar). During the past fiscal year expenses were an estimated 125 billion lira, against 25 billion in income. More goods are badly needed. Shoes were selling for 8,000 lira, coats 10,000 lira; cigarettes, 250 lira per pack! One building brick cost 15 to 25 lira . . . a roof tile, 25 lira. A simple storage shed will cost about 6 million lira, I was told.

The inflated price of materials, rent control based on outmoded 1939 levels and fear that the government may requisition all buildings for housing keeps private building at a standstill. The Italian Ministry of Public Works, in consultation with Allied Commission and Italian regional engineers, is responsible for government building. Repair work on damaged buildings is done by the owners, aided by partial government financial aid. The U. S.

Army is not planning to rebuild Italy or any part of Europe.

Demand for U. S. building equipment, materials and ideas is here, but the dollars are not. All U. S. purchases in Italy are controlled by the U. S. Commercial Corporation, which buys under Army orders following Allied Commission directives. Basic policy of the Commission is to give the most important industrial, transportation, power and communication systems first priority. It is expected that U. S. imports of Italian goods will be possible through normal channels very soon.

Town planning, long an Italian strongpoint, has been slowed down because plans needed approval of four Ministries. Action is now being taken to place this key activity under the guidance of a joint Commission which will revise the national town-planning laws in accordance with emergency peacetime needs.

Everywhere, evidences of a new Italian renaissance in design, architectural education and publishing are heartening reassurance that Italian artistry may soon resume its one-time leadership. The spirit of the leaders of these movements is unmistakable and contagious. Divorced from the pre-war concept of subjective political control, the new temper of Italian creativeness is refreshingly free from inhibition, yet shuns the dadaistic confusion which has typified such rebellion elsewhere. From us, they need technical knowledge, money, materials and understanding. Luckily we are beginning to see that in terms of the world today, such an exchange is not purely altruistic.

SWITZERLAND

Not the least of this hardy country's contribution to reconstruction in Europe is its oasis-like quality, soothing and reassuring to the minds of those who have seen nothing but destruction for so long. Here architects and building technicians from many countries find their way for a few days, to share plans, restore the shattered communication of ideas. Aside from this, the Swiss are actively engaged in setting up a clearing house for all European reconstruction activities.

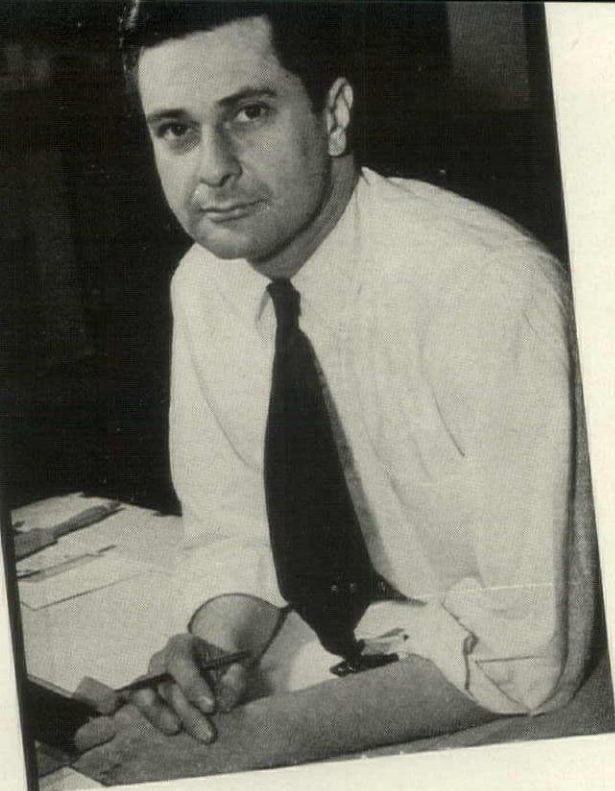
Building in Switzerland is also beset with serious materials problems. Although the Swiss economy is one of the soundest in the world, shortages of coal, steel, cement and other basic components have driven prices upward. However, with characteristic vigor the Swiss carried on various competitions during the war, including an ambitious renovating of many resorts on an integrated national plan.

ENGLAND

In January Britons in every hamlet, town, and city received a government questionnaire. It asked for information on the number of rooms, present dwellers, maximum number which might be accommodated, and rental terms. The prelude to peacetime billeting, it asked that houses be shared with homeless, adding that compulsion would be applied if necessary.

That the Labour government (well aware that its major measure of success may depend on its solution to housing needs) should resort to such steps is ample proof of the gravity of England's problem. Although 1½ million

(Continued on page 154)



Photos; Hedrich-Blessing

A portfolio of work by BERTRAND GOLDBERG

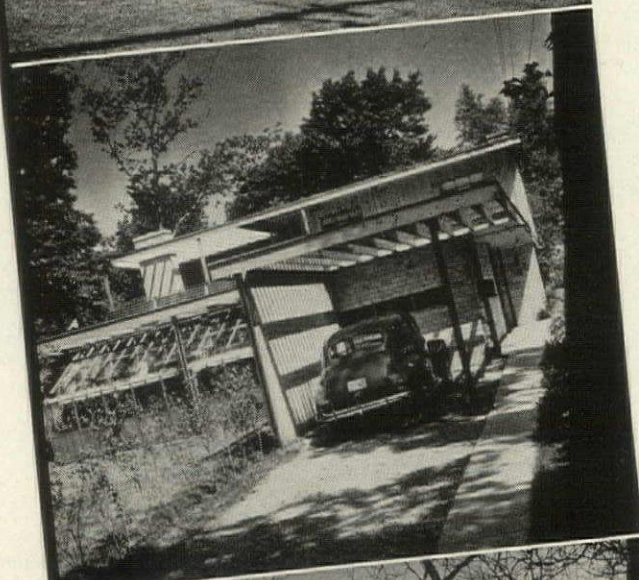
One of Chicago's younger architects, Bertrand Goldberg has designed and prefabricated some of the city's most attractive, least expensive custom-built houses (FORUM, Jan. '40, p. 66). He has also given Chicago some of its larger, tailor-made houses, five of which are presented on the following pages along with a service station which he built from the top down.

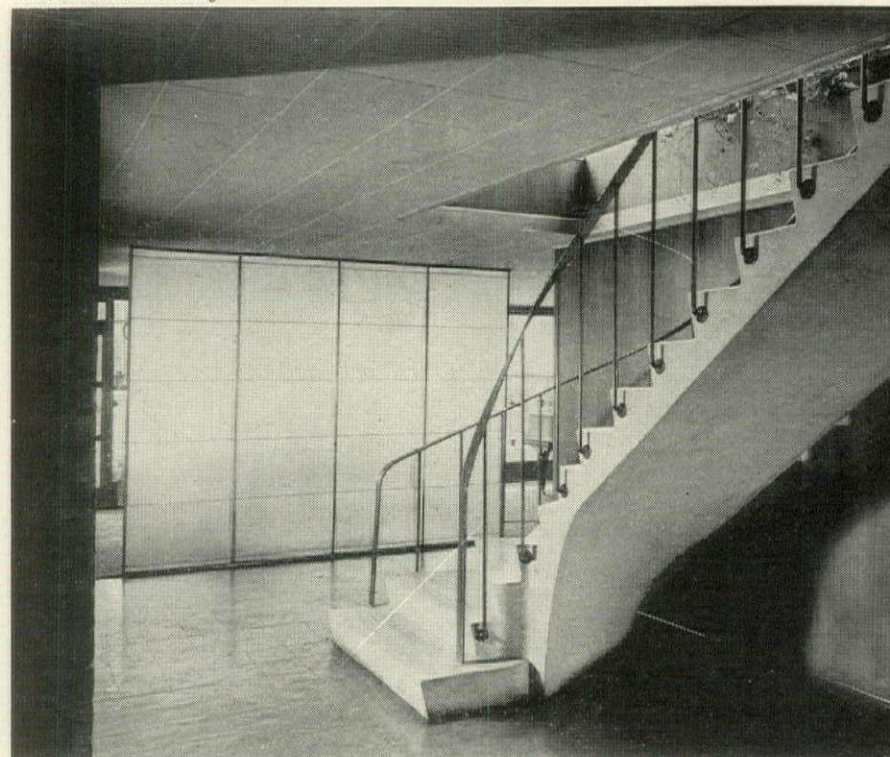
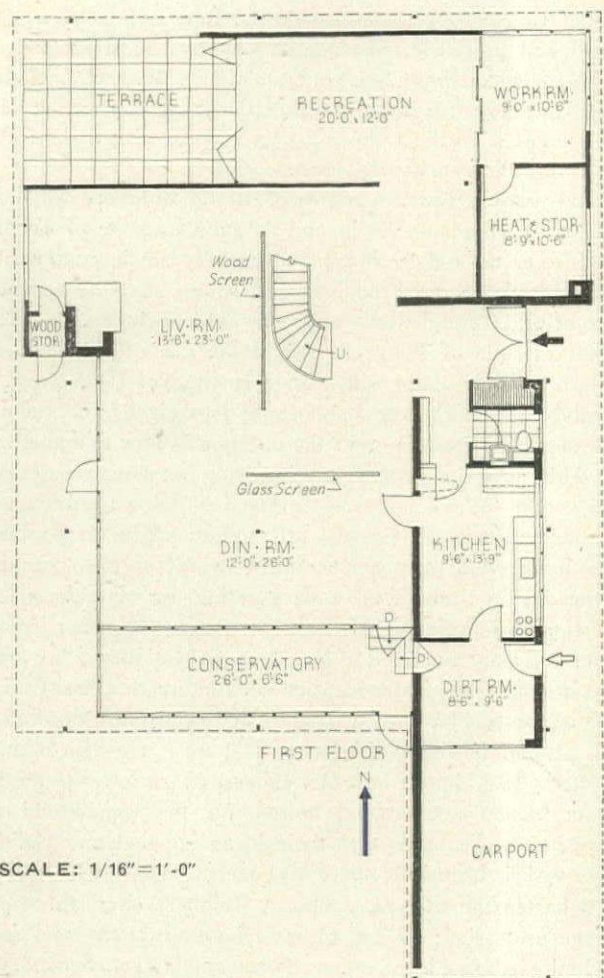
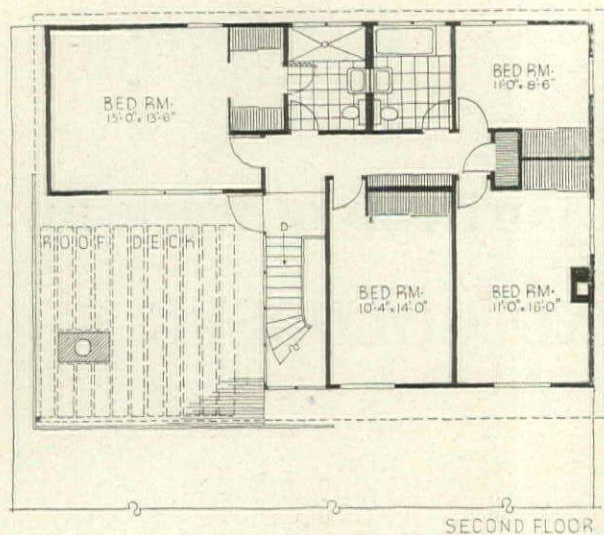
A 33-year-old Chicago native, Bertrand Goldberg was educated at Harvard, Bauhaus-Berlin and Armour Institute of Technology, was further tutored by Frank Syberen Nydam in engineering and by Architect George Fred Keck, in whose office he served as an apprentice. Through study and personal association, he became an ardent disciple of Mies van der Rohe, one of Europe's earliest modern architects, now with Illinois Institute of Technology.

Goldberg's architectural philosophy is straight Mies: the creation of a workable house is easy; the question is, how to make it beautiful. This, says Goldberg, is an "inspiring but dangerous philosophy in a country which has a secondhand building tradition and few building craftsmen." He sees all modern architects pursuing this ideal by striving to create beautiful living space, to found a new craftsmanship through an understanding use of materials and to divert public preference from 20th century suburban colonial to something more genuine. "Alas," bemoans Goldberg, "we architects have in only a few instances succeeded in creating beautiful houses—either because of limited budgets or late-arriving decorators who look around bewilderedly for wall space." He also admits that architects like himself have not endeared themselves to the individual craftsman nor created houses for the commercial market. Nevertheless, he holds that their ideas are real and right—"The paperwork is beautiful; successful execution is not far away."

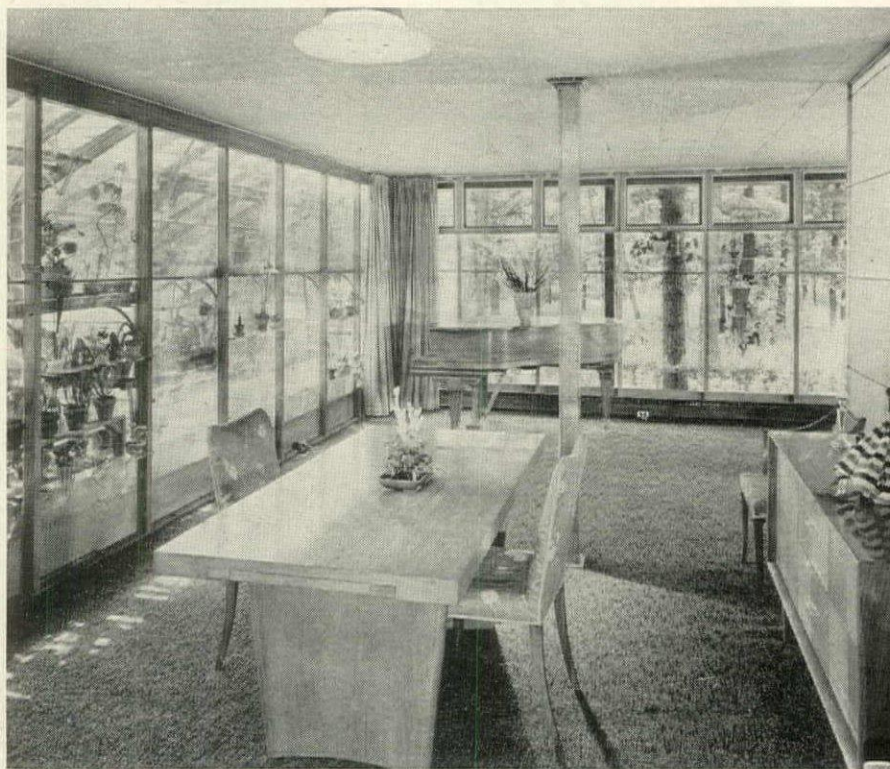
To hasten the success, Architect Goldberg offers three precepts for the profession: "First, we must be more honest and recognize the limits imposed by client, craftsmen and budget. Second, we must create the kind of houses that industry can make possible for a number of people. Third, we must assume that active work of community leadership; no longer can we shoulder the responsibility for creating the physical characteristics of life around us and allow the lawyers alone to determine the qualities of that life."

Such are the Goldberg theories. Their application is seen in the design, construction and materials of his houses and in the way he handles his clients: "Our office does a clean job of explaining to clients that we do not build colonial houses. We never say that we build 'modern' houses. We let the plan of the house evolve naturally. That seems a much better way of pleasing the client than hitting him over the head with the fact that he will have a 'modern' house—a word which is capable of many interpretations. We start in by doing a plan. We never show a client an elevation for at least two months. We have one nice stock phrase that we use on people who come to us with a bunch of clippings and say, 'We want a fireplace that looks like this, a doorway like this, a plan like this, etc.' We just say, 'You are wasting your money; you just need a good carpenter.' Some of them stay interested; some lose interest."





CONCRETE HALL-STAIRCASE CONTRASTS WITH GLASS AND PLYWOOD PARTITION



NATURAL BEAUTIES OF CONSERVATORY AND YARD ARE PART OF DINING

Abrahms house features flexible living-dining area, large conservatory.

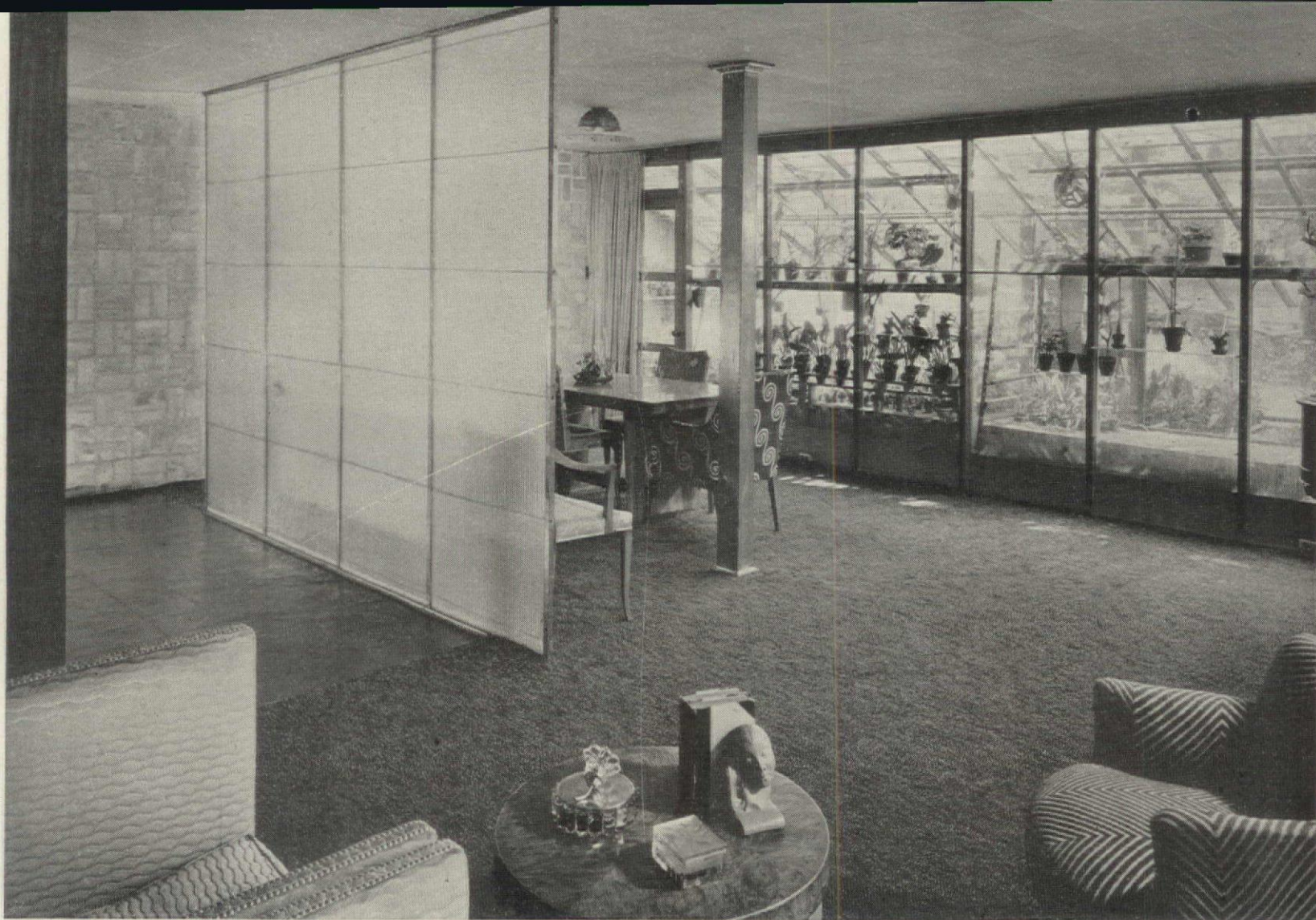
The influence of Mies van der Rohe, in whose footsteps Architect Goldberg follows, is clearly reflected in this design. Subdivision of the space is controlled by the location of supporting steel columns, only one of which (in the dining room) is in the open. One advantage claimed of this van der Rohe-Goldberg building pattern is increased flexibility of space arrangement. Thus, in this house the large 26 ft. by 35 ft. rectangle containing the living, dining and hall areas is permanently obstructed only by the concrete staircase; the lightweight glass and plywood partitions defining the individual areas can be easily shifted should the owner desire to rearrange the living space.

The client's large collection of orchids dictated the provision of a large conservatory. Orientation of the 50 ft. by 140 ft. lot dictated that it be placed at the south front of the house where it became the principal feature of the facade. The dirt room next to the carport serves the conservatory and acts as a vestibule for the kitchen.

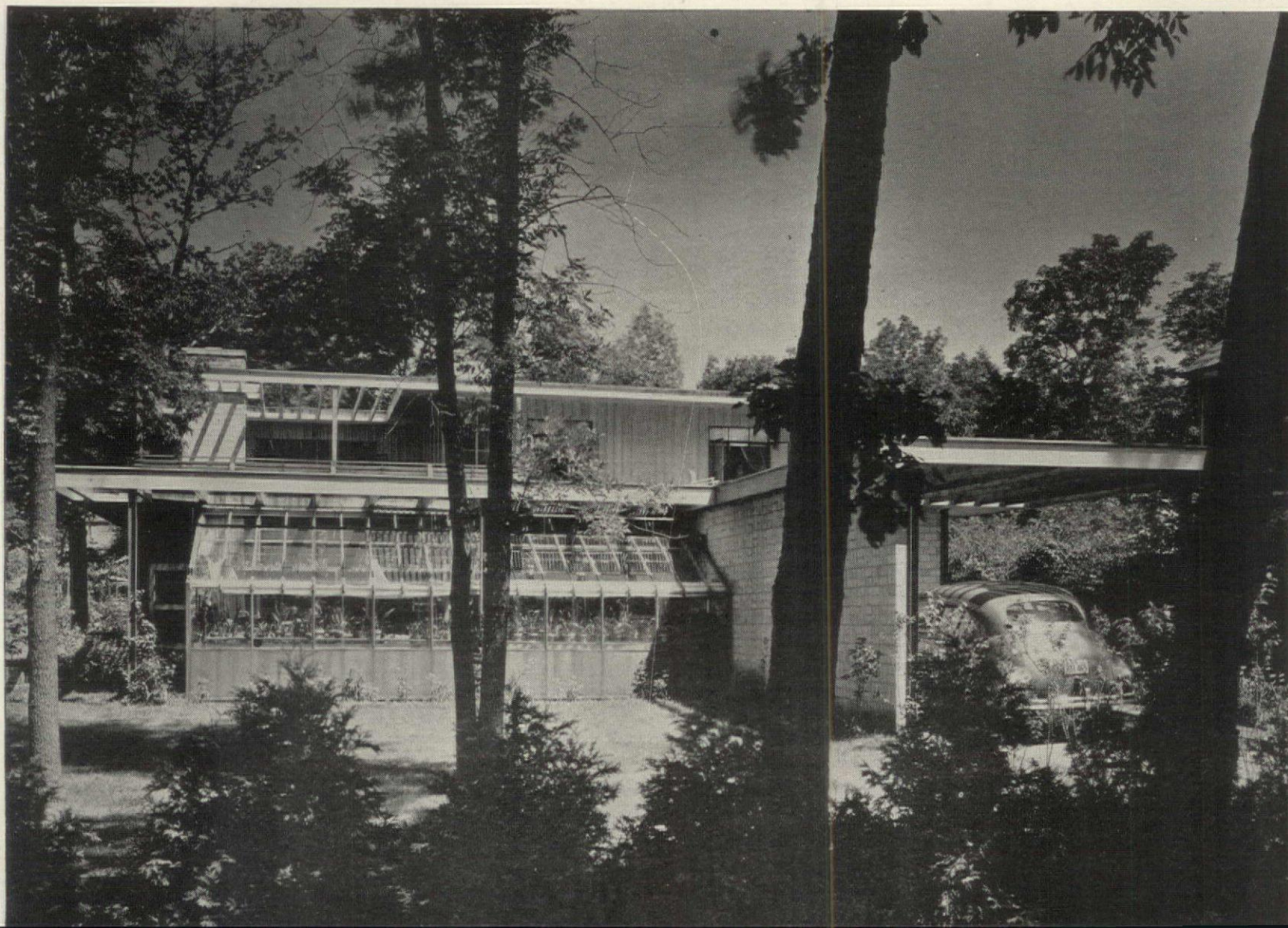
Built in 1936 in Glencoe, a North Shore suburb of Chicago, the house contains about 30,000 cu. ft. It was financed with an FHA-insured \$12,000 mortgage, which covered the entire construction cost.

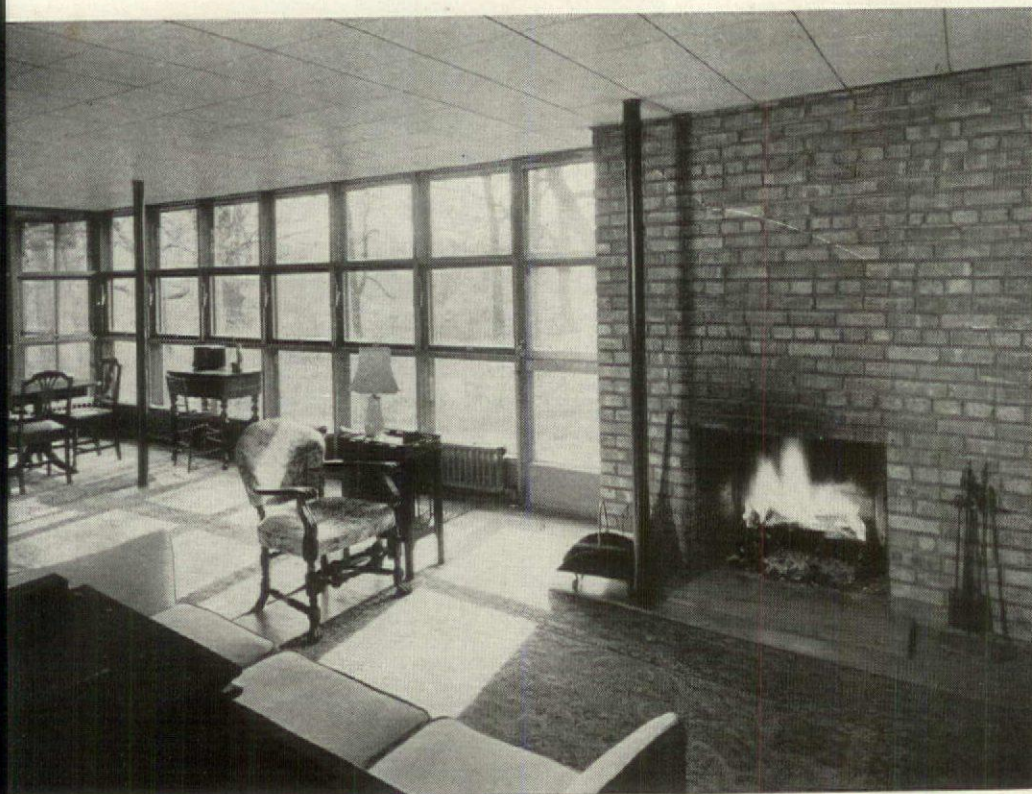
CONSTRUCTION OUTLINE: Foundation—4 in. of cinders, 4 in. hollow tile laid 1 in. apart, concrete, asphalt-coated paper, Bird & Son. 2 in. of concrete. Framing—steel post and beam. Insulation—Reynolds Metallation A, Reynolds Metals Co. Ceiling finish— $\frac{3}{4}$ in. Celotex, Celotex Corp. Floors—red oak. Sheet metal—copper. Sash—Truscon Steel Co. Glass—Pittsburgh Plate Glass Co. Wall finish—plywood. U. S. Plywood Corp. Bathroom equipment—Crane Co. Heating equipment—hot water, American Radiator & Standard Sanitary Corp.

DOVENMUHL, INC., Mortgagee



HALL, DINING SPACE AND CONSERVATORY PRESENT ATTRACTIVE VIEW FROM FIREPLACE CORNER. NOTE STRUCTURAL POST AT DINING TABLE
STREET FACADE IS DOMINATED BY CONSERVATORY WHICH APPEARS MORE AS AN AFTERTHOUGHT THAN AN INTEGRATED DESIGN ELEMENT





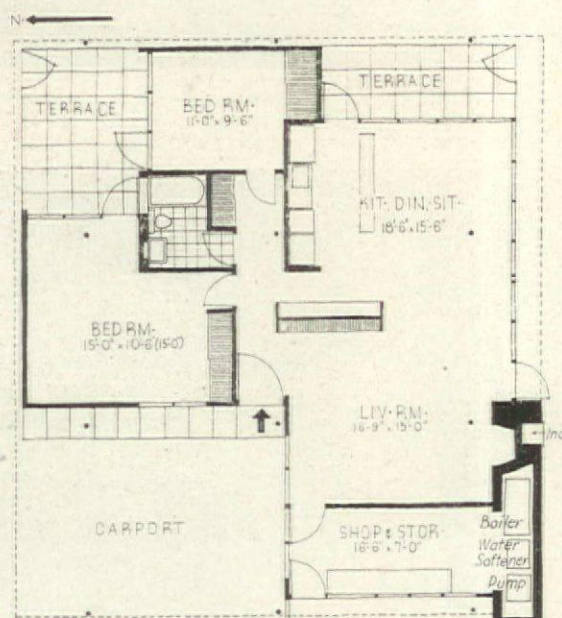
LIVING-DINING AREA IS DECORATED BY MATERIALS IN THEIR NATURAL STATE



KITCHEN IS SCREENED BY ADDED BOOKCASE



STORAGE-WALL DIVIDES LIVING-DINING AREA



SCALE: 1/16"=1'-0"



SCREENED PORCHES IN CORNERS TIE WINGS TOGETHER

Wernicke house combines living, dining and kitchen areas in one big room.

The plan of this small house is well adapted to the unusually composed "family" which occupies it. The client was a school teacher who lives with another teacher and her adopted small boy. An openly planned living-dining wing, only partially divided by a form of storage-wall, makes for easy maintenance and communication between areas. However, the plan apparently proved to be too open, for the owner has added a large bookcase in an effort to isolate the laundry-kitchen. A large, conveniently located shop provides work and play space for women and boy alike, and accommodates the heating plant.

Following van der Rohe's precepts to the letter, Architect Goldberg here, as in most of his houses, lets materials speak for themselves in interior decoration. Walls are unadulterated brick, plywood and glass; ceilings are fiber-board tile; floors are red oak on asphalt paper, sleepers and a 4 in. concrete mat. The structure, too, is undisguised—steel posts appear in the dining area, beside the fireplace and in the larger bedroom. A white gravel roof attracts attention as one approaches the small wooded hollow along the access road.

Built before the war, the house cost \$7,000, was financed with an FHA-insured mortgage.

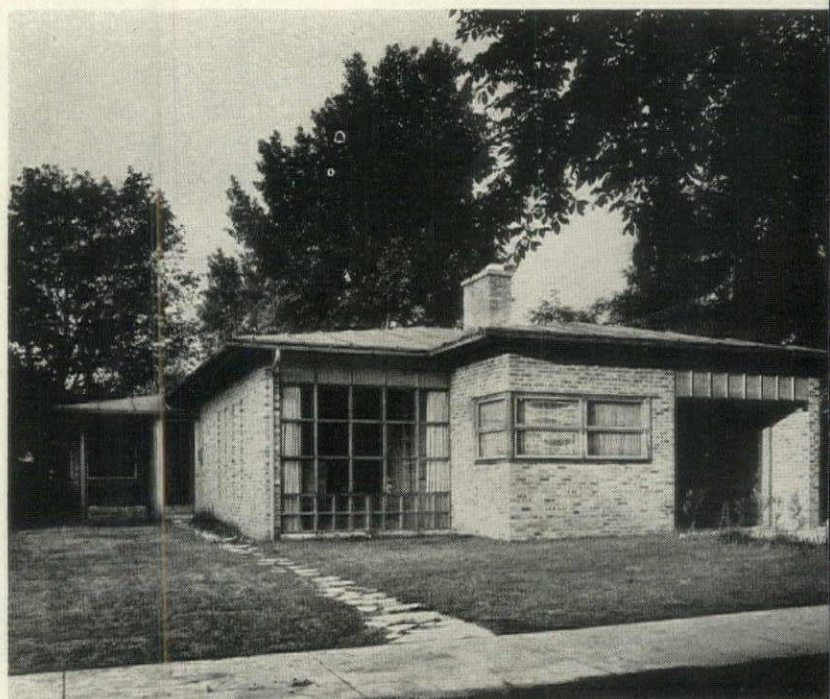
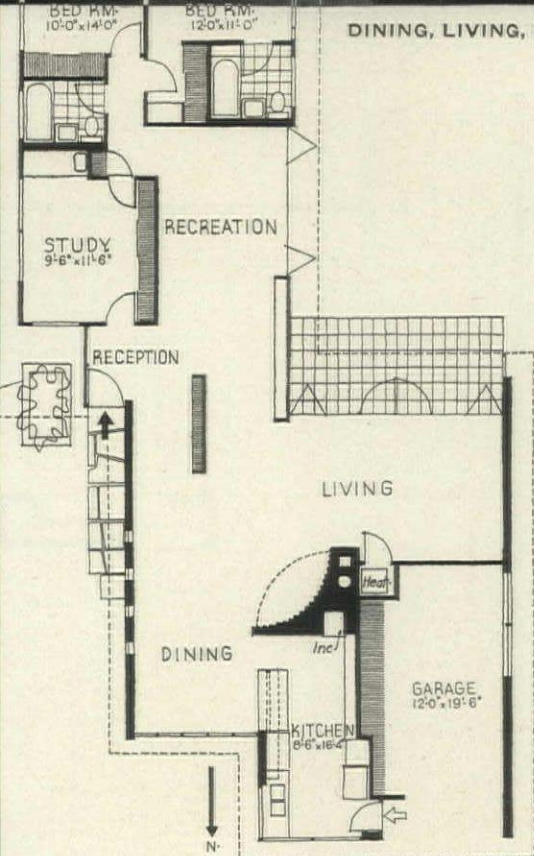
CONSTRUCTION OUTLINE: Foundation—4 in. of cinders, 4 in. hollow tile laid 1 in. apart, concrete, asphalt-coated paper, Bird & Son. 2 in. of concrete. Framing—Steel post and beam. Insulation—Reynolds Metallation A, Reynolds Metals Co. Floors—red oak. Ceiling finish—¾ in. Celotex—Celotex Corp. Sheet metal—copper. Sash—Hope's Windows, Inc. Glass—Pittsburgh Plate Glass Co. Wall finish—plywood, U. S. Plywood Corp. Bathroom wall finish—Masonite—Masonite Corp. Bathroom equipment—Crane Co. Heating equipment—Hot water, American Radiator & Standard Sanitary Corp.

FRED LINDHOLM, General Contractor



DINING, LIVING, PLAY AREAS FLOW TOGETHER

ROOF TIES RUN THROUGH FIREPLACE AND SHEETMETAL HOOD



GLAZED WALL OF DINING AREA OPENS FACADE TO STREET

Ancell house is an interesting solution to problems posed by a small lot.

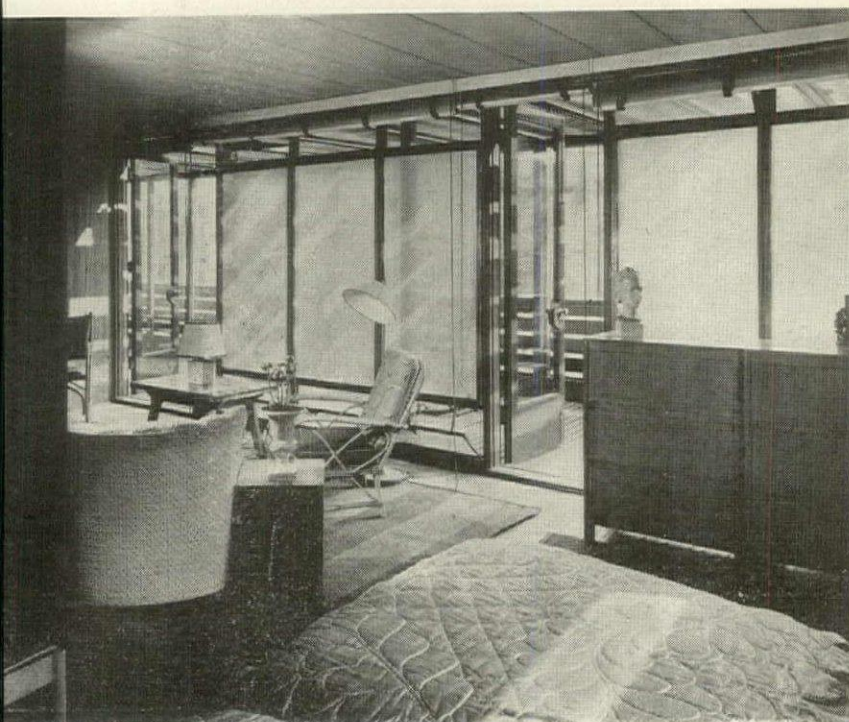
Built on a narrow 55 ft. by 125 ft. lot, this house takes full advantage of the front and rear yards, has a minimum of openings on the meager side yards. A completely glazed wall opens the dining area to the front; while the glass wall of the living space may be folded back to capitalize on the terrace and rear yard. Small vertical openings on the side of the dining room provide additional light rather than view. Carried here to the extreme, the architect's phobia for open planning causes five areas (kitchen, dining, living, reception and recreation) to flow together in one uninterrupted space; their location in small wings provides some distinction between them.

Focal point of the plan is the circular fireplace and its sheetmetal hood which was tarnished to an iridescent finish with sulphuric acid. It requires only a small, economical chimney. The study doubles as a guest room or a studio, was provided with a sink for the client's artist-wife.

The metal roof is supported by site-fabricated trusses comprised of 2 by 4's, 1/4 in. plywood, glue and aluminum ties. The ties are exposed below the fiberboard ceiling, further illustrating the architect's insistence upon a frank expression of structure and materials. Unlike the preceding houses, this one was erected on bearing walls. It cost \$9,350 in 1940.

CONSTRUCTION OUTLINE: Foundation—4 in. of cinders, 4 in. hollow tile laid 1 in. apart, concrete, asphalt-coated paper, Bird & Son. 2 in. of concrete. Framing—brick and frame bearing walls. Insulation—Reynolds Metallation A, Reynolds Metals Co. Floor finish—select red oak. Roof—site fabricated wood trusses with aluminum ties. Ceiling finish—3/4 in. Celotex, Celotex Corp. Sheet metal—copper. Sash—Glass—Pittsburgh Plate Glass Co. Wall finish—plywood, U. S. Plywood Corp. Bathroom equipment—Crane Co. Heating equipment—Hot water—American Radiator & Standard Sanitary Corp.

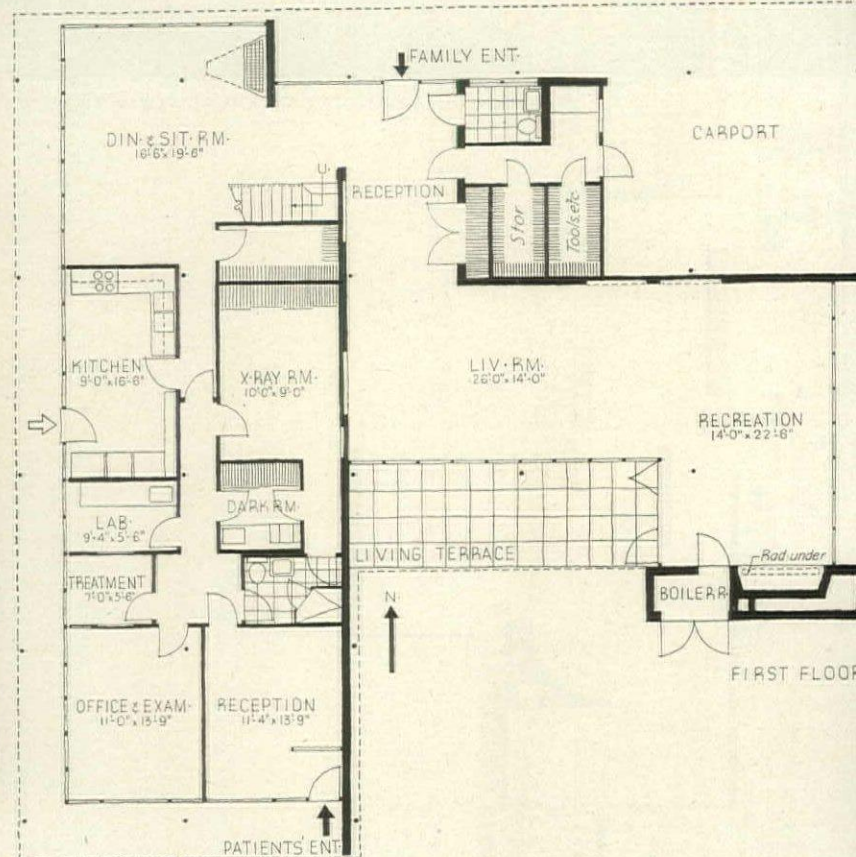
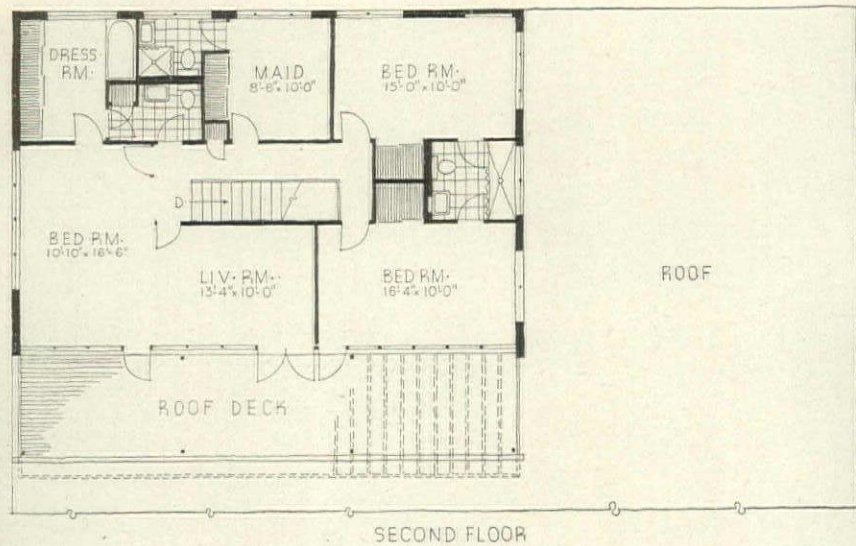
DOVENMUHL, INC., Mortgagee



MASTER BEDROOM IS COMBINED WITH SECOND FLOOR LIVING ROOM



LIVING AND RECREATION AREAS ARE DEFINED BY BOOKCASES



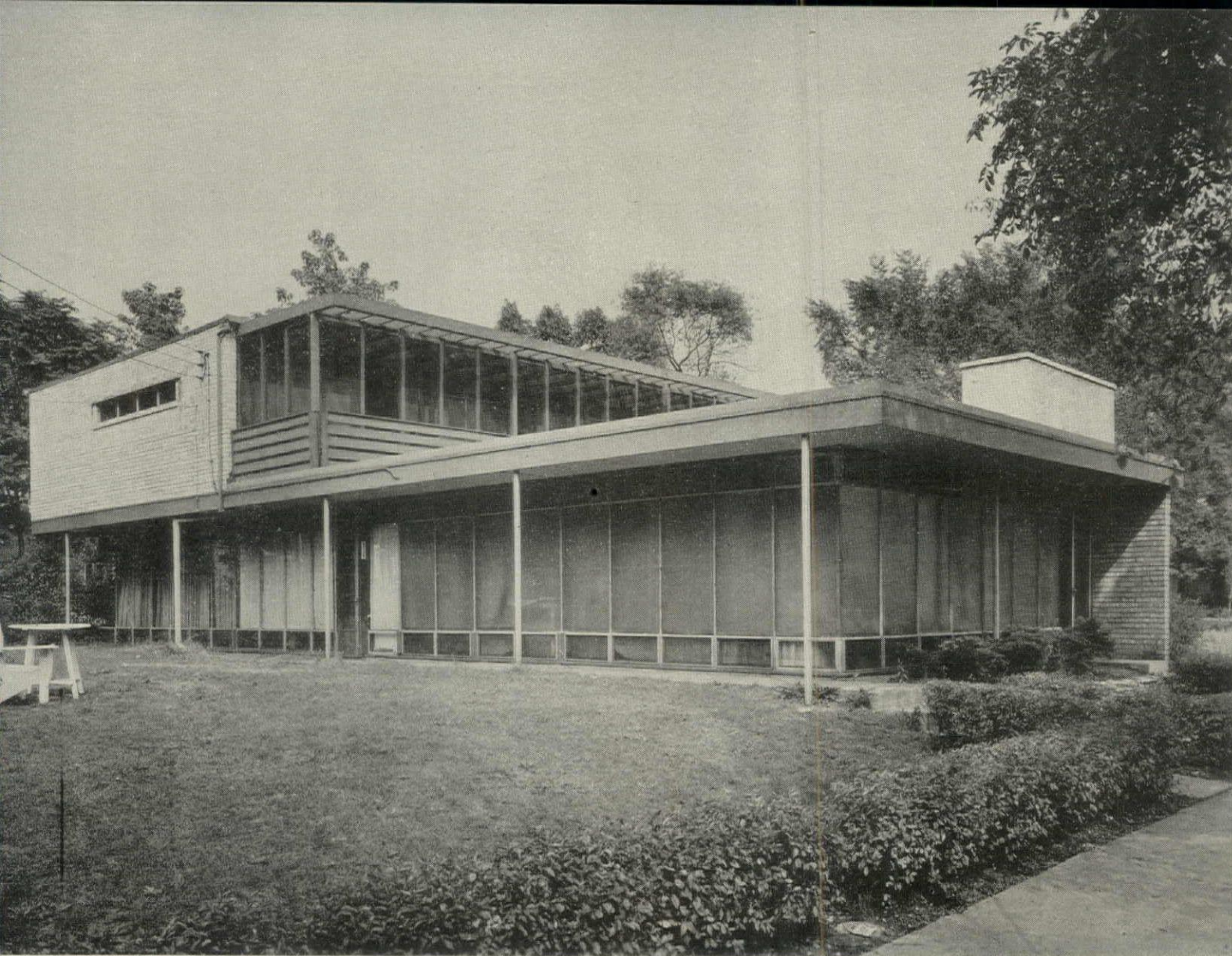
Heimbach house includes doctor's office and generous living space.

Designed for a physician, his wife and son, this house provides space for the varied activities of each. The living and recreation areas, which may be separated by a draw curtain, face south and east, respectively, on the two streets which form the corner lot, are shielded from the office wing and carport by blank brick walls. Additional living space is provided in the over-size dining room and, upstairs, in the combination living-bedroom which opens on a large screened deck. A small workshop is near the carport.

Subject to question is the unnecessarily long trek from kitchen to dining room and the provision of merely minimum closets on the second floor. (The latter shortcoming is offset somewhat by the first floor storage rooms beside the stairs and adjacent to the carport entry). Also questionable is the ponderous brick tower which houses the boiler and the playroom fireplace; it gives the street facade an unfortunate theatrical appearance that is vaguely industrial. A hollow fake, the tower is certainly not in keeping with the architect's usual and commendable insistence upon the frank expression of function.

CONSTRUCTION OUTLINE: Foundation—4 in. of cinders, 4 in. hollow tile laid 1 in. apart, concrete, asphalt-coated paper, Bird & Son. 2 in. of concrete. Framing—steel post and beam. Insulation—Reynolds Metallation A, Reynolds Metals Co. Floor finish—linoleum, red oak. Ceiling finish—¾ in. Celotex, Celotex Corp. Sheet Metal—copper. Sash—Hope Windows, Inc. Glass—Pittsburgh Plate Glass Co. Wall finish—plywood, U. S. Plywood Corp. Bathroom equipment—Crane Co. Heating equipment—Hot water—American Radiator & Standard Sanitary Corp. X-ray equipment—General Electric Co.

BLUE ISLAND SAVINGS & LOAN, M't'gee

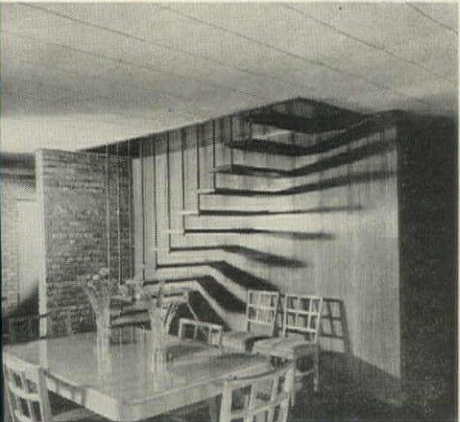


BRICK WING IS SEGREGATED FROM LIVING QUARTERS AND FRONT YARD BY BRICK WALL, FACES STREET AND LARGE SIDE YARD

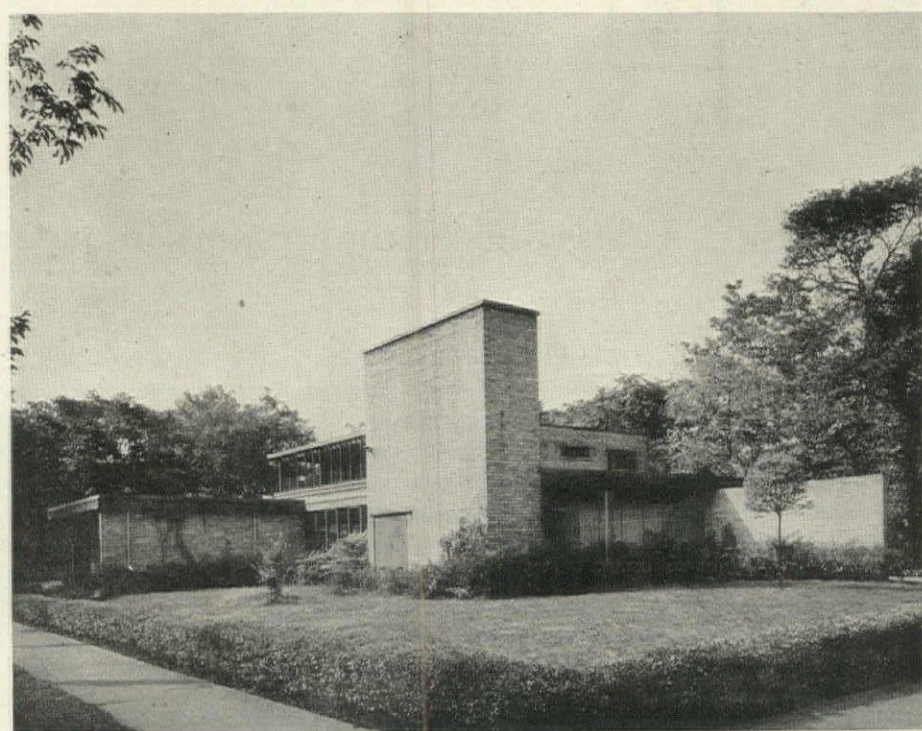
LIVING ROOM FEATURES ELEVATED FIREPLACE

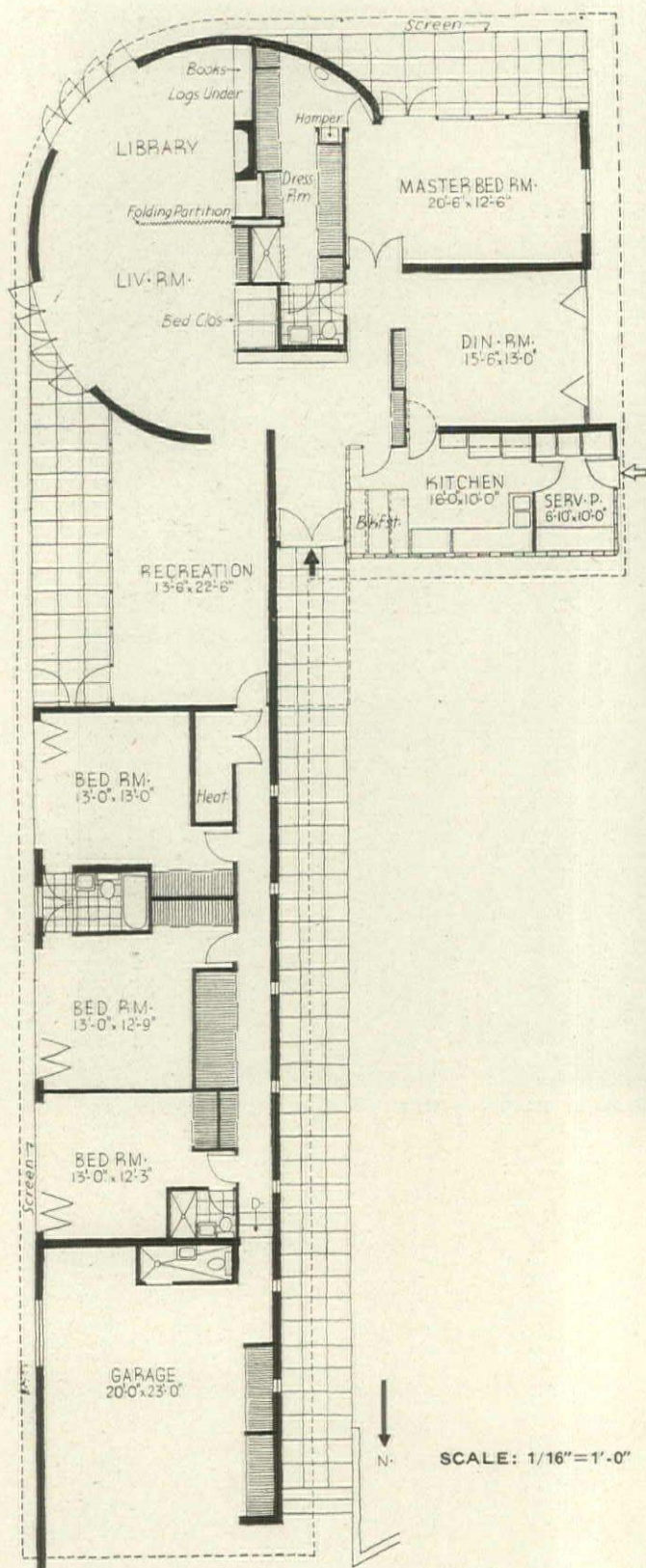


DINING ROOM CONTAINS OPEN STAIRCASE



BULKY CORNER CHIMNEY IS NEITHER FUNCTIONAL NOR VERY DECORATIVE





CURVED SOUTH FACADE IS NICELY DETAILED AND BARE OF FALSE ORNAMENTAL D

Jacobs house is comprised of nine rooms in an unusual arrangement.

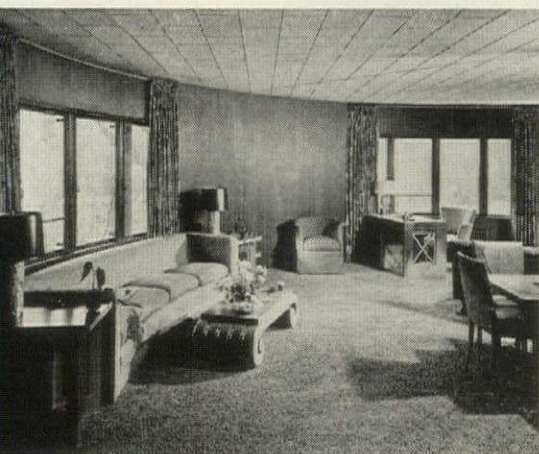
A long, narrow lot, stretching across a block from street to street, required that this house also be long and narrow. The lot measures 223 ft. by 70 ft.; the house is about 120 ft. long, 50 ft. wide. Open planning demonstrated in the preceding houses has here given away to the desire of the client (an advertising and promotional expert) for something unusual. Different, and at the same time purposeful, is the semicircular library-living room whose curves focus the attention of occupants upon the fireplace. An extraordinary creation, the fireplace has a tempered glass flue which permits sparks to be seen through a copper grille depicting a phoenix. The nearby master bedroom is served by a dressing room containing two long batteries of closets and a stall shower. The other bathroom fixtures are convenient to the living room, which is equipped with two closet beds for guests. Children's bedrooms are arranged in tandem, separated from the living space by a recreation room.

The outside wall of the kitchen is glass block from floor to ceiling, admitting daylight through the cupboards. Containing about 50,000 cu. ft., the house was completed just before the war at a cost of about 60 cents per cubic foot and financed with a \$25,000 uninsured mortgage.

CONSTRUCTION OUTLINE: Foundation—4 in. of cinders, 4 in. hollow tile laid 1 in. apart, concrete, asphalt-coated paper, Bird & Son. 2 in. of concrete. Framing—masonry bearing walls. Insulation—Reynolds Metallation A, Reynolds Metals Co. Floor finish—red oak. Ceiling finish— $\frac{3}{4}$ in. Celotex, Celotex Corp. Sheet metal—copper. Sash—Truscon Steel Co. Glass—Pittsburgh Plate Glass Co. Wall finish—plywood, U. S. Plywood Corp. Bathroom equipment—Crane Co. Heating equipment—Hot water, American Radiator & Standard Sanitary Corp.



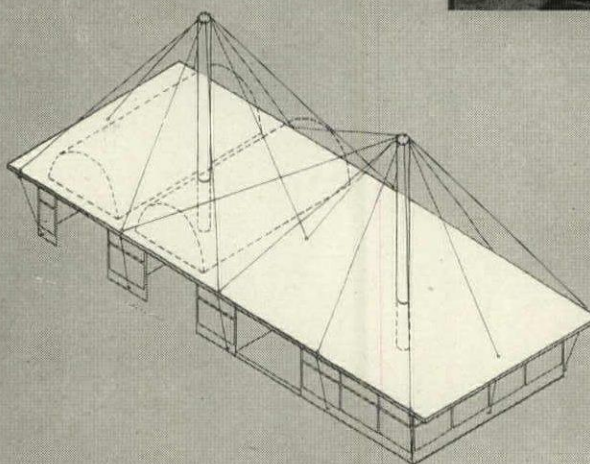
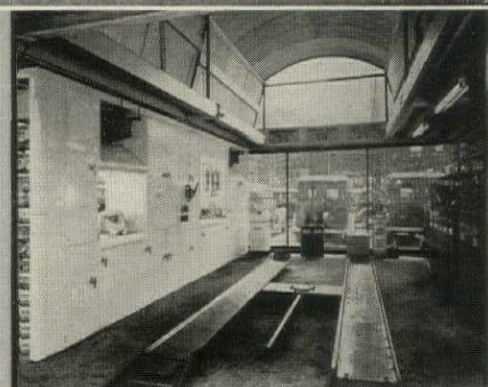
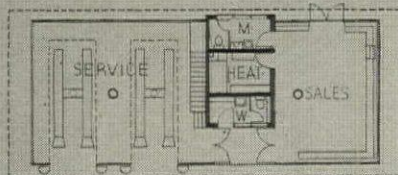
ES UNUSUAL DEPTH OF THE HOUSE BEHIND IT



ING ROOM CURVE IS FINISHED IN PLYWOOD



STER BEDROOM OPENS ON SOUTH TERRACE



Service station is hung from masts to minimize foundations and costs.

The problem was to build a service station on 14 ft. of fill which would not support a large foundation. Costs were held to \$10,000 by hanging the rough construction by cables from a pair of steel masts. Foundations were thus reduced to two footings and a platform for the heating plant. Commercial appeal was created by adding transparent walls which expose all mechanical functions of the station to the always curious public, and by doing an industrial design job on the interior of the two washing-greasing rooms. Proof of this design appeal is the fact that within two weeks after the station's opening gasoline sales had exceeded the volume at which the station owner had agreed to pay the land owner a "royalty" per gallon in addition to his rental. Comments Architect Goldberg on his client's quick success: "It has shown that even Standard Oil could underestimate . . . what a new building like this could do for one of its gasoline dealers."

HOUSING'S WHITE KNIGHT



The name of Catherine Bauer is synonymous with public housing in America. This tweedy woman, with the masculine stride, grin and astounding knowledge of facts and figures, started her career when housing was merely a word imported from Europe; through the crucial days of the Wagner-Dill bill, first important housing legislation passed by Congress; and has had an influential finger in the housing pie ever since. Her book, *Modern Housing**, is to her field what Blackstone's is to law. Her work with Edelman, brain truster for the Philadelphia hosiery workers' union, set a precedent for labor support for housing. Her research on Clarence Stein and the late Henry Wright's Radburn and Hillside Houses—early community projects—established new techniques in the planning of community centers.

But when enthusiastic youngsters ask Catherine Bauer how to get into housing, she gives them a slight unease. Actually, she became involved in it quite by accident. And her career was not a straight line shooting toward a known goal, but a series of zigzags. Casey, as her friends call her, always hopped from one job to another according to impulse and without regard for the next meal.

Coleman Woodbury, Assistant Administrator of the National Housing Authority, a co-worker with Catherine on the Wagner-Dill bill, reminisces about her career.

"It's strange how much influence she has on public housing when she's never held an important federal job for any period. She hasn't done as much writing as other people. But everything she does write is solid, reliable stuff. And she has an uncanny ability to say exactly what she thinks to anyone without insulting him."

Catherine's childhood and training give few clues to her success as a housing reformer. A slum-dweller turned reformer, she was born in a comfortable, clapboard house in New York City, N. J., of well-to-do parents. Her father, Jacob Louis Bauer, was State Highway Engineer responsible for the Pulaski Skyway. Some of the earliest clover-leaf interchanges. Only full-time politician in her quiet family tree is a Republican grandfather who must occasionally twitch in his grandeur at Casey's leftish doings. In sheltered Vassar girls' school, Casey's major interests were basketball; in summer camps: swimming. At Vassar: Proust, Kandinsky and a polo player to whom she was engaged for a brief time. Her sister, Betty Mock, who eloped with Frank Lloyd Wright's Taliesin with an architect and is now Curator of Architecture at Manhattan's Museum of Modern Art.

* Edith Elmer Wood, author of *Housing for the Unskilled Wage Earner* and acknowledged as the American housing movement, laid the groundwork.

"handsome blonde with brunette economic ideas"

Casey in her disregard for convention and convenience. Younger brother, Jacob Jr., now a mechanical engineer for Standard Oil, is the only conservative offspring of his conservative parents.

Catherine's marriage to West Coast architect William Wilson Wurster, although an improvement, was too recent to be a factor in her career. She did not succumb to the lure of matrimony until 1940 when she was 35 and had a distinguished record behind her. In her case, famous for her boyish bob, low-cut shoes and direct man-to-man speech, she always maintained that she would never marry. Like other twists in her career, she wrote the whole thing down as an accident.

Wurster came to the University of California as a Guggenheim Lecturer after her years of Washington lobbying, she was corralled into a round of her parties. At each affair her hostess would murmur: "My dear! I have the most interesting man for your dinner partner—his name is William Wilson Wurster." This went on for some time until Catherine, in desperation, left town to visit the Columbia Basin project in the state of Washington. The phone rang in her Seattle hotel and it was William Wilson Wurster. He asked for his first date in these historic terms: "Why don't I come to Seattle and take you down to San Francisco—and why don't we get married while we're up there?" The two-day honeymoon was climaxed by a long date for Catherine in Portland which she was unable to break.

WURSTER VERSUS HOUSEWORK

Casey, like Bill Wurster, however, has never told Catherine that he is no lap-dog husband of a determined career woman. He died in Portland by going to a good dinner instead of his wife's lecture. This same dinner has become a family policy and the dinner of the Wurster clan are kept distinct and separate. Furthermore, a firm hand is shown in the fact that Catherine, who never married before, is now turning out dinners for her family although she emerges from the struggle tired and exhausted as she never was after a fight with a congressman, she feels she has the makings of a cook.

Her sentiment might shock her single young disciples. Even more disturbing is the fact that, at the age of 40, she set a new approach to an all-time record by proposing to her first child, Sadie Louise. Sadie's marriage was a matter of national importance among the circles and was awaited breathlessly by her parents' many admirers. Now, at 40, this squirming infant is the unborn cause of a routine of bottles and feedings not usually associated with housing.

Marriage, Sadie, and the necessity of living near Boston's M.I.T. where Wurster was recently made Dean of Architecture and Planning, have failed to slow Catherine's pace appreciably. She manages to keep both her housing and her housework going full tilt. Although out of active lobbying in Washington, she has been running a long-distance campaign on the new Wagner-Elender-Taft bill for The National Public Housing Conference, of which she is Vice President. As in the old days, she is involved with writing persuasive pamphlets and holding hands with disagreeing housers to keep them from cutting each others' throats. She helped reorganize the National Public Housing Conference for the current fray, gives numerous speeches before local groups and has recently started to teach a seminar on housing at Harvard University. (Not, please note, at husband Wurster's nearby M.I.T.)

Here she will expound her pet theory: that housing is an advanced form of mixed enterprise, and that the attack on public housing by private enterprise is a phony war, concerned not with the touted issue of government aid, but with the question of where that aid will go—to private investors or public agencies. Like Charles Abrams, long-time housing plugger and long-time admirer of Catherine's, she explains Urban Redevelopment as a plan to guarantee landlords' profits and a means of killing off the broader public housing approach. Casey is not really worried about the fate of public housing, however, because of the grass roots support it has achieved since its inception. Indeed, she feels that public housers underestimate their own strength and still suffer from a martyr complex acquired in the early days when they were termed stargazers and were referred to by the real estate crowd as "bella donna boys"—"because their eyes get so big and round when they talk about housing."

As a matter of fact, Catherine harbors a certain nostalgia for the time when the fight was first beginning. Then, fired with zeal, everything appeared to her in startling black and white. Now, she knows so much more that her spectrum has changed to shades of gray, complicated by an angle here and a question-mark there. She is sure that her most authoritative article was the first one she ever wrote, a serious dissertation on Social Democratic housing in Frankfurt, Germany for *Fortune* magazine, cooked up with a maximum of brass and a minimum of background.

This article marked both the end and the beginning for Catherine. It was the end of her career as an esthete, interested only in the purest of intellectual and artistic pursuits; the beginning of her social conscience and her subsequent work as a hard-boiled practical houser.

Immediately after college she had joined the stream of arty, intellectual bohemians, christened by F. Scott Fitzgerald "the lost generation", who were flooding Paris in the twenties. With her hair slicked back and without stockings (a daring trick in those days), she drifted around the left bank, discussing Art and Life with diligently sophisticated painters, dancers and writers, living on \$50 a month supplied by her parents and avoiding all contact with "bourgeois Americans".

During this year she lived in a crack of a room on the Impasse des Deux Anges, supplemented by frequent visits to the public baths since her own quarters boasted no such luxury. This was the first of a long line of sub-standard nooks and crannies which would never have measured up to the USHA minimum. Casey, an agitator towards better housing for the masses, is the world's worst advertisement for the light, air and open space she champions.

BACK TO THE SALT MINES

After the Paris junket, which established Catherine's opinion of herself as an esthetic ascetic, she returned reluctantly to New York commercialism. The boom days of 1927 were on and the only qualification for success was nerve, of which Casey always had plenty. One of her first jobs was with Butterick as head of pattern promotion which she got by writing an article entitled "Why I am a Dilettante." An efficiency expert proved her downfall and she was fired only to walk into the job of advertising manager for Harcourt Brace & Company, complete with secretary, assistant and a juicy pre-'29 promotion budget. One of her greatest shocks as a serious intellectual came at a Publisher's Ad Club luncheon where a noted psychologist of the Behaviorist school spoke on the relative sales appeal of white or peach-colored Kleenex.

The crash put an end to the chichi doings at Harcourt Brace and Miss Bauer was again fired, but during her stay there she had become the protégé of Lewis Mumford, moving in a select avant garde group whose modest philosophy was that they were the saviours of the world. The Bauer-Mumford friendship blossomed over esthetic discussions of Bauhaus purism, but Lewis got in enough blows for social theory to give Bauer a new point of view when she took off for Europe again in 1930.

This time she visited Sweden, Germany, and Austria, studying modern architecture and almost unconsciously beginning to realize that planning and social politics were an integral part of the whole movement. Arriving back in New York stony broke, she approached *Fortune* with the idea of selling them some

photographs of German model housing. Instead, the editor told her to write an article explaining them and submit it to an essay contest, "Art in Industry", sponsored by Edgar Kaufmann of the Kaufmann Department Store in Pittsburgh. To her great surprise she won the contest and found herself overnight published in *Fortune* and a housing expert. The whole experience had a somewhat macabre quality described by Catherine as, "A business man giving a thousand dollars to an expert he'd never heard of for an article nobody was interested in, in a magazine nobody ever read." She still cherishes a photograph of the presentation which took place (to her horror as a modernist) in Kaufmann's private office—a mediaeval monk's cell imported from Europe.* Her mother's only comment upon seeing the picture was "Catherine! You *should* have bought a new hat!"

After their initial introduction to housing via Bauer, *Fortune* became enamoured of the subject and asked Lewis Mumford to do a series of articles—a circular move, since Mumford immediately called in Bauer as researcher and finagled another trip to Europe for her on *Fortune's* expense account. With a reputation to uphold, she did a serious and systematic study. Mumford, however, was unable to turn it into a satisfactory series. Three articles were published as planned and the remainder cancelled.

ACCIDENTAL AUTHOR

This was the second accident that speeded Catherine on her way. Left holding a bagful of housing research minus a market, she followed Mumford's cogent advice to use it as the basis for a book. Thus, *Modern Housing*, first comprehensive analysis of European housing in comparison with similar movements in America, was the result of a magazine editor's change of mind. Paradoxically, too, it was written under conditions that would have frightened a hardened slum dweller. During the two years she struggled with the manuscript, construction was underway on Rockefeller Center. To save money, she fled from one condemned brownstone flat to another, just a jump ahead of the demolition crews. Such activity, no doubt, added the necessary spice to an otherwise quiet existence, for Casey was living an introverted, scholarly life: seeing few people, writing usually from 10:00 at night until 3:00 in the morning and spending her days in research at the New York Public Library. On one of these countless research trips, ploughing along 5th Ave. haphazardly clad in a shabby sweater and skirt, saddle shoes and no hat, she suddenly began to feel conspicuous. Glancing sharply about her at the crowd of flower-bedecked females and derbied males, realization broke—it was high noon of an Easter Sunday. From her present tight routine of babies bottles, six o'clock rising and university classes, she looks back on this untrammelled period as pure luxury.

* Mr. Kaufmann subsequently hired Frank Lloyd Wright as architect for his famous Bear Run house.

Catherine was on the verge of taking a fancy planning job in 1934 when Mumford introduced her to Oscar Stonorov and he in turn to John Edelman. As research director of the American Federation of Hosiery Workers in Philadelphia, Edelman was in the midst of starting the union's Carl Mackley Houses, first project to be put up under PWA's initial limited dividend program. Stonorov and Alfred Kastner were architects for the project and together with Edelman, James McDevitt of the Building Trades and other ardent union enthusiasts, they formed the nucleus of the first practical housing group in Philadelphia. Their Mackley homes became a cause célèbre. When a die-hard mayor tried to scotch the project, Edelman marched his hosiery workers to the City Hall in a classic demonstration which brought them victory over the mayor's veto. Unions all over the country wrote in to find out how the impossible had been accomplished and it was these queries that Catherine was hired to answer.

OUT OF THE FRYING PAN

This was the third important shift in her career, jerking her, as it did, out of abstract theory into practical work. Her first day on the job, however, was a gruelling one for a sheltered lady intellectual. Sprouting instructions, she was hustled off to Camden to push the shipyard workers' project there. Perhaps it was her smile, but the workers took to her and she was started on a down-to-earth, 16-hour a day routine which eventually included forming the Labor Housing Conference, an organization to arouse labor's interest in housing; speaking at union meetings in Chicago, Detroit, Cleveland, Minneapolis and every other major city throughout the middle west; and finally becoming official A F of L lobbyist for housing legislation in Washington.

Her headquarters in Philadelphia were nothing but a cubbyhole off Stonorov's none-too-spacious office and the Labor Housing Conference's physical entity was merely a letterhead, two filing cases and a statement of policy. Catherine's pay was equally nebulous, never exceeding \$15 a week and mainly scraped up out of Stonorov and Kastner's uncertain architectural fees. However, the increasing collaboration of the A F of L in Washington through Mike McDonough of the Building Trades Department and economist Boris Shishkin, gave the organization some official standing.

This was the dry tinderland of the depression and the first stirrings of the housing movement, like prairie fires, were popping up all over the country. Housing was backed in those days, as it still is to some extent, by two contradictory sets of people: benevolent capitalists who furnished the cash and zealous union men who did most of the work. Charney Vladeck, braintruster for the International Ladies' Garment Workers' Union and majority leader in Mayor La Guardia's first City Council, headed a committee in New York and made housing a hot political issue. Nathan Straus, subsequent USHA administrator and member of the famous family which owns

R. H. Macy, was an early supporter of the movement. Alfred Stern, husband of the Roebuck fortune, put up money in C and Catherine's speech at the union hall inspired the *Chicago Tribune* to call her a handsome blonde with brunette ec ideas."

During this period, the National Association of Housing Officials, a Rockefeller sponsored foundation, headed by Cleveland's Bohn (he and Langdon Post of New York were the first bona fide housing politicians in the country) held its famous three-day conference in Baltimore. It was the climax of a visiting tour for Sir Raymond Unwin, housing expert, and produced a resolution that "the beginning of the first effort to investigate the total scope of housing needs throughout the country." Bauer, Edelman and Stonorov were delegates and were regarded as heroes because they kept plugging away for the need of labor support.

Meanwhile, the PWA subsidized housing program, started in 1933 to prime the economic pump, was running into trouble because of its centralized control under Harold Ickes in the Department of the Interior. Local housing authorities had been established throughout the country on the job, but Honest Harold, with his deep-dyed suspicion of any and all officials not directly under himself, refused to give them anything. The program sank into confusion and stagnation but one issue became clear: the need for a centralized administration of housing.

BIRTH OF A BILL

One Sunday morning at Edelman's apartment when Catherine and Stonorov were talking, the question came up of a permanent national housing authority to replace Ickes' temporary pump-primer. They decided it was time to take advantage of the groundswell of support they had aroused for housing legislation. He marked Edelman casually: "I know a Congressman in Washington who would introduce a bill for us—the congressman from Pittsburgh, Henry Ellenbogen." They started to work on the bill that Sunday and the following day they went down to Washington and sat in Ellenbogen's office until 12 o'clock at night explaining the project to him. He agreed almost immediately and an outline of the first draft of the housing bill got underway. From then on, their lives were more hectic than ever. After work in Philadelphia, the three would climb into Stonorov's car, travel all night, sleep four or five hours in a trailer and arrive in Washington just in time for a nine o'clock appointment.

In spite of the fervor of its sponsors, the first Ellenbogen bill died quietly in the Senate. The main obstacle to its passage was a similar clearance bill sponsored by Senator Charles McNary which also died a-borning. The failure back marked a real turning point in Catherine's career. Formerly, although her work had focussed strongly on housing, she had been a dilettante. Now she settled down for a hard legislative battle, a fight which was crucial in the history of American

has since left hardly any segment of the city untouched.

First move was to tackle Keyserling, secretary to Senator Wagner, with a view to uniting forces. "Pontifical Keyserling", as he was called on the Hill, knew nothing about housing at that time, but, happily, was open to suggestion. For two weeks, Edelman and I pumped housing into him. At the end of perhaps in self-defense—he recommended to Wagner and a new bill was underway. His second attempt, the Wagner-Ellender bill, was a lustier infant but nevertheless did not survive the strain of its first hearings. In the fall of 1936, the little coalition of housing supporters—now expanded to include Vinton, head of the Resettlement Administration's research bureau, Coleman Burby, director of the National Association of Housing Officials and several others—did once again to draw up another bill. New legislation, drastic reduction of forfeitures, took shape in heated early morning sessions at Vinton's apartment overlooking Connecticut Avenue. As finally drawn up, its features were a three-man federal housing authority which would work through local agencies, and annual subsidies for low-cost housing projects, designed to meet the difference between necessary maintenance income and the rents which tenants could afford to pay. These subsidies were to be appropriated over a period of sixty years and one billion dollars was earmarked for the following four years to get things started.

At this time meaning business, the housing bill was amateurs by comparison with old-time politicians on the Hill, suffering as always from monetary deficiency, but fired with religious zeal—got their campaign underway. The move was an essential but hard-boiled one. Although Ellenbogen had been in on the legislation from the beginning he had little voice on the House. He was dropped and Representative Steagall, a southern reactionary, but a power among his colleagues, was co-sponsor of the bill with Wagner. Opposing it with disfavor, he nevertheless took the lead from the White House and grudgingly gave the bill a minimum of support.

As the campaign grew hotter, Catherine's life grew more hectic. She had moved the Housing Conference to Washington and from two tiny rooms in the Hay-Adams Hotel, she and assistant Dorothy Schoell distributed propaganda pamphlets, corralled reporters and passed the hat. A familiar figure in those days was Casey, striding along with her ever-present brief case under her arm and a gleam in her eye which boded no good for the arguing congressmen.

She soundly demonstrated her ability to turn lukewarm supporters into action when she rounded up a skeptical group of building industry boys, who, after an hour or so, found themselves passing an enthusiastic resolution in favor of the bill. She ran into Louis Stark of the *New York Times* as she was leaving the building and, with justifiable pride, confided the bill to him. Stark was so fascinated by the idea of a lady intellectual putting one

(Continued on page 141)

Bauer speaks her mind

What do you consider the most important steps toward better cities?

Some idea of the kind of city we really want, and leadership to translate that idea into effective public, private and individual action. This means, first and foremost, facing the facts about urban decentralization. Most people want light, air, private gardens, community life organized at simple human scale, and open country within easy reach. Once we accept this fact, however, two things become absolutely essential: 1) unification of land use controls, housing policy, transportation, taxation, and other vital aspects of representative local government over the entire metropolitan region; and 2) drastic reduction in density and increase in amenity in central areas, on the premise that they must compete directly for business and industry as well as for residence, with new outlying districts.

What is the most important advance in housing during the last decade?

The existence of some 500 local housing authorities run by Republicans and Democrats, business, professional and labor men, whites and negroes, and even a few females—all of them with at least some degree of knowledge and concern as to the housing problems of their communities. The big test of the local housing authority is right this moment, however. Will they assume over-all leadership in the present crisis—or will they just sit tight?

What do you think has been learned through war housing?

That adequate community facilities—shops, nursery schools, movies, meeting houses, health services—are just as important as plumbing. The standard of community equipment in war housing was steadily raised—not by any do-gooders' influence, but because of the insistence of war industries' personnel offices.

What do you think of urban redevelopment?

I have no objection to bailing the boys out, provided we get really good housing and more workable cities as a result and assume responsibility for rehousing displaced families. But I think most planners of houses have been guilty of criminal opportunism in devoting 90 per cent of their time for the past five years to problems of central reconstruction and practically no time at all to the inevitable suburban homes. After all, the blighted areas will still be there—cheaper if anything—a few years hence, and we could not tackle them anyway until there is enough housing surplus elsewhere to permit demolition. But this oncoming tidal wave of suburban building can either, here and now, be directed into well integrated satellite communities, with protected open spaces between them and some sensible relation to work places . . . or it can engulf us in a final circle of chaos and potential blight.

What are the most important aspects of the Wagner-Ellender-Taft bill?

The principle of an over-all national housing policy and administrative agencies; the recognition that housing is now unavoidably a thoroughly "mixed" private-and-public enterprise from start to finish; the extension and expansion of public low-rent housing; the first serious attempt to reach the "middle income group" through yield insurance, aid for cooperatives and limited dividend rental housing, and easier and safer terms for home purchase; and elementary steps at least to encourage a local land acquisition and land use control policy. Incidentally, in the last connection, those few little words "permitting acquisition of vacant as well as blighted sites" must be left in the bill.

What, if any, are the bad points of the Wagner-Ellender-Taft bill?

The worst thing in the bill is the introduction of the compulsory "20 per cent gap" between the upper rent levels of public housing and the lowest private rents for "standard" housing, old or new. This is a backward step in the essential process of obtaining a universally effective housing market—the sine qua non for adequate neighborhood planning and city rebuilding as well as for getting enough houses built and distributed. The simple obvious fact that veterans come from *all* income groups should dramatize the necessity for new housing at all cost levels. Another weakness is the lack of any specific encouragement for unification of local planning and housing responsibility at the regional level. Also, the rural housing provisions are hopelessly confused and inadequate.

What is the solution to the present housing crisis?

Never forget that the crisis is no overnight accident, but the culmination of deep rooted failure in our entire home building mechanism—this means that even the most immediate emergencies can not be solved without basic long-term measures, foremost of which is the passage of S. 1592.

What do you think of Wilson Wyatt and his program?

It is a great relief to see someone stick his neck out at last. I think his initial report to the president (all that has come out as yet) was just about right. But he will be the miracle man of all time if he can carry it through—including drastic controls over materials and prices. For his bedside reading I recommend the sad tale of the first British labor government's housing experiences in 1919 and S. 1592. As for the Kilgore-Mitchell bill, it is right and necessary to try to expand our house production facilities by making use of war plants, but I hope Mr. Wyatt won't get lost in the woods among those prefabrication sirens.

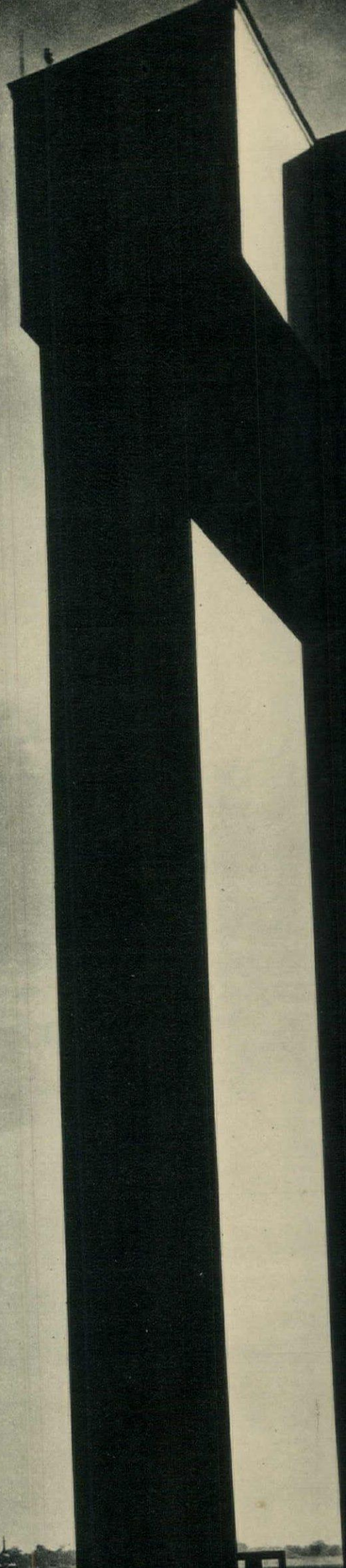
MOVIE PALACE

STEINBERG

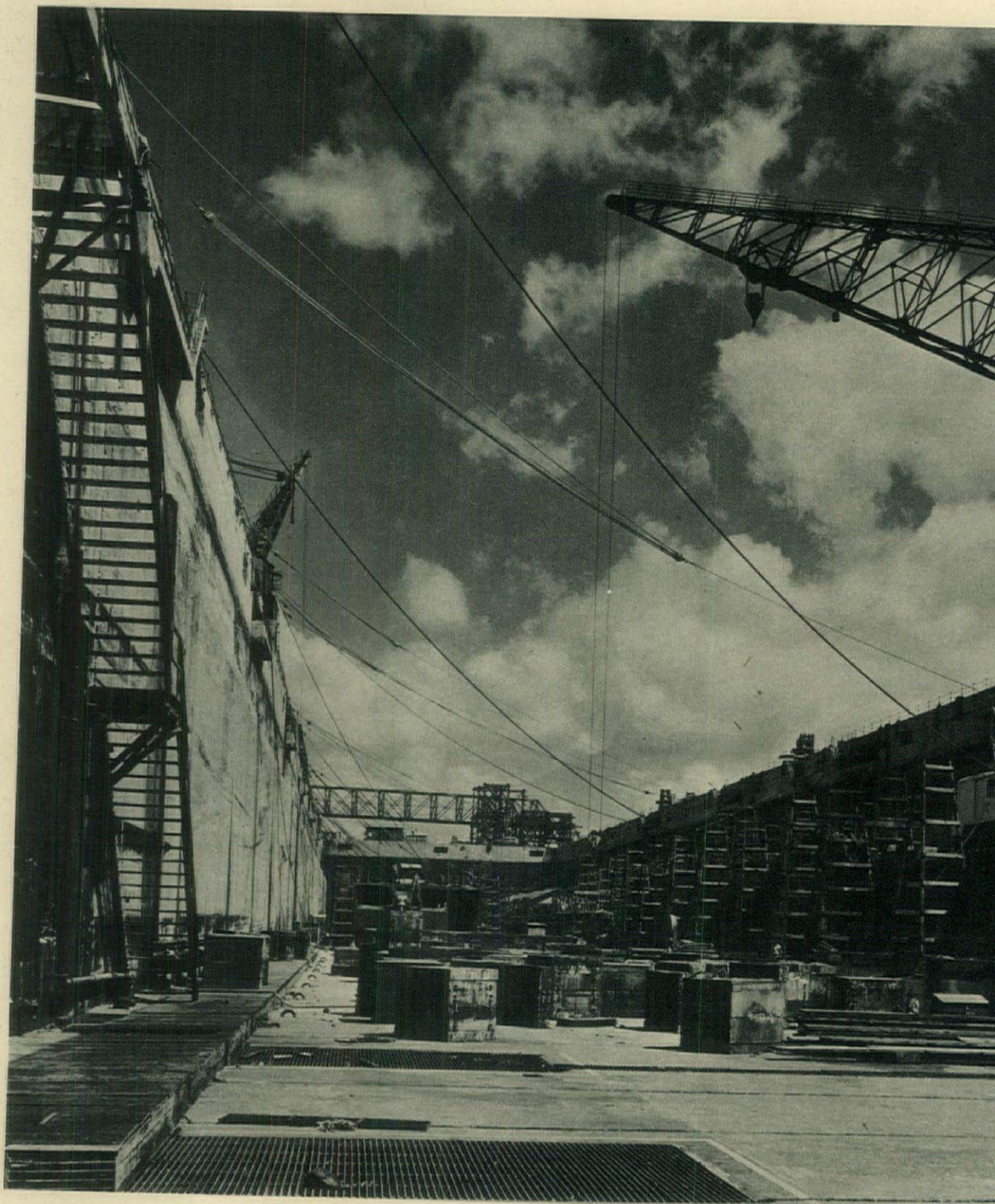
STEINBERG

The NAVY builds

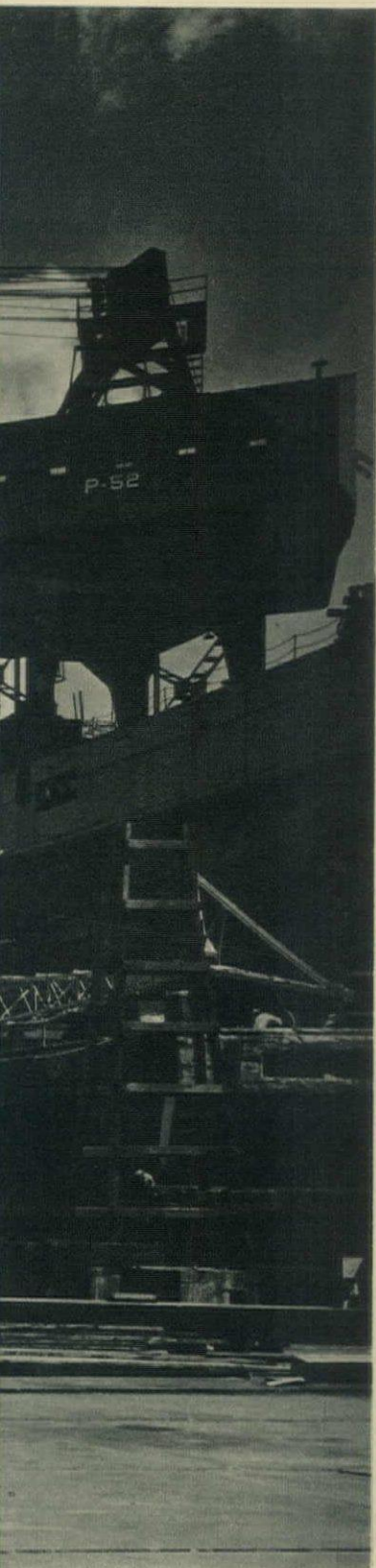
One popular idea it took a war to dispel is that sailors spend their time on ships and ships spend their time at sea. It is now clear that the fleet and its men need and get as many types of structures as a land based army. Rapid development of air power put naval shore construction on the preferred list for attack, and since the Pacific war was fought on virtually one limitless, unprepared battlefield, more construction was involved than any nation had ever before even contemplated. The total cost exceeded \$8,000,000,000. As an historical record of this mammoth undertaking, complete photographic documentation was made from which selected pictures are presented here for the first time. Heavy construction, representing the might of the floating Navy, was built under the direction of the Bureau of Yards and Docks. This includes all major shore installations—huge yards on the mainland and abroad, some equipped to prefabricate most of a warship on short notice—training camps, power houses, hospitals and administration buildings. To the Seabees, as they grew, went the job of on-the-spot construction of advance bases to keep pace with the rapid advance and achievements of the air arm. Their specialty was temporary construction—not flimsy building, but building for speed at low initial cost. Both types are presented on the following pages.



DRYDOCKS



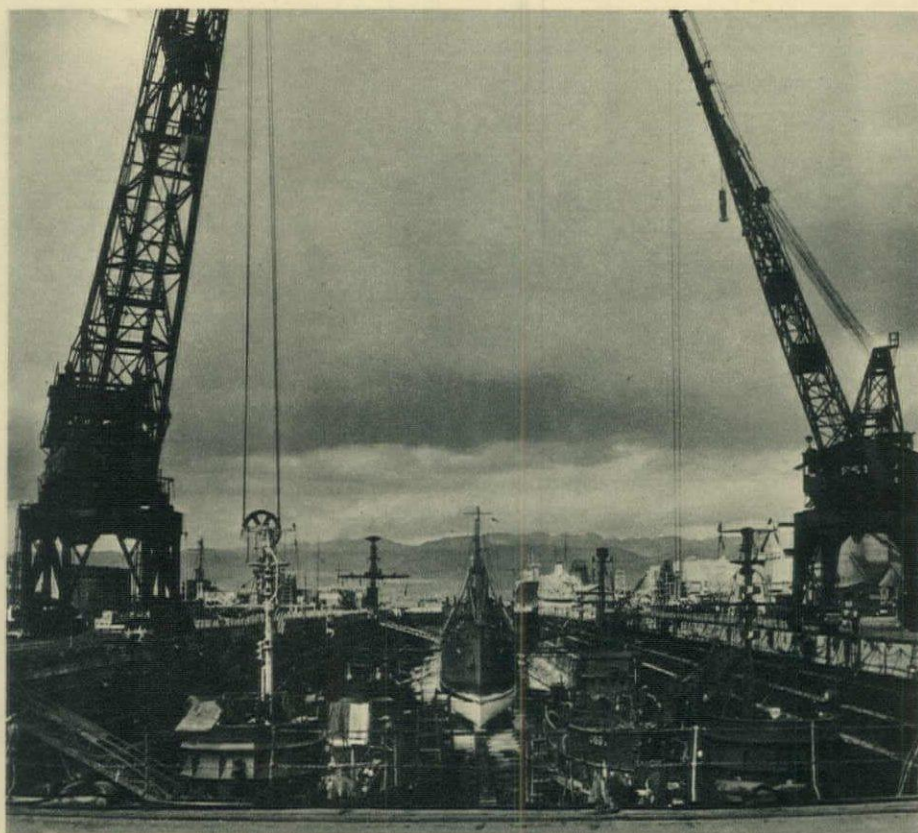
Drydock construction time was reduced from four years to eighteen months by a Navy developed, wartime formula. The process, one of pouring concrete under water replaced the "dry" method of excavating and pouring in watertight caissons. 1) One of the largest Navy drydocks—accommodates largest ships afloat. 2) "Step" type drydock of pre-Pearl Harbor vintage. 3) Sectional floating drydock which was towed to advance bases and assembled there for repair of big capital ships.



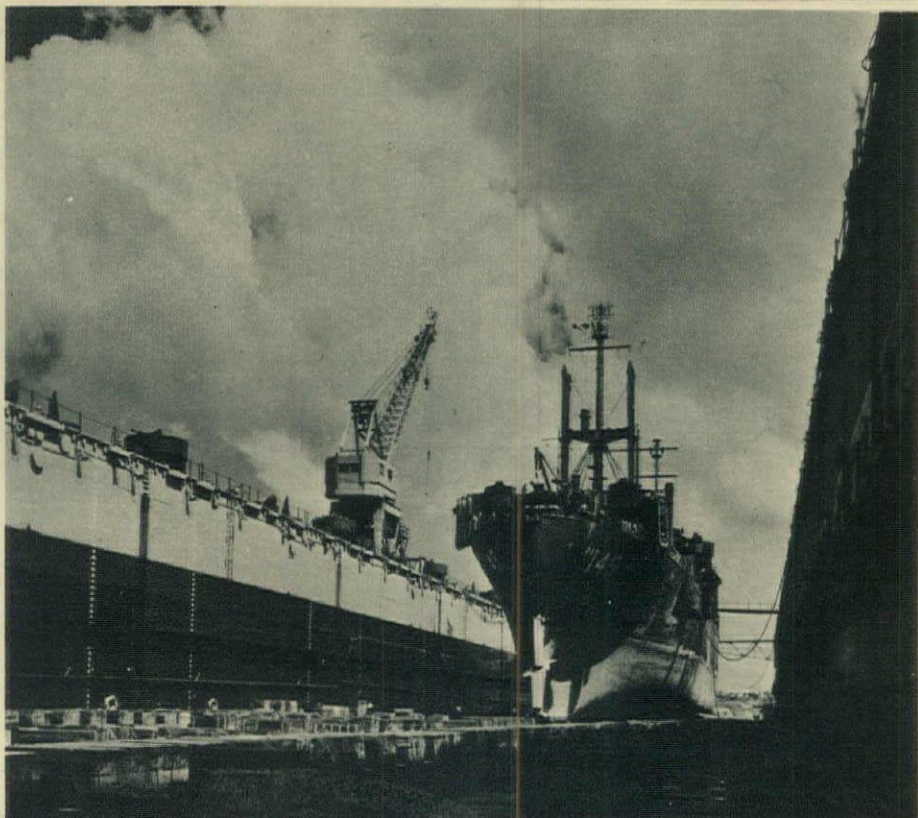
1



Direction and control of the Navy's vast wartime construction program centered in main office building of the Bureau of Yards and Docks near Washington, D. C.



2

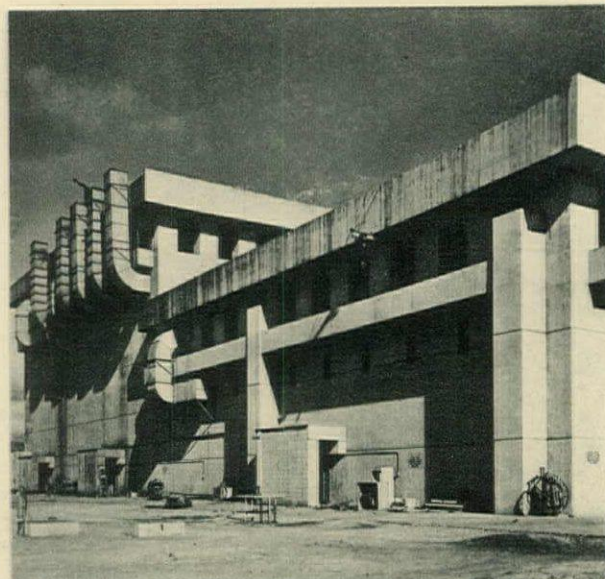


3

SHOPS

The real life of a Navy yard centers, not around its flag-bedecked ships, docks and officers' clubs but around the numerous "shops." Their activities vary from hairline precision work to the fabrication of heavy armor plate. The Navy yard's chief function is shipbuilding and repair. Major yards must be equipped to completely service craft ranging from wherries to battleships. Its mechanical appointments are as impressive as its manufacturing facilities. Cranes in the Philadelphia yard are capable of lifting a battleship's 16 in. gun barbettes, which penetrate seven decks, clear of the hull for overhaul. 1) Bomb-proof powerhouse at Pearl Harbor relies on 8 ft., reinforced concrete slabs for its strength. 2) Foundry cast metal forms such as machine blocks and parts. 3) Shop for major repairs on ships which have been damaged or partly demolished. Large prefabricated parts such as turrets are replaced here. 4) Ship fitter's shop for hull and engine repair is usually the largest structure in the yard. Here, armor plates may be seen stacked outside, huge mobile crane operates on railroad tracks in foreground. 5) Designed for the manufacture and repair of smaller parts, big machine shops like this one in San Pedro, Calif., specialize in propulsion engine shafts, heads and similar parts.

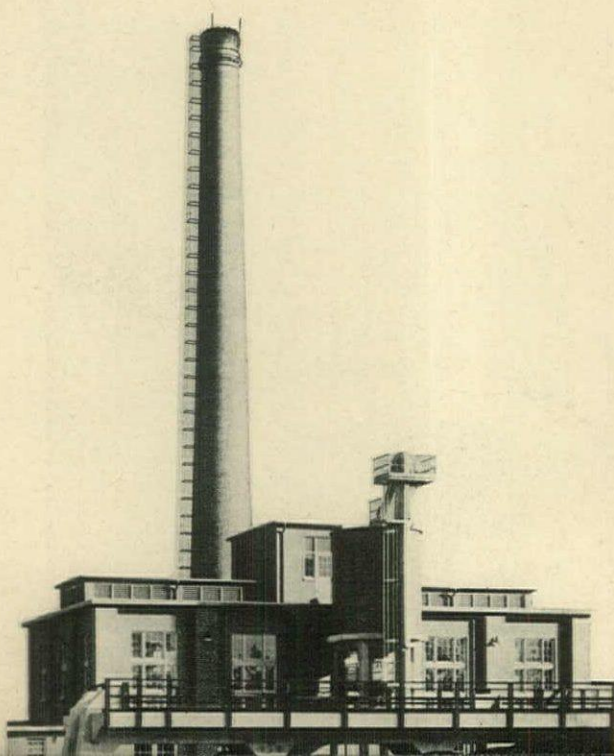
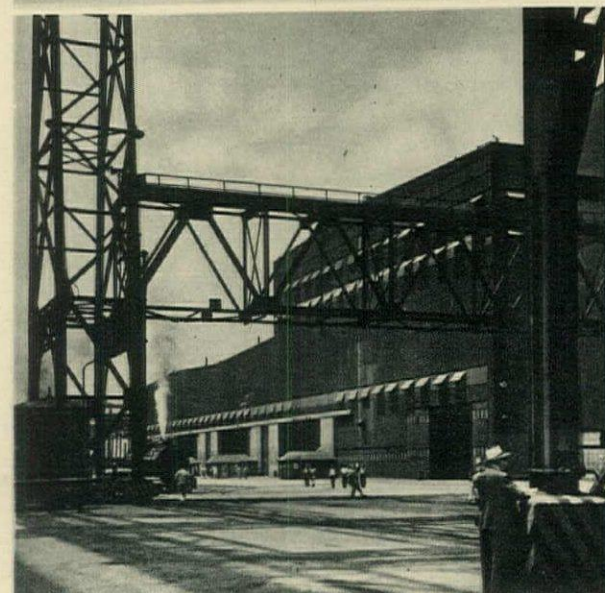
1



2

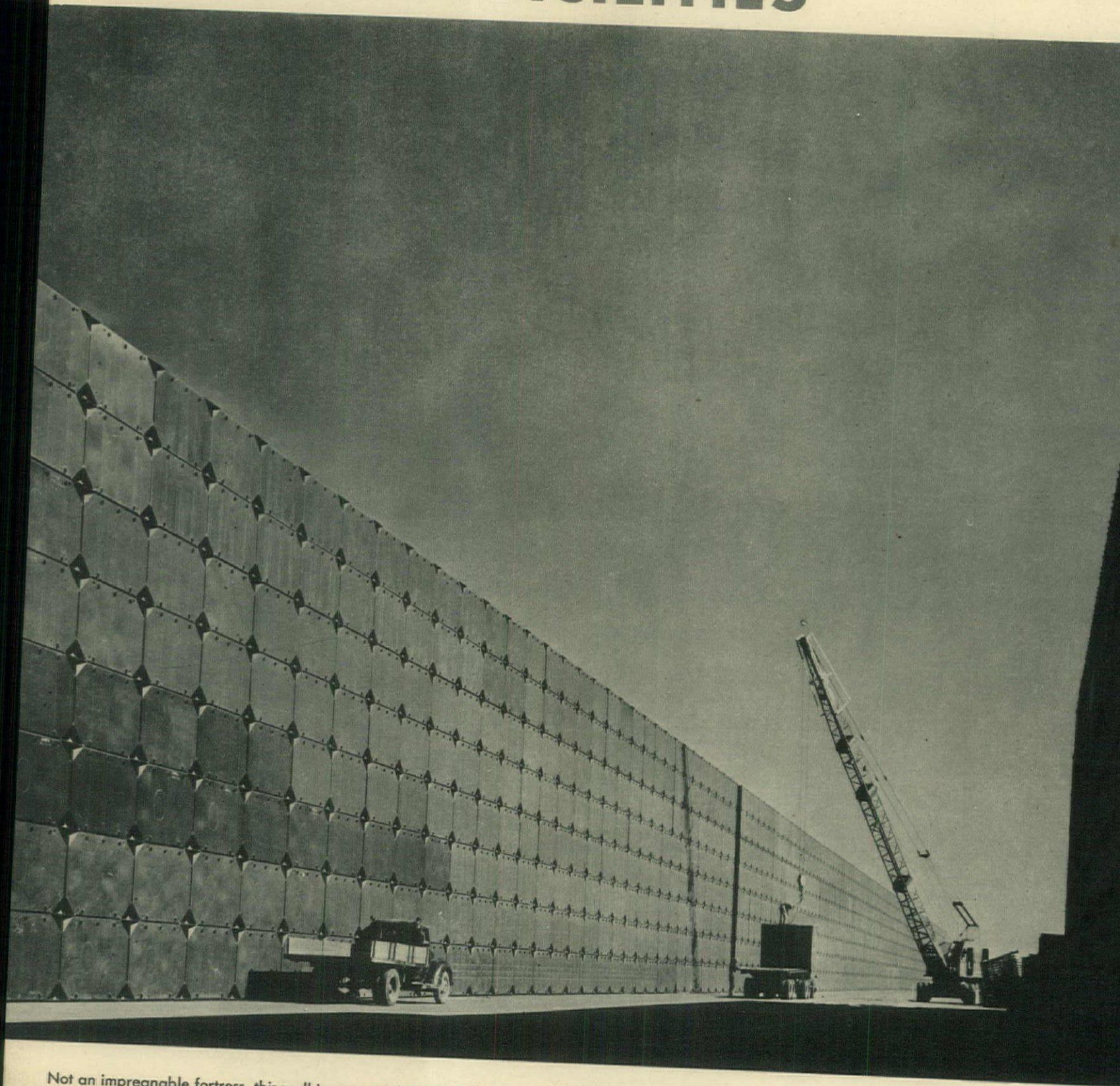


3



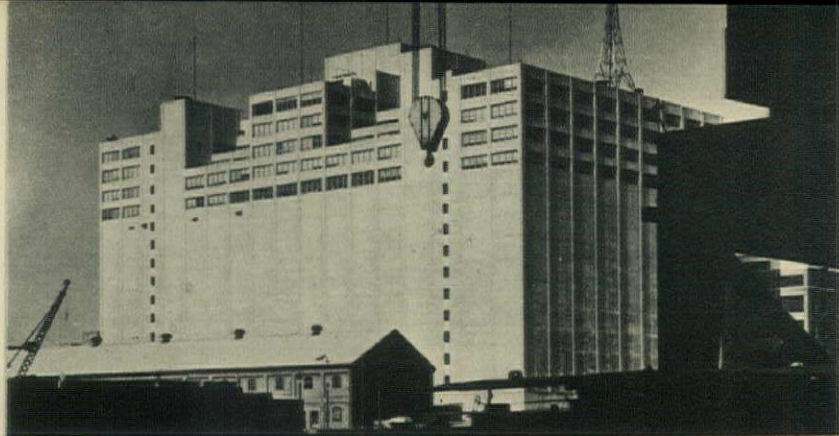


STORAGE FACILITIES

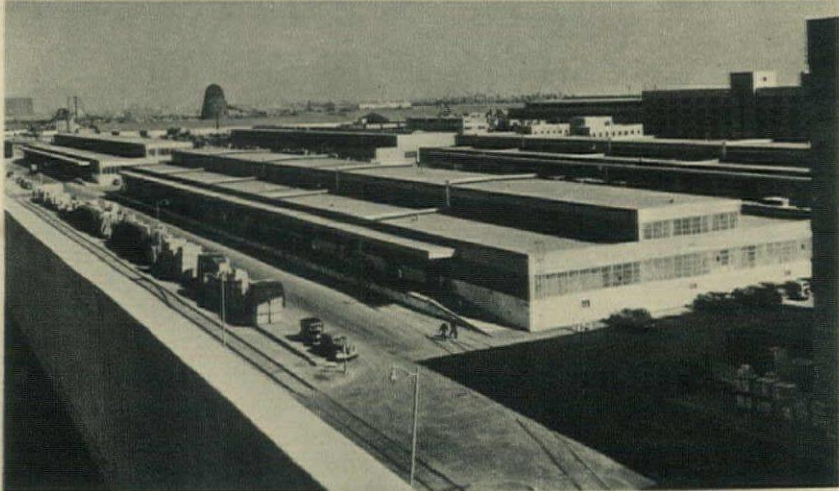


Not an impregnable fortress, this wall is composed of innumerable steel pontoons, stacked and stored for shipment. Known as the Seabees' "magic cubes," they were used to build all kinds of waterfront facilities. Assembled as barges, they participated in the Normandy invasion.

2



3



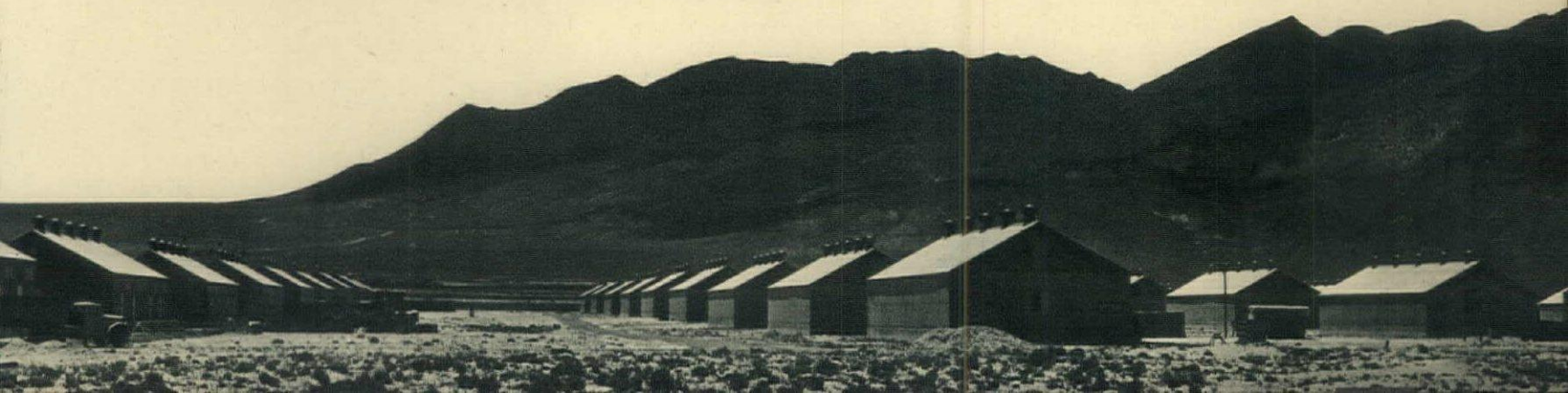
4

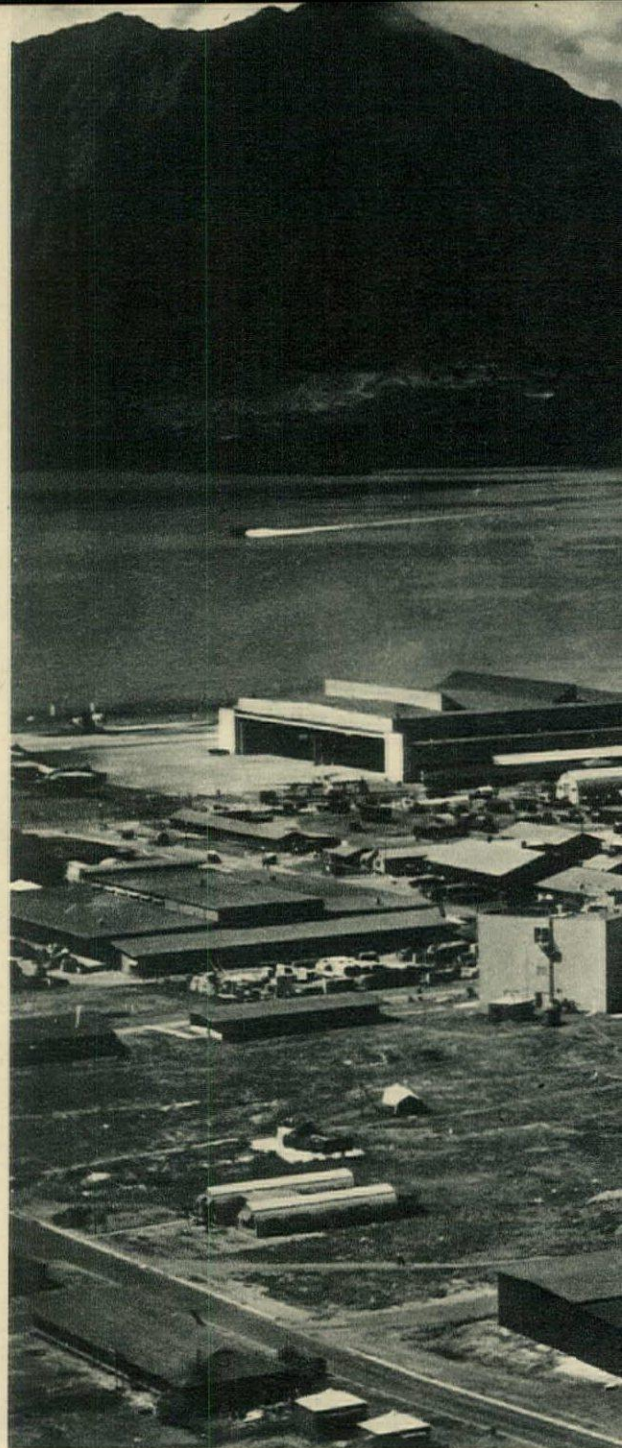
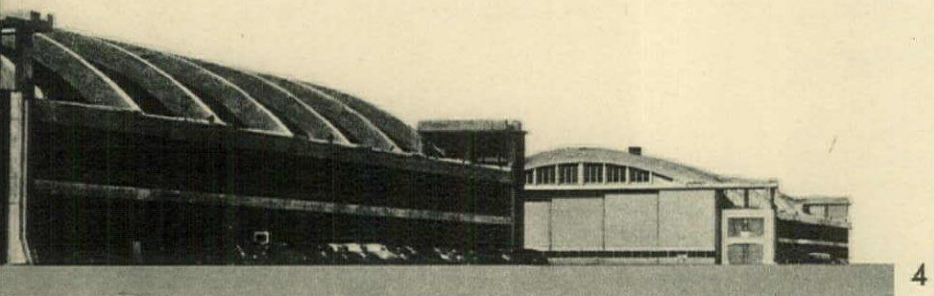
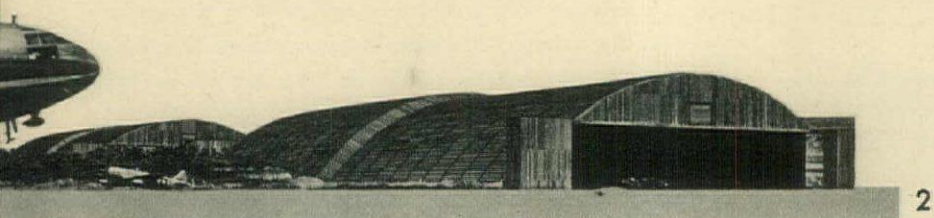
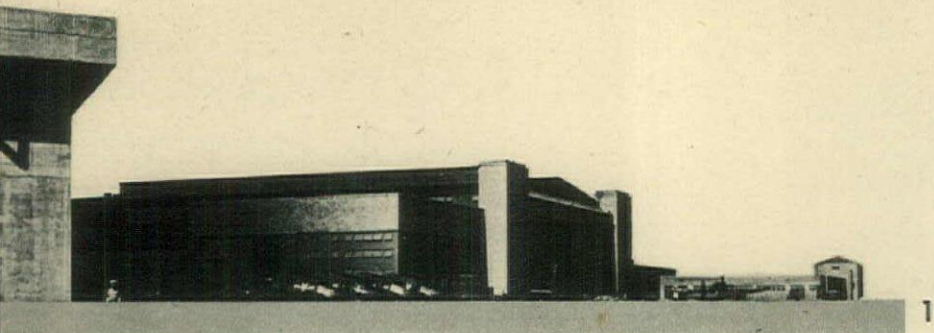


5



Storage and distribution, one of the Navy's greatest challenges during the war, proved both a headache and a triumph. Articles to be stored varied in size from match boxes to mountains of munitions. Beside many supply depots on the mainland, warehouses were required at each advance base as it was set up. Some were for dry storage, some refrigerated. Building forms varied as much as their contents. 1) Typical multi-story supply building found in larger Navy yards. Top floors are usually used as local administrative offices. 2) Over-all picture shows the variety of building types needed for a supply depot, each designed to expedite the handling of a particular type of equipment. 3) Concrete barrel vaults were used for dry storage. Building in center background houses refrigerated storage. 4) Naval aviation supply depot at an advance base utilizes large Quonset huts (40 ft. by 100 ft.), for storage. These prefabricated units were part of the temporary construction program. 5) Simple wooden storage buildings for inert (non-explosive) materials are thoroughly ventilated.

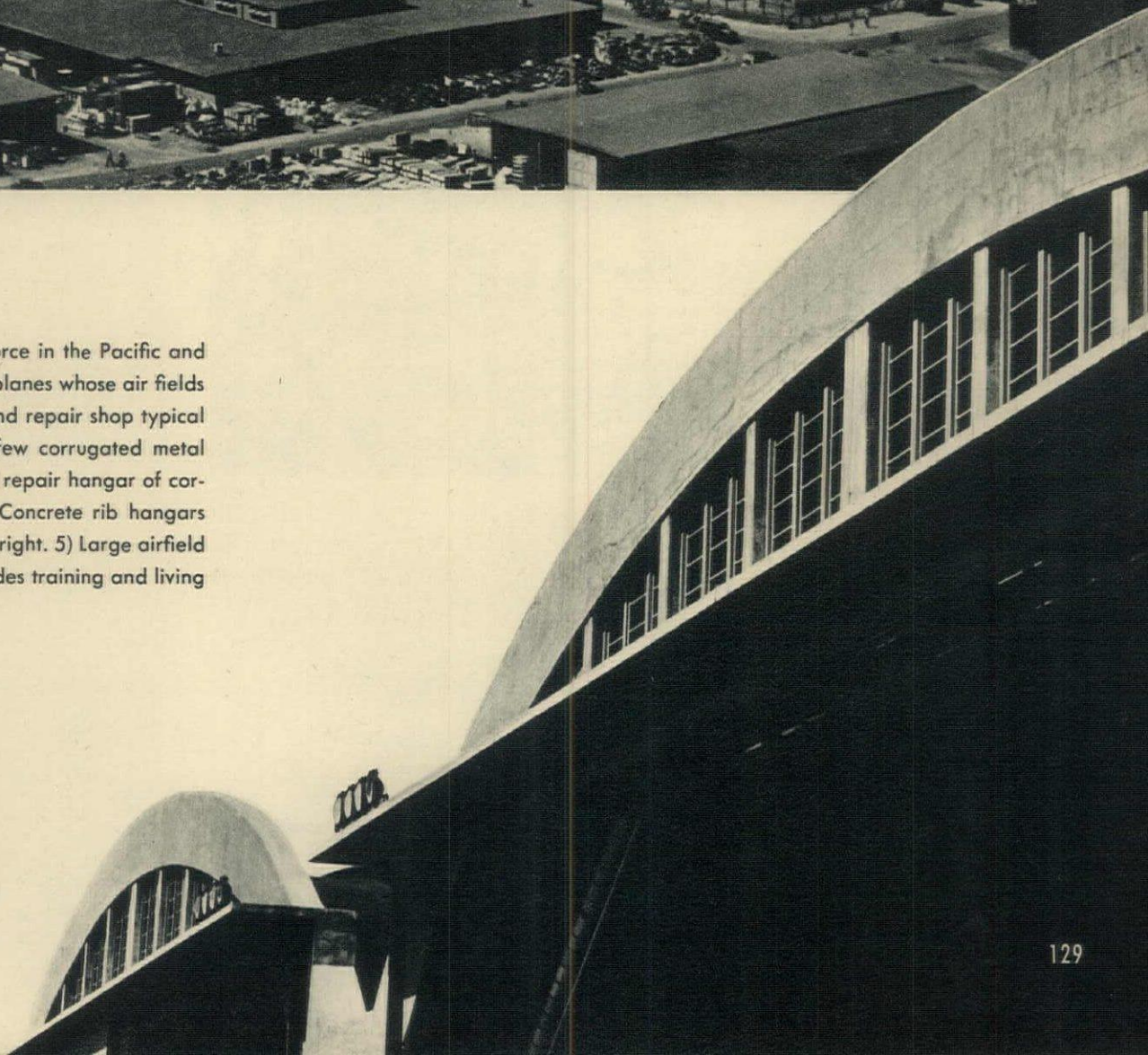




AIRBASES



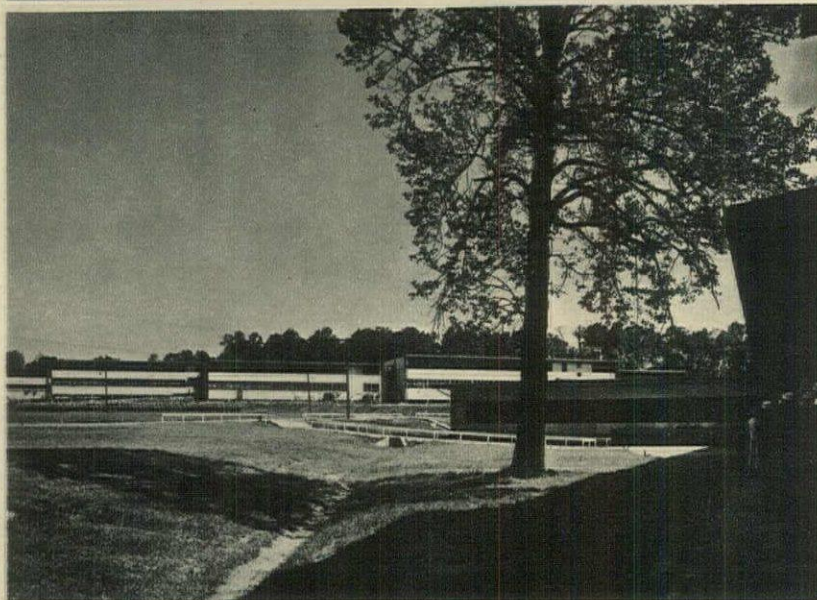
Augmenting the Navy's carrier air force in the Pacific and at home are thousands of land based planes whose air fields speckle half the world. 1) Assembly and repair shop typical of large air stations. 2) One of the few corrugated metal hangars built during the war. 3) Small repair hangar of corrugated metal with sliding doors. 4) Concrete rib hangars used at permanent bases. Detail lower right. 5) Large airfield primarily intended for seaplanes includes training and living facilities.



1



2



3

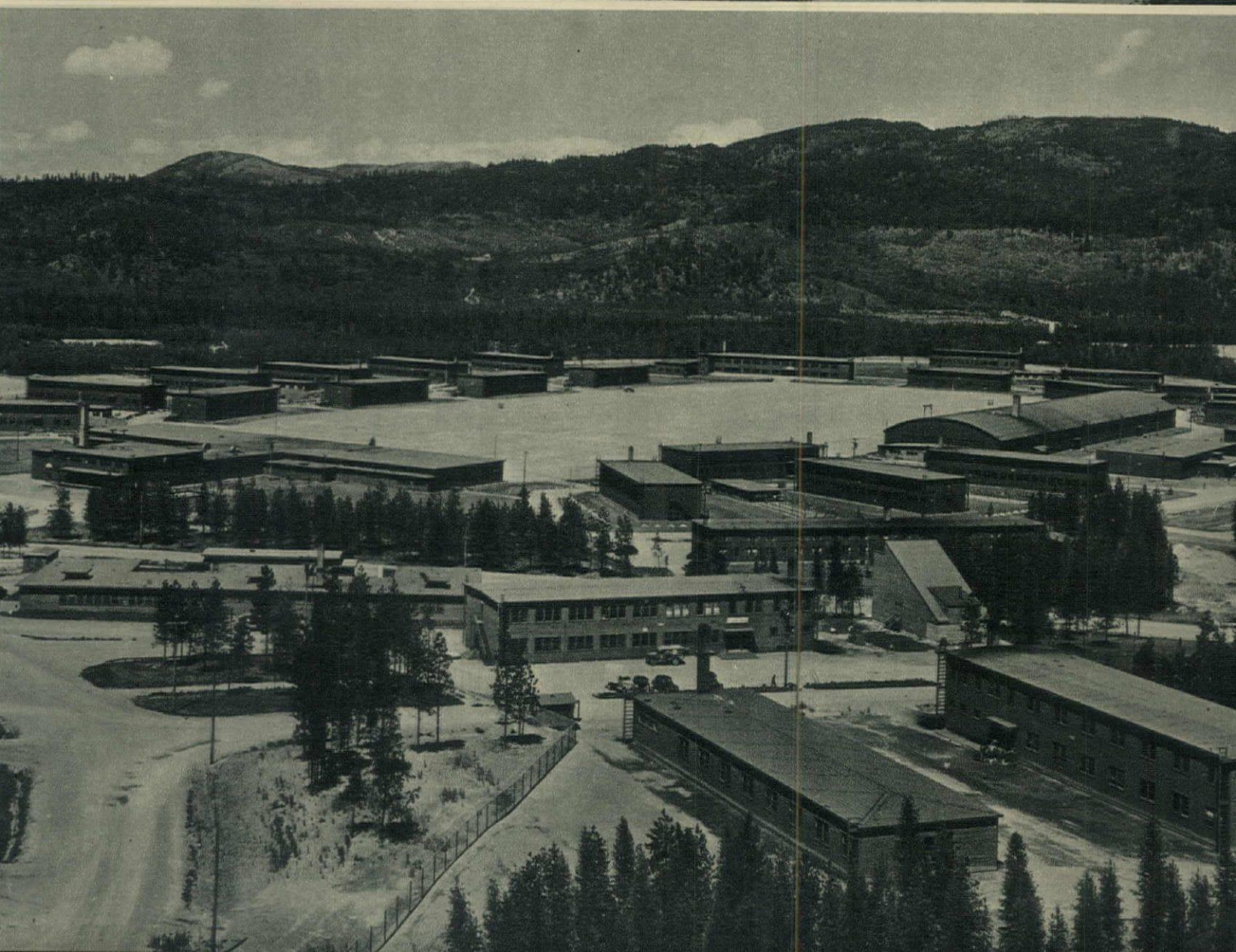
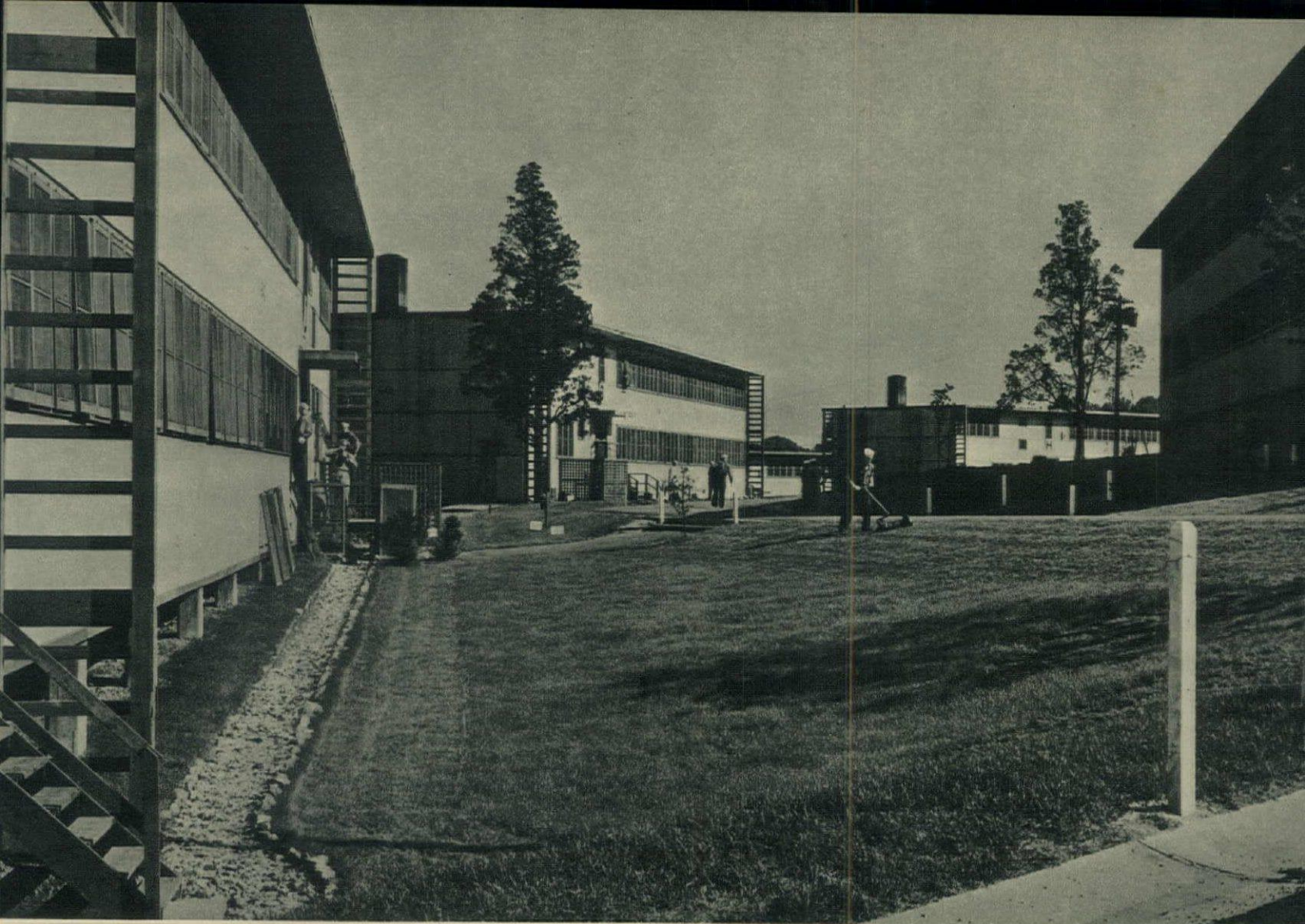


4

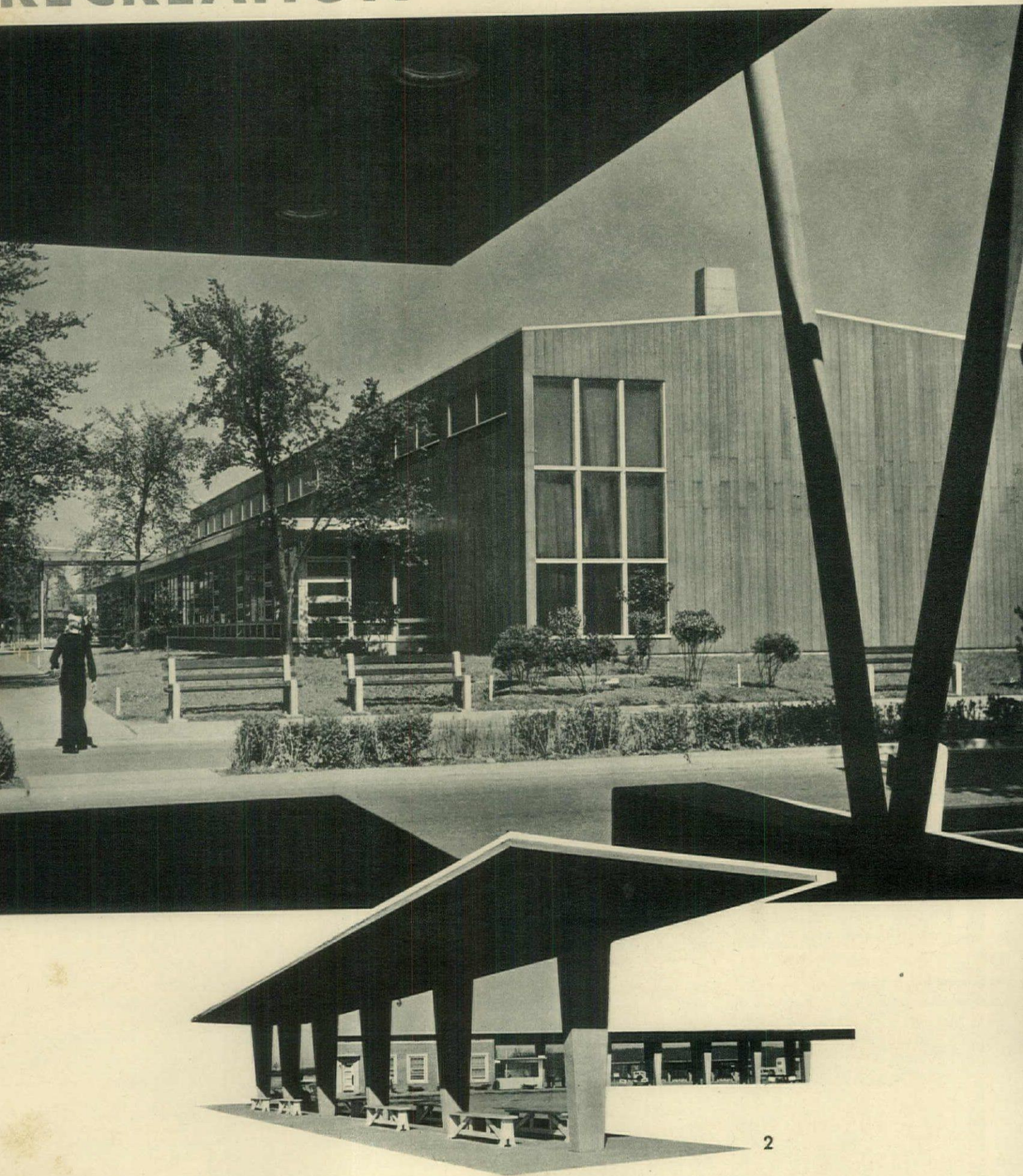


HOUSING

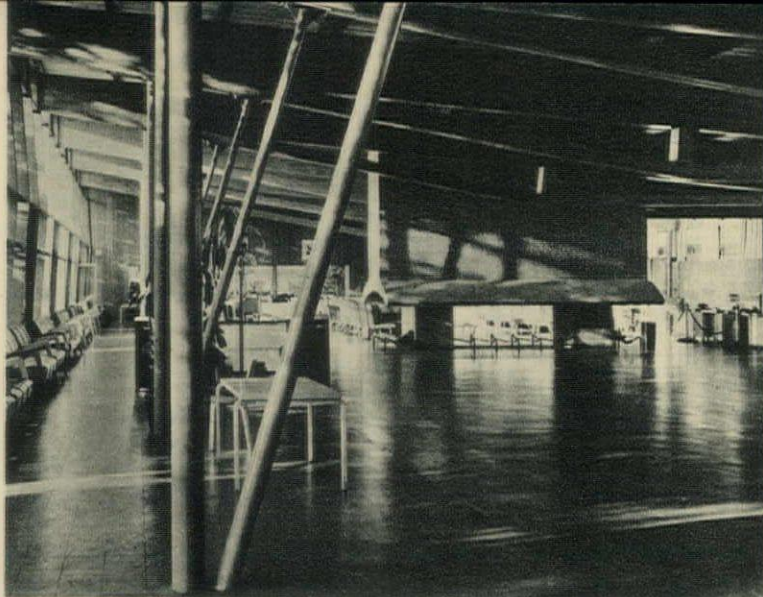
Scattered from the sub-tropics to the Arctic Circle, Navy housing must be practical for any climate or terrain. While stringent standards exist for barrack design, no single formula is adaptable to all locations. Therefore, the Navy developed a number of building types and variations, ranging from temporary huts to permanent structures, several of which are presented here. 1) Permanent concrete barracks for enlisted men (right), have been supplemented by double-deck Quonset huts. 2) Architect-designed barracks at a continental training station have contrasting horizontal strips of wood sash and white wall board. 3) Living quarters at Seabees' camp in Guam are standard Quonset huts with raised ventilating ridge on top. 4) Windowless Quonset barracks in Iceland have storm doors added. Ventilation is largely provided by roof monitors. 5) Close-up of barracks shown in 2) shows free, curving plot plan. Trellises at building ends serve as fire escapes, break the monotony of flat facades. 6) To avoid overwhelming and unworkable site arrangements, larger training centers are divided into self contained camps such as this one, each accommodating about 5,000 men.



RECREATION



2



3



4



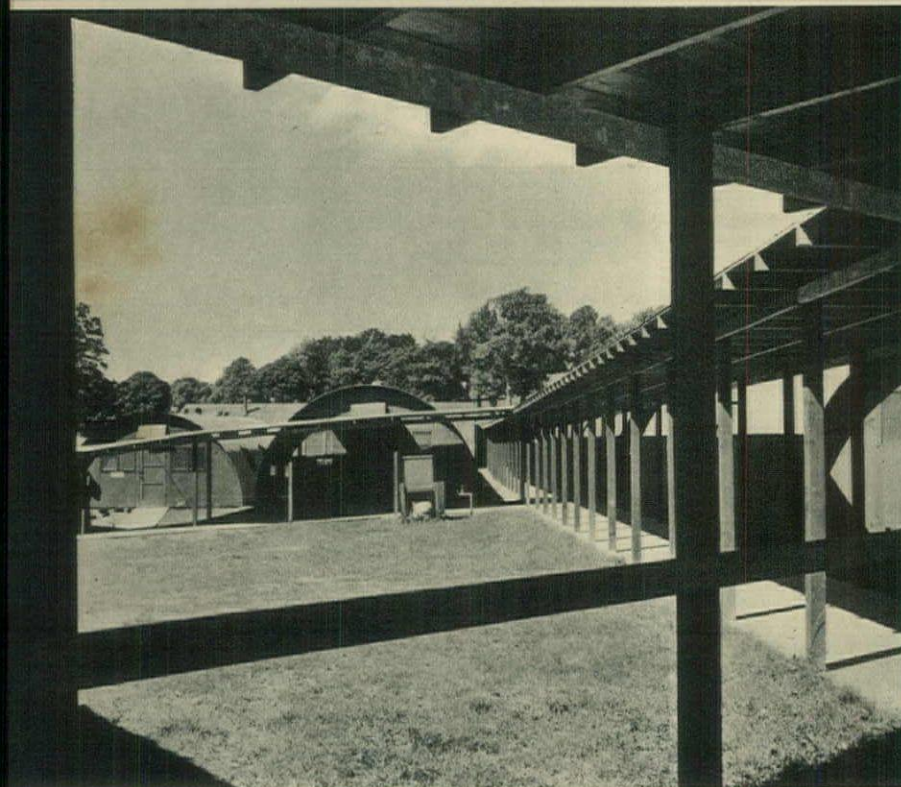
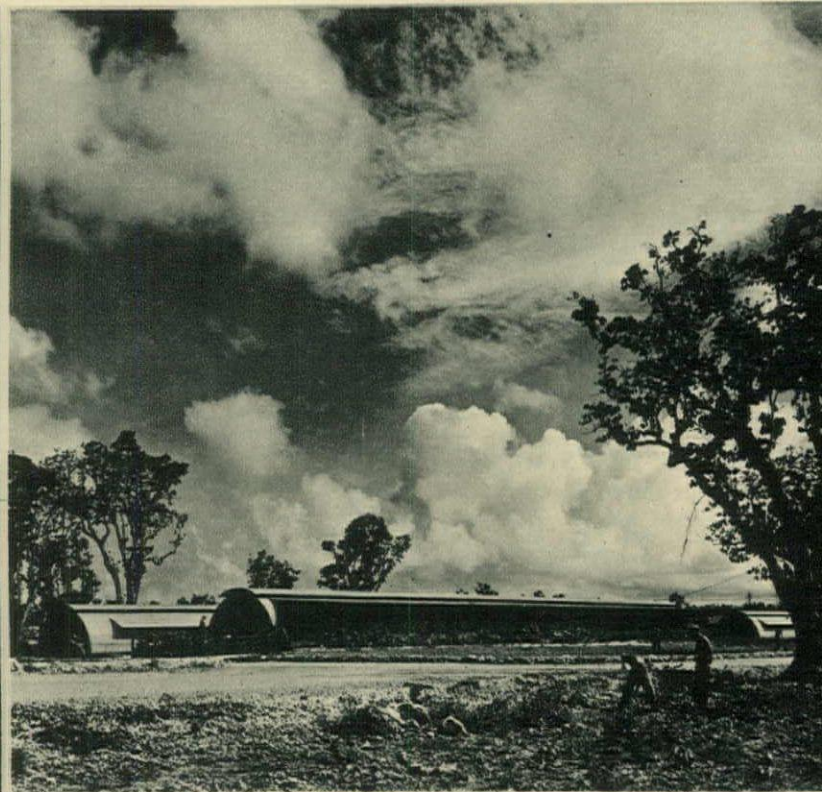
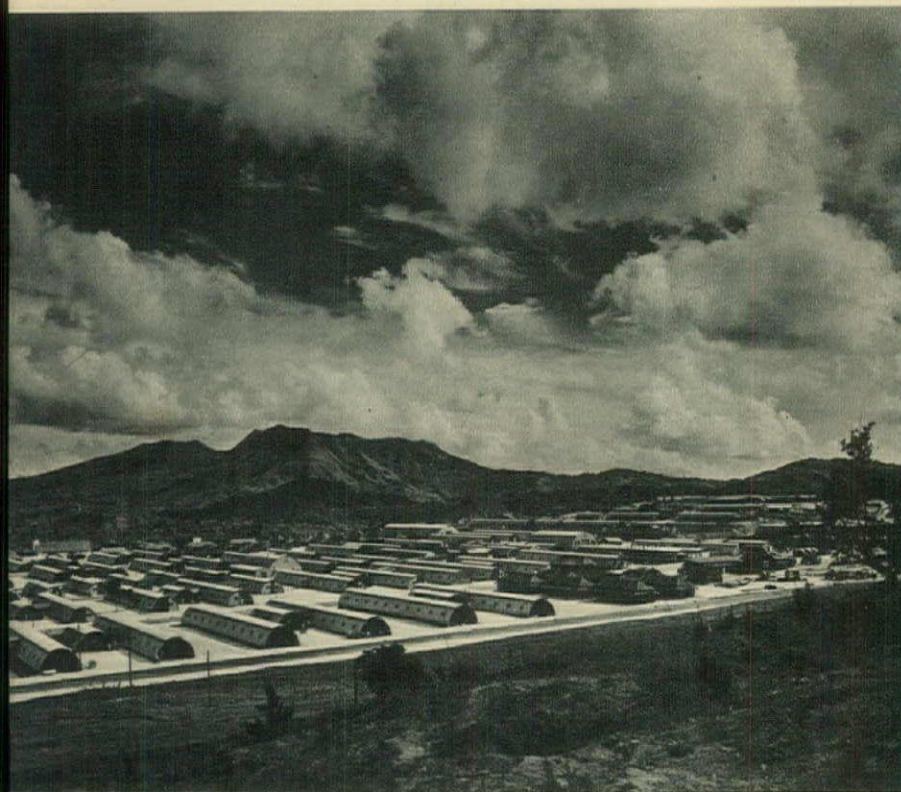
5



6

The Navy knows its middies take their recreation seriously and though some of the boys in far off ports may have to rely on their own ingenuity for amusement, wherever possible, forward areas have simple facilities for relaxation and fun. In contrast, "states side" bases are, for the most part, elaborately equipped as is evidenced by the accompanying photographs. Included in the category of recreation are auditoriums, gymnasiums, game rooms, cafeterias, dance halls and reading rooms. Many of these structures, designed by leading architects, set a high standard for future civilian community buildings. 1) This recreation center at Great Lakes, Ill., was one of the Bureau's outstanding jobs executed under a private engineer-architect contract. It was designed by Skidmore, Owings & Merrill. Note horizontal pattern of siding joints across end of building where, for economy, standard dimension lumber was used. 2) Openess and simplicity of this concrete bus shelter at an Oklahoma munitions depot makes for easy maintenance and traditional ship-shape appearance. 3) Large, multi-purpose recreation hall has exposed laminated wood trusses and an immense fireplace, open on both sides. 4) One of the concrete administration buildings adjacent to Navy housing at the San Pedro, Calif., operating base. 5) Combination auditorium and gymnasium, executed in concrete, is a good example of recent permanent building done by the Navy. 6) Gay ship's service cafeteria at a naval air station near Corpus Christi, Tex.

HOSPITALS



Advance base hospital consists of uniform one-story buildings of Quonset construction. 1) Large base hospital at Guam is quarters for complete staff. 2) Modified standard Quonset hut for tropical climates has open sides to catch prevailing winds. 3) Covered passage connects various hospital units somewhere in England. 4) Interior view shows light, clean, cheerful atmosphere.

CHAPELS



Chapels, the most heterogeneous of Navy buildings, reflect their surroundings, here and abroad, in design and materials. 5) In warm latitudes chapels are usually Quonset huts. 6) Handsome staff-designed altar at Great Lakes, Ill. 7) Marine chapel at Camp Pendleton, Calif. is built of tree trunks, woven fronds and thatch. 8) Large chapel for a major training center has simple, forthright exterior.



2

Boot camp training duplicates with astounding reality life on shipboard and since self preservation is the first letter in the trainee's primer, great stress is laid on physical fitness. 1) Large drill hall found at all training centers. 2) Interior is well illuminated, has sturdy laminated wood arch construction.

All of the work shown here was executed under the supervision of Vice Admiral Ben Moreell, Chief of the Navy Department, Bureau of Yards and Docks and the Civil Engineer Corps. Advance base construction by Navy Construction Battalions (Seabees). Admiral Moreell has recently been succeeded as Chief of the Bureau of Yards and Docks by Rear Admiral J. J. Manning.

47. SHOPPING CENTER

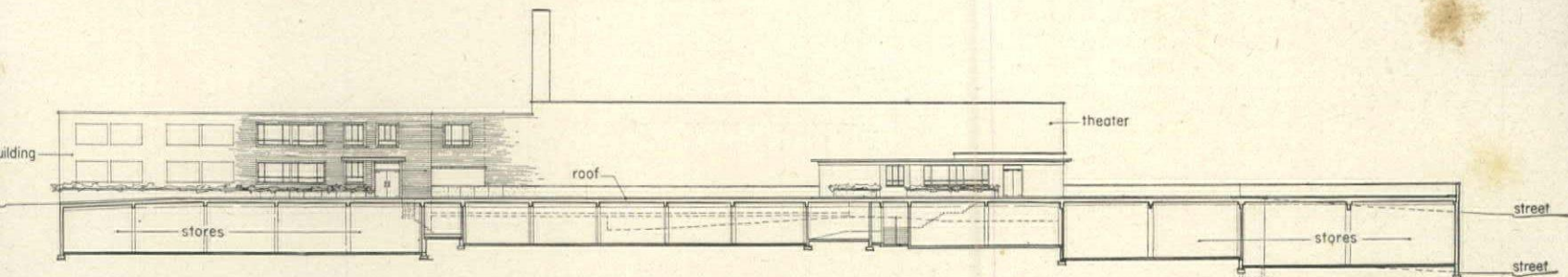
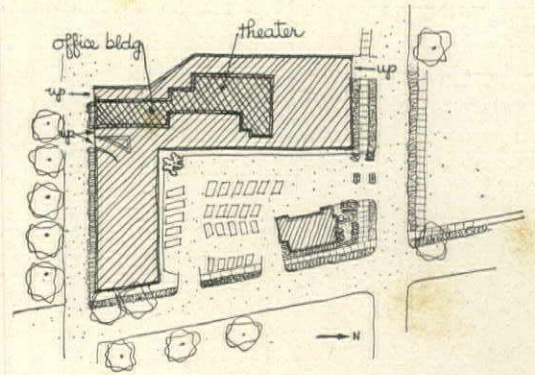
BUILDING PREVIEWS

A sloping lot is exploited to yield a theater, offices and extra parking.

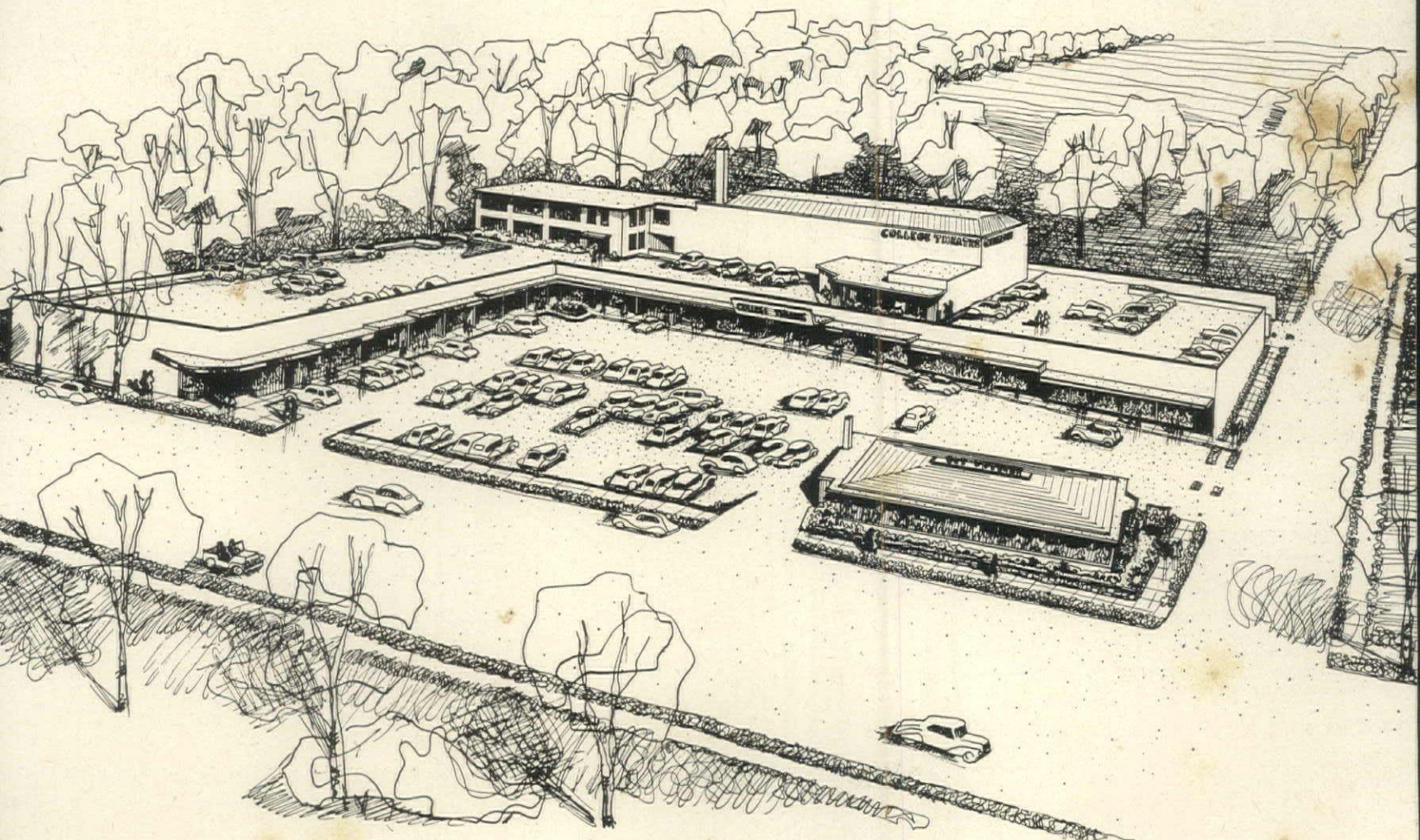
BERLA & ABEL, Architects; JOHN & DREW EBERSON, Architects for the theater

COLLEGE PARK SHOPPING CENTER, INC., Owners

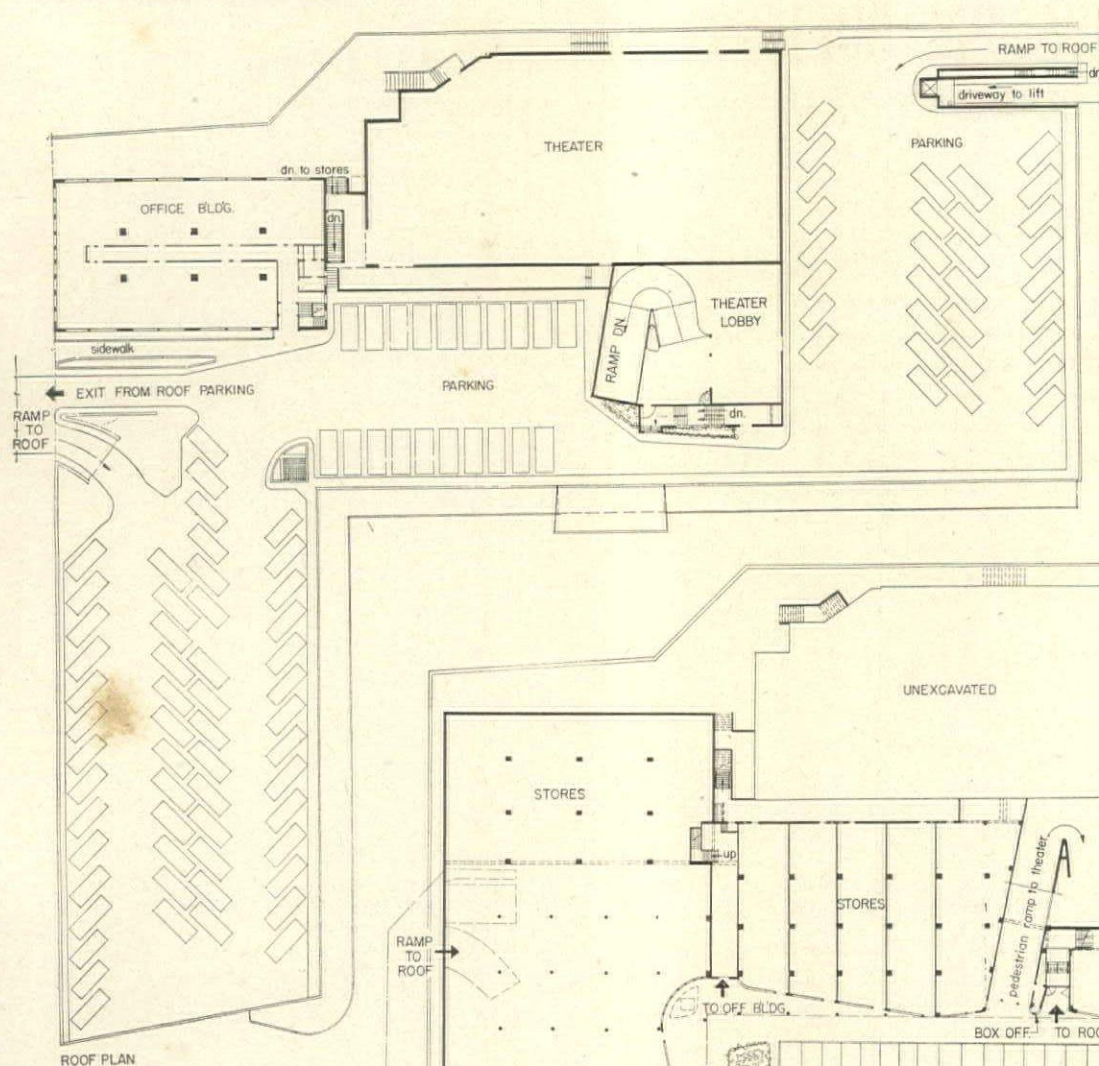
This project, covering four acres on the Washington-Baltimore highway, takes its name from the University of Maryland a block away. Site contours permitted easy access to the roof of the single story block of stores at the interior corners; and this slope also permitted location of the theater lobby level midway between main floor and roof levels, with a ramp connecting both. The main level, which will be cut down to that of the highway, will provide a corner restaurant for a national chain, 17 stores connected by a covered walkway and parking space for 135 cars. The upper level provides a two-story office block with some 10,000 sq. ft. of floor space, a theater seating 965 and additional parking space on the roof. Construction throughout will be of reinforced concrete with precast concrete exterior walls. Adjacent land has been acquired by the owners for extension of the parking area as required.



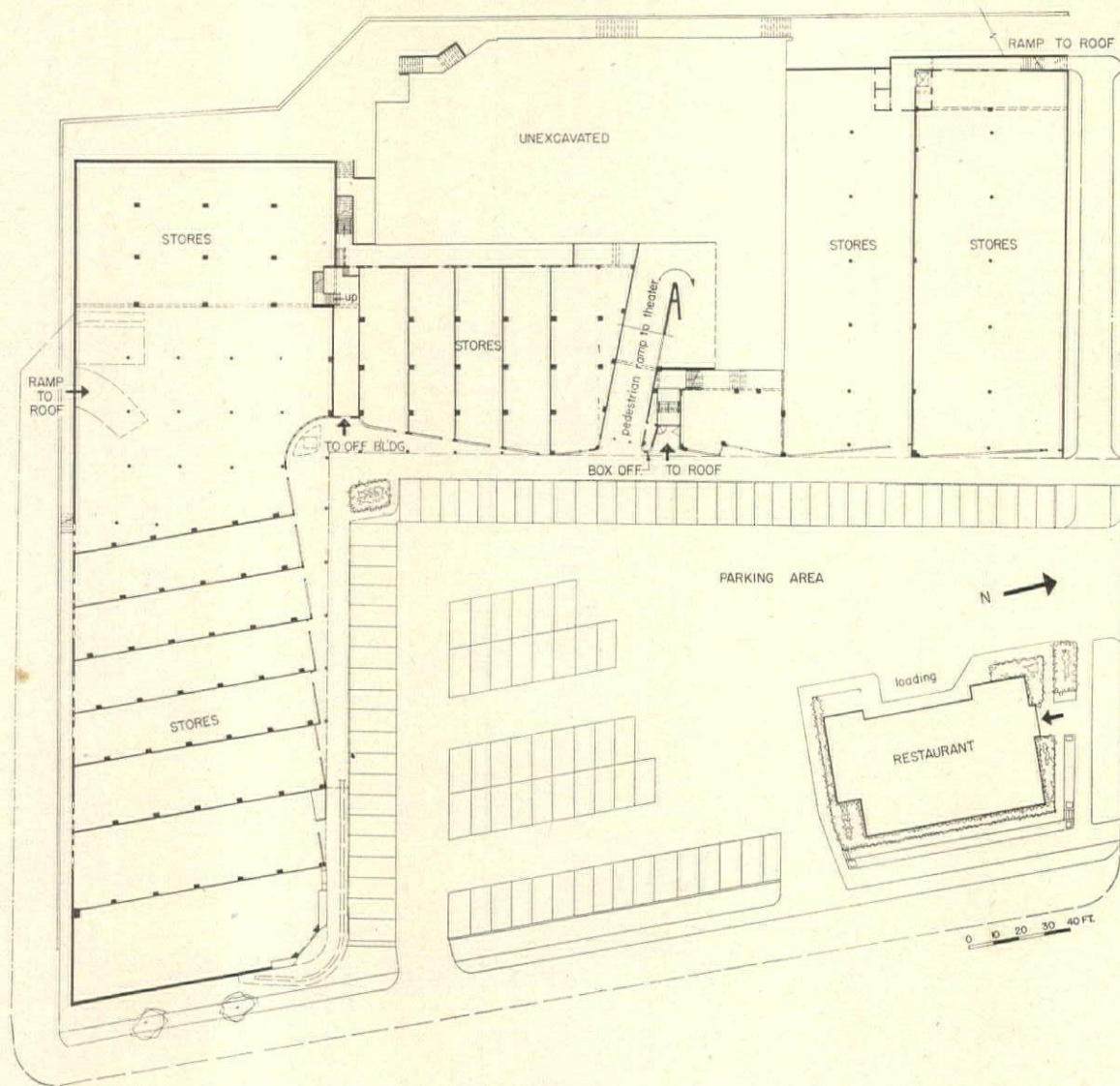
SECTION SHOWS HOW TERRAIN HAS BEEN UTILIZED TO PROVIDE EASY ACCESS TO ROOF PARKING AND MINIMIZE THEATER EXCAVATION



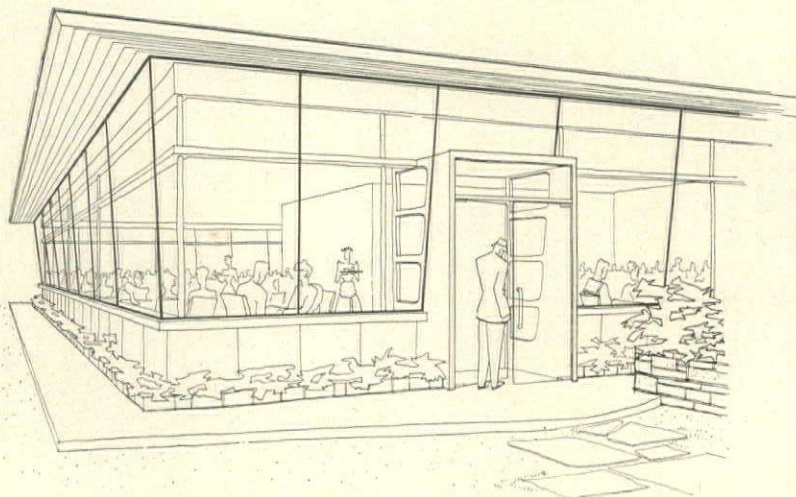
SHOPPING CENTER



BY PLACING theater floor midway between stores and roof, architects have reduced excavation required to a minimum. Traffic flow is well-planned: egress from roof parking correctly brings patrons down into center of shopping area and auto ramps spill into side streets rather than the project itself. Theater box office is at street rather than at lobby level; this unnecessarily awkward arrangement forces roof parkers to walk down and then back up in order to enter theater.



CHARACTERISTIC FEATURE of all Washington shopping centers is a drive-in restaurant. Designed for a national chain, this building is a brightly-lit glass cage with services concentrated in a central core. In the storeblock (above) the shopfronts have been successively recessed to give some show-window space to the largest unit on the interior rear corner. This incidentally serves to broaden the covered walkway at points where traffic would presumably be heaviest.

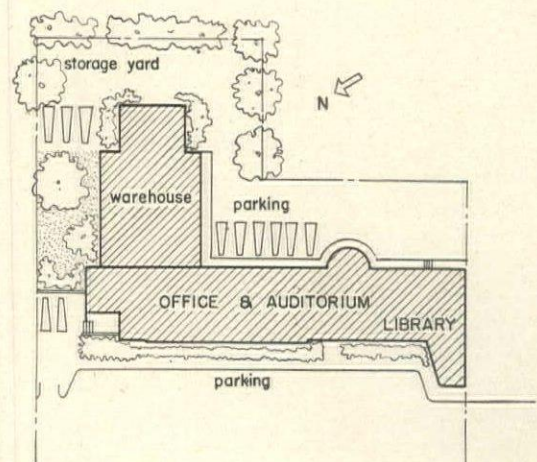
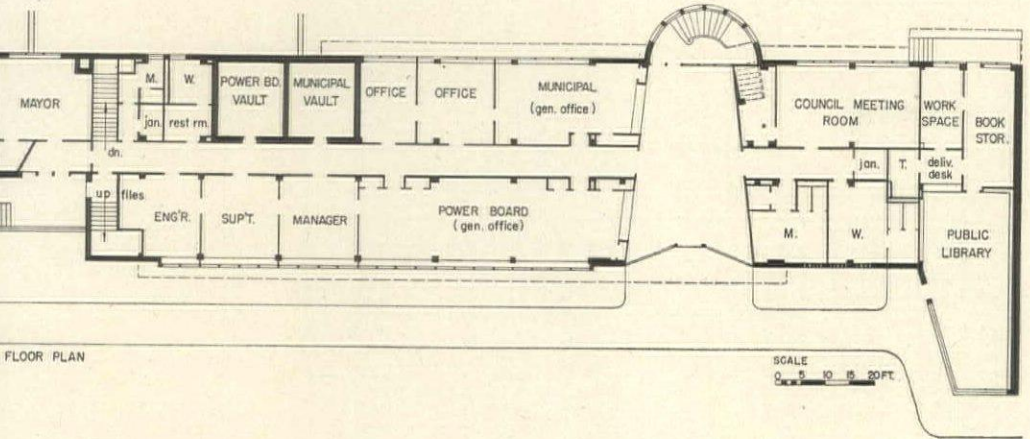
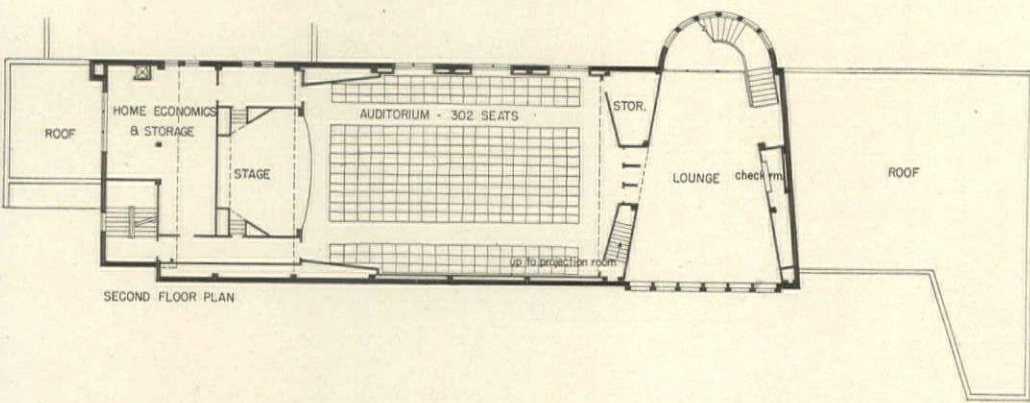


48. POWER BOARD AND MUNICIPAL BUILDING

The Alabama State Planning Board and TVA's Department of Regional Studios collaborate to produce a new type of public building.

GILL & BIANCULLI, Architects

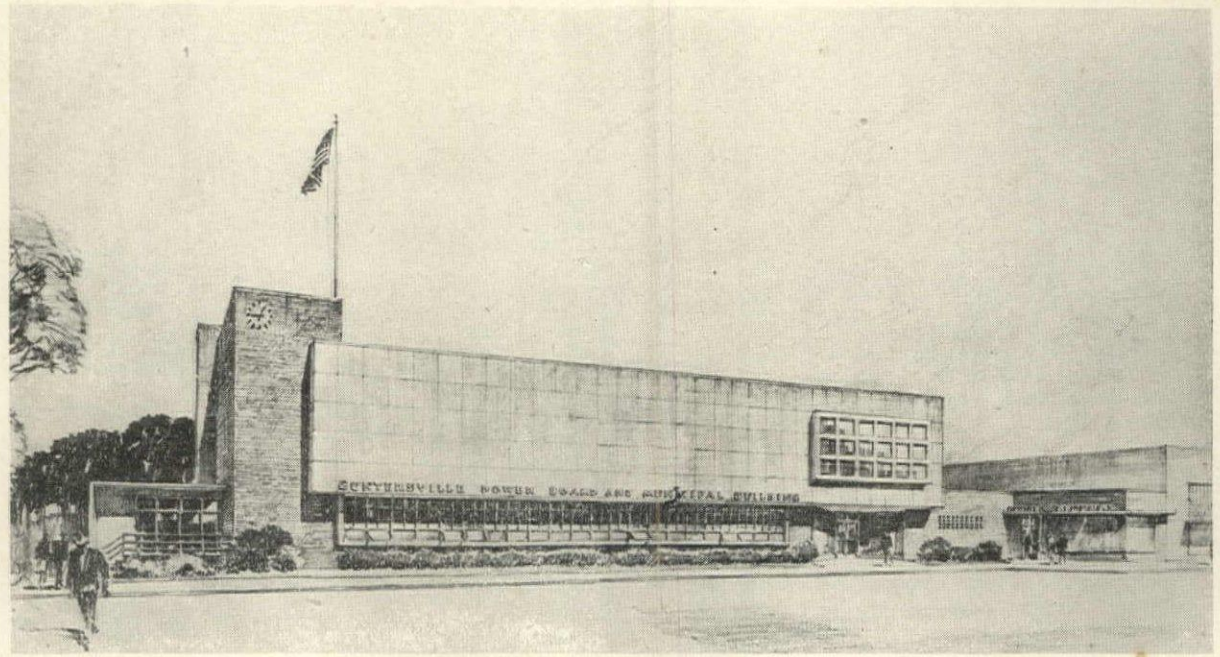
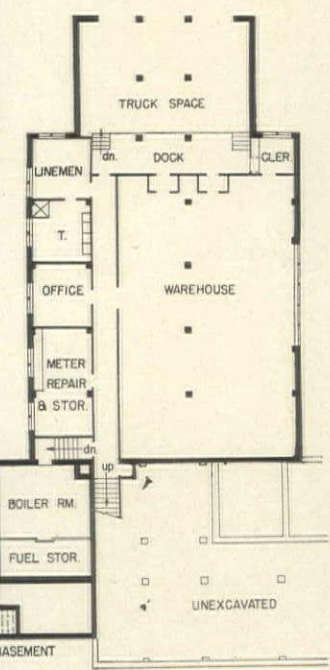
This interesting example of public architecture in one of its more promising aspects is a plan providing for a noteworthy collection of public functions. Prepared for Guntersville, Ala., a town within the region of TVA-developed electric power, the design is intended to create working space for the mayor, the city council, power board executives and employees. It also provides a public auditorium seating 300 people, space for the home economics demonstration work so successfully carried on in connection with power development in the area, and a public library. In the semi-basement projecting from the rear of the building there is space for repair and maintenance crews and warehouse facilities for power equipment, with an adjoining loading platform. The workmanlike arrangement of facilities needed for this variety of functions is well expressed by the building's exterior. The impressive lines of the central mass are a logical definition of the second-story auditorium, while the adjoining lounge is differentiated by projecting windows. The Gill-Bianculli version of the familiar municipal clock-tower provides added height for the auditorium stage.



SECOND-FLOOR AUDITORIUM is reached by broad spiral stairway, attractively located in two-story window bay. Home economics room has its own stair at other end of building.

FIRST-FLOOR PLAN shows logical organization of facilities for major functions, with each having its own direct entrance from outside. The mayor's office is given a special entrance.

SIMPLE AND HANDSOME MASSES OF BUILDING FACADE CLEARLY EXPRESS ITS VARIOUS FUNCTIONS

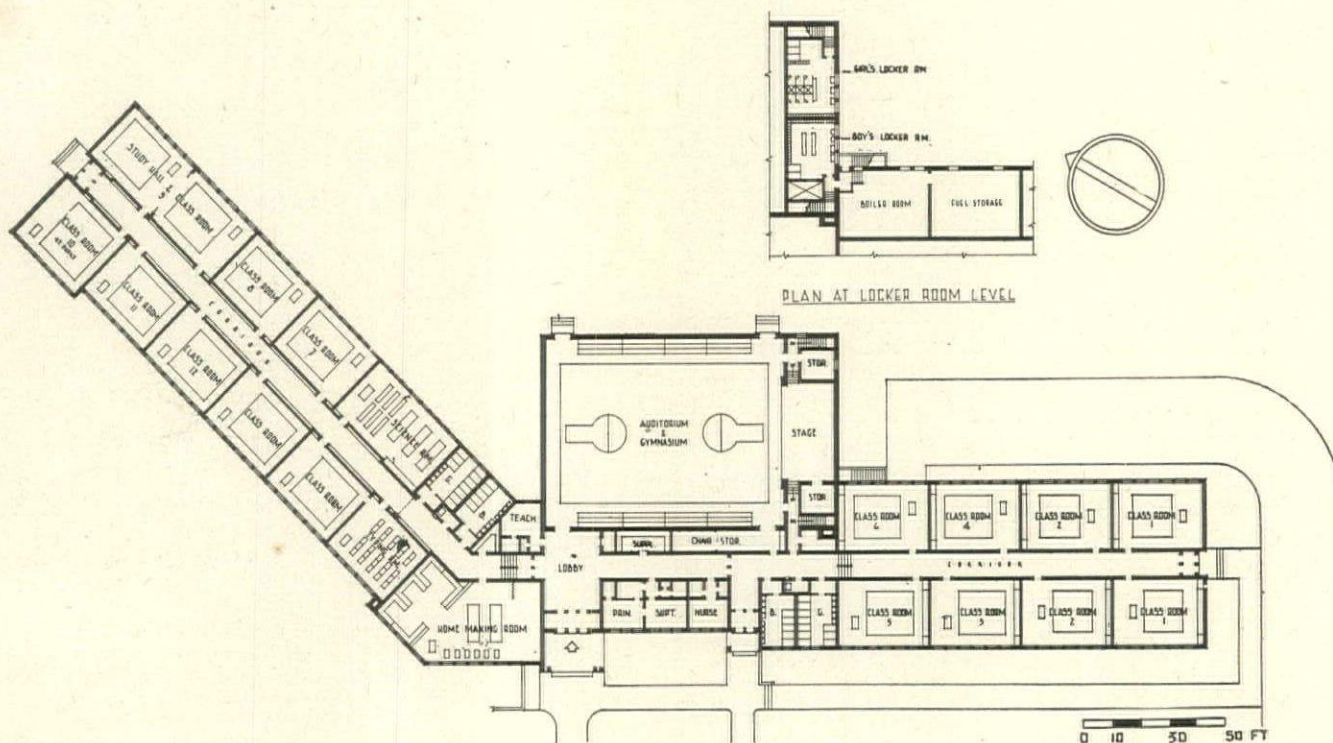
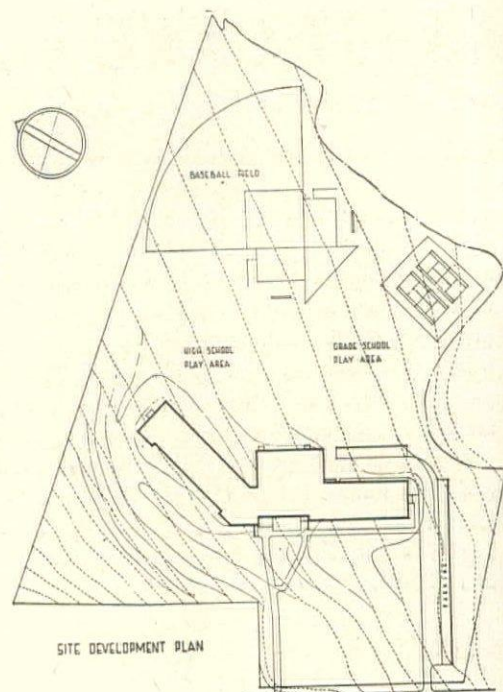


49. RURAL SCHOOL

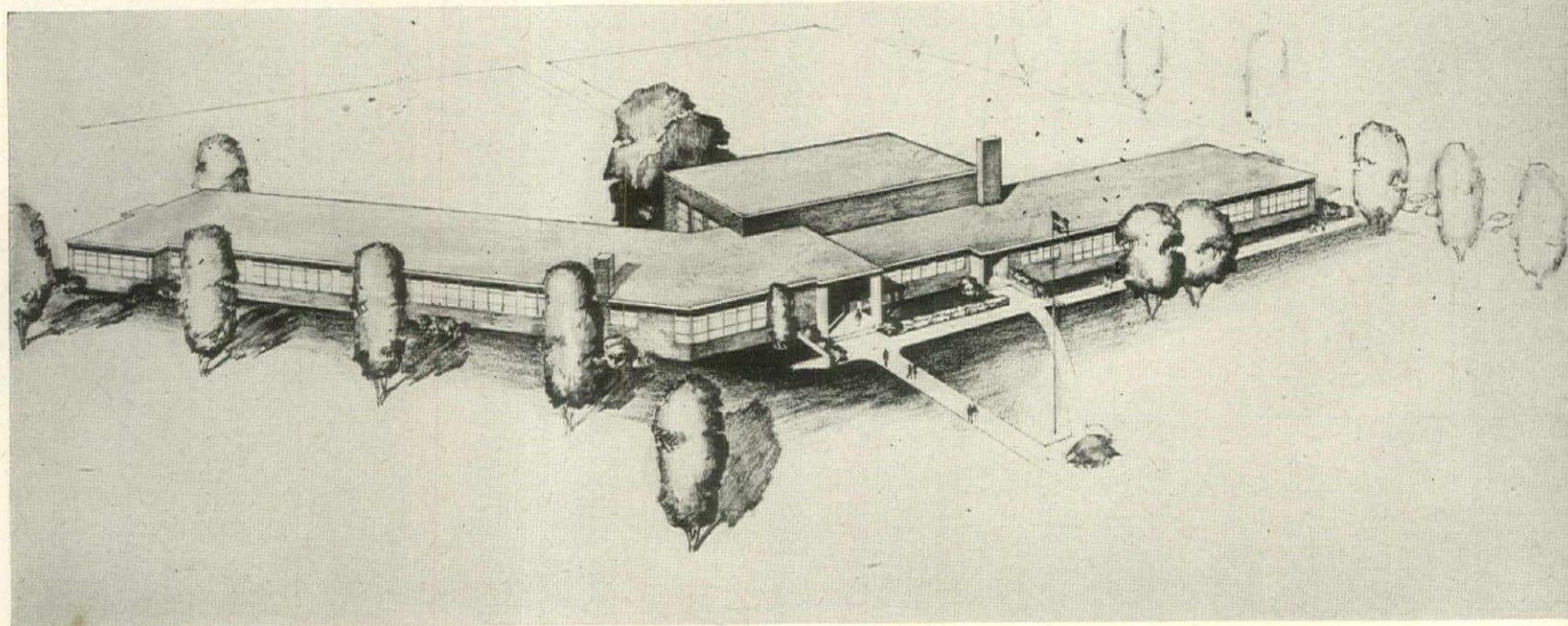
This combined grammar and highschool makes good use of a limited budget and an irregular site.

FREEMAN, FRENCH, FREEMAN, Architects

Prepared for the town of Vergennes, Vermont, this school building answers a problem typical in a rural community: how to meet the requirements of both high school and grade school children with a single building. Working within an extremely limited budget, the architects achieved a well-defined separation, not only for the classroom facilities to be used by each age group, but also for the auditorium, which will be used for town meetings and other community functions. South wing of the simple, one-story structure houses elementary classrooms, gives direct access to the play space set aside for younger children. High school classrooms are in the north wing, slanted to take maximum advantage of the irregularly shaped site. The two units are separated by the centrally located administrative office and by the entrance lobby, which gives direct access to the ample auditorium and gymnasium. Fitting this low-slung structure to its rocky Vermont site required careful planning and land development, while the site's uneven boundaries were an added problem. Total cost of construction, the architects estimate, will amount to not more than \$225,000.



SIMPLE, ONE-STORY BUILDING SEPARATES CLASSROOM FACILITIES FOR TWO AGE GROUPS, ALSO HAS DIRECT-ACCESS AUDITORIUM



LANDSCAPE GARDENING II: Community Planting

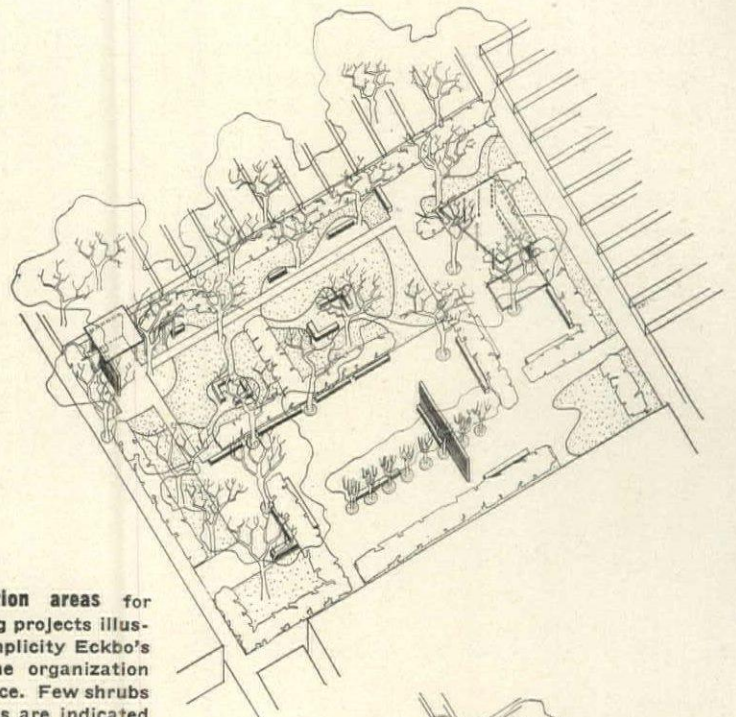
Indigenous plants and trees, set out along sweeping lines contribute to Eckbo's success in economical group landscaping.

As the importance of neighborhood planning becomes more widely accepted, the requirements for group landscaping take on new interest. Garrett Eckbo, who has had wide experience in large scale public and private work, approaches it not as a problem exclusive to his profession but from the collective viewpoint of real estate developers, site planners, architects, engineers and landscapers. Describing a dilemma common to owners of small lots (though few are consciously aware of it), he points to an average family seeking to escape the congestion and discomfort of city life. To them, more room and a garden of their own seem the ultimate answer. They buy a typical suburban lot, 50 ft. by 100 ft., in an unplanned, growing development and sit back to enjoy their new found peace. The size of their property is certainly not impressive but it still has too much lawn and planting for the family to maintain properly in its leisure time. A limited budget eliminates the possibility of hiring a gardener. But this family, because they have no control over the use of surrounding land, cannot risk a smaller piece of property. As it is, their lot insures only minimum privacy and security. Therefore, the owners are forced to put up with a quantity of expense, work and annoyance unknown to the resident of a well planned community. Furthermore, the chances are that their children will enjoy far less freedom and safety beyond the boundaries of the family lot. Contrastingly, in the planned neighborhood where properties border a community park or open area and roads are restricted to the use of residents, acreage required for a really livable private lot is drastically reduced.

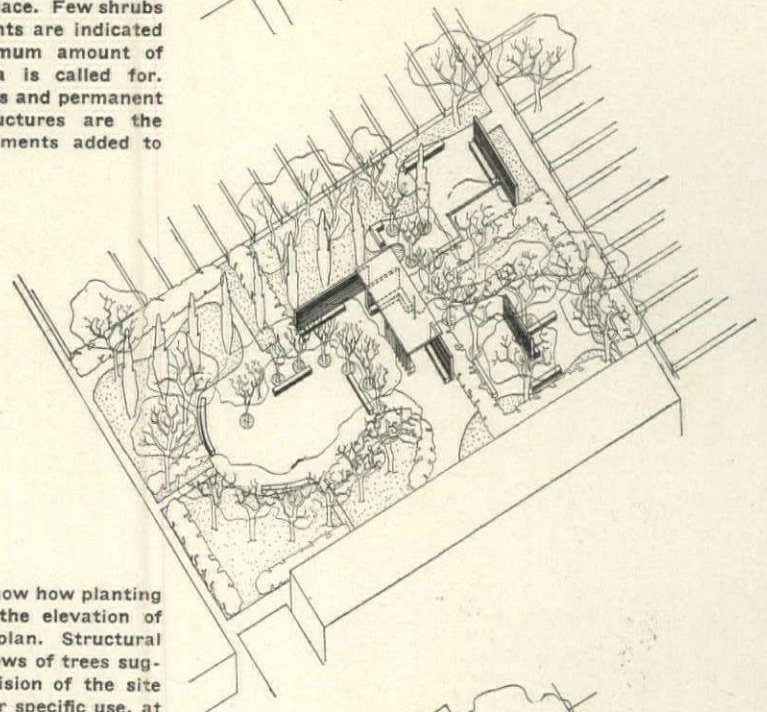
Eckbo's idea of a soundly planned community is one where all private and public buildings are related to each other by service facilities and recreational areas. He finds a neighborhood grouped around the local elementary school to be the smallest logical unit for a thorough planning and landscaping job. To him, the contour and expanse of the undeveloped land serves as the skeleton and controlling form of the site plan rather than a by-product of the building and roadway arrangement. Since roads and sidewalks are purely service elements, their use as a primary outline overemphasizes their importance and reduces the livability and design potentialities of the site.

Breaking down the private home into four principle parts, Eckbo labels them Public Access, General Living, Private Living and Work spaces. All but Private Living are also components of the neighborhood plan, (a point which is in itself a strong argument for group cooperation to avoid expense, waste and duplication). Public Access takes in streets and sidewalks, General Living ties in with public parks, green areas and community buildings, Work Space is related to neighborhood service facilities. Most private houses contain a wealth of devices which reduce the drudgery of the housewife but many of these could be provided as community facilities at far less expense to the individual home owner. Few houses, however, are able to provide recreational opportunities equal to those of parks, playgrounds, community buildings, country clubs and commercial amusement centers—advantages not unusual in the planned neighborhood.

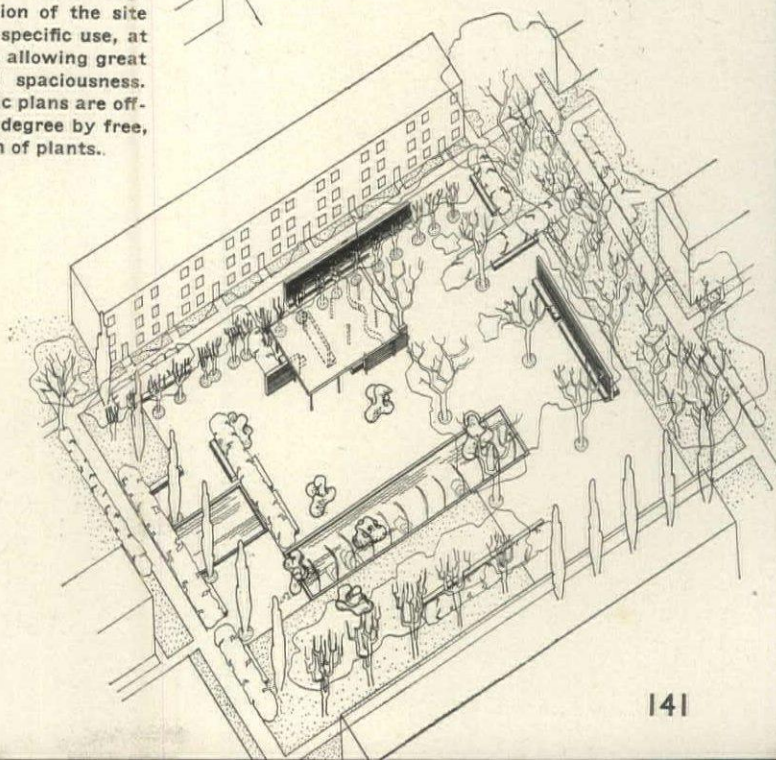
Landscaping is essential to neighborhood planning because, as part of the physical environment, it is on an equal footing with building arrangement, architecture, roads and utilities. Its primary duty is to relate these refinements to the unimproved terrain; to create harmony between man-made structures and earth, rock, water and plants. Good landscaping can do as much to organize outdoor space for maximum use and enjoyment as architecture does indoors. Characteristic of Eckbo's technique is his use of plants as structural rather than decorative elements of the design. This does not mean, however, that the effect must be very geometrical or formal. On the contrary, straight lines are usually softened by luxurious, free growth. The result is handsome and sweeping. More discernible in large scale work than on the private lot (FORUM, Feb., '46) is the fact that Eckbo's bold conception unifies and encompasses the whole site rather than dividing it into a series of unrelated garden spots.

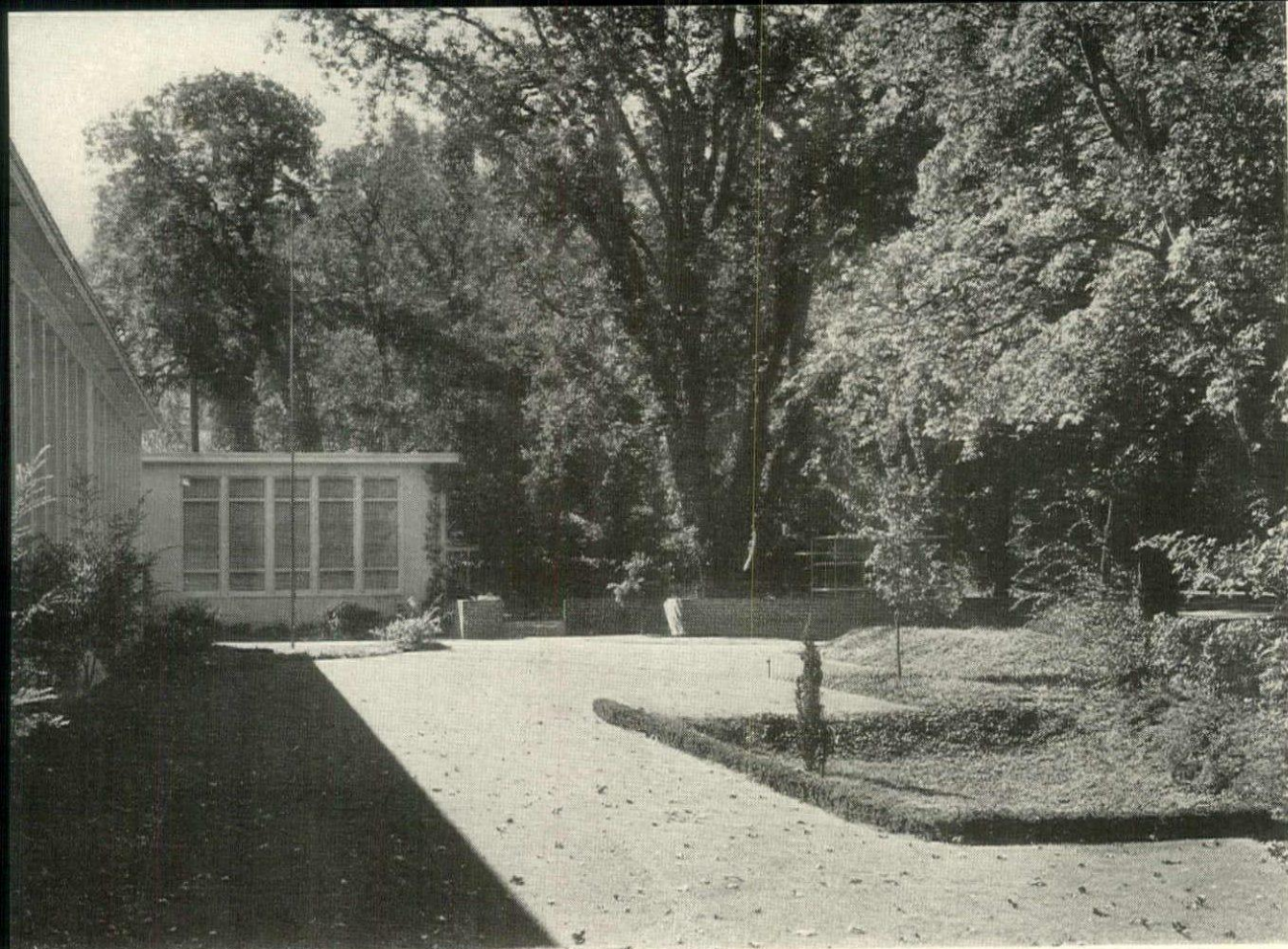


Three recreation areas for USHA housing projects illustrate with simplicity Eckbo's theory for the organization of outdoor space. Few shrubs or small plants are indicated and a minimum amount of planted area is called for. Trees, hedges and permanent outdoor structures are the principal elements added to the site.



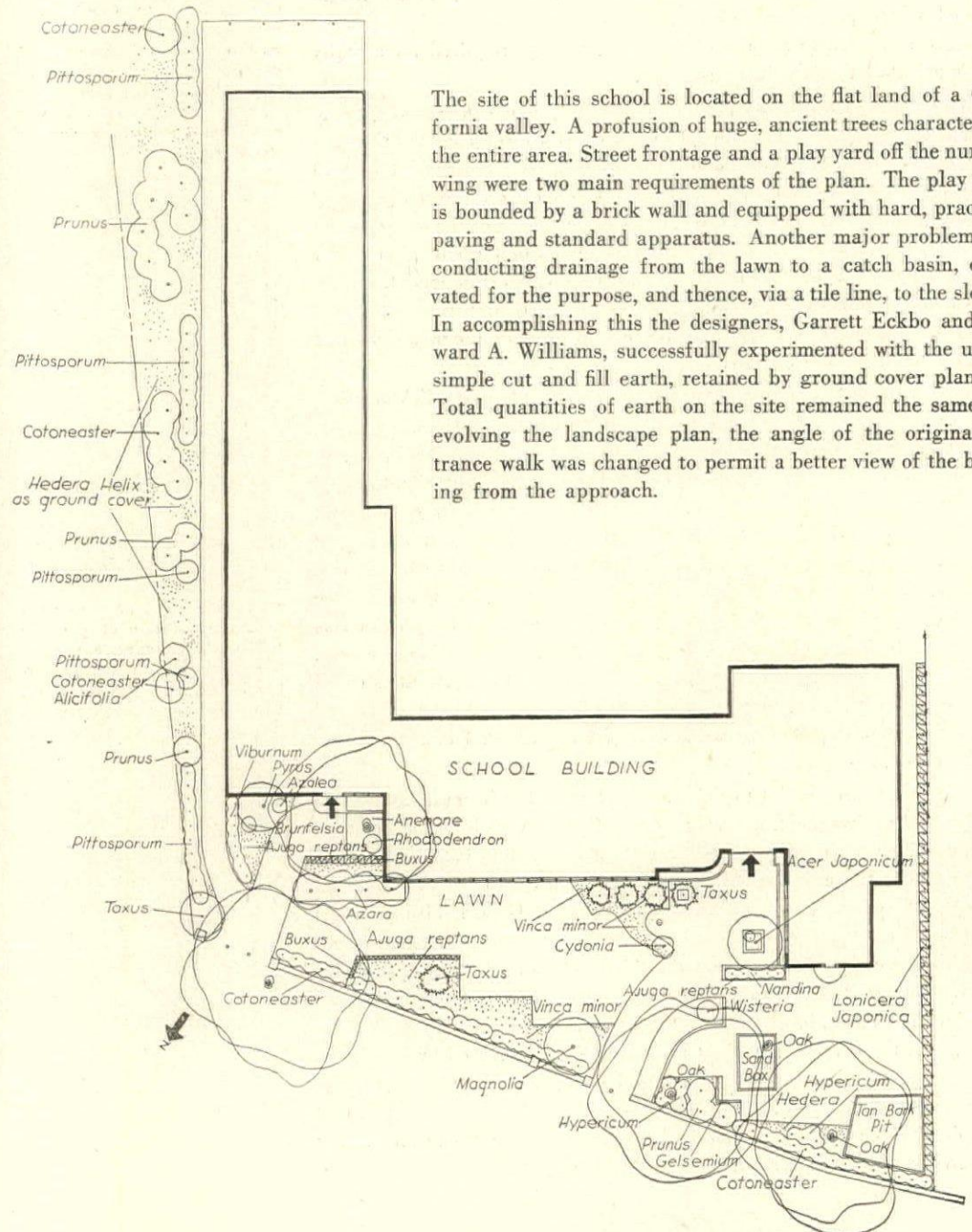
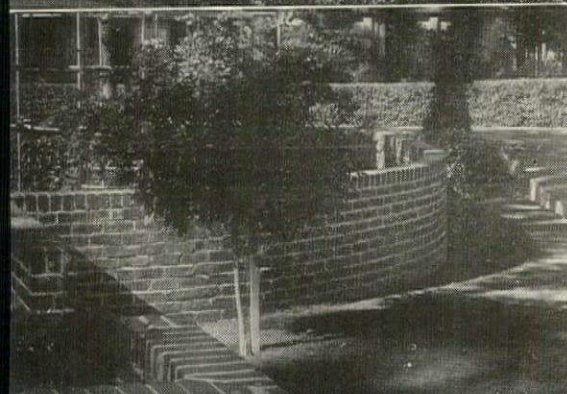
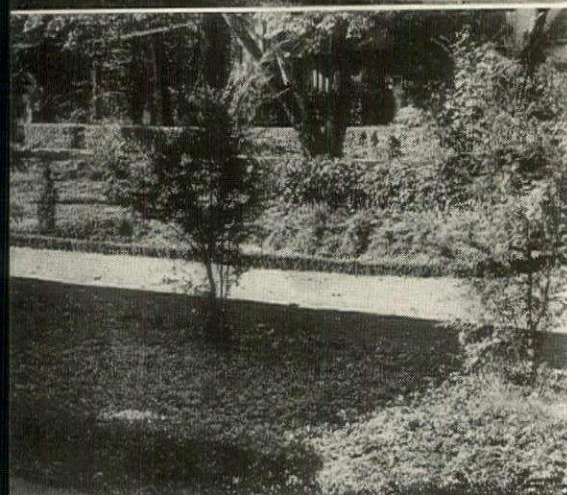
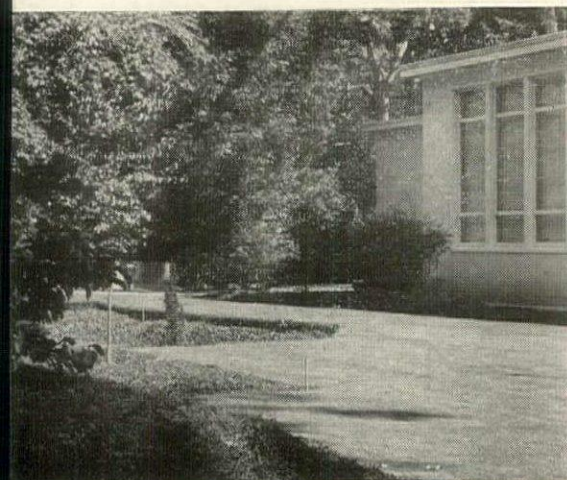
Isometrics show how planting carries out the elevation of the ground plan. Structural screens or rows of trees suggest the division of the site into units for specific use, at the same time allowing great flexibility and spaciousness. Rigid geometric plans are offset to a great degree by free, natural growth of plants.





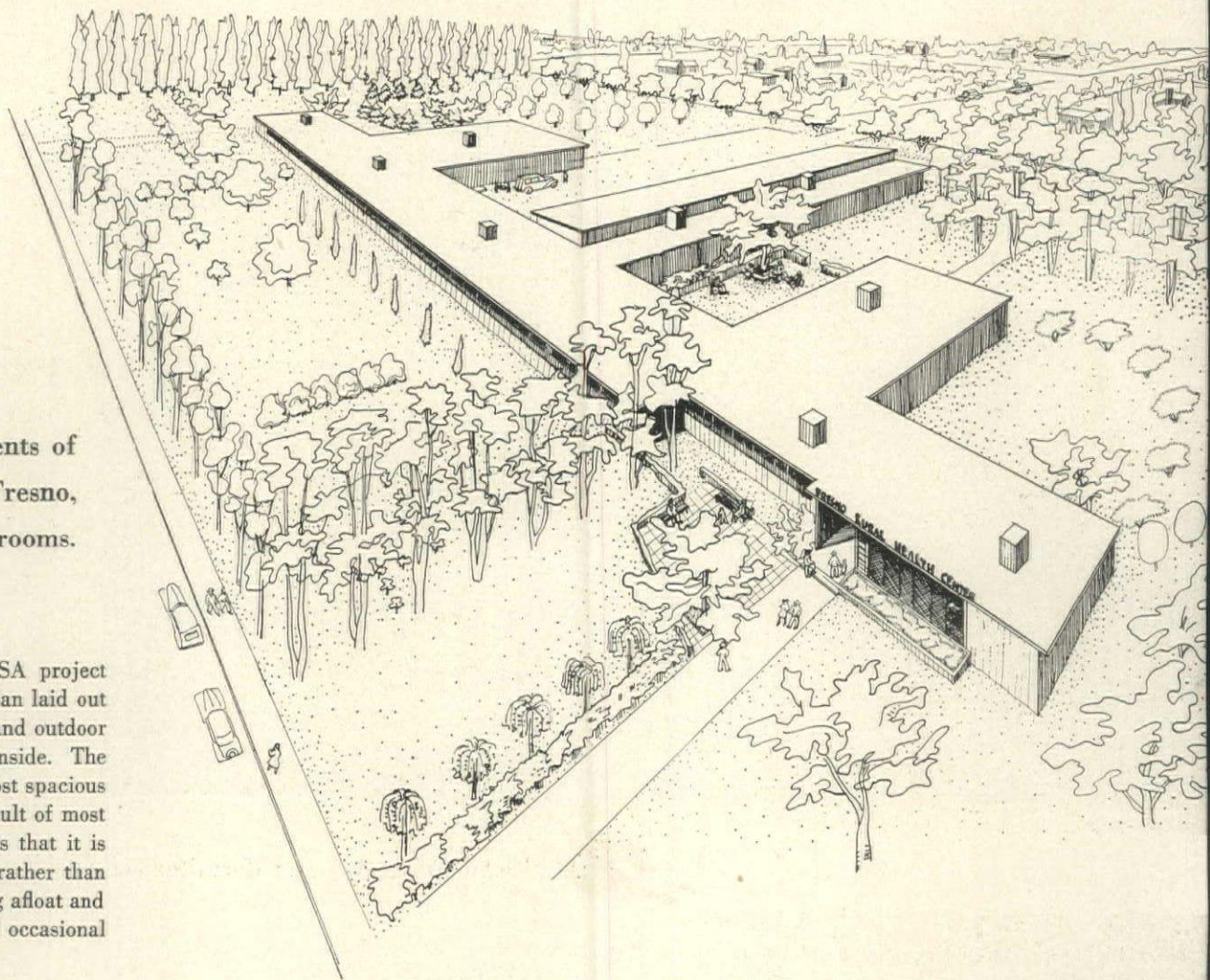
Ground sculpture, controlled planting, open wooded school site for light and usefulness.

GARRETT ECKBO, Landscape Architect



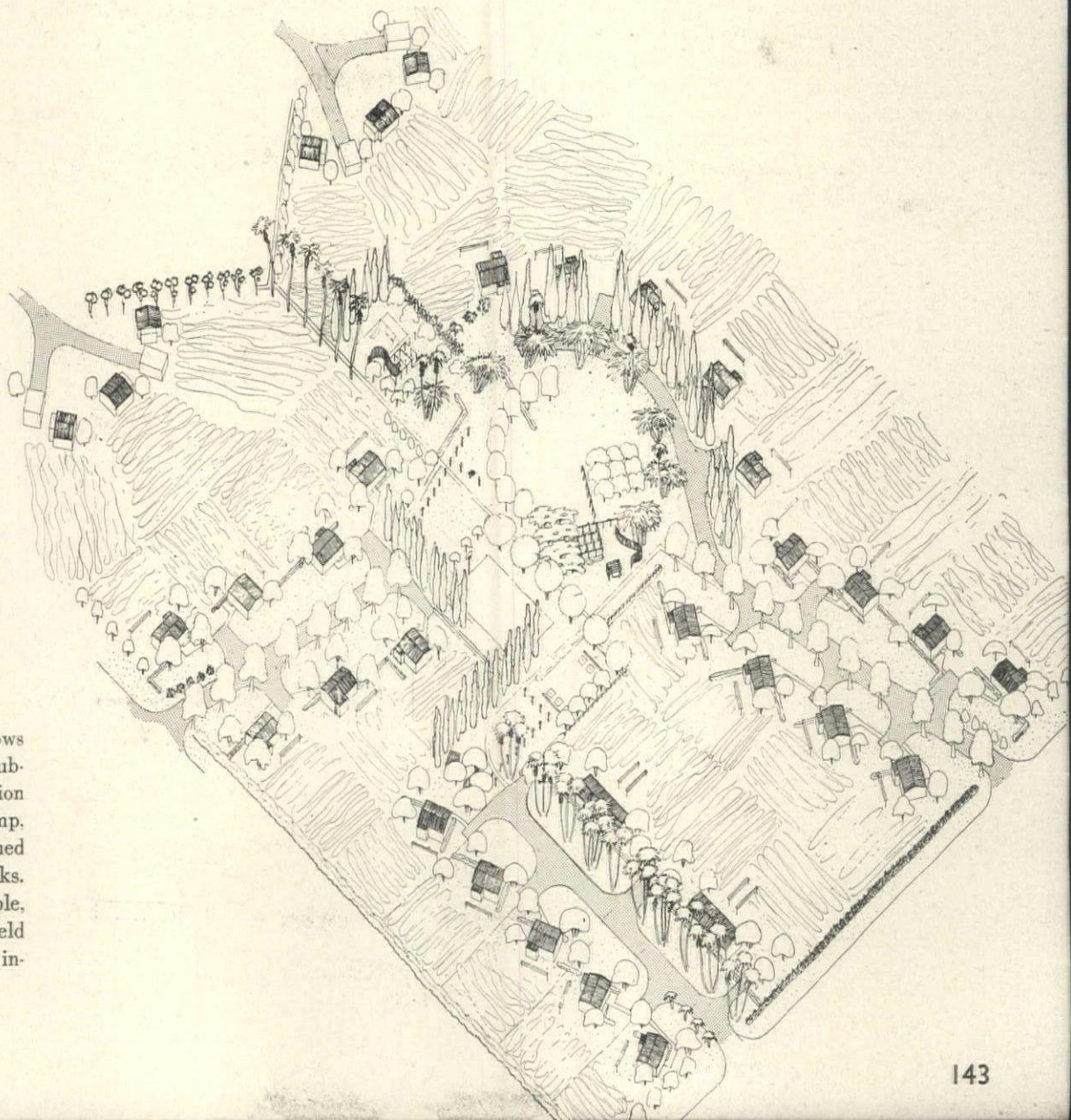
Adroit planting surrounds patients of proposed health center near Fresno, Calif., with spacious outdoor rooms.

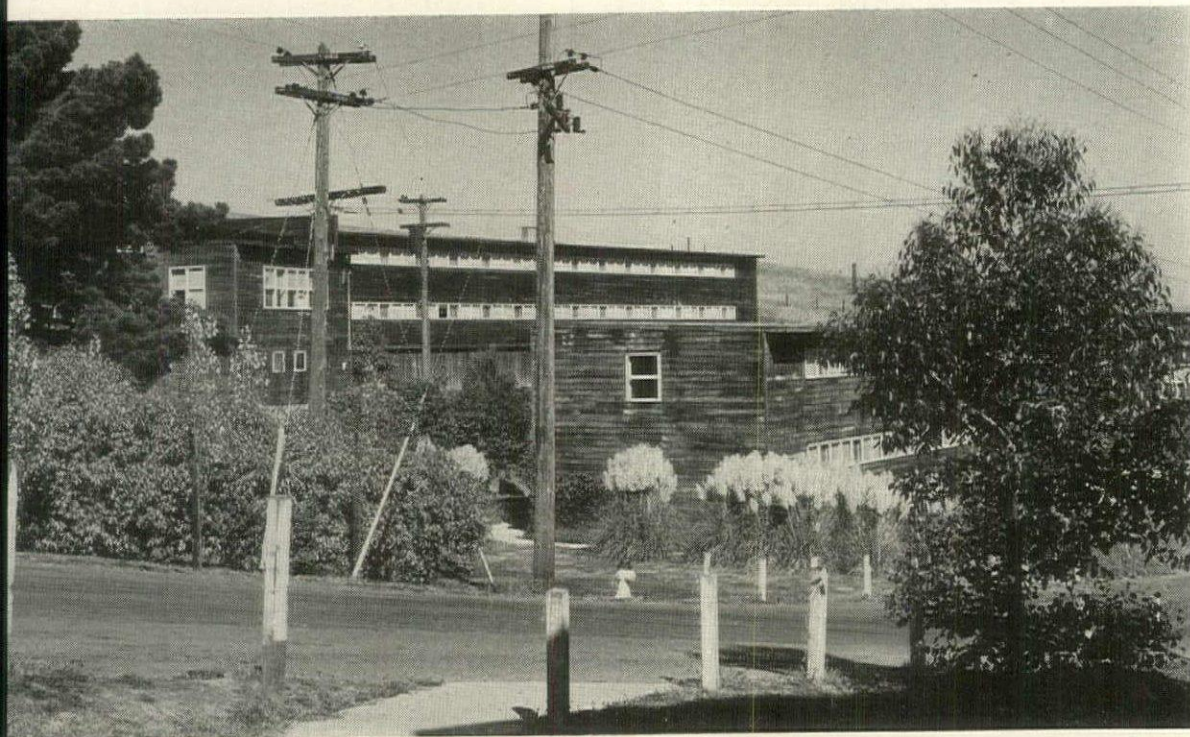
The landscaping of this hospital, an FSA project halted by the war, features a planting plan laid out to produce visual integration of indoor and outdoor space for those looking out from the inside. The object was to produce the richest and most spacious effect possible. In Eckbo's opinion the fault of most landscaping for large public buildings is that it is planned for the benefit of the passerby rather than that of the occupants, leaving the building afloat and anchorless in a sea of grass, shrubs, and occasional trees.



Contrasting tree forms and textures are key to economical landscaping of group housing project in farm area.

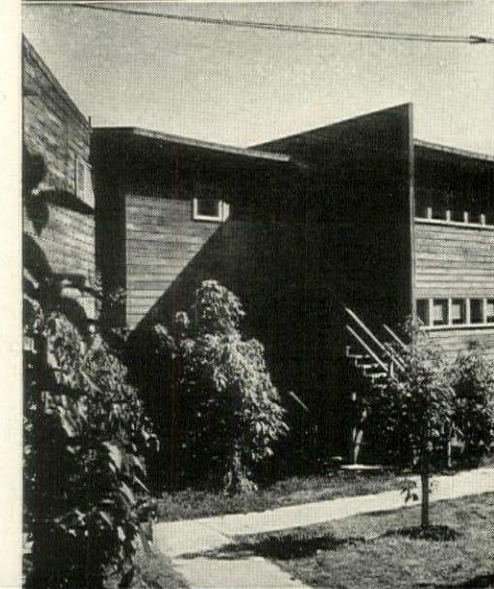
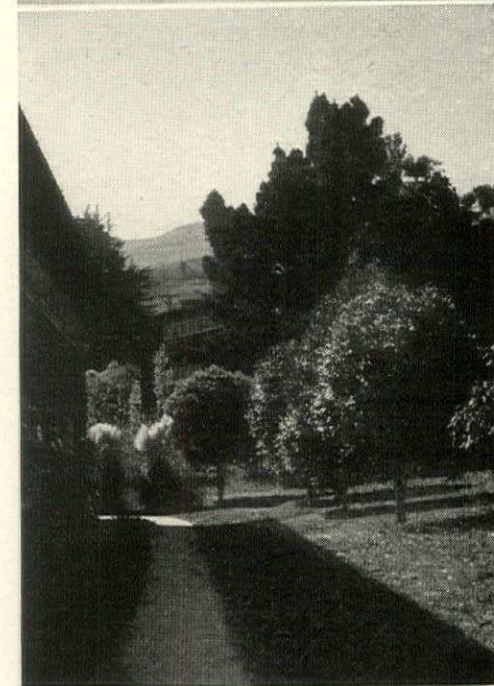
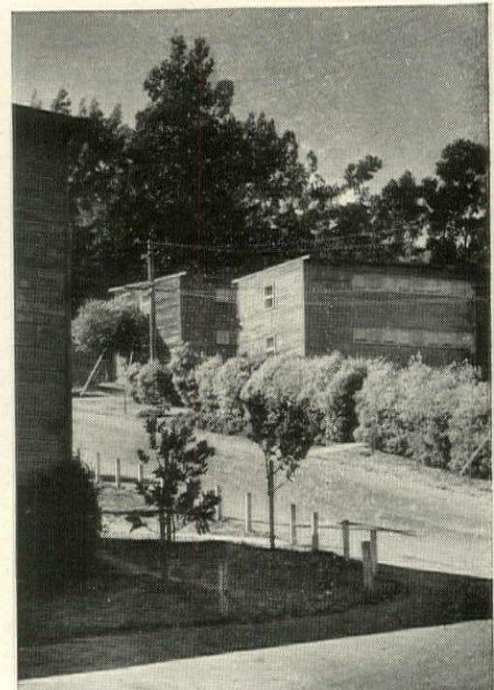
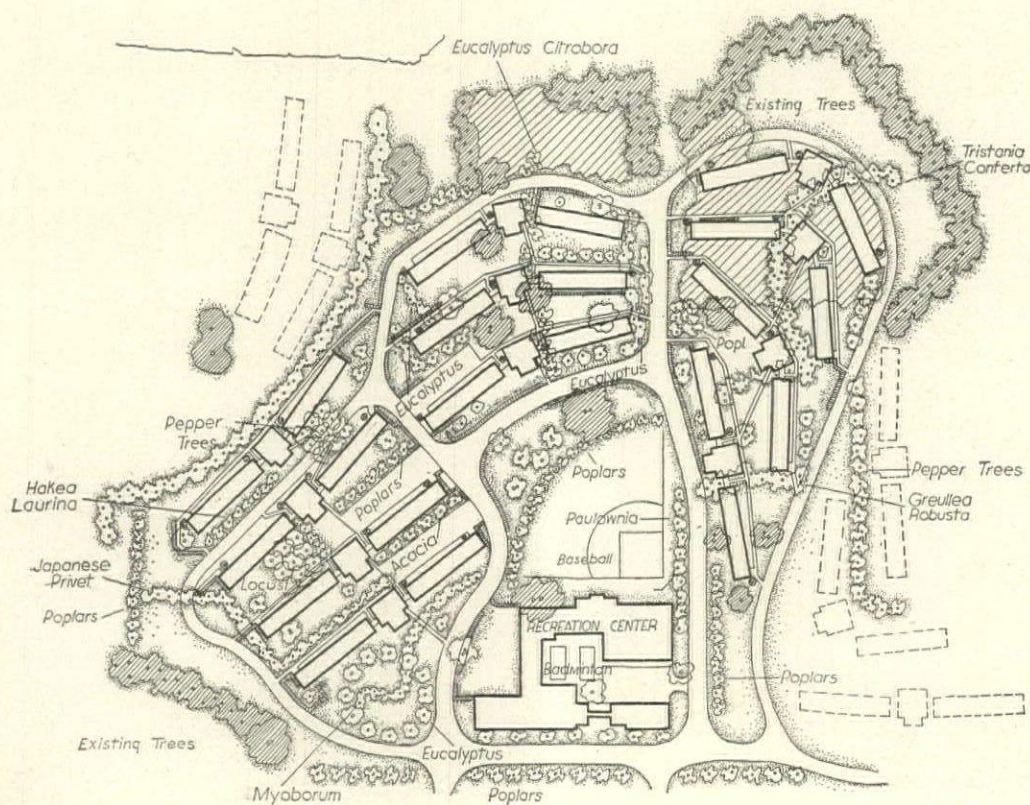
Isometric plan for rural housing development shows the site broken up into 29 lots large enough for subsistence crops. To make up for lack of recreation space in an adjoining community and migrant camp, two acres were given over to a fancifully designed park, accessible to all houses by roads and walks. Here, more clearly than in any other example, Eckbo's adaptation of the standard agricultural field pattern is evident. Planting, consisting mostly of indigenous trees, was done on a limited budget.





An existing garden is incorporated in a landscape plan for war dormitories.

Living quarters occupy the sloping portion of this site which curves, horse-shoe fashion, around a relatively flat central area in which a recreation center is located. The purpose of the planting pattern was to establish an interesting, formal relationship between the buildings and the site. Sausalito's mild climate and the availability of nursery stock during the early years of the war allowed a wide variety of quick, colorful plant material. The portion shown in the photographs was an old garden which provided an interesting specific problem in preservation and utilization. Considerable new material was added and today it is almost impossible to distinguish between the old and the new planting.





More and More Overhead Type Doors are Bought This Way!

More and more Architects, Builders and Contractors are finding that the simplest way to solve most of their door problems is to specify Ro-Way Overhead Type Doors. No other doors offer all of these 5 extra-value features—



1. **Friction-reducing track**—Makes rollers ride away from the track side wall... provides extra clearance... makes for easier operation... gives greater strength and rigidity.
2. **"Double-thick-tread" track roller**—Each rolling smoothly and easily on 7 ball bearings.
3. **"Tailor made" power springs**—Individually "Power Metered" for the weight of each particular door. On Ro-Way Doors having Twin Torsion Spring Power, patented "Zip-Lock" permits instant, easy adjustment of spring tension.
4. **"Crow's foot" outer bearing support**—Holds sheave wheel in permanent alignment... no twist or sag to cause friction or binding.
5. **Rust-proof hardware**—All Ro-Way Door hardware is rust-proofed by Parkerizing and painting after fabrication. Avoids rust streaks that mar appearance of finished installation.

You will find
dependable
Ro-Way sales and
installation service
available all
over America

See our Catalog in Sweet's

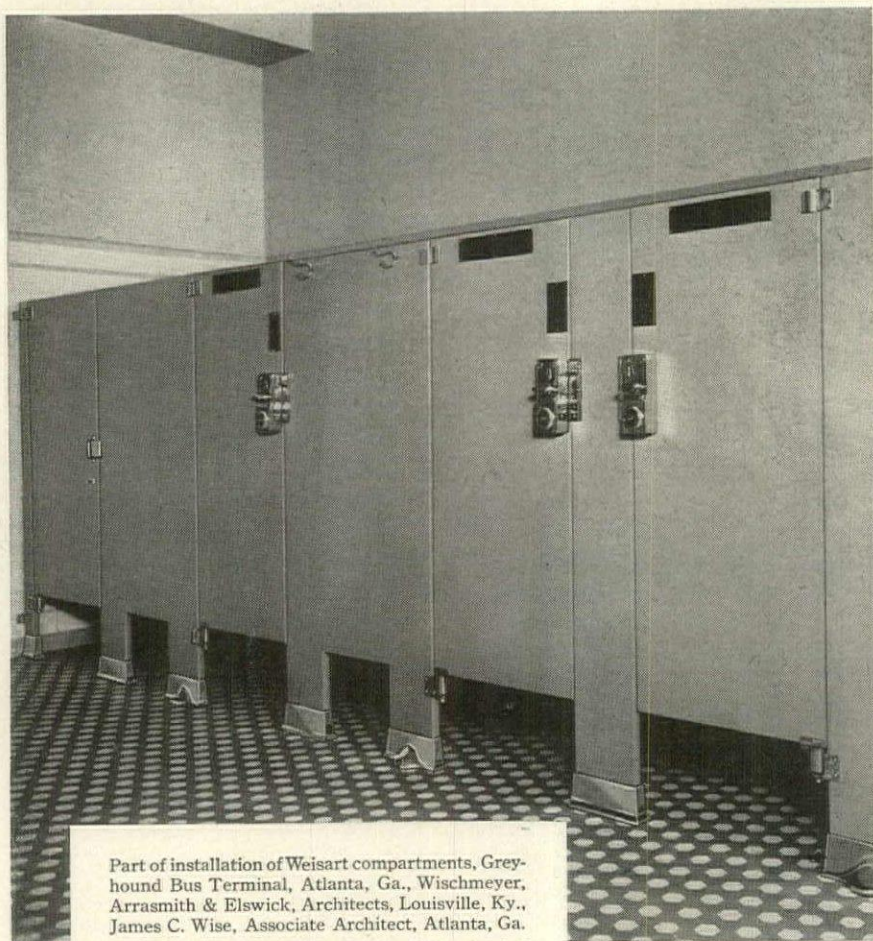
ROWE MANUFACTURING CO.

901 Holton Street • Galesburg, Ill., U. S. A.

There's a Ro-Way for every Door way!

WEISART

FLUSH COMPARTMENTS



Part of installation of Weisart compartments, Greyhound Bus Terminal, Atlanta, Ga., Wischmeyer, Arrasmith & Elswick, Architects, Louisville, Ky., James C. Wise, Associate Architect, Atlanta, Ga. Weisart Compartments may also be suspended from ceiling, without floor contact.

Modern Appearance with Triple Protection

Class A quality metal compartment design and construction, harmonizing with the latest trends in fine buildings. Weisart Compartments are thoroughly field tested and have won wide-spread acceptance. The cost is moderate.

Rigid, flush construction eliminates posts and head rail. Partitions and doors are of highest class flush steel construction. Bonderized galvanized steel is finished with synthetic gum enamel baked at high temperature, affording triple protection against corrosion. The durable and lustrous finish is available in a wide range of colors.

Send now for detailed description and specifications.

HENRY WEIS MFG. CO., INC.
DEPT. 302, ELKHART, INDIANA

over on these hard-boiled brothers that the next day the story was plastered on the front page of the *Times*. From that moment, an impressed group of Washington tough guys ate happily out of Casey's practical hand.

Catherine's rare charm is also revealed by the fact that Herbert Nelson of the National Association of Real Estate Boards—strongest and angriest anti-public housing lobby in Washington—considers her, while slightly demented, a "sweet gal." He volunteers proudly that she once accused him of being a frustrated idealist. He in turn calls her "the best talker the housers have outside of Phil Klutznick."

During this year Casey was certainly talking hard and fast. In addition to her other activities, she continued flying about the country drumming up more labor support for housing and periodically wiring frantically for money. Vladeck, from his base in New York, would forward the request to the most likely angel, he told that it was the last time, but garnered enough to keep Catherine on the road. Ernie Bohn often came to Washington for the fray along with Langdon Post, Chairman of the New York Housing Authority.

At one point, when the debate in the Senate was stiff, the papers carried a headline that a tenement in Post's district had collapsed, killing several people. The housers could not help feeling more justified than ever, but as Post joined them that morning they remarked coldly: "Don't you think you've gone a bit too far this time, Langdon?"

At the end of the fourth day of discussion an amendment was introduced which would have hamstringed the most important clauses in the bill. Langdon was in New York for the day, so Catherine and Dorothy dashed to their den, worked all night on a petition to reconsider the move, signed Post's name to it and tipped a page boy to put the memo on the Senators' desks before the session opened. They met Langdon on his way to the gallery and as they walked in the door Senator Clark of Missouri was waving the document and shouting, "This is an affront to the U. S. Senate!" "What's the matter?" asked Post, curiously. "Duck," replied Catherine, "your name's signed to that thing he's waving in his hand." Whether because of Casey's scheme or in spite of it, the crippling amendment was not passed.

The bill ran into its first inner circle difficulties when Secretary of the Treasury Morgenthau put thumbs down on its financial arrangements favoring outright capital grants for housing projects rather than the new-fangled annual contributions outlined in the bill. After much delay and haggling, President Roosevelt finally called Morgenthau, Wagner and his cluster of experts (including Bauer) to the White House where he herded them in a private room and forbade them to come out until the issue was settled. Morgenthau arose and made a detailed speech explaining why, although he, too, was in favor of nice homes for slum dwellers, he could not back the financial set-up of the bill. Catherine and her cohorts were taking copious notes refuting (Continued on page 148)



CATHERINE AT 25

RESEARCH on Tile-Tex Asphalt Tile means—



- 1 That when you specify Tile-Tex Asphalt Tile, you are specifying a product built to the highest quality standards by a manufacturer with the longest experience record of any in the industry.
- 2 That when Tile-Tex Asphalt Tile is installed by approved Tile-Tex contractors, your client benefits because the use of better asphalt tile makes possible better installation practice.
- 3 That your client will benefit from lower maintenance costs per year because the better surface of Tile-Tex Asphalt Tile means easier cleaning at lower cost.

Here are three tangible reasons why architects who have used large quantities of asphalt tile prefer Tile-Tex. They know from actual experience that the superior quality of Tile-Tex Asphalt Tile is reflected in better wearing, better maintain-

ing, and better looking asphalt tile floors in the buildings of their clients.

The Tile-Tex Company, Inc. will continue to protect the architect and his client with an intelligent, aggressive research program devoted to product improvement. At all times, we welcome constructive criticisms and suggestions from the architectural profession on the subject of product quality.

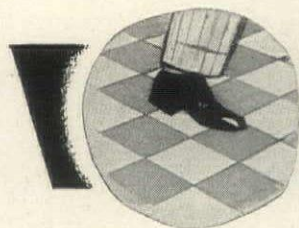
THE TILE-TEX 1946 PLEDGE

- 1 Adequate Plant Facilities
- 2 Continuous Product Development
- 3 Uniform Product Quality
- 4 Controlled Installation Standards
- 5 Maintenance Service Program

THE TILE-TEX COMPANY, Inc.

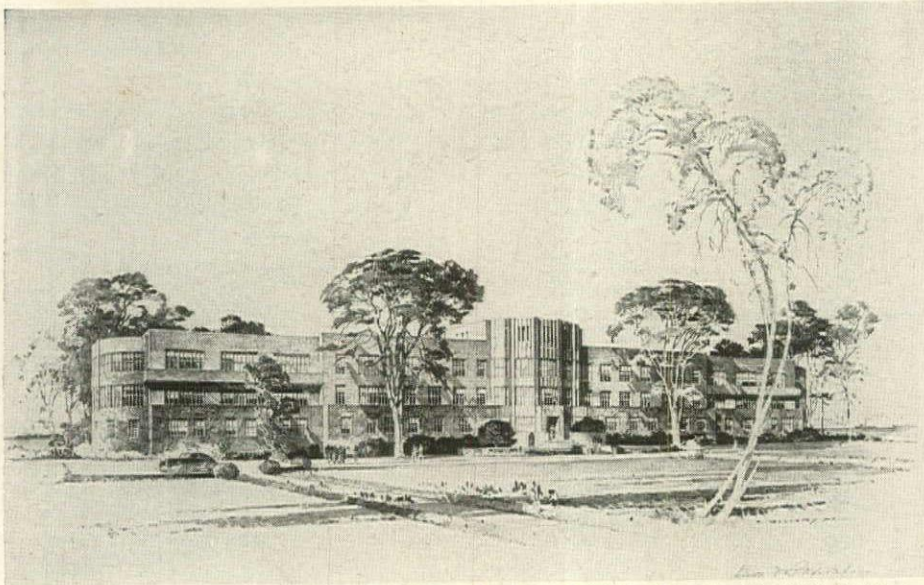
Asphalt Tile Mfr. Subsidiary of The Flintkote Company

Chicago Heights, Illinois
220 E. 42nd Street, New York City



**LOOK TO Tile-Tex IN '46
FOR THE BEST IN FLOORING**

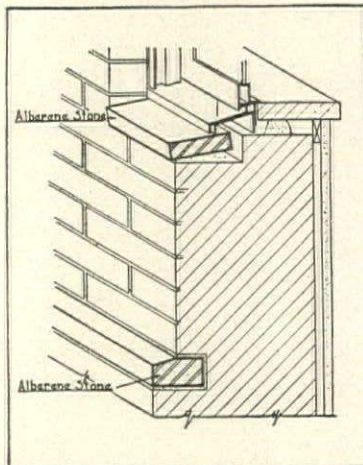




Riverside Hospital, Tuberculosis Pavilion, No. Brother Island, N. Y., N. Y., Electus D. Litchfield, Architect.

Sills, coping and trim of Alberene Stone are durable, colorful and economical

Alberene Stone is ideal for exterior use because it is impervious to moisture; it does not chip, scale or split. Its natural light blue-gray tone harmonizes with practically any other colors. The fact that it can be cut into thin sections makes for definite economies. Used for sills, coping, spandrels, exterior or interior trim. Alberene Stone is free for all time of maintenance costs. Our Mills in Virginia are the largest in the country devoted to producing special purpose quarried stone. We are prepared to make deliveries *promptly* of stone in a color range of gray, dark gray, blue, blue-black, dark green and black, in various textures and finishes; and *prompt delivery is an important consideration in the present emergency*. Inquiries will receive immediate attention.



Detail showing 1 3/4" thick Slip Sill, and 2 1/4" thick Belt Course of Alberene Stone as used in Riverside Hospital. At circular sections, Sills carry through to form a band course. Alberene Stone used for roof and balcony copings, also.

Similar Sill treatment, 1 1/2" thick, being furnished for U. S. Army Tripler Hospital in Hawaii; York & Sawyer, Architects.

ALBERENE STONE CORPORATION OF VIRGINIA
419 Fourth Avenue, New York 16, N. Y.
Quarries and Mills at Schuyler, Virginia
Sales Offices in Principal Cities

ALBERENE STONE

THE NATURAL STONE OF DIVERSIFIED UTILITY

Morgenthau's complicated technical arguments which they slipped to Senator Wagner. That wise politician completely ignored them. Tugging at Morgenthau's coat, he merely chided: "Sit down, Henry, and stop worrying about your pocketbook." That was the beginning of the end for Morgenthau's stand and he eventually gave in to the housers.

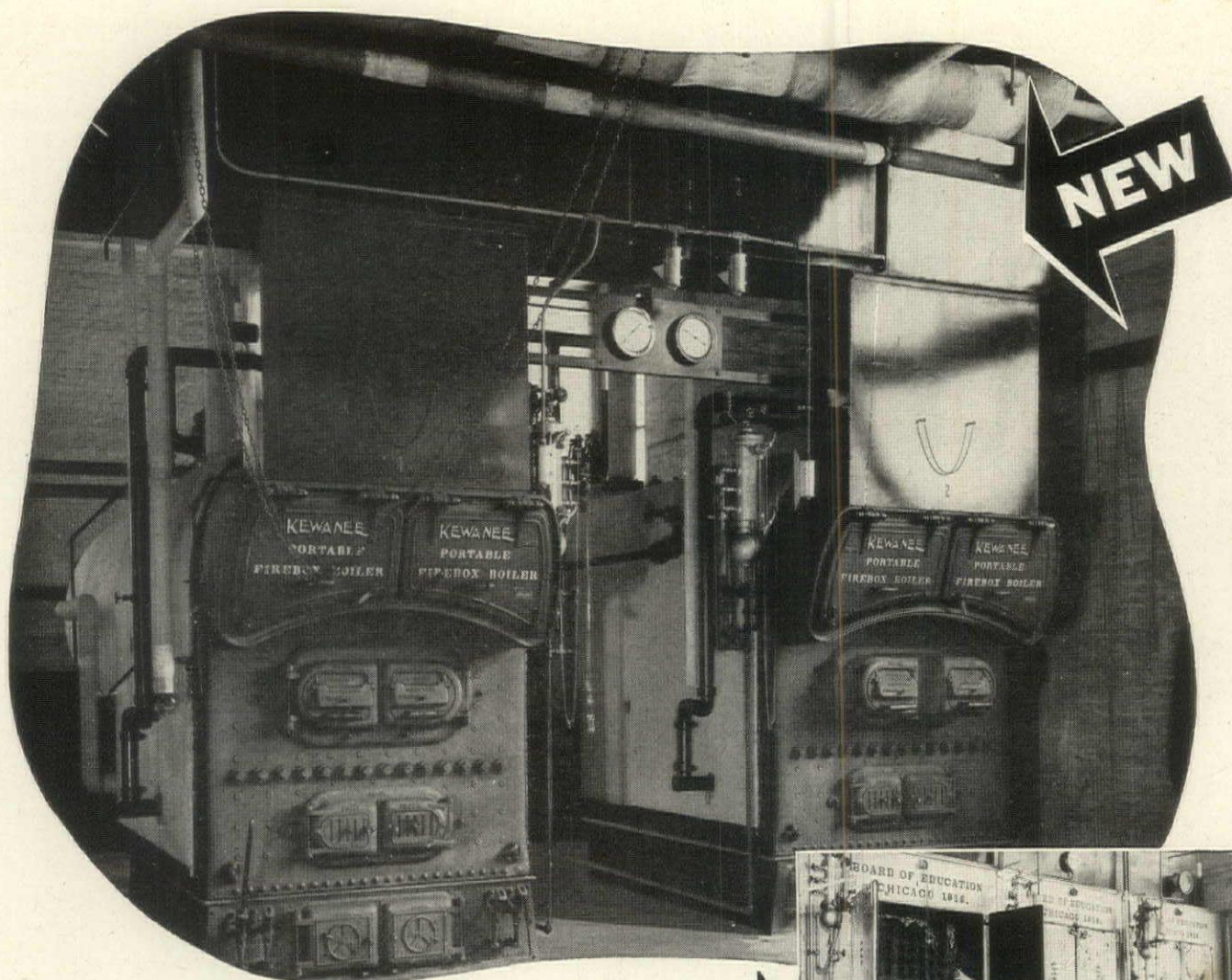
Between the Ellenbogen and Wagner-Steagall bills Catherine had received a Guggenheim grant for further study in Europe. Her trip was cut short, but during the summer of 1937 when the big push was on, she had hoped to go again. Her trunk was packed and squeezed into the Hay-Adams room, but as the summer wore on, Catherine stayed. Air-conditioning, rather than lending refuge from Washington's heat, produced a dank dripping atmosphere which swallowed and enfolded those bold enough to enter. Her friends christened it "Catherine's air-conditioned cavern." From this unpleasant roost she fought the eleventh hour drive by the U. S. Chamber of Commerce—backed by the National Retail Lumber Dealer's Association and the U. S. Building and Loan League—to kill the bill. Catherine was also busy trying to dynamite Representative Steagall into action, for he was quietly sitting on the bill in Committee.

In spite of these innumerable last minute difficulties, the Wagner-Steagall bill was finally passed in the last days of the session, September, 1937. Catherine is particularly fond of the post-passage comment of Representative Steagall's secretary, Mr. O. K. Weed of Alabama. Confronted with a rejoicing Bauer and her equally excited assistant the day after the bill went through, he drawled: "Ladies, if ah evah have to heah anotha wo'd about housin', Ah'm goin' to go out and buy me a tent!"

Overnight, the little group of housing revolutionaries had become bureaucrats. Nathan Straus was named administrator of the new United States Housing Authority and its long-time supporters were swallowed in the billowing red tape of administration. This first year was a period of test. Conservative interests were smugly watching for the Authority to flop and they found a perfect target in Nathan Straus who was quickly dubbed the "man of the iron whim." USHA was indeed a seething battleground, due mostly to Straus' constant and tactless changes in unimportant details—such as the lettering on a housing project sign. But Catherine stoutly maintains that he was forced to resign for (Continued on page 150)



Mr. and Mrs. William Wilson Wurster, A.I.A. convention, 1940



Two Kewanee Smokeless Firebox Boilers (for 100 lbs. pressure) installed in the Gage Park School, Chicago

OLD



... replacing 3 tubular type boilers 60 x 18

TWO KEWANEE

**HEAVY DUTY
BOILERS**

REPLACE THREE OTHERS IN A CHICAGO SCHOOL

Won For The 5th Time



**75 YEARS
BOILERMAKERS**

Every characteristic which makes Firebox Boilers especially advantageous for Hi-Pressure steam is incorporated in the Kewanee Heavy Duty Series. Big, high fireboxes . . . long gas travel . . . ample water content . . . unimpeded waterways . . . generous steam space. Such features insure ample steam with economy.

FOR HAND OR MECHANICAL FIRING
100, 125, 150 lbs. W. P. . . . 25 to 304 H. P.

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

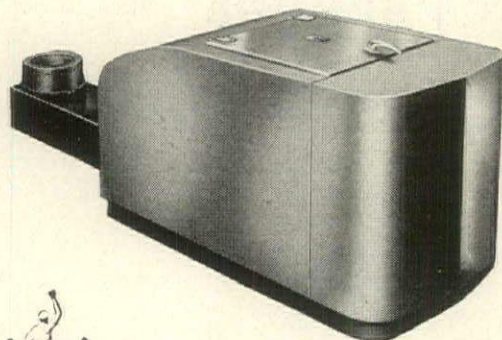


If rising operating costs are putting the squeeze on you, here's a potent weapon for your defense. It's the tapered feed screw of a Whiting Stoker—one of the many reasons why Whiting gives you maximum burning efficiency. This screw and the tapered coal tube which is its working partner are covered by U. S. Patent No. 2,127,018.

Whiting Stokers were designed first of all for *combustion effectiveness*—fire power. That's why the Whiting retort will burn bituminous stoker coal from any mine; that's why the Whiting guarantee does not exclude "parts in contact with the fire." If you think all stokers are alike—we suggest you investigate.

Our new booklet, "How To Choose A Stoker," will help you. It tells what to look for in any stoker, points out the things you need to know to make your stoker investment pay top dividends. We'll gladly send a copy at your request. Ask for it today.

WHITING STOKERS, Suite 2501, 11 S. LaSalle St., Chicago 3, Illinois



The Whiting DeLuxe Stoker, Model D3S6, one of a complete line covering all domestic and industrial requirements.



WHITING

COMPETENT REPRESENTATION
IS NEAR YOU

Stokers

the wrong reason. In spite of the quarrels and confusion, he made USHA a going concern and never compromised on fundamental issues.

Catherine had been made Director of Research and Information, an experience she regards as valuable, though painful, since it taught her how hard it is to run things. Most of the year and a half before she gave up in despair was spent feuding with the Civil Service over job classifications, an ordeal which has hardened her heart forever toward that unyielding organization.

This period of earthly purgatory marked the end of Catherine's administrative career. She fled to Europe, thence to California and into the comforting arms of matrimony. She and Bill, although not exactly fire-side-and-slippers types, lead a quiet life compared to Casey's Washington existence. Great-



Sadie at 3 months

est excitement of post-lobbying days was the Wursters' sudden and unexpected break into the Boston newspapers. Surveying a local journal over their morning orange juice, they were startled by the headline "Housing Experts Caught in Own Noose!", flanked with their own photographs. Like less publicized citizens throughout America, the Wursters were indeed having housing trouble. The occupant of their newly purchased home in Cambridge, stiffened by reassurances from the OPA, refused to budge and Casey, Bill and Sadie have been sitting out the fall and winter in a tiny, dark flat on Boston's Chestnut Street. With the Cambridge tenant exorcised at last, they plan to move in March, but Catherine declares that Sadie will need short preliminary visits to ease the shock of sunlight after the Chestnut Street hibernation.



Pram and friend

Catherine, herself, is looking forward to the first real house she will have lived in since childhood. It is near both Harvard and M.I.T., convenient for student conferences and, best of all, close to her pet bakery stores. Casey's shopping expeditions are often undertaken in the company of Mrs. Joseph Hudnut, wife of the august Dean of Harvard's Graduate School of Design. They present an amusing spectacle to startled Cambridge residents, for long, lean Casey strides ahead at her own speed with valiant little Mrs. Hudnut scampering behind, trailing perhaps by half a block. This a typical performance: throughout her entire career, one thing both Casey's friends and enemies have had to do is run like hell to keep up with her.

For Durable, Attractive,
Modern Buildings —

EXTERIOR TYPE Douglas Fir Plywood

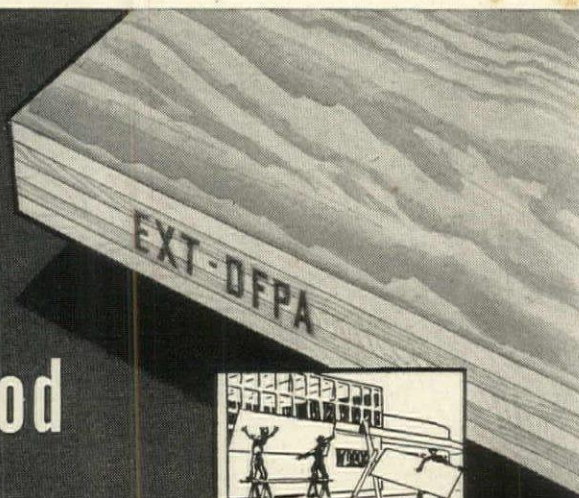
There are scores of reasons why Exterior type Douglas fir plywood is so widely used for the exteriors of homes, stores, farm structures and many commercial buildings.

This modern "miracle" wood makes possible many construction economies. The large panels cover surfaces quickly, with a minimum of labor. Fewer fastenings are needed — and these may be placed close to the edge of panels without danger of splitting.

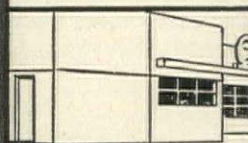
Plywood's cross-laminated construction gives every panel

great strength, too—adding to the rigidity of the framing. The large, smooth panels permit striking, beautiful, modern effects—and at the same time help keep out dust and drafts because "joints" are kept to a minimum.

Exterior type plywood—made with completely waterproof synthetic resin binder—will not delaminate, even in boiling water. Its rugged, durable, weatherproof qualities have been proved by years of use and by constant laboratory testing. Make full use of its many advantages!



Big panels go up quickly—with a minimum of handling, cutting, fitting and nailing.



Smooth attractive walls are easily achieved with plywood. There are fewer joints and "cracks."



Exterior type plywood can be bent to form pleasing curves—without danger of splitting.



Exterior type Douglas fir plywood is made with completely waterproof synthetic resin binder, especially for permanent outdoor use. Sound 1-Side grade of Exterior type plywood (EXT-D.F.P.A.) is generally specified for outside siding—and every panel MUST carry

EXT.-D.F.P.A.

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

the "grade trade-mark" shown above. For information, write the Douglas Fir Plywood Association, Tacoma, Wash. For prices and delivery information, see your lumber dealer.

This beautiful drive-in restaurant, just south of Tacoma, Washington, on Highway 99, is a pleasing example of the smooth, streamlined, modern effects made possible with Exterior type Douglas fir plywood. Notice the curved surfaces—easily achieved with this modern "miracle wood."

FOR PRICES AND DELIVERY INFORMATION
SEE YOUR NEAREST LUMBER DEALER

**DOUGLAS FIR
PLYWOOD**

LARGE. LIGHT. STRONG.

Real Wood
PANELS

HOW TRANE ENGINEERING

Leadership

Opens the door to Weather Magic

Sound yet imaginative engineering forms the solid foundation on which Trane—the House of Weather Magic—is built. Trane particularly is proud of the many developments of its research laboratory, but proudest of all that so many people think so highly of them. The greatest satisfaction of leadership comes from the added comfort millions of Americans now enjoy because Trane engineers have unlocked the door to Weather Magic—magic that cools in Summer and warms in Winter.

TRANE'S "COMPLETE" PRODUCT ENGINEERING ASSURES UNDIVIDED RESPONSIBILITY

Trane has earned its reputation for leadership by adhering constantly to the single concept of "complete" product engineering. This means that at every step from drafting board through production, every Trane product is under direct engineering supervision. Moreover, Trane engineering carries through every phase of production, effecting operating efficiencies that assure highest quality and economy.

"Complete" engineering also means integrating the design of each element of a Trane heating or air conditioning system so that all parts are coordinated to function together for maximum efficiency. These "matched-set" systems, featuring Trane-engineered and Trane-built products throughout, not only provide greater installation flexibility but assure undivided responsibility for the efficient operation of the entire system.

WHAT TRANE FIELD ENGINEERS MEAN TO YOU

Trane product engineering never stops short at the factory, but is carried through to the last detail on the job. Trane's more than 200 field engineers are strategically located in 85 principal cities. This staff constitutes one of the largest and most thoroughly experienced organizations of its kind. It is available to assist architects, engineers and contractors in the technical design of any installation. When asking for additional information on any product, send the name of your architect, engineer or contractor so complete details can be supplied him.

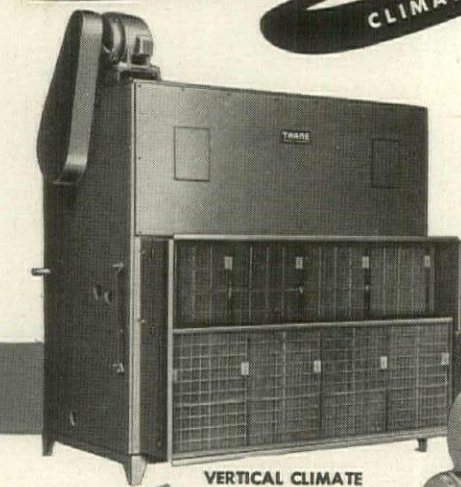
Now!

CUSTOM-ENGINEERED
CLIMATE

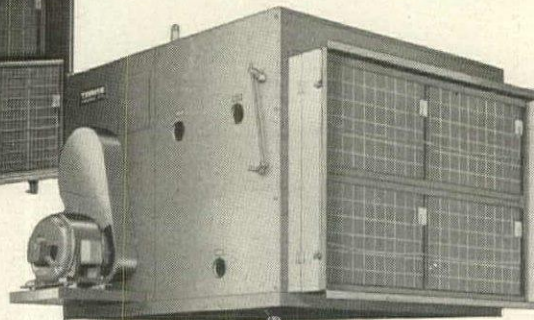
TRANE CLIMATE CHANGERS PROVIDE ANY COMBINATION OF:

- Air Conditioning
- Cooling and Heating
- Humidification
- Air Cleansing
- Air Circulation
- Dehumidification

One example of Trane's advanced engineering ability is the 1946 Climate Changer line. This unit air conditioner provides complete air conditioning for every comfort or process application. It is so completely flexible that any or all combinations of the six phases of air conditioning can be provided. Trane Climate Changers are applicable to summer, winter and year around air conditioning systems.



VERTICAL CLIMATE CHANGER



HORIZONTAL CLIMATE CHANGER



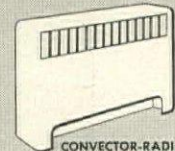
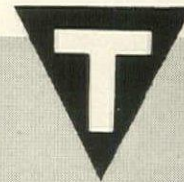
Write for Bulletin PB-290—a handy, condensed catalog of the broad Trane line.

THE TRANE COMPANY

The House of Weather Magic

LA CROSSE • WISCONSIN

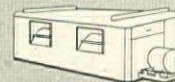
MANUFACTURING ENGINEERS OF HEATING AND AIR CONDITIONING EQUIPMENT



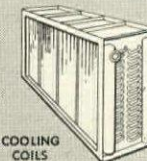
CONVECTOR-RADIATORS



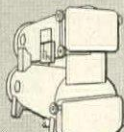
UNIT HEATERS



CLIMATE CHANGERS



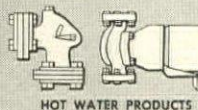
COOLING COILS



COMPRESSORS



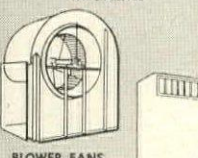
HEATING COILS



HOT WATER PRODUCTS



STEAM HEATING SPECIALTIES



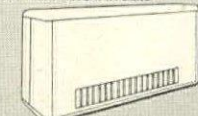
BLOWER FANS



SELF-CONTAINED AIR CONDITIONERS



EVAPORATIVE CONDENSERS



SHELL AND TUBE HEAT EXCHANGERS



UNIT VENTILATORS

SPECIFY G-E Q-FLOOR WIRING

WITH ROBERTSON Q-FLOORS

FOR ELECTRICAL ADEQUACY

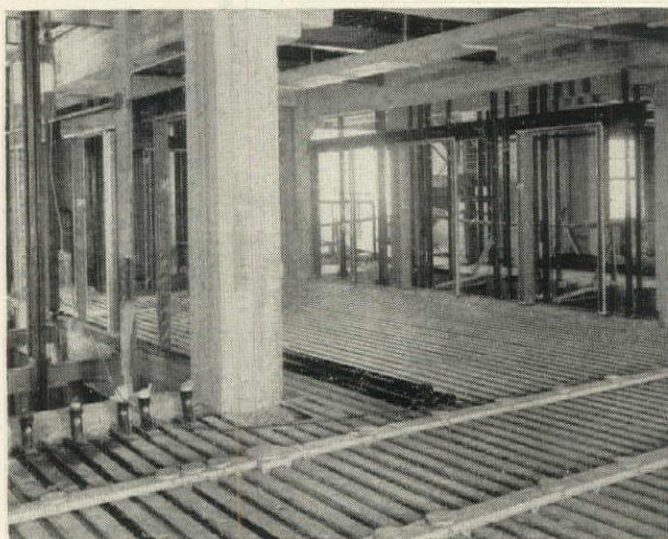
G-E Q-Floor Wiring installed in Robertson Q-Floors provides undreamed of electrical adaptability, flexibility and availability in office buildings, factories, stores, etc. Therefore, your clients will benefit if you always specify G-E Q-Floor Wiring when you specify Robertson Cellular steel floors.

G-E Q-Floor Wiring is simple. It consists of header ducts and accessories. The header ducts feed wires into the floor cells. This accounts for the wide electrical adequacy. Outlets can be established every few inches in all parts of the floor at any time. Changes in building equipment can be made at will with new power, telephone and signal connections readily available.

FOR FURTHER INFORMATION on G-E Q-Floor Wiring or G-E Fiberduct underfloor raceways see the nearest G-E Merchandise Distributor or write to Section C168-26, Appliance and Merchandise Department, General Electric Company, Bridgeport, Conn.

SPECIFY G-E FIBERDUCT
with Wood and Concrete Floors

G-E Fiberduct underfloor raceways provide utmost electrical adequacy and flexibility when masonry or wood-type construction is used. Outlets can be preset at the factory or added later at any time.



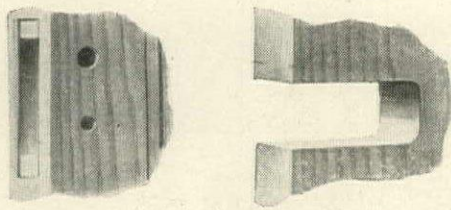
Here two G-E Q-Floor Wiring header ducts are being installed to provide two different services. These header ducts feed the cells. Note cell cells for panel connections in lower right of photograph.



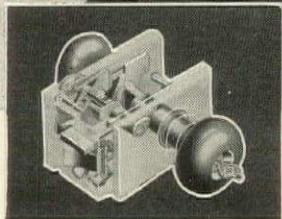
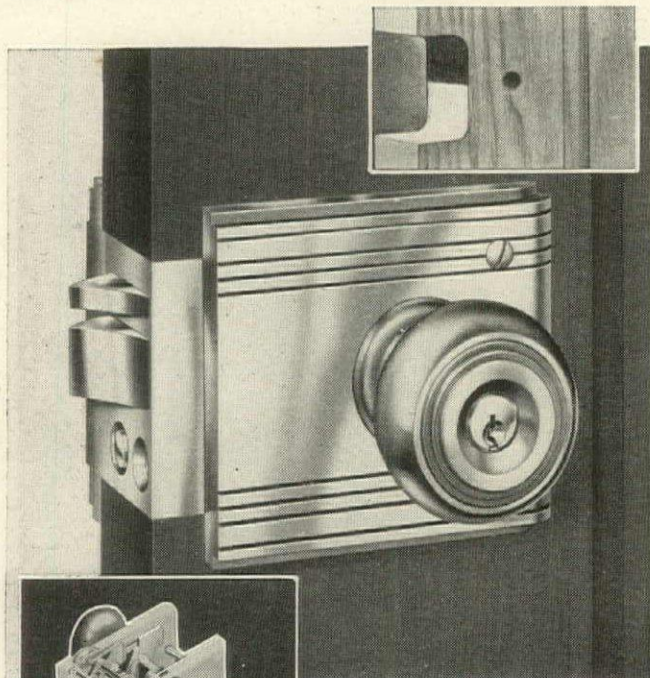
Above photograph is of a sales floor in a store with G-E Q-Floor Wiring. Note the many floor outlets in different parts of the room. Power is readily available for working models, etc.

GENERAL ELECTRIC

(Continued from page 106)



No Mortising . . . No Deep Cuts
Only a Shallow 1 3/4 inch Notch is Needed



Phantom View Illustrating Construction and Parts of the Russwin Unit Lock Set.

for RUSSWIN UNIT LOCKS

These sturdy locks — perfected by Russwin years ago — have, as usual, the *extras* for which Russwin Hardware is noted. For example . . .

Instead of laborious mortising or deep door-weakening saw cuts in the stiles, only an inch-and-three-quarter notch and a single small hole for the knob is necessary. The entire unit is slipped into place — a quick and permanent job!

Another *extra* is the safety devices — auxiliary latch to guard against outside manipulation and deadlocking plunger to guard the latch and prevent operation of the stops when the door is closed.

Wherever the need for a smooth-performing, long-service lock — for home, apartment, office, school and public building, communicating and toilet doors — choose from Russwin's broad line of Unit Locks. Russell & Erwin Mfg. Co., New Britain, Connecticut.

SINCE 1839
RUSSWIN
 DISTINCTIVE HARDWARE

bombed homes have been repaired, 300,000 more were completely ruined. This plus a pre-war backlog of 950,000 homes brings the immediate need to 1,300,000 homes.

What many fail to realize in appraising the Labour Government's progress is that until four months ago British local elections had not been held. Thus the new national government was struggling along without a full mandate for its aims. With the sweeping Labour victories in November's local elections the wheels began moving more rapidly. The British are now about to launch the most powerful concerted building drive ever conceived, with private industry and government coordinated in a massive effort.

Although seriously slowed by lack of certain key materials, England's biggest problems (aside from administrative snarls) have been lack of labor and technical supervision. Thanks to the recent speeding up of demobilization this is being overcome, but many architects, draftsmen and engineers are still enmeshed in military functions. Without such key personnel, work cannot go forward despite increased numbers of common laborers.

The government has set up a training system through which it hopes to instruct 200,000 building trades workers in the next four years. After six months' schooling in theory and practice, the trainee is assigned to an employer for another 14 months. The program is planned by the Ministry of Labour, in cooperation with building employers and unions. Maintenance wages are paid during the six months in school with starting pay when employed at 85 per cent of skilled rates for eight weeks; 90 per cent for the next 26 weeks and 95 per cent during the final 26 weeks. After this the trainee is qualified for full rates.

Resumption of peacetime conditions may bring to a head the rift long brewing between young adherents of contemporary design and older architects who cling to the old patterns. Forestalled in 1939 by the drafting of most of the younger men, the feud seems destined to resume with increased bitterness in view of the scale of the building effort needed.

To Americans who have carefully followed Minister of Health Bevan's cogent speeches, one thing is certain. A lot of them make sense over here, too. A few examples:

"What we have to look for are high wages and high output. Employers . . . must look for their profits from smaller margins on more houses . . ."

" . . . If we allowed the normal laws of supply and demand to operate in the existing circumstances, we would have an inflation that would ruin all. That is

why the government finds it essential to retain controls."

"If the cost of traditional building is too high, I shall encourage other forms. The traditional builder must not assume that he monopolizes the field irrespective of building costs."

"The quick solution of rural areas is as important as housing in cities. Unless we find good houses for agricultural workers we shall lose our agricultural population."

"Main problem in rural areas is shortage of labor . . . What I am anxious to find is a system of semi-fabrication of steel and of treated cement which the housing contractor can use, especially in a rural area."

Big battle today in Britain is between private builders and public authorities. Here is Bevan on this dispute:

"The reason why the local authorities are being used for the major part of the program is because they are the natural custodians of houses to let . . . They are being used because the overwhelming need at this time is to build houses for the people who need them most . . . The building of houses to sell has its part in the program later on when we have first of all dealt with people who need houses most."

"What I am not going to allow while I am in office is the building of luxury houses when poor people have no shelter over their heads."

Talk like this from a responsible U. S. source would sound good to many an American, too.

* * *

After several weeks on this side of the Atlantic, the jangled pattern that is Europe today gradually begins to assume perspective. It is most important for us to remember that the speed and power of our army and its ability to deal with large-scale problems have raised the regard of Europeans for our technical skills to a new high. The U. S. today, with its productive potential, is looked to everywhere in Europe for the means of regaining new life and vigor.

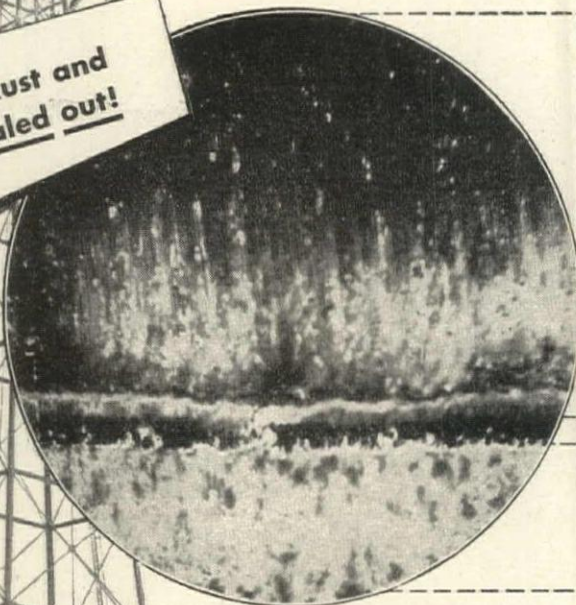
Finally, many people wonder if Europe in the winter of 1946 is depressing. It is. But it is not the physical destruction — one becomes adjusted to that. It is not even the sight of the thousands of gaunt, shivering humans who wander through this charnel heap, nor the cynicism of the common man. These things can be changed. The most depressing spectacle is the efforts of these bankrupt, starving nations to struggle back to life alone.

HOT-DIP GALVANIZING

provides the utmost in rust prevention

The Elements of Rust and Corrosion are sealed out!

A reproduction of actual photomicrograph, showing protective bond of zinc which only the Hot-Dip Galvanizing process provides.



A
ZINC

B ZINC RICH ALLOY

C IRON RICH ALLOY

D IRON (STEEL) BASE METAL

The infallible testimony of the microscope reveals why the application of molten zinc through the Hot-Dip Galvanizing process provides the *utmost in rust prevention* . . . The protective zinc (A) is first *bonded* to the base metal (D) by an iron rich alloy (C)—then a layer of rich zinc alloy (B)—obtainable only through the Hot-Dip process, *seals out* the destructive elements that are the cause of rust and corrosion.

Time has proved by thousands of case histories that the Hot-Dip Galvanizing method, as employed by members of this Association, does provide longer life, greater uninterrupted service and effects tremendous savings in expensive maintenance and replacement costs.

For information in regard to *your* particular corrosion problems, address American Hot Dip Galvanizers Association, Inc., First National Bank Building, Pittsburgh 22, Pennsylvania.



For the best Zinc Coating

use

hot-dip GALVANIZING



Contractor Casey was stumped . . .

BUT NOT FOR LONG

*He consulted with the architect and
engineer...together they called in Ceco
...and the job went ahead on schedule*

The job was a big one—the kind contractors like. It looked like smooth sailing to Casey until lack of material suddenly stopped the job. But not Casey! With the architect, the engineer and Ceco, he made changes to use available Ceco products such as Concrete Reinforcing Bars, Meyer Steelforms, Welded Wire Fabric, Light Fabricated Trusses and Open Web Steel Joists, all of which gave greater advantages—in space and cost—in manpower and installation. The gist of it all is that Casey completed his contract on time, within the original cost, and to the satisfaction of the architect and owner.

In construction products **CECO ENGINEERING**

CECO ENGINEERING PLUS CONSTRUCTION KNOW-HOW...MAY HELP YOU WITH YOUR PROBLEMS

Ceco engineers do more than design fine construction products. All their wealth of technical engineering knowledge is constantly available to you, as well as their construction know-how gained by years of experience on the job in the field. In 23 offices strategically located from coast to coast, they stand ready to help solve your problems without delay, with perfect technical skill. Ceco Construction Products, whatever they are, are engineered so as to make for ease of installation and correct construction practice. So call on Ceco for engineering and construction skill, for the finest in construction products.

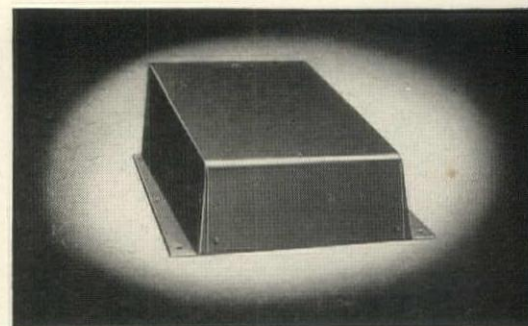
CECO STEEL PRODUCTS CORPORATION

MANUFACTURING DIVISION, 5679 WEST 26TH STREET, CHICAGO 50, ILLINOIS

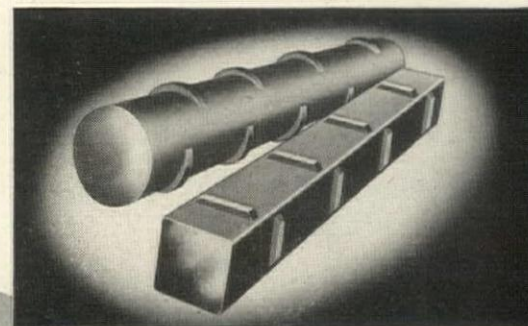
Concrete Engineering Division, Merchant Trade Division, Highway Products Division
Offices, Warehouses and Fabricating Plants in Principal Cities

makes the big difference

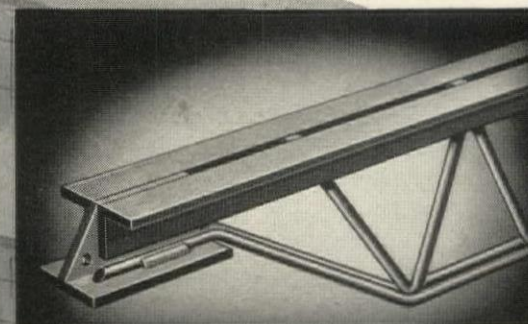
HERE ARE THE CECO PRODUCTS THAT HELPED SOLVE MR. CASEY'S PROBLEM



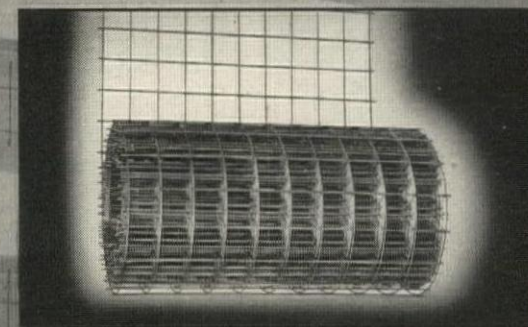
Meyer Steelforms mean less concrete is required, making for economy in construction.



Ceco Reinforcing Bars provide positive bond to aid adhesion of concrete to the steel.



Open Web Steel Joists provide fire-resistant construction, concealing sanitary, lighting and heating systems.



Ceco Welded Wire Fabric provides reinforcement for the concrete slab over Meyer Steelforms.

CECO STEEL PRODUCTS CORPORATION

5679 West 26th Street
Chicago 50, Illinois

Please send me the catalogs checked below:

- ☐ Handbook of Ceco Products
☐ Ceco Steel Joists

Name

Address

City State

The Crowning Touch to a well planned home



Lo-K
flameproofed
COTTON INSULATION

Architects and builders find Lo-K flameproofed COTTON INSULATION the ideal combination of efficiency and economy. The low thermal conductivity, or "k" value of cotton, provides, by actual test, 4% to 36% greater insulating effectiveness . . . the fact that it is the lightest and easiest to handle of all commercial insulations can save up to 40% in time and labor costs.

Lo-K will not sag or settle to leave exposed walls or ceiling. It will withstand 1800° blow torch heat to safeguard against fire. It resists moisture, rot and vermin, to give long, durable service. It is harmless and non-irritating to handle.

Today, as for 76 years, the Lockport company stands foremost among America's leading cotton processors, particularly in the production of cotton insulation. In new construction or remodeling, recommend Lo-K with confidence to your clients and customers.

Lo-K is available in light, easy-to-handle blanket type rolls sized to fit all standard construction. Special sizes can be made to order. Write for full details.



Lo-K flameproofed
COTTON INSULATION

A Product of

LOCKPORT COTTON BATTING CO.
Established 1870 LOCKPORT, NEW YORK

LOCKPORT COTTON BATTING COMPANY
Dept. AF-3, Lockport, New York

Gentlemen: Send me the facts about Lo-K Cotton Insulation for better building.

☐ ARCHITECT ☐ DEALER
☐ CONTRACTOR OR BUILDER

Name _____
Address _____
City _____ Zone _____ State _____

G.I. JOBS

FREE SERVICE FOR DISCHARGED VETERANS

To aid discharged veterans secure professional and executive employment in the building industry, THE FORUM will publish without charge classified ads giving applicants' qualifications, stating preference in occupation and location. Ads may be run with name and address or with box number. (If answering ads please include postage for forwarding—3¢ per letter.)

Employers seeking personnel are urged to make known their requirements. Address: G. I. Jobs

THE ARCHITECTURAL FORUM
350 Fifth Avenue, New York 1, N. Y.

POSITIONS WANTED

MATERIAL EXPEDITOR—28, 3½ yrs. experience examining, shipping, and expediting materials on large projects. Have supervisory ability and can handle a large group of men. References. Driver's license. Box E-203.

MECH. ENGINEER—28, married, coll. grad., 3 yrs. prewar prof. exper.; army major, 4 yrs. 9 months service, exec. and admin. exper. Capable, progressive, energetic. Familiar with all types construction methods. Desires position with building and construction or air conditioning firm. Interested in prefab homes. Willing to invest a few thousand. Prefer Southern states. Avail. after March. Box E-204.

PURCHASING AGENT—Desires pos. with gen. contractor in metropolitan area as buyer of bldg. supplies. Was employed by structural steel concern and studied merchandising before entering service. 29, married. Box E-205.

GRAD. ARCH. DESIGNER—28, married, ex-Naval officer, exper. in residential work, wishes pos. leading to jr. partnership in Fla. or Southern Calif. Box E-206.

ARCHITECT—Naval Reserve, Grad. of U. of P. '34, wants contacts with mfrs., business, advertising, interested in development of prefab. stationary units, metal bodies, wide range size, price and design. Box E-207.

GRAD. ARCHITECT—B. S. '42—Ill. Inst. of Tech., Armour Coll. of Engr. Age 26, married, 1 yr. varied arch. exper., 2½ yrs. aeronautical design and engr. for USN. Desires responsible pos. with future in small but prominent arch. firm in or near Chicago. Eager to learn practice of professional arch. Avail. March 15. Box E-208.

ARCH. DRAFTSMAN—Exper., degree from Texas A & M College school of arch., 1940, knowledge of func. design, to be licensed soon, wants opportunity leading to associateship with architect pref. in Houston or Texas. Box E-209.

MANUFACTURER'S REPRESENTATIVE—Which home prefab mfr. is meeting the needs of the nation? Which mfr. is prefabricating, or planning on prefabricating something other than the emergency home? Which mfr. has, or will have in near future, a prefab home that is superior to conventional home? Army Engr. Capt., 35, married, 3 yrs. real estate selling and mortgage placing exper. Avail. March 1. Eager to acquire franchise or represent this mfr. Box E-210.

DESIGNER—USN "Seabees" 3½ yrs. Ideas for furniture, homes, built-ins, fabrication & design. Exper. also in const. speed-up and interior decor. Able to sell and travel. Box E-211.

RENDERINGS—Arch. delineator desires work. Pen and ink perspectives done on linen. Rate: 25¢ per sq. inch. Also do sketches from photos, prompt service. Samples sent upon request. Truman H. Aldrich, 22½ So. Court St., Montgomery, Ala.

CIVIL ENGR.—25, married, family. B.S. in C.E. at 20. Struc., sanitary majors. 1 yr. stress exper., 3 yrs. admin. liaison exper. as naval staff officer. Desires utilize engr. background in admin. capacity, or as engr. rep., with constr. firm. Prefer perm. location East-N.E. Being released June 1. Lt. David Siff, USNR, Highmount Ave., Nyack, N. Y.

MURAL ARTIST—12 yrs. mural prac., 25 painting, teaching, etc. Examples in many public and private bldgs., museums and private collections. Invites commissions to design, execute murals murals for airports, radio stations, terminals, hotel lobbies, schools, hospitals, reception rooms, banks, clubs, railroads, bars, over-mantels, etc. in private homes. No problem too big. Traditional or modern media. Box E-212.

ARCHITECT & ENGINEER—Vet., 25, college grad., engineering exper. desires pos. in Wilkes Barre, Pa. or vicinity. Competent and diligent. Also exper. in editorial and tech. writing. Box E-213.

EXP. ARCH. DESIGNER-DRAFTSMAN—knowl. struct. design; French; German. Pref. pos. with outside duties. Julius Oblatt, 245 Broadway, Costa Mesa, Calif.

LANDSCAPE ARCHITECT—Vet., 27, married, B.S. Utah State. Limited exper. in nursery planning. Interested in land or city planning; also nursery work. Pref. far west; any locality accepted. Box E-214.

VET. DESIRES APPRENTICESHIP—Have had no formal training in arch. but am willing to learn and have a desire to become an architect. Some knowl. of use of drafting instruments, blue-printing, tracing, etc. Neat in work. Desire work in Madison, Wisc., age 23. Robert E. Lindeman, 209 No. Marquette St., Madison, Wisc.

ENGR.-BUILDER—36, married, Civ. Engr. degree. Ex-Seabee Lt., 25 mos. overseas. Prior to war engr. and trades coordinator large chem. co., 18 mos. Panama Canal, 27 mos. USED. Desire exec. pos. progressive constr. firm, or maint. supt. indust. plant. Will locate anywhere. Box E-215.

SALES ENGR.—Ex-Navy Lt., 33; 3 yrs. college Civ. Engr. 5 yrs. constr. engr.; 2 yrs. sales engr.; well-groomed, aggressive. Location NYC or NJ. Avail. March 1. Box E-216.

CIVIL ENGR.—23, Navy Civil Engr. Corps officer, Iowa State Coll. '44. Ltd. exper. in teaching, editing, and the mgt. of a printing office. Anxious to apply coll. trng. Desires to locate perm. in the South, Southwest, or Midwest as asst. to a bldg. contractor, engr., or architect. Avail. 1 April. Box E-217.

LANDSCAPE ARCH.—23, B.S. in L. Arch., Univ. of Cincinnati, 2 yrs. exper. Cln'tl Recreation Comm., 1 yr. exper. as site planning engr. with arch. engr. firms. Completed 58 mo. service as 1st Lt. Corps. of Engrs. Avail. immed. Prefer S. Calif. or West Coast. Desires pos. in city planning office or estab. firm. Box E-218.

CITY PLANNER—Ex-officer USNR, 37, 10 yrs. exper. in regional and local planning with TVA. Grad. Harvard City Planning School (M.C.P. 1933). Box E-219.

ARCHITECT & TOWN PLANNER—Continental, at present Brit. Army Officer, India. Former Chief Arch. prize petrol company in Rumania. Prize winner in several internat'l. arch. and town planning comps. 16 yrs. exper. in all types of struc. Desires to begin negotiations for pos. leading to partnership with established arch. firm. Pref. Calif. Box E-220.

CONSTR. SUPT.—28, B.A. degree majoring in math. Several engr. and arch. courses. Speak Spanish fluently. 3½ yrs. Naval constr. btm. 6 yrs. exper. in bldg. trade. Desire pos. with contracting or constr. firm, materials dealer or arch. Box E-221.

ARCH. DRAFTSMAN OR JR. ARCH. ENGR.—Vet., 27, married, 6 yrs. mech., struc. and tool design draftsman, detailer. 3½ yrs. aeronautical engineering school. To attend arch. engr. school nights. Desires pos. as arch. draftsman or jr. arch. engr. in or around Chicago preferred; but will accept pos. in Los Angeles. Herman J. Lipkin, 4007 W. Polk St., Chicago 24, Ill. Phone Sac. 4085.

CONSTRUCTION ENGINEER—Ex-Navy officer mech. engr. Penn. grad., professional engineering license, N. Y. 42, married, experienced in plant construction and industrial buildings especially public utilities plants, estimating, design, supervising. Desires permanent connection with estab. firm. Box E-222.

ARCHITECT—39, married. Ex-Navy officer available about 1 April. 16 yrs. experience construction and drafting. Want job with progressive architect or builder in Florida or Southern Calif. assuring good future. Box 294, Evergreen, Colo.

MANUFACTURER'S REPRESENTATIVE—Wants sales agreements in non-competitive lines in the building field in Iowa. A grad. in arch. engr., Reg. Arch., age 40, well trained in construction and sales promotion now opening office for building service and technical sales. Box E-223.

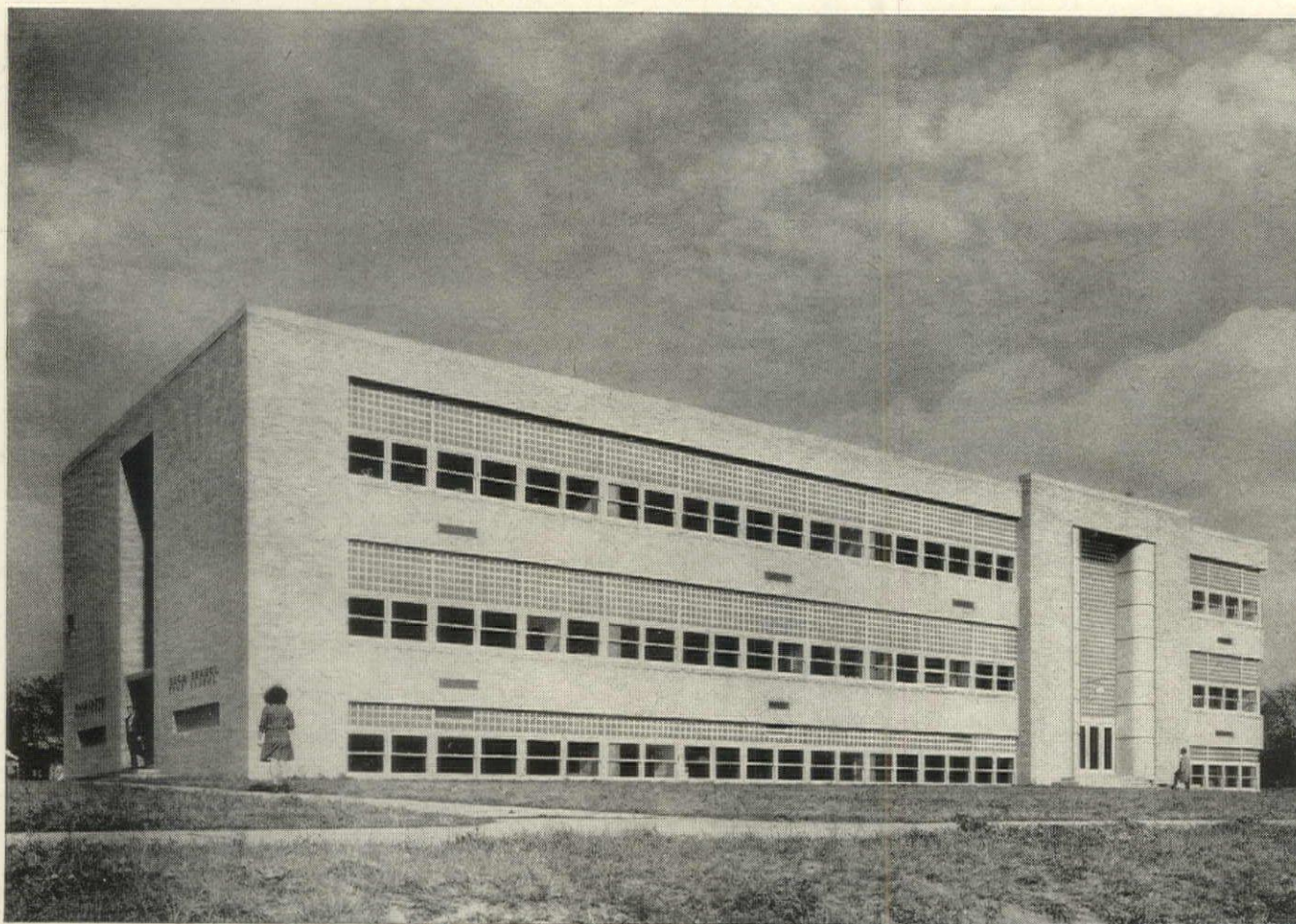
CIVIL ENGINEER—Discharged army Lt. Col., 33, married, civ. engr. degree; 62 mo. personnel and office administration with Ord. Dept. 10 yrs. office and field duties on bridge and bldg. construction (masonry), prior to war. Interested in perm. position as asst. to contractor or exec. position with construction materials firm. Location U. S., preferably Midwest. Box E-224.

REGISTERED ARCHITECT—Va., married, attended NYU School Arch. and Allied Arts, 10 yrs. experience on varied residential and commercial construction. Being released from Army Air Forces, available after April 30. Desire connection with established building contractor or arch. firm in executive capacity. No location preference, will travel abroad. Box E-225.

ARCHITECT—Wishes work as senior draftsman with small New York City firm specializing in the better class of residences, shops and schools. Ten years experience. Degree. Southern license. Young man. Available March. Box E-226.

ARCHITECT—39, Lt. Comdr. on terminal leave, College grad., seeking position, any location, leading to partnership with well established firm having opening for a practical designer. Can handle projects from perspectives thru working drawings. 20 years experience includes hospitals, colleges, housing, schools, alterations. Registered 4 eastern states, also NCARB. Box E-227.

ARCHITECT-INDUSTRIAL DESIGNER—Vet., B. of Arch. Texas A. & M., 1939. 5 yrs. in Army as architect with Hawaiian Air Depot & Headquarters. Constr. Service. Expert delineator, detailer and draftsman. Box E-198.



Exterior — Walkerton High School, Walkerton, Indiana. Architect—Joe H. Wildermuth & Co., Gary, Indiana.

EYE PROTECTION Planned in Advance

HERE'S the latest window treatment for school buildings.

It helps to protect children's eyes—helps to reduce brightness contrasts—helps to make full use of natural daylight.

Note photographs shown here. Every classroom is "daylighted" with a combination panel of clear glass and the new Insulux Light-Directional Block.

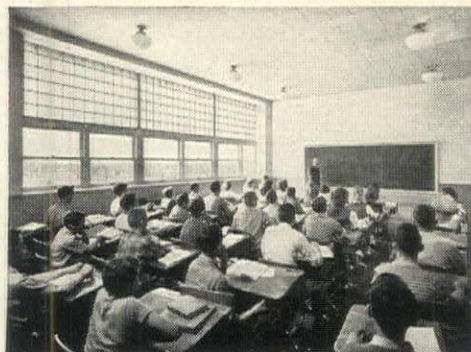
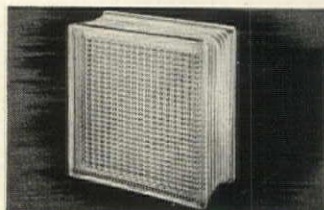
The clear glass is used from sill-height to somewhat above eye level. Above that point—the new prismatic block is used.

The result? The main beam of light is bent upward to the light-colored ceiling and is reflected deep into the interior of the classroom. There is a substantial improvement in light distribution, more light from above, less interfering shadows.

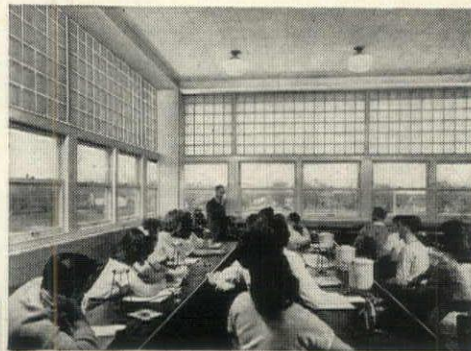
Investigate! Panels of Insulux are now being used to "daylight" classrooms, lecture halls, laboratories, gymnasiums, libraries, swimming pools, corridors and entrance ways.

OWENS - ILLINOIS
INSULUX
GLASS BLOCK

For technical data, specifications, and installation details, see our section in Sweet's Architectural Catalog, or write: Insulux Products Division, Dept. C25, Owens-Illinois Glass Company, Toledo 1, Ohio.



Mathematics Classroom. Note that clear glass is used from sill-height to somewhat above eye level. Above that point—Insulux Light-Directional Block No. 351 is used.



Chemistry Laboratory. This room is flooded with softly diffused natural daylight. More light from the ceiling, less horizontal light, fewer shadows.

Insulux Glass Block is a functional building material—not merely a decoration. It is designed to do certain things that other building materials cannot do. Investigate!

YOUNG DELIVERS HEAT Where it's Wanted!



"Streamaire" Vertical Flow Units; specially designed to heat rooms with high ceilings.



Horizontal "Streamaire" Units; heat large areas efficiently, most economically.

● The most modern and efficient way to heat plants, stores, and other large areas, is with one or both types of "Streamaire" Unit Heaters. Thermostatic controls operate units individually or in series, providing comfortable, controlled temperatures. Young Units save floor space... are easy to install... are low in first and maintenance costs. Because "Streamaire" Units give such unprecedented satisfaction, they prevent heating-plant complaints from clients and customers. Write today for further information, without obligation.

YOUNG



HEAT TRANSFER PRODUCTS

OIL COOLERS • GAS, GASOLINE, DIESEL ENGINE COOLING RADIATORS • HEAT EXCHANGERS • INTERCOOLERS • ENGINE JACKET WATER COOLERS • EVAPORATIVE COOLERS • GAS COOLERS • UNIT HEATERS • CONVECTORS • CONDENSERS • AIR CONDITIONING UNITS • EVAPORATORS • HEATING COILS • COOLING COILS • AND A COMPLETE LINE OF AIRCRAFT HEAT TRANSFER EQUIPMENT.

YOUNG RADIATOR COMPANY

DEPT. 156-C

RACINE, WIS., U.S.A.

ARCHITECT—Member A.I.A., age 37, married. Looking for permanent location in West or Midwest. Degree in Arch.; best qualifications; thoroughly experienced. Can create, design and produce. Box E-199.

STRUCTURAL DESIGNER & DRAFTSMAN—33, B. S. in arch. engr., Univ. of Nebraska, 1939. 5 yrs. civil engr. exp., 5 yrs. Army Corps of Engrs. Now on terminal leave, will receive disch. with rank of Major in March, 1946. Middlewest preferred. Box E-189.

ENGINEER OFFICER—36, 2 yrs. constructing airfields in New Guinea, grad. arch. engr. Univ. of Ill. 8 yrs. exp. in estimating and supervising general and building constr. Prefer Wisconsin or Middlewest. Box E-190.

LAWYER—30, Chicago area, desires position with builder or real estate office. Executive ability, thorough, capable accepting responsibilities. Released from Army December '45. Sidney Salins, 3617 Leland Avenue, Chicago, Ill.

DRAFTSMAN — ESTIMATOR — SURVEYOR—Marine vet, 38, married, 16 yrs. varied exper. in construction industry. Desires connection with reputable arch. or bldg. constr. office located in or near Philadelphia. Box E-191.

BUILDING CONTRACTOR'S ASST.—Disch. Army Officer, 31, grad. of Rochester Inst. of Tech., constr. supervision. Desires position as assistant to bldg. contractor. Limited exper. (1 yr.) but willing and intelligent, especially interested in housing projects. East preferred. Box E-192.

MANUFACTURER'S REPRESENTATIVE—Plumbing & heating trade in southern Calif. 12 yrs. exper. with national manufacturers. Age 38. 3 yrs. Naval service. Have knowledge of market and can provide warehouse facilities if desirable. Box E-194.

LANDSCAPE ARCHITECT—Vet, 35 grad. Univ. of Wis., B. S. (Land Arch.), Masters (Land Arch.) Harvard. 5 yrs. varied experience. Desires permanent position in landscape arch. or some related field. Box E-195.

PIPING DRAFTSMAN—Veteran, 26 yrs. of age, 6 yrs. exper. on marine power plants including field supervising. Past year stationed at Pearl Harbor Navy Yard as a piping draftsman. Anxious to get connected with a heating engineering firm or similar. Live in Westchester County, N. Y. Box E-196.

ARCHITECT—Registered since 1928, 37 yrs. old, white, christian, Lt. Col. Corps. of Engineers, 5 yrs. Army service. Desires position or business opportunity in architecture or allied line, somewhere in eastern U. S. Box E-197.

ARCHITECTURAL DRAFTSMAN—28, four years college. 3½ years experience in topographical drafting in Corps of Engineers. 1 year experience in engineering drafting. Desires position in architectural firm. Box E-200.

ARCHITECTURAL ENGINEER—War vet, 3 years experience in bldg. construction supervision, 3 yrs. in structural design, 2 yrs. as procurement engineer of industrial equipment and materials, desires technical sales representation in Twin Cities and Northwest. Box E-201.

ARCHITECT—25, married, 1 child, 5½ yrs. AAF flying officer, radar instructor and navigator. A. B. Harvard Univ., and 1 yr. Harvard School of Design. 1 yr. experience in arch. design and drafting. References. Desires position with a future. Prefers Boston or vicinity. Box E-202.

MEN WANTED

ARCHITECTURAL DRAFTSMAN—First class draftsman wanted by architectural firm in Ohio. Box R-200.

INTERIOR STORE DESIGNER—with

knowledge of merchandising by Mid-south firm establishing a new department. Give full particulars. Splendid opportunity for responsible party. Box R-199.

ARCHITECTURAL DRAFTSMEN—(2) capable of producing complete working drawings with knowledge of commercial and industrial work. Salary according to ability to produce. Mid-south firm of architects. Give complete information. Box R-198.

SALES ENGINEERS—Architectural or civil. Large manufacturer of building materials has need for three men, 35-40 yrs. of age, good personality, to contact leading architects, building engineers, etc. Locations Chicago, New York and Atlanta. Permanent positions and opportunities for advancement. Box R-201.

ARCHITECT, ENGINEER, or ARCH. ENGINEER—Needed by large lumber & building company in West extensively active in the constr. field. To help assist in setting up a prefabrication plant. Box R-202.

ARCHITECTURAL DEPARTMENT HEAD & ASSTS.—Progressive lumber company, Denver, wants man to head arch. design & production dept. for small homes work. Need not be registered architect. Also require two young men with some drafting and general arch. exper. Will train. All should be able to handle customer contacts. Box R-203.

ARCHITECTURAL DRAFTSMEN—To work in architect's office in Florida. Should be familiar with preliminary layouts and working drawings on apartments, hotels and commercial structures. Will pay good salaries to men familiar with tropical arch. Box R-204.

ARCH. DESIGNER—Male. Specialized in interiors, constr., color and furnishings, qualified with prof. and tech. schooling, and 10 yrs. exper. in recognized arch. offices. Apply Employment Office 3rd Floor, Marshall Field & Co., Chicago, Ill.

CIVIL ENGR., ARCHITECT—Or equivalent exper., capable of practical application and original thinking for research on building material uses in Research and Devel. Dept. of progressive expanding org. producing bldg. materials. NY Metropolitan area. Box R-205.

DESIGNER-DILINEATOR—Good position in small office doing high class work. Give complete information. Erle G. Stillwell, Inc., P. O. Box 1056, Hendersonville, N. C.

EXPERIENCED DRAFTSMAN—Wanted by small office, varied prac., pleasant working conditions. Prefer party with gen. drafting exper. and possibly some specification exper. Sal. and bonus commensurate with ability. Otho McCrackin & Russel H. Hiett, Archs. & Engrs., 308 W. 20th St., Hutchinson, Kansas.

ARCH. DRAFTSMAN—With prac. exper., industrial, commercial. Salary commensurate with ability. Perm. pos. for right man. Milton Searle Carstens, 1 No. LaSalle St., Chicago, Ill.

ARCH. DRAFTSMAN—Exper. in designing and detailing for commercial and industrial buildings. State exper. and sal. wanted. Oppor. with this firm is excellent if you desire to make connection. R-206.

ARCH. DESIGNER—Top Flight—For fine residence and office bldg. work. State exper. and sal. expected. Perm. job. Applicant will be requested to submit examples of personal work. Box R-207.

WANTED!—DESIGNER-DRAFTSMAN. For arch. store fixture and interior display. Many permanent openings. R. H. Macy's. Phone for an appointment. CHickering 4-2000, Extension 2413.

ARCH. DESIGNER AND DRAFTSMAN—By small office on Fla. W. Coast. Fut. connection for right party. State full exper. and sal. expected. Box R-187.

EXPER. ARCH. DRAFTSMEN—Wanted by arch. firm in the South. Able to handle scale drawings, details, all types of public, institutional and commercial work. Please state trng., exper. and salary expected. Box R-190.

ARCH. DESIGNER—To work in Chi. Exper. in designs and constr. required. Sal. proportionate. Interesting diversity of problems to the proper man. Shaw Nacess and Murphy, 80 E. Jackson Blvd., Chicago, Ill.

DESIGNER—Cap. of rendering persp. colored sketches for the redecor. of churches and pub. auditoriums, etc., must have complete knowl. of Catholic art and decor. designs. Pref. given combination man who can also take measurements, prepare est., close sales and super. Reliable firm, med. size Ill. city, low living cost. Contracts in various states. Advise exper., starting sal., relig., snapshot, phone, refs. Box R-178.

ESTIMATOR-DRAFTSMAN & GENERAL FOREMAN—wanted by newly org. constr. firm in W. Fla. Must be thoroughly famil. with masonry bldg. constr. and gen. concrete work. Age, detail educ. and exper. record, min. sal. acceptable, date avail. and refs. Box R-179.

DESIGNER—If you know store design and want to locate yourself with firm that is going places and that will reach the top pos. in the next 5 yrs., drop us a line. We need you and you need us. Box R-180.

ARCH. & DESIGNER—with 1965 ideas for So. Texas devel. company. Good drawing account and interest in firm for right man. Box R-181.

BLDG. SUPERINTENDENT—Some arch. eng., estim., quantity survey, indus. and res. constr. exper. Write with confidence, stating full qual., exper. and sal. desired. Excel. oppor. for right man. Box R-182.

ARCH. OR DRAFTSMAN—Exper. in reinforced concrete, mod. des. Either to open an off. on partnership basis or on a sal. or fee basis. N. Y. area. Box R-183.

EXPER. DESIGNER-DILINEATOR—DRAFTSMAN—Wanted by arch. released from service re-estab. office in Houston, Tex. Job leading to association. Box R-184.

ARCHITECT—Grad. Preferably regis. Good oppor. for young man looking for perm. indus. connection. Phil. area. Box R-185.

ARCH. DRAFTSMEN—Wanted by N. Y. arch. with winter quarters along Gulf Coast of Fla. Would like to interview smart young men with basic knowl. of eng. and sound concern about indigenous arch. Good future. Box R-186.

ENGINEERING DRAFTSMEN—For work in Washington, D. C. government agencies. Starting salaries range from \$1,704 to \$2,980 yearly. Positions offered covering the fields of aeronautics, architecture, civil engineering, electrical engineering, lithography, mech. engineering, shipping, statistics, struc. design, topography and general. Applicants need minimum of 6 months appropriate drafting exper. No written test required. Application forms and examination announcement No. 406 obtainable at any first or second class PO or write U. S. Civil Service Commission, Washington 25, D. C.

ARCH. & STRUC. DESIGNERS & DRAFTSMEN—Wanted by arch. firm in large Southern city. Must be well trained and with varied exper. Perm. pos. Box R-188.

DRAFTSMAN—Clever young man capable of doing perspectives and drawing plans for homes and apartments. Oppor. to become jr. assoc. or partner, southeast Florida. Box R-189.

ARCH. DESIGNER, DRAFTSMAN—Clever delineator, mod. res. work pred. Opp. for adv. in small Denver, Colo. office. Box R-191.

Every woman wants

TELEPHONE OUTLETS

in her new home

BUILT-IN telephone facilities are striking evidence of good planning and construction. Prospects will like the thought that built-in conduit is provided to carry telephone wires out of sight between the walls. Also, that outlets at convenient points are planned for, and ready for use as soon as telephones become plentiful.

Telephone outlets make sales easier. Your Bell Telephone Company will be glad to co-operate in planning them with you. Just call the nearest Telephone Business Office.



BELL TELEPHONE SYSTEM



DESIGN POSSIBILITIES FOR PUBLIC



In the evolution of building design, fenestration has assumed greater and greater importance. Window areas have become larger, more functional. And the glass used to glaze them has become correspondingly more important. That is why so many architects rely on Pittsburgh Polished Plate Glass as a glazing material today.

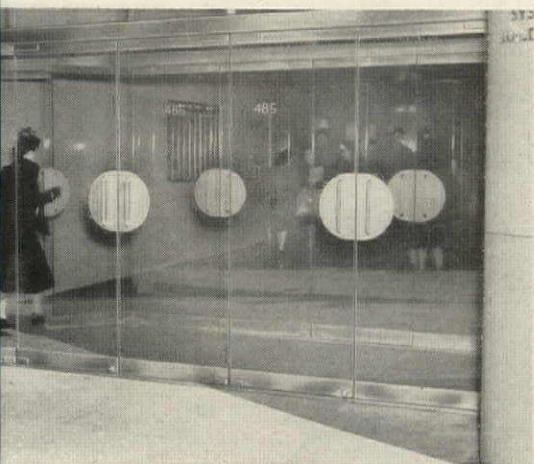
This glass assures windows of outstanding beauty and clarity in public buildings of all kinds . . . from clinics to recreation centers. Providing clear, undistorted vision and brilliant, polished surface. Pittsburgh Plate Glass is available in various types and colors to meet specialized needs. Architects: Elizabeth and Winston C.

BUILDINGS...with

Glass



Installation in public building washrooms is often determined by the material used for walls and partitions. Carrara Structural Glass is a modern material that permanently retains its finished beauty and excellent sanitary properties. It is easy to keep clean. It will not check, craze, stain, nor fade. It is impervious to water and pencil marks. Ten colors of Carrara are available to help the architect achieve attractive washroom designs. Architects: Marr & Holman.



Architects are finding many new design possibilities for entrances since the development of Herculite Tempered Plate Glass. Sturdy, handsome doors of crystal-clear Herculite help create entrances that are distinctive and impressive. In the application shown, inner and outer doors are of Herculite, and an over-door panel of lustrous Polished Plate Glass.



Windows of many mullions are often a desirable element of design in large buildings. And Pennvernon Window Glass has consistently proved itself eminently satisfactory for glazing the many small openings that such mullioned windows present. Pennvernon has a degree of clarity, beauty and freedom from distortion exceptional in a sheet glass. And for this reason is well suited for use in buildings such as this hospital in Richmond, Va. Architect: Baskerville & Son.

believe you will find much to interest you in our new illustrated booklet of ideas concerning the use of Pittsburgh Glass in building design. Send the coupon for your free copy.

Design it better with

Pittsburgh Glass



"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH PLATE GLASS COMPANY

Pittsburgh Plate Glass Company
2108-6 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, your new booklet entitled: "Ideas for the Use of Pittsburgh Glass in Building Design."

Name.....

Address.....

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



Wear-Proof — Stain-Proof
WITH COVER ENCLOSING ENTIRE SEAT

SAVE THE FUTURE EXPENSE of toilet seat replacements, refinishing, repairs — install 1-piece all-plastic San-DURO seats that never need refinishing, varnishing, or other maintenance. No chance for disease germs to lurk and spread on the satin-smooth, non-porous, non-cracking surface. When closed, cover encloses entire seat. Designed for use on regular toilet bowls, and available in white, ivory, and black.

YOUR JOBBER can supply you — or write for complete information and prices.

Left — Open Front Seat for Regular Open or Elongated Toilet Bowls.

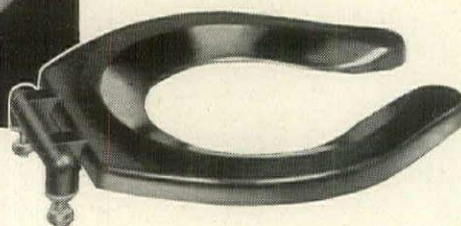
Regular Open type, less cover — Stock No. PB-102

Elongated Open type, less cover — Stock No. PB-302



Regular Closed Front with cover

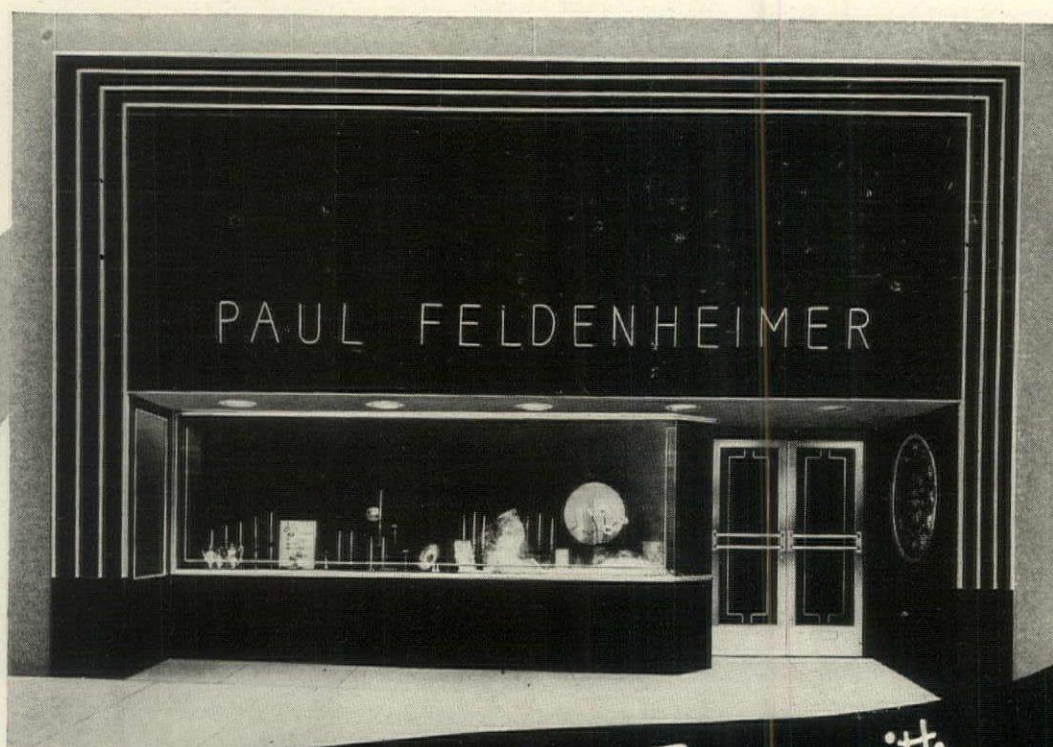
White — Stock No. 222
 Black — Stock No. 221
 Ivory — Stock No. 220



ECLIPSE MOULDED PRODUCTS COMPANY

Plastics Div. of General American Transportation Corp. • 5152 NORTH 32nd STREET • MILWAUKEE 9, WISCONSIN

Manufacturers of San-DURO BRAND PLASTIC PRODUCTS and PRODUCERS OF PLASTIC ITEMS CUSTOM-MOULDED



Enhance the beauty of Store Fronts with **ARCHITECTURAL METALS**

It may be poor policy to judge a book by its cover but "sales-minded" architects know that many a store is judged by its outside appearance. That's why architectural metal work is used so extensively in store front design.

Both architects and store owners, interested in dignified smart-looking store fronts, know and appreciate the feeling of quality, reliability, and dignity that is associated with artistic metal work.

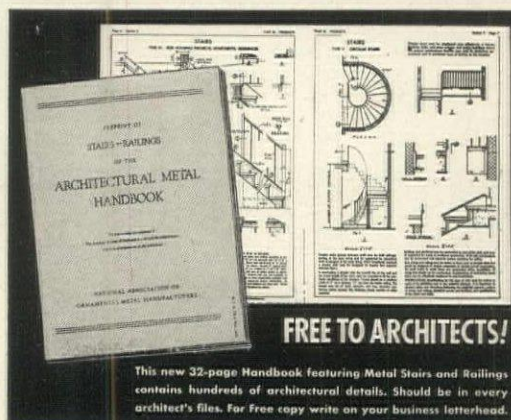
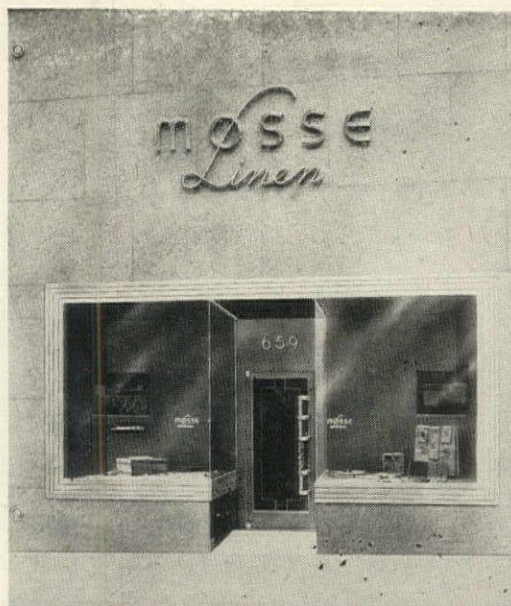
As you plan new stores or the remodeling of old ones use architectural metals not only for store fronts and entrances, but use them, too, inside for display cases, lighting fixtures, hand railings, stairs and in dozens of other ways.

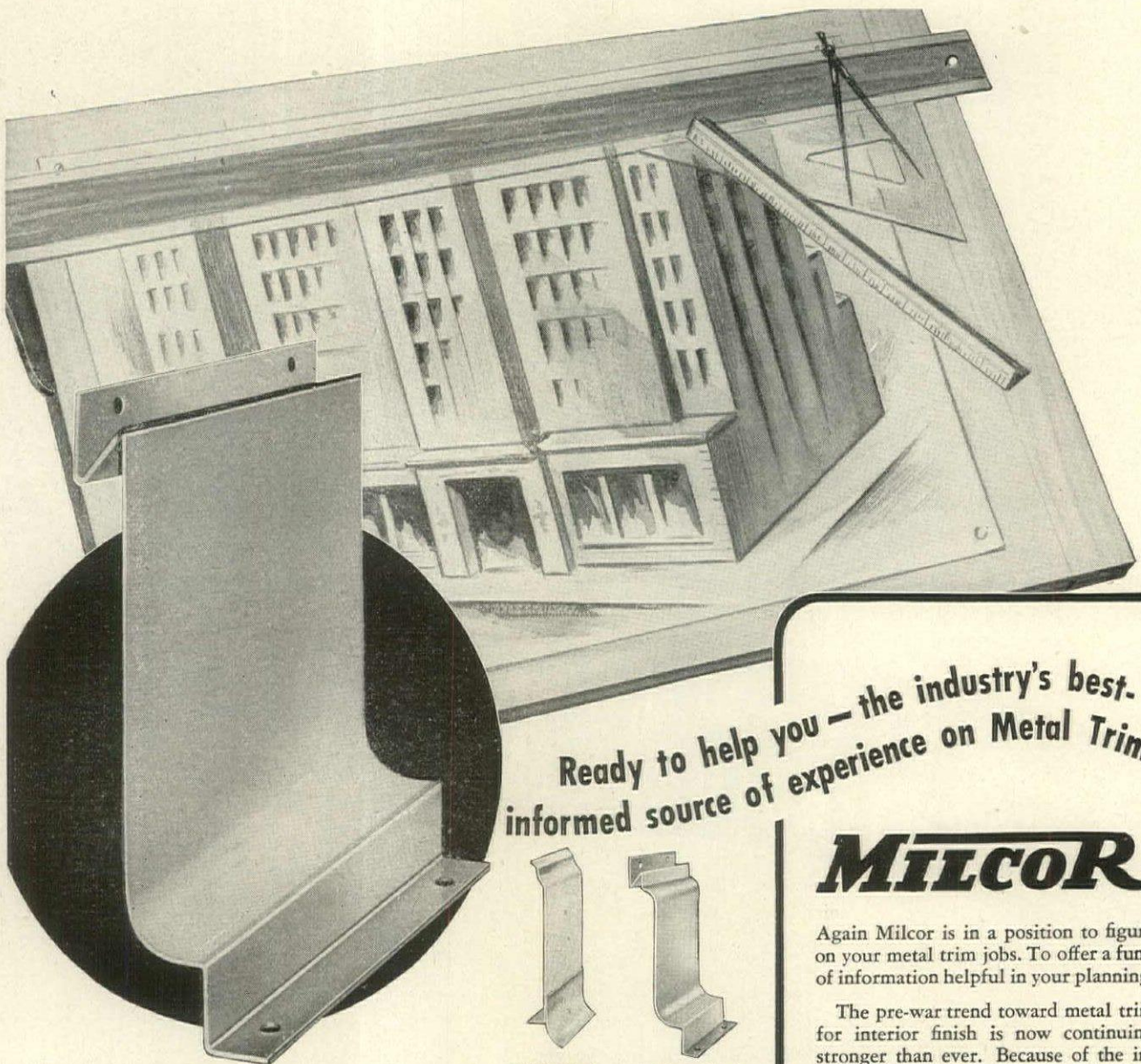
The manufacturers and fabricators of architectural metals are anxious to work with you, to offer helpful suggestions and to be of assistance in any way they can. Consult them whenever you plan new buildings.

Architects who are interested in a Free copy of the new Handbook on Stairs and Railings, just published by the Association, should write today on their business letterhead. Address Dept. AF-3.

NATIONAL ASSOCIATION OF **ORNAMENTAL METAL MANUFACTURERS**

209 CEDAR AVE., TAKOMA PARK WASHINGTON 12, D. C.





Ready to help you — the industry's best.
informed source of experience on Metal Trim...

MILCOR

Again Milcor is in a position to figure on your metal trim jobs. To offer a fund of information helpful in your planning.

The pre-war trend toward metal trim for interior finish is now continuing stronger than ever. Because of the increased capacity for production of steel. Because of the basic advantages of metal.

Metal trim is permanent, sanitary, economical to maintain. It is fire-safe. It lends itself to attractive treatments in interior design, providing unobtrusive beauty in the modern spirit.

There is an appropriate Milcor Metal Trim item for every exposed interior detail. Milcor, leader in this field, offers everything you need for either monumental or residential construction. And only Milcor offers interior metal trim with a sound-deadening insulmat lining.

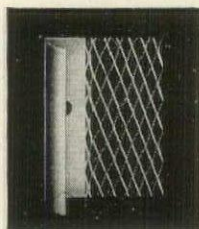
Use Milcor Metal Trim, for creditable results on all your jobs. Write for revised Milcor Metal Trim catalog. Or, see the Milcor catalog in Sweet's.

T-200

Milcor Metal Base No. 601

Milcor Metal Base No. 643

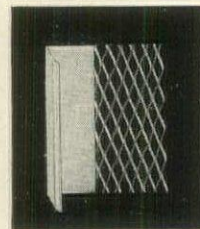
Milcor Metal Base No. 621



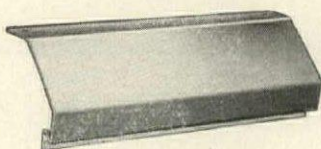
Milcor Metal Casing No. 4 — 3/4" Ground



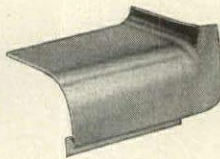
Milcor Metal Casing No. 6



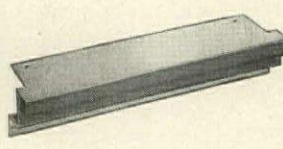
Milcor Metal Casing No. 60



Milcor Window Stool No. 511



Milcor Window Stool No. 501



Milcor Window Stool No. 521

MILCOR STEEL COMPANY

MILWAUKEE 4, WISCONSIN

BALTIMORE 24, MD. • CHICAGO 9, ILL. • KANSAS CITY 8, MO.
LOS ANGELES 23, CALIF. • ROCHESTER 9, N. Y.

... additional service through
THE J. M. & L. A.

OSBORN CO.

A Division of Milcor Steel Company
CLEVELAND 14, OHIO
Detroit 2 • Buffalo 11 • Cincinnati 25

REVIEWS

One of the great events of this or any other art season is the collection of Oceanic sculpture now on view at New York's Museum of Modern Art under the title, *Arts of the South Seas*. To the average person the names of the islands are familiar from war reports: New Guinea, New Britain, the Solomons. Known to few is the fact that they have produced in the past, and in some cases are still producing, a great primitive art comparable to those of all time; Cycladic, Greek, early Cretan, Egyptian, pre-Colombian and African Negro. This showing in New York is the first ever assembled in an art museum and presented for its esthetic merits. For years Oceanic art has been collected by natural history museums for the light it could shed on primitive cultures, and the public led to regard such collections merely as "curios". Now, for the first time, we find more than 400 objects magnificently displayed in a setting so subtly and thoughtfully contrived that the spectator absorbs a definite impression of the culture, climate and atmosphere that produced them.

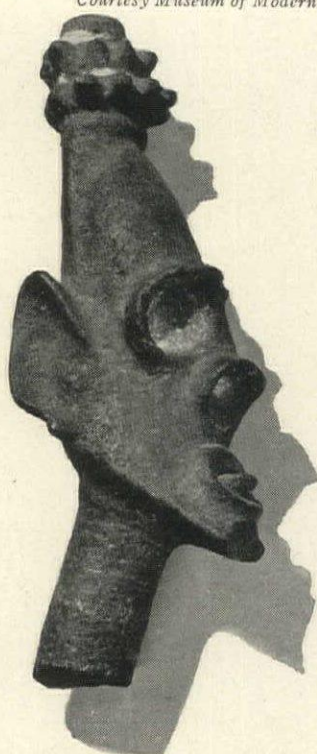
The exhibition is divided into four major sections: Australia, Melanesia, Micronesia and Polynesia. A large, simple wall map greets the visitor, orients him geographically, and, along with color, light and perspective, enables him to grasp some idea of the interplay of influences from one area to another.

Over 100 years ago Yankee traders, seamen and whalers brought back curious items which they kept as souvenirs of their voyages. These finally found their way into collections of local historical societies and ultimately into the ethnological collections of the great museums. Thus we find that most of the Polynesian objects are loans from the museums of the eastern seaboard and were collected before the middle of the nineteenth century. The islands of Polynesia have since that time been increasingly under the influence, and finally the domination, of the West. Now nothing is produced in that area that ranks with the work of the past. Melanesia and Micronesia, on the other hand, have retained their primitive cultures and include areas where few outsiders have penetrated and where the traditional arts are being pursued to this day. While the Melanesian group is represented by carved door jambs, tall sculptured figures used for ceremonial rites, and intricate roof spires, Micronesia presents mostly smaller useful objects. An area where living is hard, the creative energies of the people are channeled toward fine craftsmanship of everyday things. Objects in these groups were collected by archaeologists and anthropologists fully aware of their enormous value as clues to our own culture.

Australian art, which springs from the most primitive of living peoples, contributes useful objects such as shields, finely ridged in geometric shapes and polished to a soft patina, boomerangs and some lively decorative bark paintings which closely resemble prehistoric cave paintings in Europe. Shields from the Papuan Gulf tribes form one of the finest groups and most effective installations (see cut). Primitive work of great virility is found in the New Hebrides group, including dance masks covered in fringed bark cloth to conceal the dancer's shoulders. Work from the Sepik River—tall, impressive ceremonial figures and huge shields—is installed on a curved sand platform which winds through the art of geographically related areas. The relationship of crafts is clearly seen not only in the room containing the platform but also through large openings which reveal work from other sections.

The Museum of Modern Art deserves great credit for sponsoring this exhibition, and Mr. Rene d'Harnancourt for directing it. Dr. Ralph Linton and Dr. Paul Wingert collaborated during eighteen months of selection and assembly of this collection which lifts from obscurity one of the world's great primitive arts. D.D.S.

Courtesy Museum of Modern Art



New Guinea



Papuan Gulf

Courtesy Newark Museum

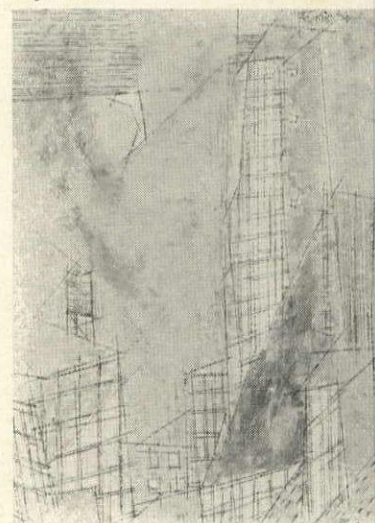


New Ireland

Retrospective shows are often so laboriously complete that one is apt to wish the painter had less storage space at his disposal, but in the comprehensiveness of the Lyonel Feininger exhibit, which filled two New York galleries during January and February, the spectator could trace with pleasure the emergence of the poet, his rejection of established cubist clichés no longer necessary to him. Feininger gives us his world which we vaguely recognize as our own, but to him it is much more beautiful and significant. His symbols for the furnishings of the world are as graphic and interpretable as the musical notes and mathematical signs which, along with painting, are his absorption.

Feininger's architectural approach appears in all his compositions—in a series of arctic watercolors where vast and serene spaces are made habitable by the presence of becalmed schooners and the artist's symbols for clouds and figures and more specifically in his recent city studies where his oils have muted colors ribbed and reinforced by a skeletal gridwork of steel-fine black lines revealing an essential element of the city's make-up (see cut). Whether Feininger uses oil or watercolor, the technique is much the same—large, angular planes, close in color and value, with dark or light lines drawn in as emphasis on rigging or a setting sun. Whether he paints northern waters or urban chasms, Feininger finds spaciousness—projects it in echoless colors, sweeping angularity and highly refined simplification, all of which render the word "abstract" too cold a definition for so sensitive an art. C.T.

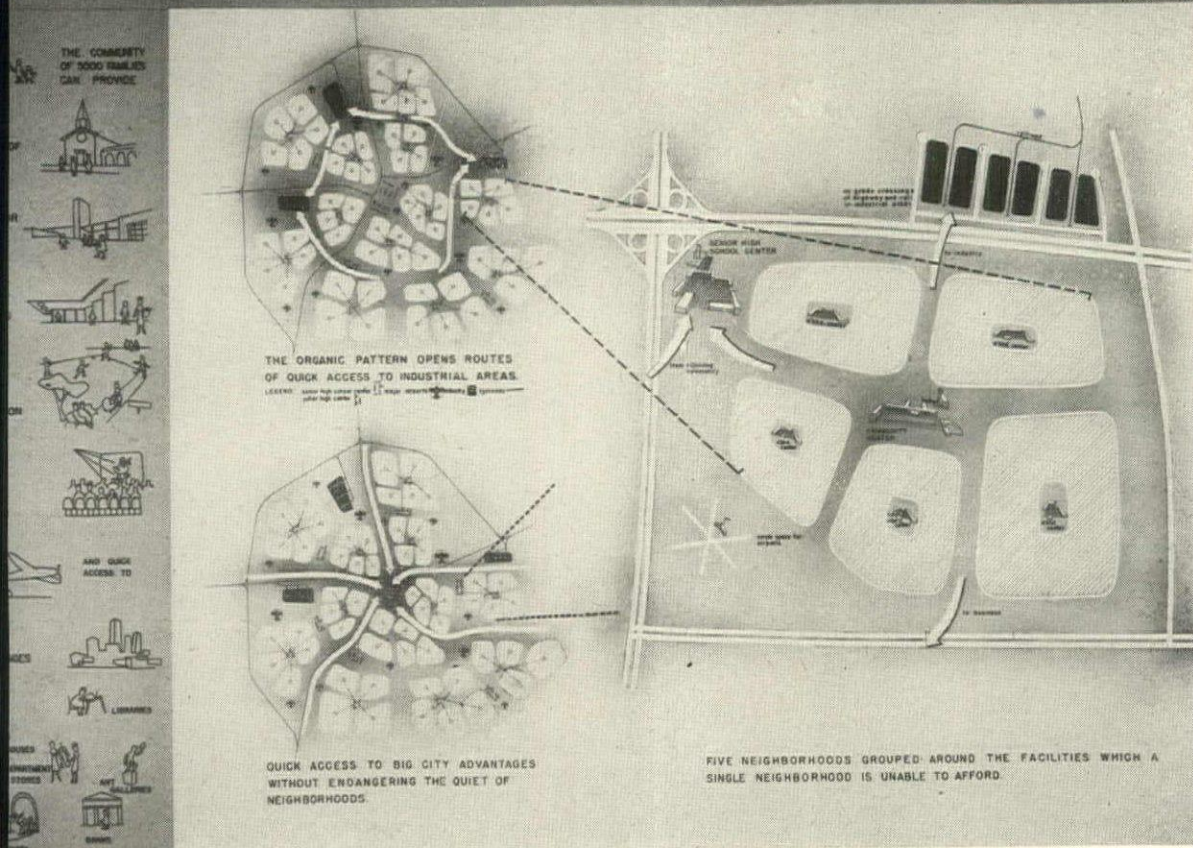
City Moon



REVIEWS

David S. Geer, Edward W. Waugh and George Matsumoto win first prize in Chicago's city planning competition.

COMMUNITY THE LINK BETWEEN THE NEIGHBORHOOD AND THE CITY



Based on the philosophy expounded in Eli Saarinen's book *The City*, the winning entry in the Better Chicago Competition presents in diagrammatic form the basic principles of modern planning and their application to Chicago's needs. Prepared for publication in the *Herald-American*, it is an exhibit composed of a series of illustrative panels and as such will eventually be turned over to the Chicago Plan Commission. Three sections deal respectively with (1) the needs which prompt planning (2) Chicago's specific problems and (3) a tentative general solution. As a whole it presents a continuous graphic argument building from simple ideas to more complex planning concepts. Panels shown here are typical examples taken from the three consecutive sections.

WHY PLAN?

"WE ALL HAVE TWO SETS OF WANTS:

1. Plenty of space: light and air.
Healthy surroundings: access to sports.
2. Convenience to work: nearby shopping.
Handy entertainment: social ties.

AS THINGS STAND CHICAGOANS ARE FORCED TO CHOOSE BETWEEN ONE OR THE OTHER!

City life satisfies one set of wants; suburban life the other.

THE ONLY WAY TO GET ALL THE THINGS WE WANT IS BY WORKING TOGETHER TO PRODUCE A NEW CITY AND A NEW COMMUNITY PATTERN.

THIS IS PLANNING PLANNING BEGINS WITH THE INDIVIDUAL FAMILY!"

Succeeding panels in this section trace planning from the basic family unit through to an integrated city. The plate left shows the community.

AND NOW CHICAGO

"CHICAGO HOLDS AND MUST KEEP TOP PLACE AMONG AMERICAN CITIES. IT HAS—

- A key geographical position
- Air, lake and highway transportation
- A vast railroad center
- Rich agricultural surroundings
- Many industrial satellites

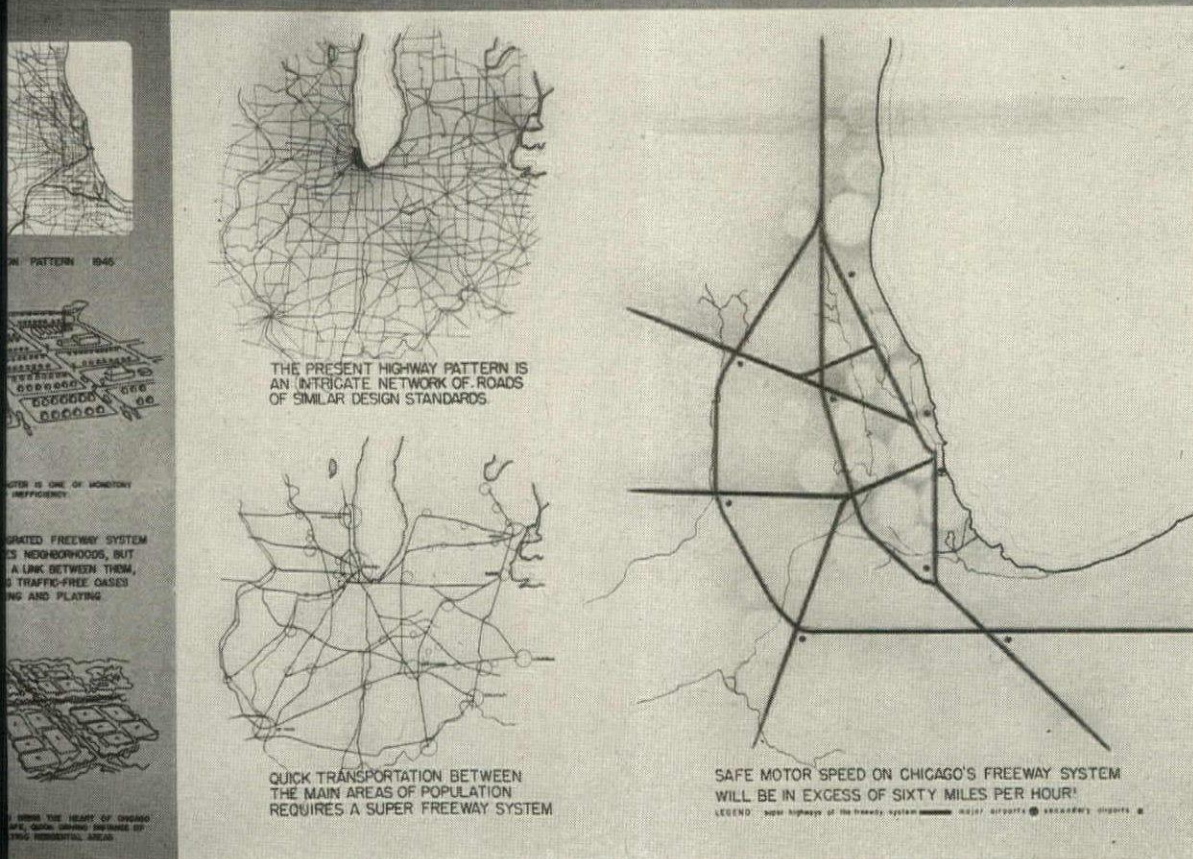
Traditionally brilliant business enterprise. These have attracted commerce, industry and people

BUT IT ALSO HAS—

- Too many people for the land
- High crime and delinquency rates
- Huge slum areas
- Unintegrated rail facilities
- Stinking midtown stockyards
- Heavily congested traffic

These are driving people and industry away

FREEWAYS LIMITED ACCESS HIGHWAYS IN BROAD STRIPS OF GREEN



MONEY

GREENBELT PROTECTION IS ECONOMICALLY FEASIBLE

UNCLASSIFIED STREET SYSTEM
WASTEFUL, DANGEROUS, MONOTONOUS,
INEFFICIENT, AND EXPENSIVE

GRID IRON PATTERN - UNPROTECTED
COMPARATIVE COST PER
50 FT. OF LIVING SPACE

PLANNED NEIGHBORHOOD - PROTECTED

LIVING SPACE IMPROVEMENTS GRIDIRON PATTERN
 $1¢ + 20¢ = 21¢$ PER 50 FT. LIVING SPACE

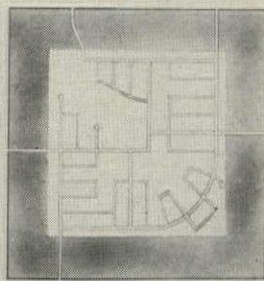
LIVING SPACE PROTECTION IMPROVEMENTS PLANNED NEIGHBORHOOD
 $1¢ + 1¢ + 15¢ = 17¢$ PER 50 FT. LIVING SPACE

A PLANNED STREET SYSTEM
26% LESS PAVED AREA
ECONOMICAL TO BUILD AND MAINTAIN

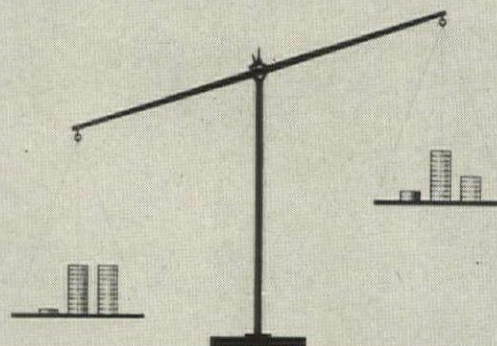
COST OF DEVELOPED LAND PER SQUARE FOOT OF LIVING SPACE
COST OF LAND BASED ON \$400 PER ACRE FOR OPEN FARM LAND
COST OF IMPROVEMENT 26% LESS IN A PLANNED NEIGHBORHOOD THAN
IN OUR PRESENT GRID IRON STREET SYSTEM



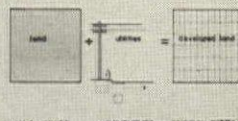
UNCLASSIFIED STREET SYSTEM
WASTEFUL, DANGEROUS, MONOTONOUS,
INEFFICIENT, AND EXPENSIVE



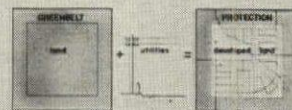
A PLANNED STREET SYSTEM
26% LESS PAVED AREA
ECONOMICAL TO BUILD AND MAINTAIN



GRID IRON PATTERN - UNPROTECTED
COMPARATIVE COST PER
50 FT. OF LIVING SPACE



LIVING SPACE IMPROVEMENTS GRIDIRON PATTERN
 $1¢ + 20¢ = 21¢$ PER 50 FT. LIVING SPACE



LIVING SPACE PROTECTION IMPROVEMENTS PLANNED NEIGHBORHOOD
 $1¢ + 1¢ + 15¢ = 17¢$ PER 50 FT. LIVING SPACE

COST OF DEVELOPED LAND PER SQUARE FOOT OF LIVING SPACE
COST OF LAND BASED ON \$400 PER ACRE FOR OPEN FARM LAND
COST OF IMPROVEMENT 26% LESS IN A PLANNED NEIGHBORHOOD THAN
IN OUR PRESENT GRID IRON STREET SYSTEM

The third and conclusive section is concerned with detailed solutions to the broad problems posed in the preceding group of plates and culminates in a tentative master plan. Also included are cost figures to back up the Saarinen arguments for his new city plus suggestions for actual procedure. The introduction reads like a rule book for citizen participation:

IT CAN BE DONE!

"SOUND RESULTS WILL EVOLVE ONLY WHEN THERE IS AN INDEPENDENT ORGANIZATION CARRYING OUT CONTINUOUS PLANNING AND RESEARCH ON ALL ASPECTS OF THE PROBLEMS OF GREATER CHICAGO

WHERE?

Start at the point of least resistance—first where vacant land is being laid out, then where slum decay is beyond patching.

WHO?

You;
Your neighborhood council;
Your municipal government;
Your state government, and—
A NEW GREATER CHICAGO LEGISLATIVE BODY

—elected by you

All advised by a vigorous new—

GREATER CHICAGO PLANNING BODY

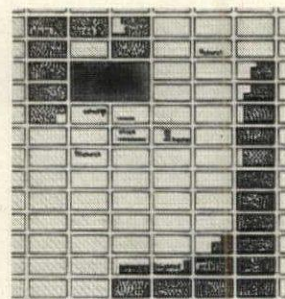
HOW?

Guidance of public expenditure
Legal controls on private action
Stimulating incentives for business and industry
Informed citizen participation."

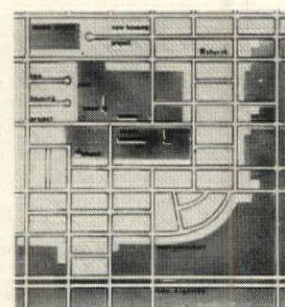
The first chart shown above illustrates clearly the economy of a planned street system and protected neighborhoods as compared with the haphazard gridiron street pattern which now dominates our cities. Although 26 per cent less paved area is used in the planned system, substantially lowering building and maintenance costs, the flow of traffic is not sacrificed. Instead, convenience and speed of vehicular movement is greatly increased while the added advantage of much open space makes for pleasanter living. Cost of providing utilities is also reduced to a surprising degree when the streets are not crowded together.

The panel below climaxes the series by showing how Chicago would look if laid out according to a planned system. Communities, made up of smaller neighborhoods are separated from each other by wide greenbelts. Thus open space, trees and parks flow through the entire city rather than being a luxury of the suburbs. Industry and business are also scattered throughout the city for convenient access from residential zones, although a greater concentration is of necessity placed on the waterfront. A simplified pattern of through highways and railroads provide speedy transportation and are supplemented by feeder roads leading to communities and business areas.

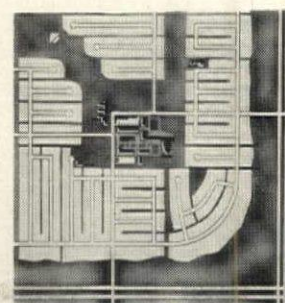
GENERAL DEVELOPMENT PLAN



Original grid pattern

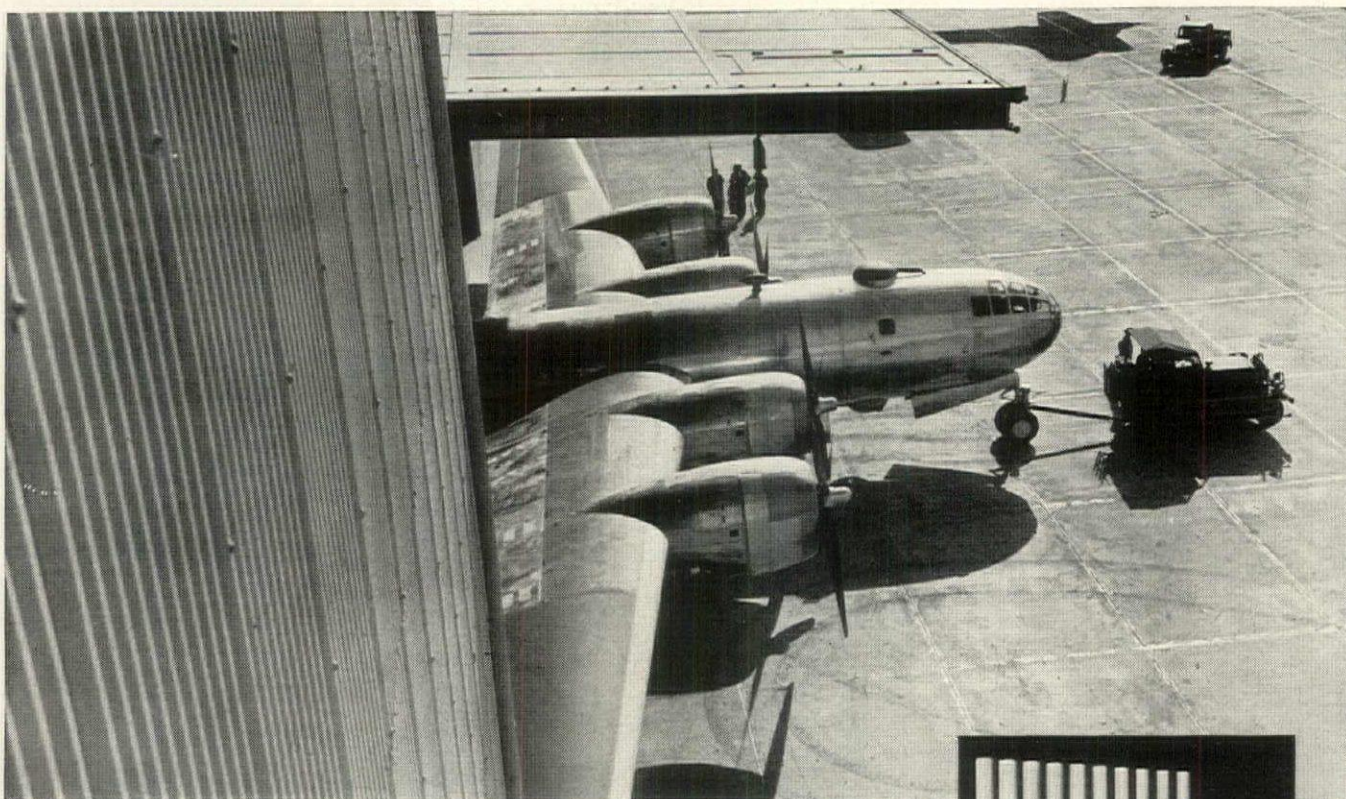


First shift of streets



Eventual open plan

CORRUGATED TRANSITE ... in the Age of Wings



Durable, maintenance-free walls and roofs . . . low in cost . . . can't rot . . . can't rust . . . can't burn

STREAMLINE and simplify your construction in the Age of Wings with Johns-Manville Corrugated Transite!

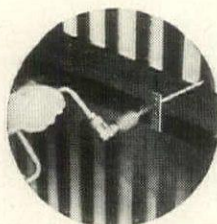
Low in cost and adaptable to every type of modern building, Corrugated Transite offers a way to save money both on construction and maintenance.

The large *fireproof* sheets—with their unusual strength increased by corrugations—permit a minimum of framing. Quickly installed,

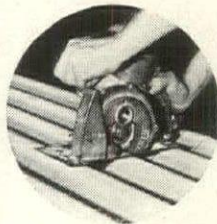
they require little or no upkeep. They're made of asbestos and cement, practically indestructible materials.

Attractive stone-gray in color, Transite can be used alone or in combination with other building materials. And when need for alterations arises, the sheets are practically 100% salvageable.

For more facts, send for illustrated brochure. Johns-Manville, 22 E. 40th St., New York 16, N.Y.



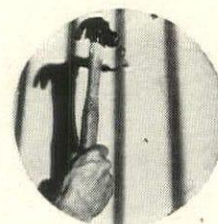
EASY TO BOLT TO STEEL



EASY TO SAW



EASY TO DRILL



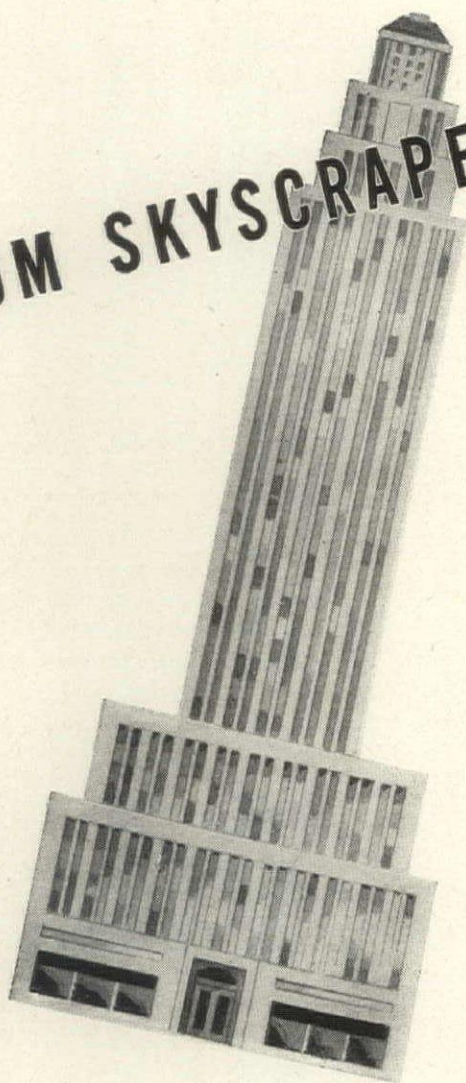
EASY TO NAIL TO WOOD

Johns-Manville

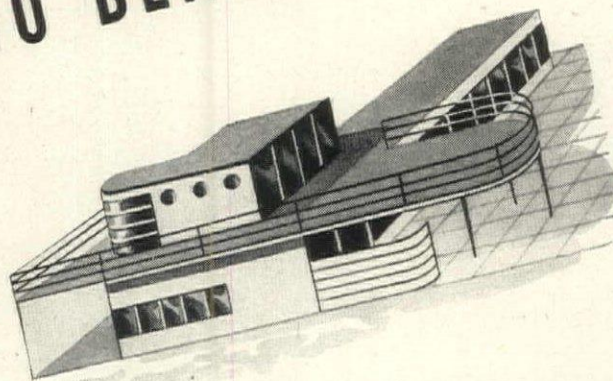
Asbestos

CORRUGATED TRANSITE

FROM SKYSCRAPER . . .



TO BEACH HOUSE



Turn to



For Better Air Conditioning

AIR conditioning can be a marvel of comfort. Or it can literally be a pain in the neck . . . and the pocketbook, too.

For dependable, trouble-free air conditioning . . . that dehumidifies*, circulates, filters, and ventilates the air as well as cools* it . . . turn to G. E.

The G-E reputation in air conditioning is something you can depend on. When G-E

equipment is properly installed, you'll get the kind of air conditioning you specify.

For heating, too, gas or oil . . . steam heat, hot water or warm conditioned air, for homes or small commercial buildings . . . specify G. E. for economical, efficient performance.

General Electric Company, Air Conditioning Department, Section 6133, Bloomfield, N. J.

*G-E winter air conditioning humidifies and warms the air.

GENERAL  ELECTRIC

Complete Air Conditioning



**BONDERIZED,
GALVANIZED STEEL
WALLS,
ROUNDED STILES**

Specifications

SIZES—32 x 32 x 80
36 x 36 x 80

WALLS — BONDERIZED,
GALVANIZED STEEL. Fin-
ished inside and out with
white baked-on synthetic en-
amel.

RECEPTOR — Semi-flat
standard type precast Stone-
tex; slipproof, leakproof,
nonabsorbent. Brass drain
for 2" waste connection cast
integral with receptor.

VALVES—Individual com-
pression valves with arm
and shower head.

ACCESSORIES—Curtain
and soap dish.



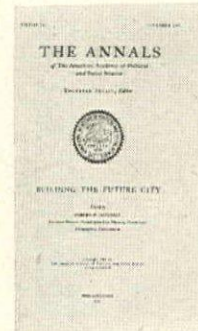
NEW *Cadet* SHOWER...

Redesigned along modern lines with improved construction features. The Fiat tension locking joint is used on all four corners and in joining the side walls with the receptor. No screws are used in any of these joints. This construction speeds erection on the job and assures a watertight shower cabinet with unusual strength and rigidity.

FIAT METAL MANUFACTURING COMPANY

1205 Roscoe St., Chicago 13, Ill.

21-45 Borden Ave., Long Island City 1, N. Y. • 32 So. San Gabriel Blvd., Pasadena 8, Calif.



Review this page



Review page 180

BUILDING FOR THE FUTURE, edited by Robert B. Mitchell. *The Annals of the American Academy of Political and Social Science*. Philadelphia, Pa. November, 1945. 214 pp. 6 1/4 in. by 9 1/4 in.

"Planning a city . . ." The words have been around now for a quarter of a century and have meant all things to many people. Everyone is aware that city building will be one of the great public issues of the next decade—the preoccupation of citizen and specialist alike—and the louder concern of politicians. Assembling a valuable collection of viewpoints in this one-topic issue, *The Annals* hails what it foresees as "renaissance of urbanism"—the coming-of-age of ideas in city form.

City Planning, already dignified with capitals and the tradition of a profession, reaches a fuller definition in this volume. Presumed to incorporate civic design, architecture, city economy and the breath of philosophic humanism, this synthesis of activity translates as design in the complete sense of design as the deliberate coordination of all civic influences for ends of human gratification. Not without lyricism Charles S. Ascher, (*What are Cities For?*), calls it "the greatest and most encompassing of our arts."

The city celebrated in these essays is neither the City of Dreadful Night nor the City of Daydream. It is significant that in their practicality, these authors are concerned with the historic attractions of the "urban way of life." "We must," says Ascher, "with faith and imagination rethink our cities from the ground up in the light of a true understanding of what cities are for."

We can shape our environment and redeem the promises of city life. Contemporary technology, which threatens to destroy our existing material environment, also puts a new environment within our reach. Myers S. McDougal, (*Municipal Land Policy and Control*), promises a "new kind of environment with an efficiency and richness in the production of basic human values hitherto undreamed of . . ." It can be accomplished financially. "Our fiscal resources are amenable to needed control." It is now known that there are no real obstacles when all levels of government are drawn upon. Cities can be organized administratively. "What is required is a new kind of administration which will cover the whole of a functionally interdependent area." Victor Jones, (*Governments in the Future City*) points out that there are at least 140 cities in the United States, ranging in population from 53,000 to 10,500,000, that are not politically organized as cities.

All this—if we will. In actual practice, as most of the articles point out, we have made only the most partial and petty use of the available planning tools. As New York City Comptroller Joseph D. McGoldrick, (*City Building and Renewal*), acidly remarks, "Many cities have made postwar plans, and somehow the

(Continued on page 180)

Central Heating-

the first step in **SMOKE ABATEMENT**

Elimination of individually fired furnaces *can*
do more than any other one thing to solve the
smoke problem on a city-wide basis!

Soot fall during the heating season in highly industrialized communities runs as high as 2,000 tons per square mile per month.

Besides polluting the air we breathe, smoke damages health by depriving us of sunshine during winter months when we need it most!

Central Heating of American cities is long overdue. Steam from a central source is just as practical as water, gas, or electricity.

Central Heating, universally applied, should be a first consideration in communities which are earnestly seeking the best weapon to fight the smoke menace. Large, modern steam plants, equipped with the latest automatic devices for efficient fuel combustion and serving large districts, will practically eliminate the clouds of smoke now hanging over our cities, which come from the thousands of individual chimneys. Modern methods of steam distribution—piping steam safely at any desired high pressure, now make Central Heating practical for any application—be it an entire city, an industrial or commercial area, a large housing project or a small real estate development.

Ric-wil has many case histories and project studies on Central Heating in its files. If smoke abatement is YOUR problem, we can help you.

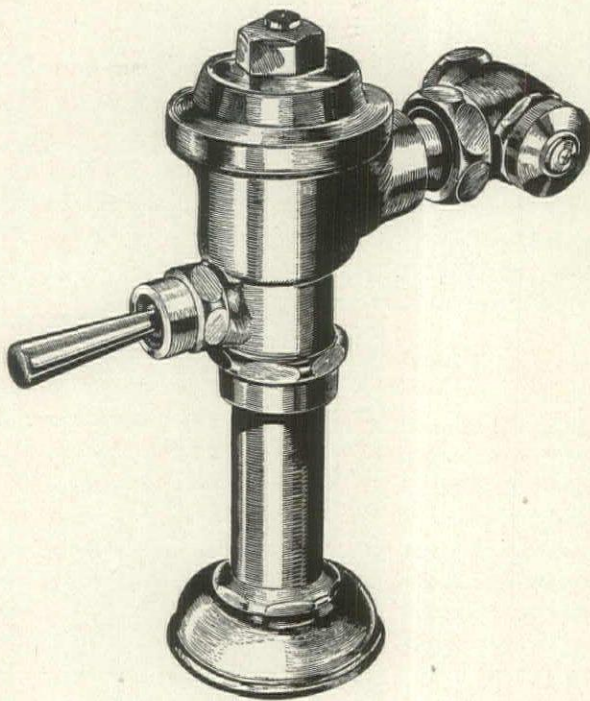


It costs \$5,000.00 to wash the soot from this one building—and the process must be repeated every few years to maintain the property. The savings to property owners in maintenance alone would go far toward paying for city-wide Central Heating.

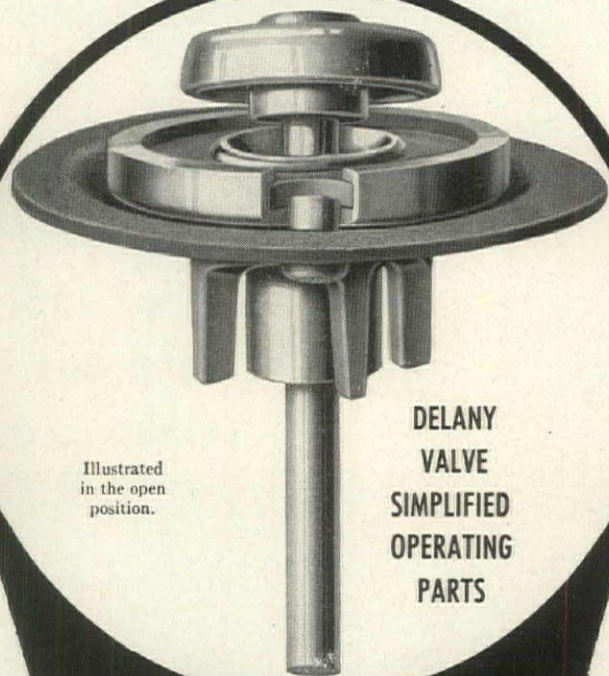
RIC-WIL

INSULATED PIPE CONDUIT SYSTEMS
THE RIC-WIL COMPANY · CLEVELAND, OHIO
AGENTS IN PRINCIPAL CITIES

**ITS
SIMPLICITY**
is your assurance of
EFFICIENCY



DELANY FLUSH
VALVE equipped with No. 50
DELANY VACUUM BREAKER



Illustrated
in the open
position.

DELANY
VALVE
SIMPLIFIED
OPERATING
PARTS

Everyone Strives
for
SIMPLICITY

We have achieved
this end.

SIMPLICITY
begets
LOW-COST
UPKEEP

•
SEND FOR
BOOKLET
"E"

SINCE 1879
Coyne & Delany Co.
BROOKLYN N.Y.

Outstanding Authorities

to Decide Winners of *Magic Chef* Design Competition



GEORGE B. NELSON
Professional
Contest Advisor

GARDNER DAILEY
San Francisco, Calif.



SAMUEL
A. MARX
Chicago, Ill.

ELAINE
KNOWLES
New York, N. Y.



PETER
SCHLADERMUNDT
New York, N. Y.

EDWARD
D. STONE
New York, N. Y.



The ARCHITECTURAL FORUM, sponsor of the Magic Chef Design Competition, has named an eminent board of judges to decide the winners of the \$18,000 cash prizes for the best designed gas range of tomorrow.

This board consists of four of America's most prominent architects and a leading home economist. A record of the personal ability and fame of these individual judges would fill a book; hence, it must suffice to say that collectively they represent a board whose fitness for the important task assigned them could not be surpassed by any other similar group in the United States.

The overwhelming number of contestants from all walks of life who have entered this competition is assurance that the designs submitted will represent a cross-section of American opinion almost impossible to obtain by any other method—The highly skilled board of judges assures an impartial selection of winners based strictly on the merit of the designs submitted—The ultimate hope—A finer, more beautiful, more efficient Magic Chef than ever before—Truly the gas range of tomorrow, ready to play its part in a world that will be filled with the wonders of Gas.

AMERICAN STOVE COMPANY

4301 Perkins Ave. • Cleveland 3, Ohio
NEW YORK • ATLANTA • PHILADELPHIA • CHICAGO
CLEVELAND • ST. LOUIS • LOS ANGELES



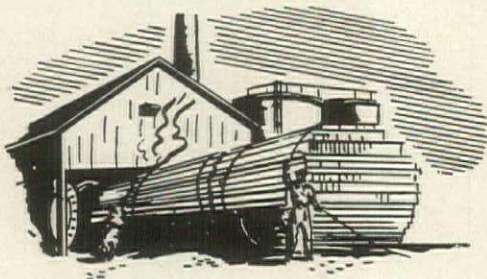
Magic Chef

RED WHEEL GAS RANGES AND HEAVY DUTY GAS COOKING EQUIPMENT

THE GAS RANGE WITH THE FAMOUS RED WHEEL

Contest has been approved by A. I. A.

PRESSURE IS PROTECTIVE TREATMENT



For most effective wood preservation, the chemicals must be forced *deep* into the wood. American Lumber & Treating Company obtain this deep penetration by the vacuum-pressure method in closed steel cylinders. Dipping, brushing on, or other makeshift methods can't begin to give comparable results. So, when you buy treated lumber, remember to say, "pressure-treated" . . . it's best!

Whatever your needs —

AMERICAN LUMBER GIVES YOU ALL 3

1. Wolmanized Lumber* — protects against decay and termite attack.
2. Minalith — fire-retardant.
3. Creosoted lumber.

**AMERICAN LUMBER
&
TREATING COMPANY**

*Registered trademark

WOLMANIZING

FLAMEPROOFING

CREOSOTING

1647 McCORMICK BUILDING, CHICAGO 4, ILLINOIS

impression has got around that these have involved some city planning. Planning a highway system for a city is not the same as planning a city with, among other needs, a highway system."

Breadth of outlook characterizes the best of the 17 essays published in this volume. To McDougal, the land policy of a community, like its policy with respect to any resource, should be engineered to gear with a *total* policy, that is "designed to further to the utmost the efforts of its people to secure for themselves all the basic values for which the community exists." In contemporary democratic society, he goes on to say, these commonly are, "a wider sharing of power, respect, knowledge, income, safety, health and character and of all the other values that contribute to the dignity of the individual and the possibilities of his maturing his latent talents, with discrimination, into socially valued expression."

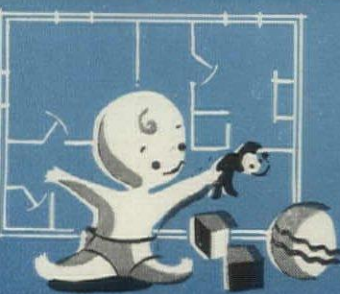
Are such statements of aim irrelevant? Catherine Bauer, (*Good Neighborhoods*), points out that the "broader implications of the neighborhood concept" reveal a primary omission in much past and current planning talk. Take, for example, "the critical question of class and race relations in a democracy; the interplay between environment patterns on the one hand and increased leisure and minimum standards of economic security on the other . . ." Are not these matters germane to the task?, she asks. Are they not "much more fundamental than such frayed questions as curved versus straight streets, flat versus peaked roofs, superblocks, orientation, school-to-home distance, and apartments versus row houses versus single family dwellings versus trailers? A dictionary definition of 'civic' is 'proper to the citizen': we cannot plan neighborhoods without a broad and progressive civic philosophy as to what really constitutes a "good neighborhood."

Even more easily delimited topics should contain further-ranging assayings. Harold M. Mayer, (*Emerging Developments in Intercity Transportation*), brings such perceptions to the question of locating terminals. Mayer points out that inefficient terminal patterns do more than boost transportation cost. Lack of terminal coordination in many of the larger cities greatly hampers the development of a more logical and functionally efficient city pattern of land use. Specifically, Mayer recommends the use of extensive railroad areas in the center of cities for low cost housing construction where blighted neighborhoods are prohibitively difficult to assemble.

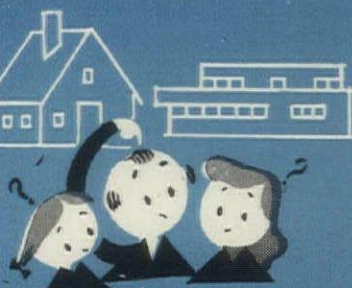
Although arranged under conditions of magazine publication with little opportunity for consultation among the authors, *Building for the Future* has considerable unity and, despite a few routine items, the articles have real theoretical value. Chauncey D. Harris and Edward L. Ullman, geographers, who describe the city as "the focal point in the occupation and the utilization of the earth by man", provide a new synthetic approach to city development patterns in their exposition of the "multi-center" principle. Bernhard J. Stern, in the course of a provocative statement of *The Challenge of Advancing Technology* looks forward to a period when even location will be a "free" choice for the founders of cities.

The chief value of such summary analyses, limited as to detail reference as they must be, is in the blocking out of an approach to city planning fundamentals. The basic "Whither's" and "Why's?" must be asked and asked again. In a philosophy of functionalism, no design, however large, can be planned in purely formal terms. Planning intentions—the life satisfactions of people—are the necessary reference points without which too many planners work with an illogic they would not apply to the blue-print of a trolley car. M.B.

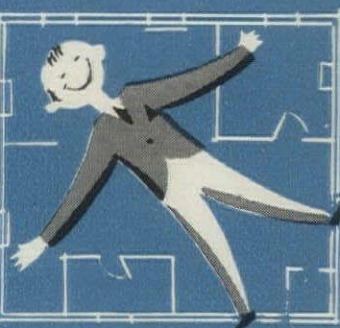
(Continued on page 180)



What is the basic difference
in homes planned for
FAMILIES WITH CHILDREN?

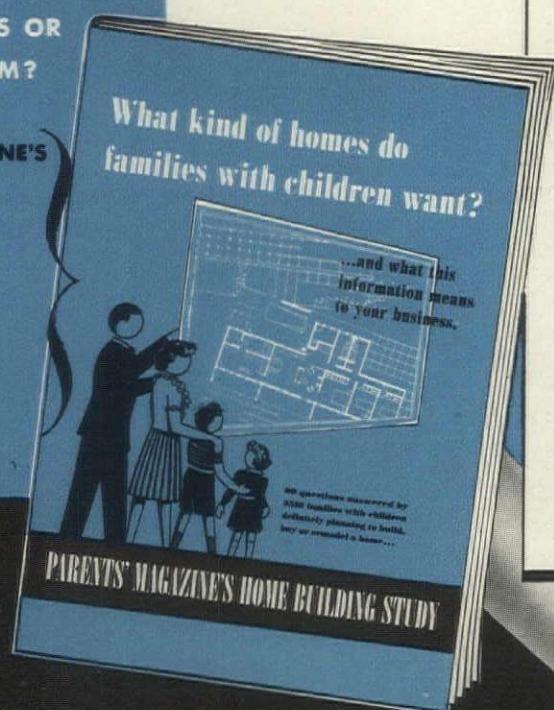


Do families with children
want
MODERN or TRADITIONAL?



Do most of them want
MORE ROOMS OR
MORE ROOM?

PARENTS' MAGAZINE'S
HOME BUILDING
SURVEY ANSWERS
HUNDREDS OF
QUESTIONS LIKE
THESE, OF VITAL
INTEREST AND
IMPORTANCE
TO YOU



1..The Most Revealing Home Building Survey Ever Made

THE FACTS ARE IMPORTANT...because the WPB found, in its survey conducted in April 1944, that of those who said they would build or buy a home when materials and manpower are available, two-thirds were *families with children*.

THE FACTS ARE RIGHT...because **ONLY** families with children definitely planning to build, buy or modernize a home in the near postwar period were included in this comprehensive nationwide survey. Wishful thinking and "blue-sky" dreaming were completely eliminated. Many of these families have already bought lots, or have a substantial portion of the cash for their home set aside, or both. We believe this is the most helpful home building survey ever made—going more deeply, more intimately into the needs and wants of *families with children*. It discloses a demand for many unsuspected needs in new houses which are not now provided to families who are the largest

home-building market.

THE FACTS ARE YOURS—You'll find them invaluable helps—if you sell building materials or home equipment...if you are a builder or contractor.

THE FACTS ARE FREE—Get your copy of the Parents' Magazine Home Building Survey Book, "What Kind of Homes Do Families With Children Want." Call or write:

FAMILY HOME DEPARTMENT
PARENTS' MAGAZINE
52 VANDERBILT AVE., NEW YORK 17
CHICAGO • BOSTON • ATLANTA • SAN FRANCISCO

2..

THE PARENTS' MAGAZINE EXPANDABLE HOMES PROGRAM

Down-to-earth help for home-hungry families!

Six leading architects, engaged by Parents' Magazine, developed from the findings of this survey, a group of practical plans for homes which meet the distinctive needs, desires and financial ability of *families with children* everywhere. Each of the Parents' home plans is expandable—allows harmonious expansion at minimum cost as the family grows. Each plan is adaptable to all kinds of building materials and architectural treatment and the program will be powerfully publicized in Parents' Magazine, America's most trusted counsel for *families with children*.

YOU CAN SECURE THE PLANS...to help make the homes you build more desirable—to help you sell building materials or home equipment.

YOU CAN TIE IN PROFITABLY—The Parents' Magazine Home Building Survey Book tells you how. Write today for your free copy.

**850,000 PROGRESSIVE AMERICAN
FAMILIES READ PARENTS' MAGAZINE**

for guidance in bringing up their children. And they look to Maxine Livingston, Family Home Editor, for help in creating suitable homes for their children to grow up in; comfortable homes, efficient, easy to care for. Requests for home building advice have poured in so fast during the last few home-hungry years, Mrs. Livingston decided to do something about it. The Parents' Magazine Survey and Expandable Homes Program are the result!

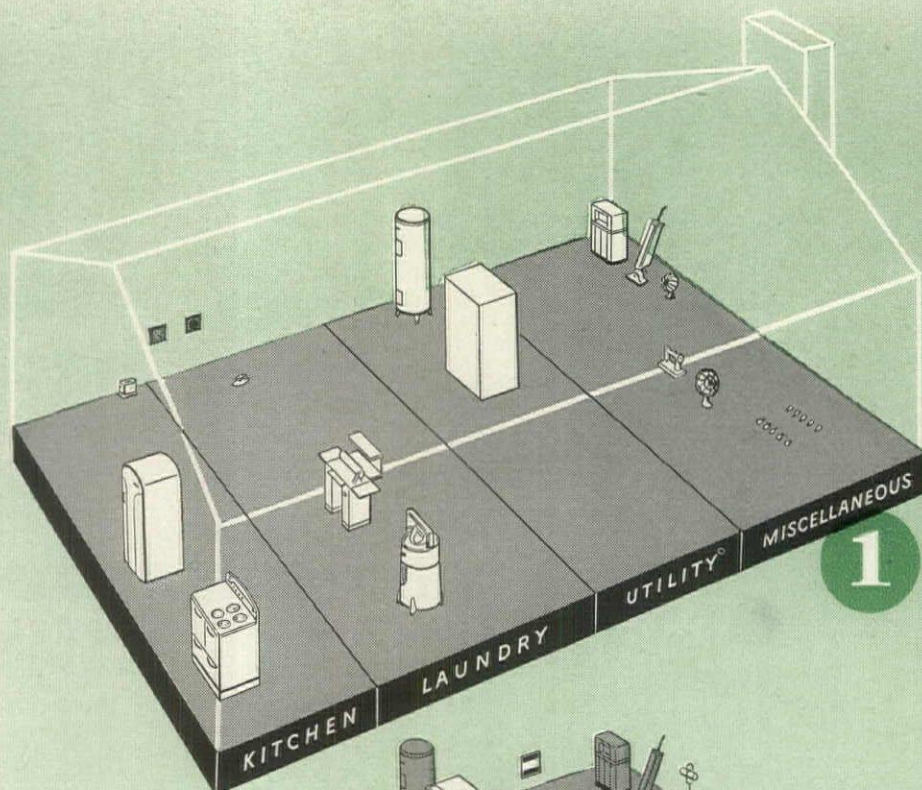
the **PARENTS' INSTITUTE, INC.**

PARENTS' MAGAZINE ★ BABY CARE MANUAL ★ YOUR NEW BABY ★ SCHOOL MANAGEMENT
THE PARENTS' JUNIOR QUALITY GROUP

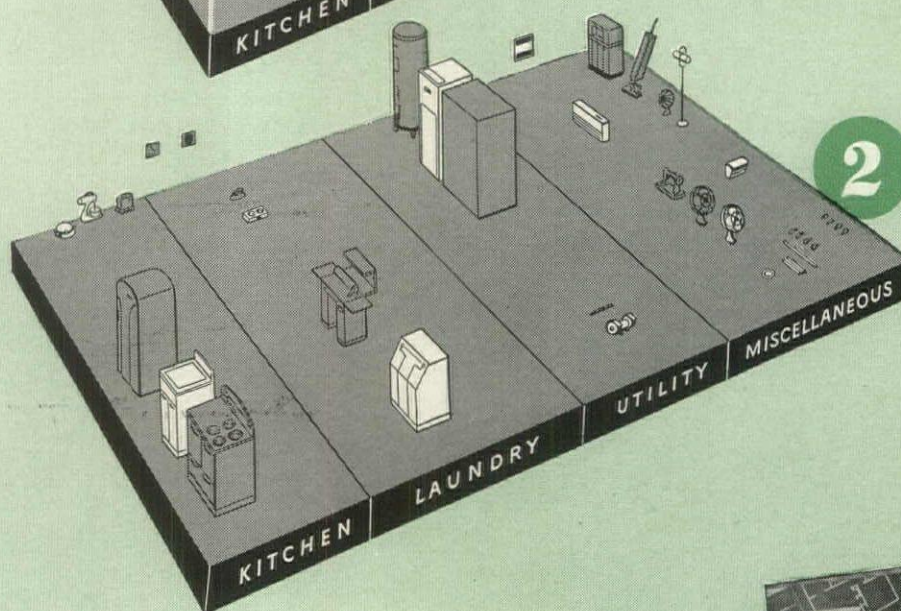
CALLING ALL GIRLS ★ CALLING ALL BOYS ★ CALLING ALL KIDS ★ POLLY PIGTAILS ★ TRUE
AVIATION PICTURE-STORIES ★ SPORT STARS ★ TRUE COMICS ★ REAL HEROES ★ FUNNY BOOK

WESTINGHOUSE OFFERS
A NEW IDEA...

4 degrees



1 Thrift Degree—the minimum standard for Electrical Living. Includes appliances, equipment and lighting shown.



2 Budget Degree—more equipment and automatic features are added to the Thrift standard. Additions include a dishwasher, home freezer and Laundromat.

WHICH OF THESE DO YOU WANT?

FREE. Four Degrees of Home Electrification for Electrical Living. Gives full information on basic equipment and wiring requirements.

Home Wiring Handbook. \$1.00. Complete technical information on wiring systems for Electrical Living. 120 pages. Dozens of charts and tables.



of Electrical Living..

now it's easy to choose the right degree

Greater client satisfaction will result when you design homes which offer the advantages of Electrical Living.

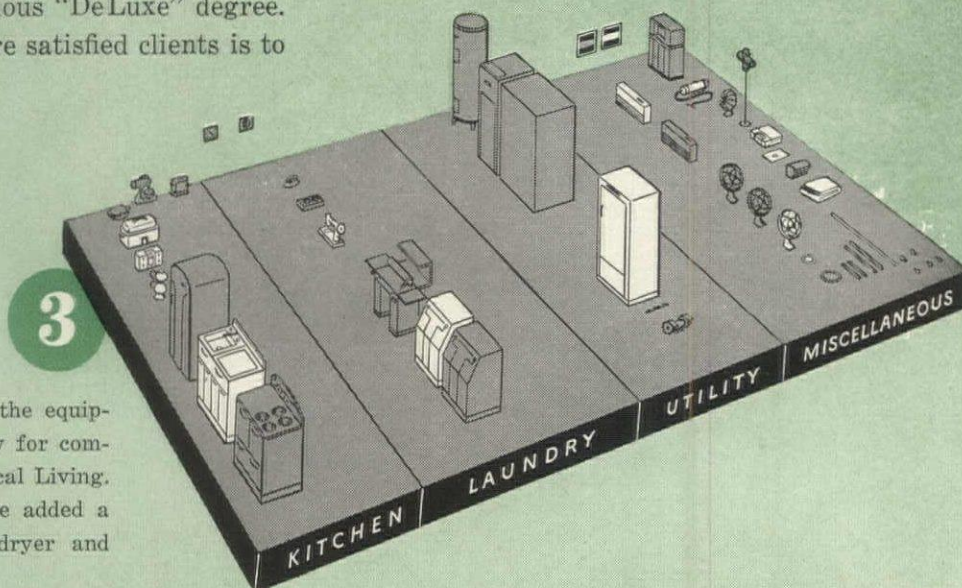
To help you, Westinghouse has developed *Four Degrees of Electrical Living* that make it easy to select the desired degree for the homes you design. The four degrees range from the "Thrift" or minimum standard of Electrical Living, up to the luxurious "DeLuxe" degree.

Another way to assure satisfied clients is to

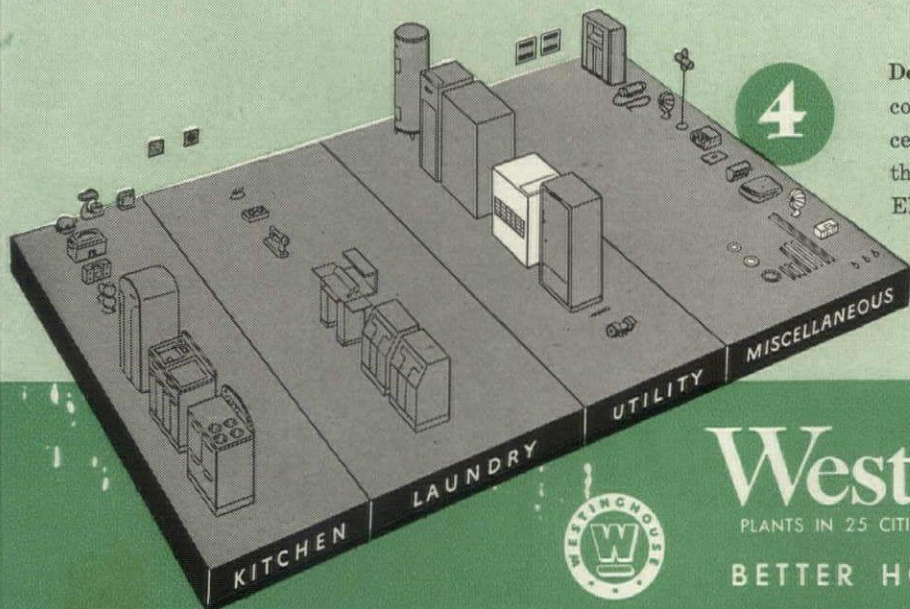
specify Westinghouse electric appliances and equipment throughout your houses, plus quality wiring devices by Bryant.

For your free booklet, write Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. Send dollar for Handbook to Westinghouse Electric Corp., Extension Training Department, Pittsburgh 30, Pa.

J-91547



Ideal Degree—provides all the equipment and lighting necessary for comfortable, economical Electrical Living. To the Budget standard are added a garbage disposer, clothes dryer and Precipitron.



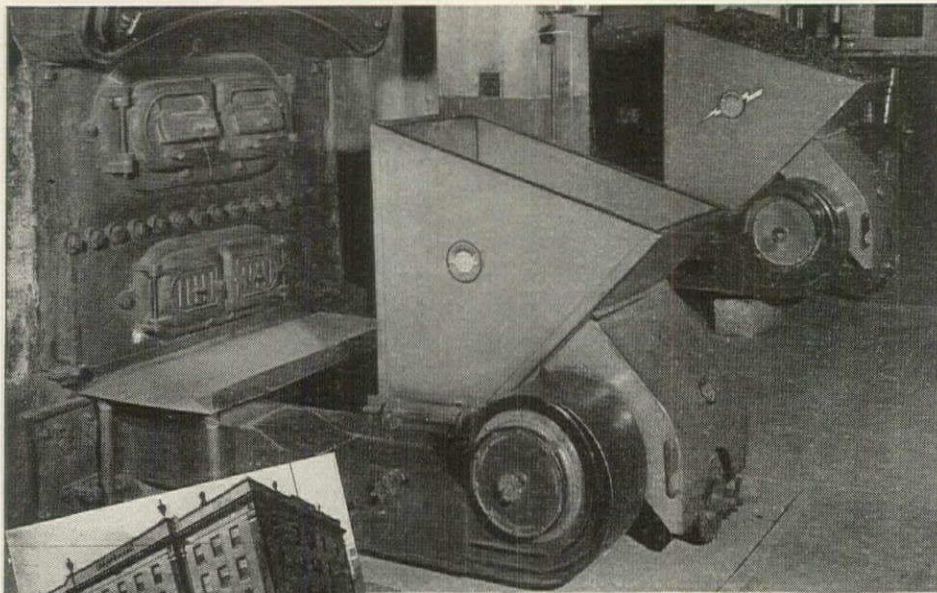
De Luxe Degree—adds central air cooling and extensive use of concealed and decorative lighting to the Ideal degree. Here we have Electrical Living at its best.



Westinghouse
PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE
BETTER HOMES DEPARTMENT

20% RETURN

ON THIS INVESTMENT IN WINKLER STOKERS



CHIEF ENGINEER WRITES:

"The Model No. 55 Winkler Stoker which was installed in the Queen City Club in 1943 has given unusually good performance inasmuch as it has saved approximately 42 tons of coal per year, which amounts to \$252.00 per year reduction in the coal bill. Figured on an investment basis, the Club is receiving a 20% return on the stoker installation.

"Just recently the Club purchased a second Winkler to replace a shear pin stoker which had given a lot of trouble and now the two Winklers do a fine job for us.

"It is an easy job to look after these stokers and I have about 3 hours a day for other work that I could not do when hand firing the boilers. Also, I never have to worry about keeping the proper boiler pressures as the automatic operation of the Winklers does this for me. They keep the entire building warm and the only thing I have to do is fill the hopper, clean the fire occasionally and the Winkler Stokers do the rest. There has never been any service work necessary on these two stokers and it is a big relief after the experience we had with the shear pin stoker."

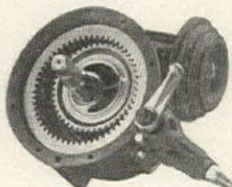
QUEEN CITY CLUB
(signed) Herman Hoff
Chief Engineer

A Winkler Stoker installation is not only a sure way to improve heating comfort or manufacturing efficiency... it is also a safe investment remarkable for the size of its return in cash and labor savings.

The high regard for good engineering and precision workmanship which won five Army-Navy "E" awards for the three Winkler plants is evident in every detail of Winkler automatic coal-burning equipment. It is the reason why Winkler Stokers make economy records, year after year, in buildings of every character.

These stokers combine sound, creative engineering with rugged durability. *There is no shear pin in a Winkler*—its fully automatic transmission gives full protection against overload. Its Economizer Burner is noted for design features which minimize segregation of coal sizes, provide for correct air distribution and in general improve combustion efficiency.

The purchaser of a Winkler has his investment protected in three ways. First—a nation-wide Distributor organization trained and equipped to give service. Second—the backing of a company with excellent financial rating and complete manufacturing facilities. Third—a guarantee on the product itself.



FULLY AUTOMATIC TRANSMISSION—NO SHEAR PIN!

When the screw load exceeds a predetermined torque, the Winkler Automatic Safety Release disconnects the transmission from the drive shaft, then momentarily re-engages it. If the obstruction is rock or slate, two or three re-engagements will, in most cases, crush it. If the feed screw is permanently locked, the mechanism is fully protected even though it runs for hours. Upon removal of the obstruction, the Winkler resumes normal operation.

WINKLER

fully automatic STOKERS

U. S. MACHINE CORPORATION, Dept. N13, Lebanon, Ind.

PAUL KLEE. Edited by Margaret Miller. Museum of Modern Art, New York. 59 pp. Illustrated. 7 1/2 in. x 10 1/4 in. \$2.25.

Consistent with the high standard of this museum's publications is the latest book on the works of the versatile Swiss painter, Paul Klee, who died in 1940. In addition to extracts from the artist's journal and some of his own opinions on creation, there is included an introduction by Alfred H. Barr, Jr., and two articles by James Johnson Sweeney and Julia and Lyonel Feininger. Because of current production limitations, only two color plates are included but both of these are admirable reproductions. In leafing through the paintings, the reader cannot help but be impressed by the mutability of quality and technique and the same pitying derision of mankind that can be found in the more psychogenic works of William Steig. Although Klee was accepted by the surrealist group in Paris he was never a true member of the movement. Mr. Barr, however, describes his painting as "perhaps the finest realization of the surrealist ideal of an art which appears to be purely of the imagination, untrammelled by reason or the outer world of empirical experience... But there are in Klee's work qualities other than the naive, the artless and the spontaneous. Frequently the caricaturist which he might have been emerges in drawings which smile slyly at human pretentiousness. In evaluating Klee's place in art, Mr. Sweeney says that after 1917 he developed "a calligraphic expression, sensitive to the most delicate suggestions of the nervous system, responsive to the most subtle unconscious associations... This was the Klee who was to persevere in scrupulous craftsmanship and yet grow in invention, lightness of touch and richness of texture... Yesterday, in a blind, self-satisfied world, Klee was forced to withdraw into himself to protect the sensibility his art cultivated. Tomorrow will find Klee's work a delicate distillation of those qualities most needed to give life to a renewed art in a renewed world." Its future rests, of course, with posterity but few will deny that this artist painted with a lyricism and sensibility lacking in many of his contemporaries. *M.S.*

HOUSING IN THE UNITED STATES: Problems and Policy. Catherine Bauer. 28 pp. 10 cents. International Labour Office, Montreal.

This is an excellent resume of work done under the United States Housing Act, of war housing experience and a clear-cut analysis of the problems to be faced in the big house-building period just ahead. Miss Bauer's ability to isolate the basic issues involved is so well-known as to need no underlining here. Those who are still befuddled by the obscuring controversy over "private versus public" effort would do well to expose themselves to her point of view summed up in the following words: "Clearly, there can be neither a universal housing market, nor balanced modern communities, nor efficient metropolitan areas, nor fully developed regional resources, without a great deal of 'mixed enterprise' in a variety of forms, with business and government and the citizen-consumer each performing whatever role it can handle most effectively." *L.C.*

HOUSING GOALS. The National Housing Agency 33 pp.

Prepared for distribution to the mayors of some 400 cities, this booklet is well worth a careful reading by anybody concerned with housebuilding. The National Housing Agency has consistently emphasized that local communities must take the initiative in surveying housing needs and in mobilizing public and private resources back of a comprehensive program. Drawing upon its experience, NHA offers some specific suggestions about how to do the job. *L.C.*

*Its builder
opened
new windows
for YOU*



He built this house before the war and put in windows of Alcoa Aluminum. They are "windows of new opportunity" for you in days ahead.

Because this and other homes have shown that aluminum windows will never rust, rot, or warp. They always open easily and smoothly without sticking or jamming. And no painting is required.

Right now, availability from window manufacturers is limited. But, put Alcoa Aluminum windows on your list of better things home builders want in the future. They will help sell your houses.

Note: And don't stop with aluminum windows! There are many other places in the home where Alcoa Aluminum is the best choice. For instance, sills and thresholds, screens and storm sash, railings and venetian blinds, moldings and hardware.

What you can do with any other metal, you can often do better with Alcoa Aluminum. *Investigate this versatile metal.* ALUMINUM COMPANY OF AMERICA, 2166 Gulf Building, Pittsburgh 19, Penna. Sales offices in leading cities.



They help sell from the inside out, too, with their wide glass area and obvious ease of cleaning.

Windows of **ALCOA** **ALUMINUM**





in tomorrow's interior

*Velon** fabric over **FOAMEX*** cushioning

Now you can let yourself go "out of this world" on luxurious color and comfort—and stay "down to earth" on upkeep. Firestone's perfect seating team—*Velon* upholstery fabric and *Foamex* cushioning—make your dreams practical.

Design the interior around unusual color—*Velon* fabric stays fresh and new in softest pale tints or bold, glowing tones because dirt and grease can't penetrate its non-porous threads, acids and alkalis can't stain them, nor can sun fade or change the color. And *Velon* can be quick-cleaned with a cloth dampened in water or cleaning fluid. No matter what the texture or weave, homogeneous *Velon* threads won't scuff or snag. The fabric's so resilient it stays smooth, can't buckle, bag or "grow" out of shape when upholstered over deep cushioning.

Design the interior around unusual form—*Foamex* cushioning gives more comfort with a fraction of the bulk and thickness of old-style upholstery innards. It's one, simple, welded-together material that replaces springs and stuffing, makes revolutionary design in seating practical. Foamed of millions of tiny air-and-latex cells, *Foamex* floats folks in blissful relaxation with gentle, cradling support. Each cell is a perfect cushion, an air-breathing ventilator; keeps seating fresh and cool.

Specify this amazing seating combination. Write Firestone, Akron, for information if your regular sources cannot supply you. Firestone will be glad to send them samples of *Velon* yarns and *Foamex* cushioning with full technical advice.



Listen to the Voice of Firestone, Monday Evenings Over NBC

Firestone

*TRADE MARK

"OUR BUILDER CONSIDERED
OUR COMFORT WHEN HE
INSTALLED **CRANE HEATING**"



"YES, AND IT'S
FULLY **AUTOMATIC**
SO CLEAN AND CONVENIENT"



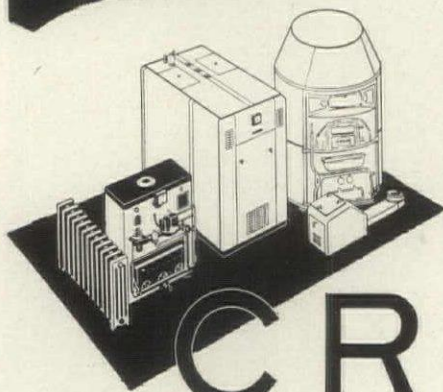
Comfort and convenience bulk large in a prospect's estimation of a home. Many builders have found that "heating by Crane" gives their sale a running start and more than that, helps keep homes sold by freeing home owners from cold weather worries.

And because the Crane line includes complete equipment for every type of home heating, it permits flexibility in your planning. You can choose boilers in a wide variety of sizes particularly designed to burn coal, oil or gas. You have a selection of furnaces

adapted to these fuels. You can specify radiators or convectors or if you want the latest in home heating, you may want to consider the new Crane Radiant Baseboard Heating soon to be in production.

The Crane line also provides oil burners, stokers, controls, water specialties, pipe, valves and fittings—everything for home heating.

Crane heating is now in production—naturally, the demand today exceeds the supply of all types of heating, so we suggest that you discuss your plans with your Heating Contractor or Crane Branch.

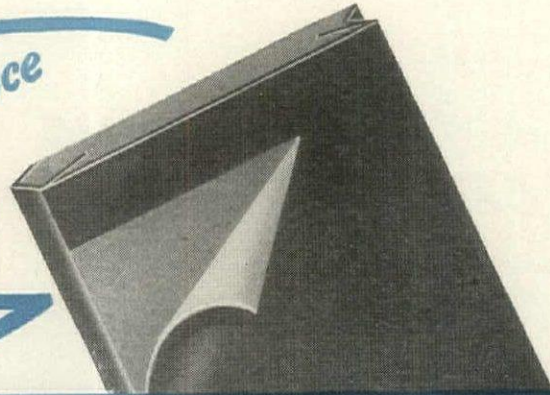


CRANE

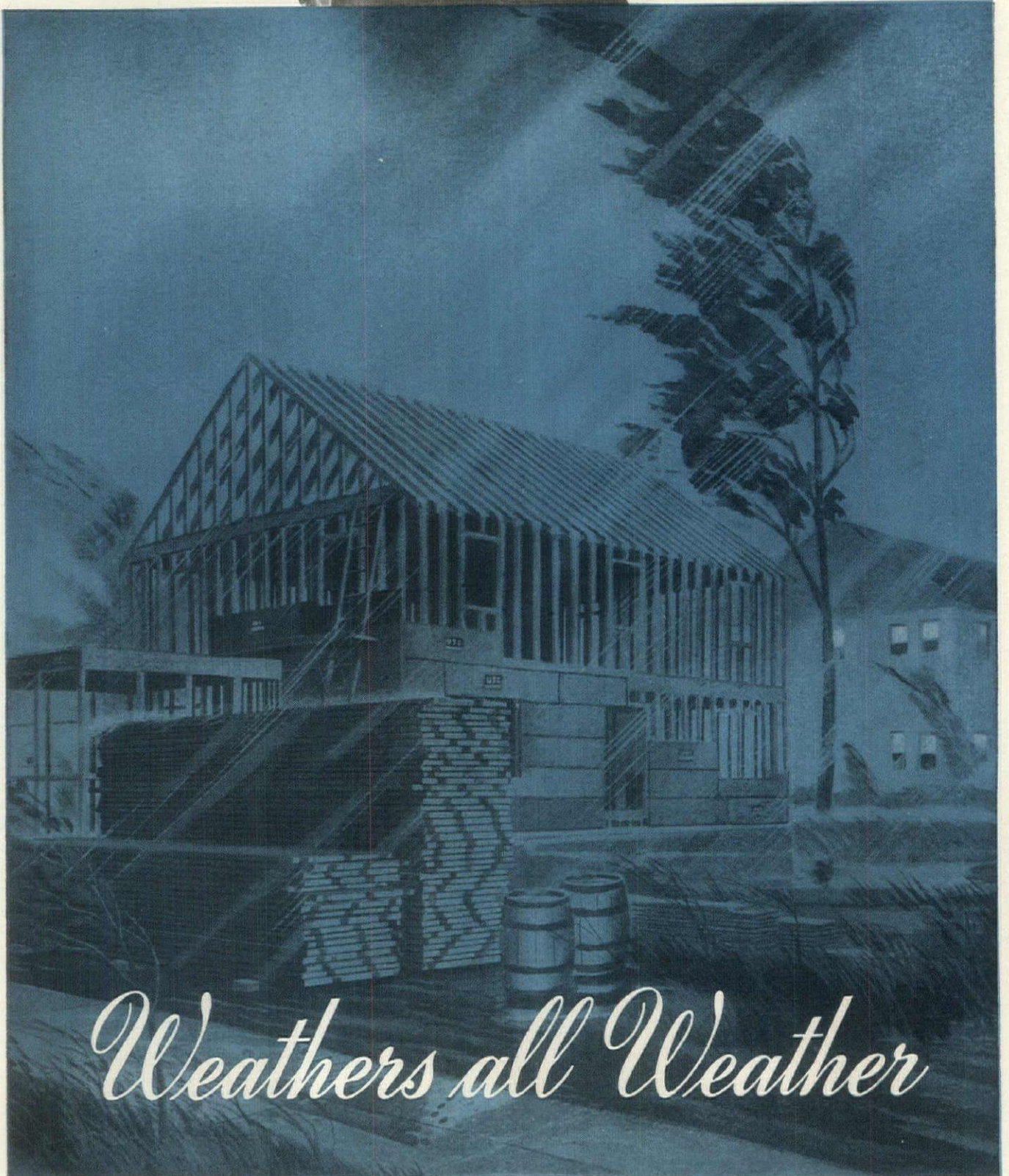
CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVENUE, CHICAGO 5
PLUMBING • HEATING • PUMPS
VALVES • FITTINGS • PIPE

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

The Difference
is in the
CORE!



It's New!

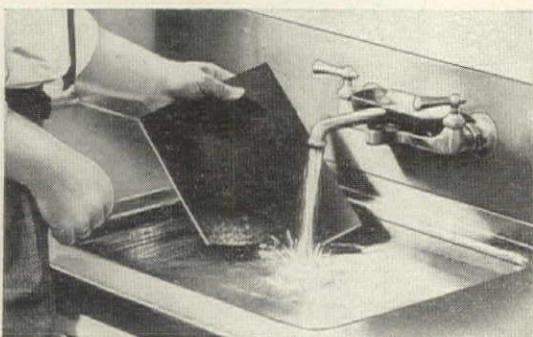


Weathers all Weather

It's Different! It's Sensational!

U·S·G SHEATHING

with the Asphalted-Gypsum Core



IT'S WEATHERPROOF. Before the gypsum core mix is formed, it is thoroughly impregnated with an asphalt emulsion. With this amazing asphalted-gypsum core, U-S-G* Sheathing "Weathers all Weather" . . . piled on the job or nailed to the framework.



IT'S FIREPROOF. The gypsum in the core makes U-S-G Sheathing fireproof, helps protect all kinds of frame construction. Siding can be brick, wood, asbestos, stucco or stone . . . need for building paper is eliminated. Available in limited quantities.



IT'S STRONGER. U-S-G Sheathing has superior bracing strength. In a test by the U-S-G Research Laboratories, an 8'x8' panel withstood a load of 1,850 lbs., even when drenched by the equivalent of 165 in. of rain, with a lateral deflection of just 1.125 in.



CUTS SHEATHING COSTS $\frac{1}{3}$ TO $\frac{1}{2}$. Cut and nailed right on the studs. In an actual job test 1,504 sq. ft. of this sheathing were applied in eight man-hours. Each unit is 2'x8'x $\frac{1}{4}$ ", can be easily handled by one man . . . practically no waste.

*Reg. U. S. Pat. Off.

ASK YOUR U·S·G SALESMAN FOR TEST-IT-YOURSELF SAMPLES AND MERCHANDISING HELPS

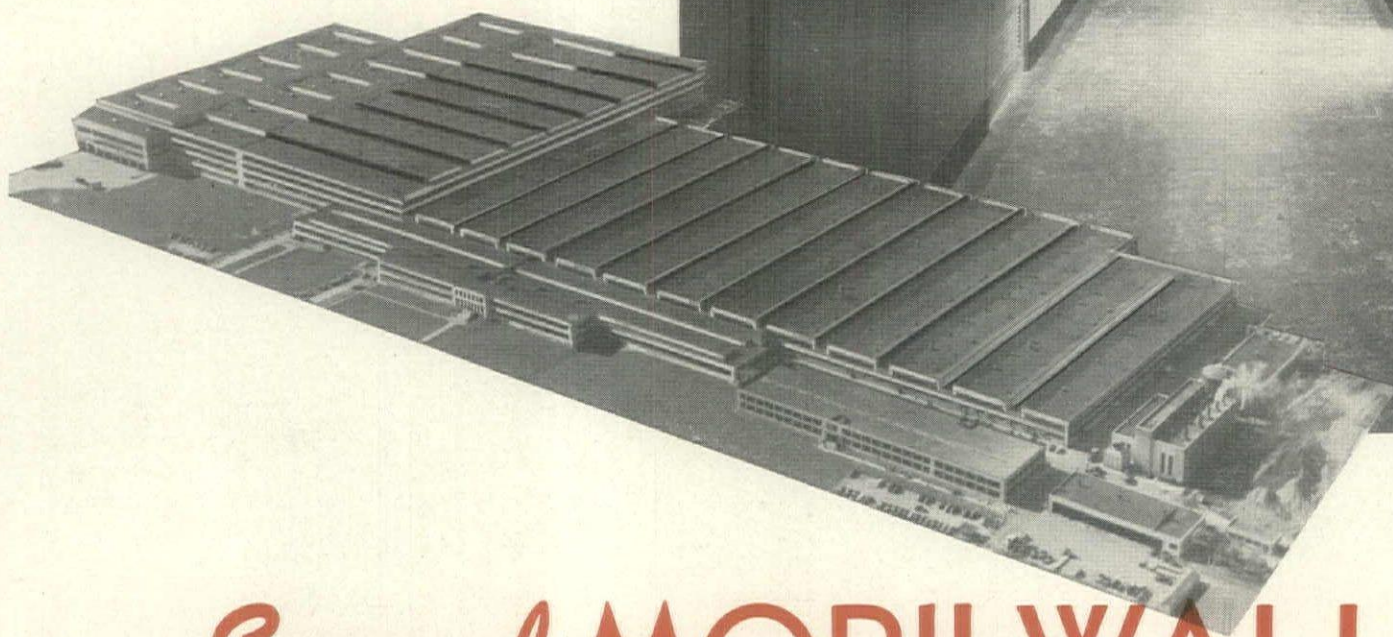


United States Gypsum

For Building • For Industry

Gypsum • Lime • Steel • Insulation • Roofing • Paint

MODERN *Flexible* INTERIORS



CURTISS - WRIGHT CORP.,
FALO PLANT Albert Kahn,
Associated Architects and Engineers

Snead MOBILWALLS

KEEP THIS PLANT EFFICIENT

Recognizing that change is inevitable, Snead Mobilwalls were selected as standard equipment for the offices and factory of the Buffalo plant of Curtiss-Wright Corp. by the architects, Albert Kahn, Associated Architects and Engineers. The extreme flexibility and mobility of Snead Mobilwalls has permitted many changes to be made overnight without interfering with production. All radi-

ator covers, wall linings, and partition walls are Snead Type "SF".

Snead Mobilwalls have expedited greatly the reconversion of many plants. With Mobilwalls change is simple, quick, and inexpensive. All parts are reusable without waste. No dirt, muss or paint. Get details. Write, wire or phone.



Since 1849, the Snead symbol of lasting beauty, quality and progress in metal construction

SNEAD & Company **FOUNDED 1849**

Designers, manufacturers and erectors of library bookstacks and steel partitions

Sales Office: 94 Pine Street, JERSEY CITY 4, N. J.

Main Office and Plant: ORANGE, VA.

PRODUCTS AND PRACTICE

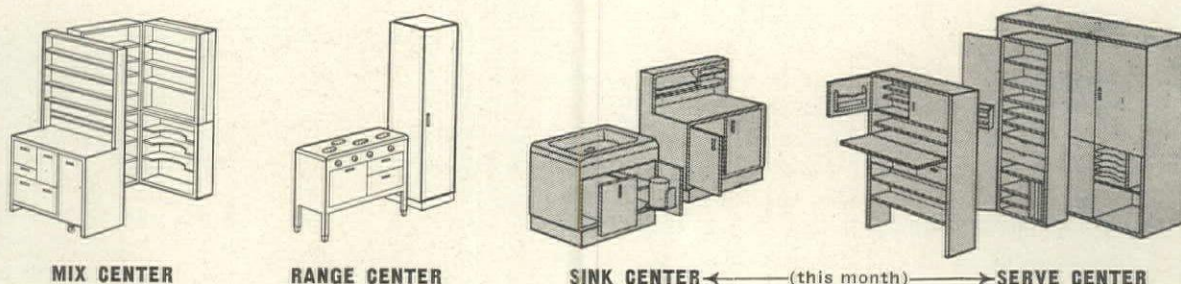
NEW LOOK AT THE KITCHEN: Second of two articles in which the bedrock facts of kitchen work are analyzed by two women from the women's point of view for the consideration of masculine experts on the subject.

eneath its bland enamel surfaces, the modern kitchen is the scene of surprisingly sharp controversy which crops up in the most unlikely places. Both Mrs. Heiner and Miss McCullough* are well aware of this and are therefore not surprised that any examination of such features as doors and drawers leads smack into the issue of functional order versus surface neatness. Thus, to take a categorical stand against conventional doors (as being, for instance, a threat to heads and fingers) is to collide with many a housewife who wants to be able to close a door on anything not in use. Similarly, to argue that a slotted rack is a better way of storing paring knives and egg-beaters does not necessarily change the mind of the woman who wants them out of sight. Therefore, although they incline to a place for everything and everything in its place, Mrs. Heiner and McCullough are far from dogmatic on the subject. They take the position that any type of kitchen equipment imposes a certain discipline on the housewife: that each operation in the preparation and serving of a meal has its own internal pattern: and that the equipment which conforms most closely to this pattern will get the housewives' vote.

It was on this basis that the concept of four work centers was evolved—range and mix centers (shown last month) and the sink and serve centers illustrated here. The operations of each of these centers were then carefully analyzed, the equipment and supplies tabulated, and the required space for their storage computed. From such data the physical shape of the equipment for each center was evolved. The need for flexibility has been met by assembling the component elements into a variety of units for each center. But kitchen work is circular, like a clockface, with the housewife moving from one phase to the next. And though the sequence may be the same in all households, the actual layout will vary with the space available, housewives' preferences, etc. In recognition of this, the Heiner and McCullough units are designed for a wide variety of combinations.

Neither Mrs. Heiner nor Miss McCullough are anti-gadget when it comes to kitchen equipment, but they do feel strongly that a safe, labor-saving kitchen involves more than mechanizing the egg-beater. In their opinion, it is at least as important that the egg-beater be located for easy accessibility as that it be motor-driven when you find it.

As research associates at Cornell University's College of Home Economics in Ithaca, N. Y., Mrs. Mary K. Heiner and Miss Helen E. McCullough have carried out this research project under a grant established by the American Central Manufacturing Co. of Connersville, Ind.



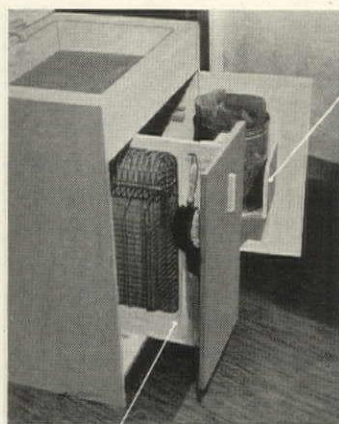
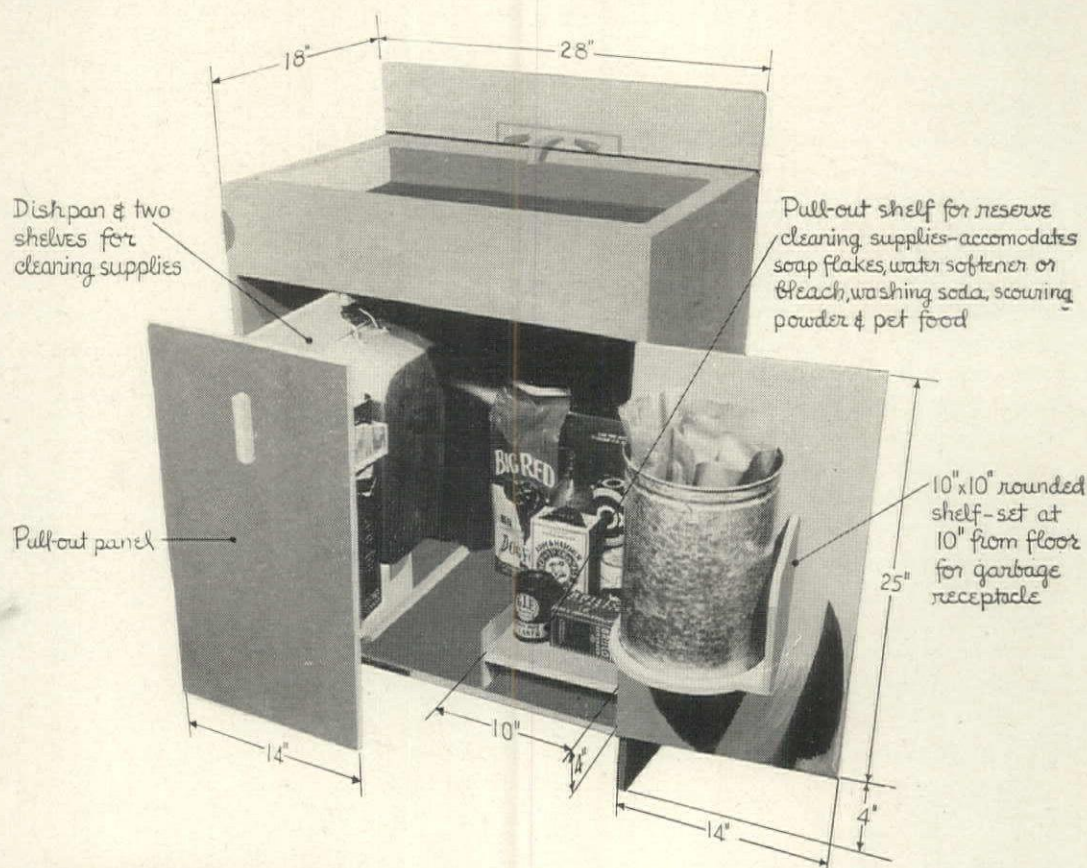
MIX CENTER

RANGE CENTER

SINK CENTER

(this month)

SERVE CENTER



Garbage receptacle on swinging door

Panel offers hanging surface on left for standard dish drain and two brushes

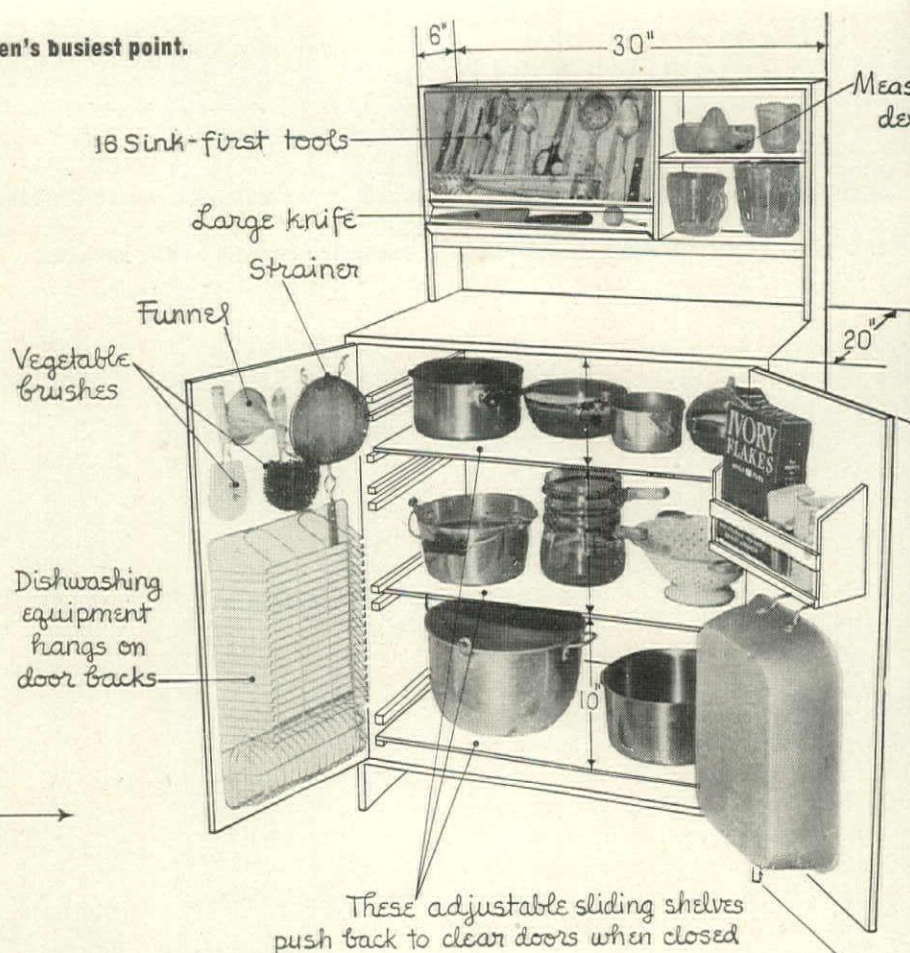
UNDER-SINK STORAGE COMPARTMENT. The sink itself raised certain questions which could not, with the limits of this research, be solved. The average urban family in the \$2,000 to \$3,000 income group is not apt to have either a mechanical dishwasher nor garbage grinder. Hence Heiner and McCullough had to provide for traditional dishwashing and clean-up equipment and supplies. The logical place for this was obviously under the sink. But many housewives, they were aware, prefer to sit while working at the sink: for such cases they have provided the alternative solutions shown overpage to fit alongside the sink. The under-sink unit is designed for the accepted 36 in. counter height and assumes a shallow-bowl sink: a deeper one would either raise the counter too high for the average woman or reduce the space available for storage underneath it. In any case, in the interests of motion economy, the researchers recommend an 18 in. depth from front to back, with a horizontal tool panel between splashboard and window sill.

SINK CENTER: Three units to ease the work load at the kitchen's busiest point.

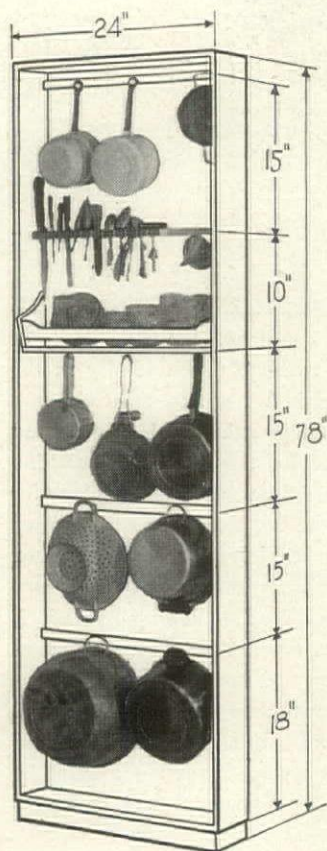
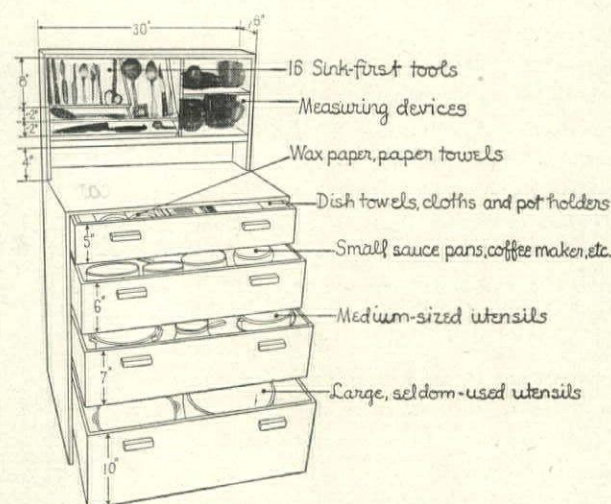
ALTERNATIVE SOLUTION to the under-sink storage compartment, the unit at right accommodates all dishwashing and clean-up equipment and supplies. It also provides for all ten of the sink-first cooking utensils as well as for sixteen accessory tools—paring knives, apple corers, etc.—on the horizontal panel at the back of the counter. This unit would presumably be used alongside a conventional open sink by the woman who prefers to sit while working there. A variation of this unit (right, below) accommodates only the sink-first utensils and tools. This would be used in conjunction with the under-sink storage unit or with a sink which included dishwasher and garbage disposer. Neither of these two units provide for the storage of sink-first foods. Provision for the 23 items of packaged foods used first at the sink center is made in the wall unit shown on facing page, and in the Swing Storage cabinet also at the mix center units shown last month.

Obviously, the storage of fruits and vegetables would be either at or adjacent to the sink center. Perishables like lettuce or meats would be stored in the refrigerator; others like apples, onions or potatoes, while not requiring refrigeration, would demand special ventilation. The storage of such foods will be the subject of a later research by Mrs. Heiner and Miss McCullough.

SINK-FIRST PANEL: (Below) A 24 in. by 78 in. panel, identical in size and shape with the panel for hanging range-first utensils, may be placed vertically at the side of the sink, horizontally over it or opposite the sink in a narrow kitchen. The panel readily meets the three requirements set up for effective storage. It will accommodate the ten utensils and sixteen small accessory tools used first at the sink. Each of these is hung individually and placed according to weight and frequency of use; those most used occupying the central position on the panel. A slotted rack accommodates all of the knives, the sharpener, the scissors and a plate scraper. A hanging shelf holds the three measuring devices and a large-size reamer. The panel would require the under-sink cabinet or its equivalent as an accessory storage center for the cleaning supplies and dishwashing equipment.



Note: All vertical dimensions in Heiner-McCullough suggestions are based on average woman 5 ft. 4 in. tall.



ITEMS TO BE STORED AT SINK CENTER

PACKAGED FOODS

23

Canned

10

- 3 canned milk
- 3 canned soup
- 2 canned fish—shell fish
- 1 can cocoa
- 1 (10 lb. pkg.) pet food

Glass

0

Cartons

13

- 2 pkg. (1 lb.) prunes
- 1 pkg. currants
- 1 pkg. raisins
- 2 pkg. (1 lb.) 3 navy beans
- 1 pkg. dried peas
- 1 pkg. rice
- 3 pkg. gelatin puddings
- 2 pkg. bouillon cubes

CLEANING SUPPLIES

12

Cartons

11

- 1 coarse cleansing powder
- 1 fine cleansing powder
- 1 pkg. steel wool pads
- 1 drain cleaner
- 1 bar white soap

1 bar yellow soap

- 1 medium pkg. soap granules
- 1 medium pkg. flakes
- 1 5 lb. pkg. soap flakes
- 1 2½ lb. pkg. washing soda
- 1 pkg. paper towels

Glass

- 1 qt. ammonia

UTENSILS

35

Top of Stove Cooking

10

Regular use

- 1 Stew pot—6 quart
- 1 Sauce pan—4½ quart
- 1 Stew kettle—4 quart
- 1 Sauce pan—3 quart or
- 1 Sauce pan—2 quart
- 1 Sauce pan—1 quart
- 1 Double boiler—2 quart
- 1 Teapot—6 cup
- 1 Coffee pot—6 cup

Occasional use

- 1 Stew kettle—2-3 gallon

Measuring Equipment

- 1 Glass measure—1 quart
- 1 Glass measure—1 pint

1 Glass measure—1 cup

Food Cleaning and Straining

- 1 Plate scraper
- 1 Brush—stiff
- 1 Brush—soft
- 1 Funnel
- 1 Colander
- 1 Strainer—large
- 1 Tea strainer

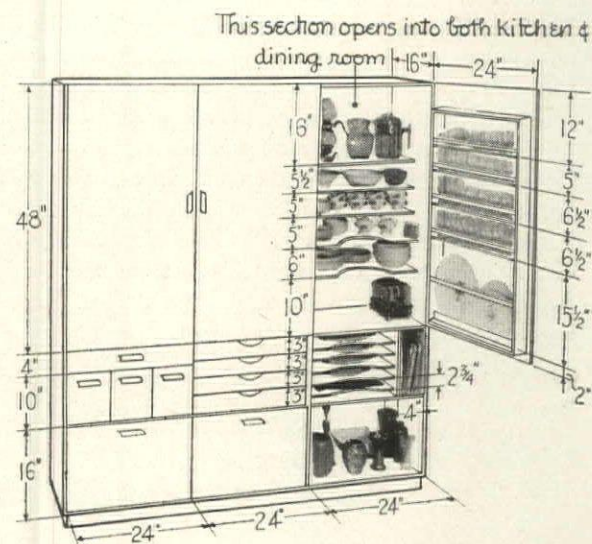
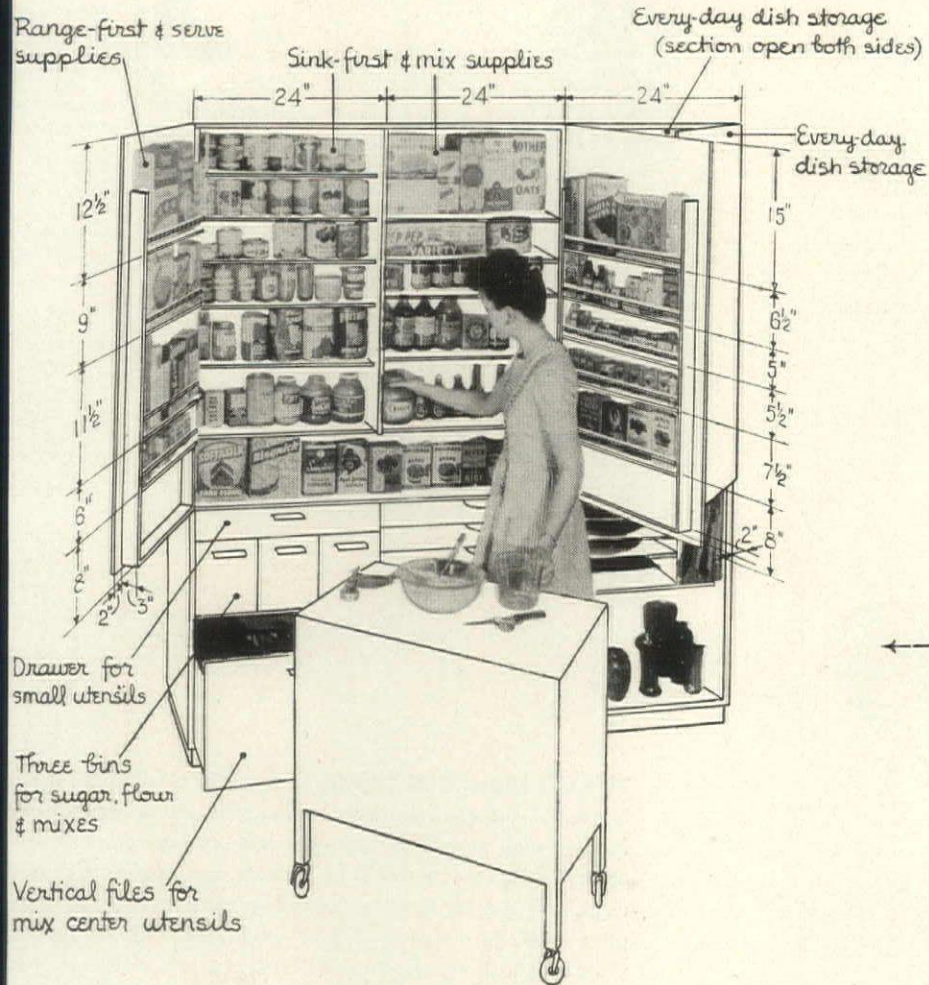
Paring, Cutting, Juicing

- 1 Scissors
- 2 Paring knives
- 1 French type slicing knife
- 1 Hard wood cutting board
- 1 Steel or carborundum
- 1 Apple corer
- 1 Floating blade vegetable knife
- 1 Can and bottle opener
- 1 Fruit reamer or extractor

Clean-up

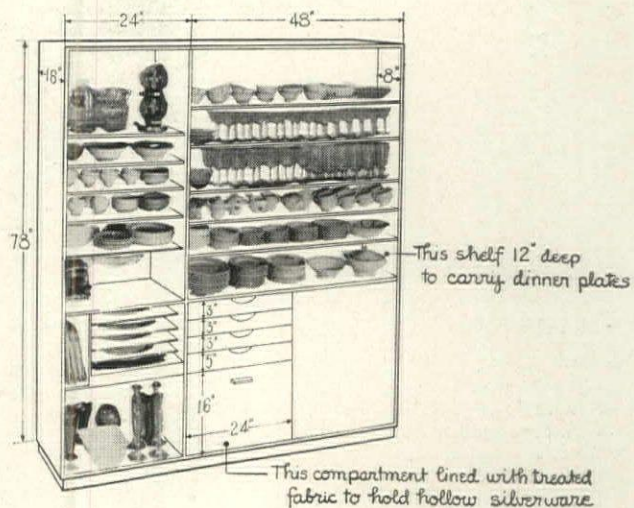
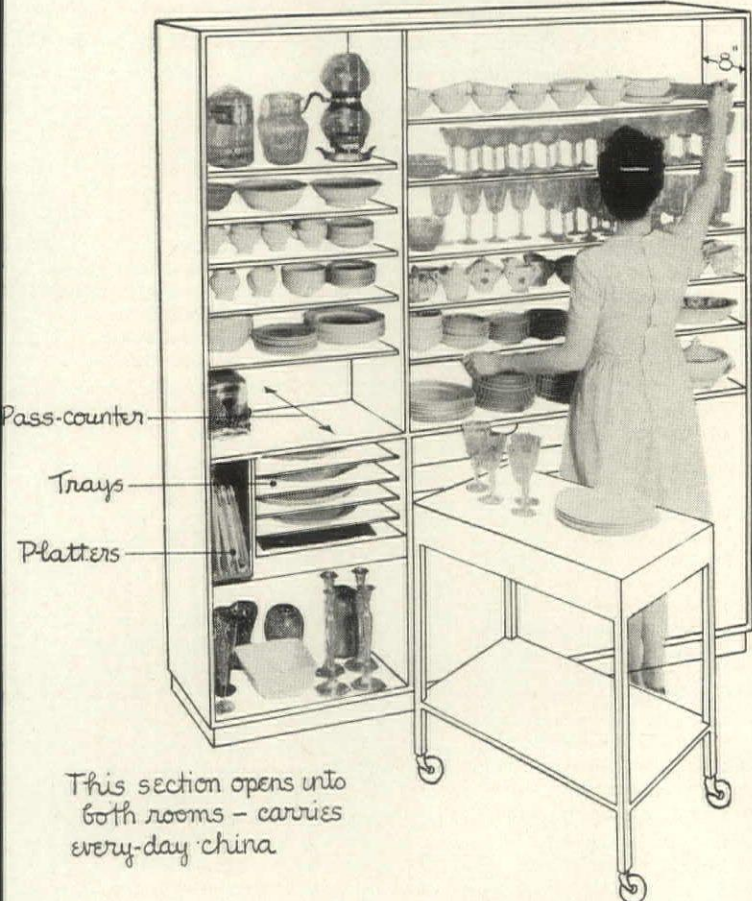
- 1 Sink strainer
- 1 Dish pan
- 1 Dish drainer
- 1 Garbage unit
- 1 Trash basket

COMBINATION UNIT to separate dining room and kitchen, accommodates 300 items of china and glass, 150 items of food.



← **KITCHEN SIDE** of unit is divided vertically into two sections—one 48 in. and one 24 in. wide. The narrower section is open on both sides, so that it serves simultaneously as a "pass window" between the two rooms and as storage space for the 95 items of everyday china and glassware. A door on the kitchen side permits the entire opening to be closed when not in use but the inner face of this door is racked for storage. Above counter height, the 48 in. section also has doors. This area is utilized to store the entire list of 150 items of packaged foods—sink and mix supplies in the center, range and serve supplies on the left.

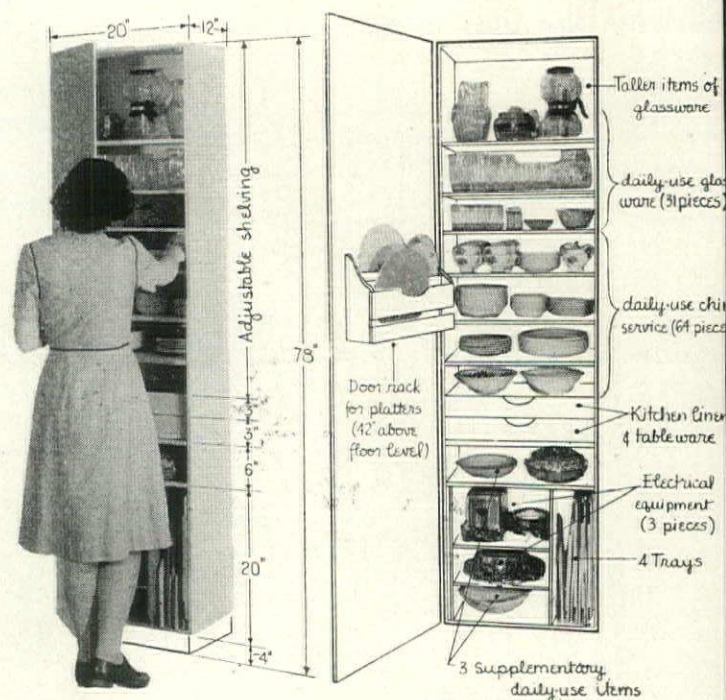
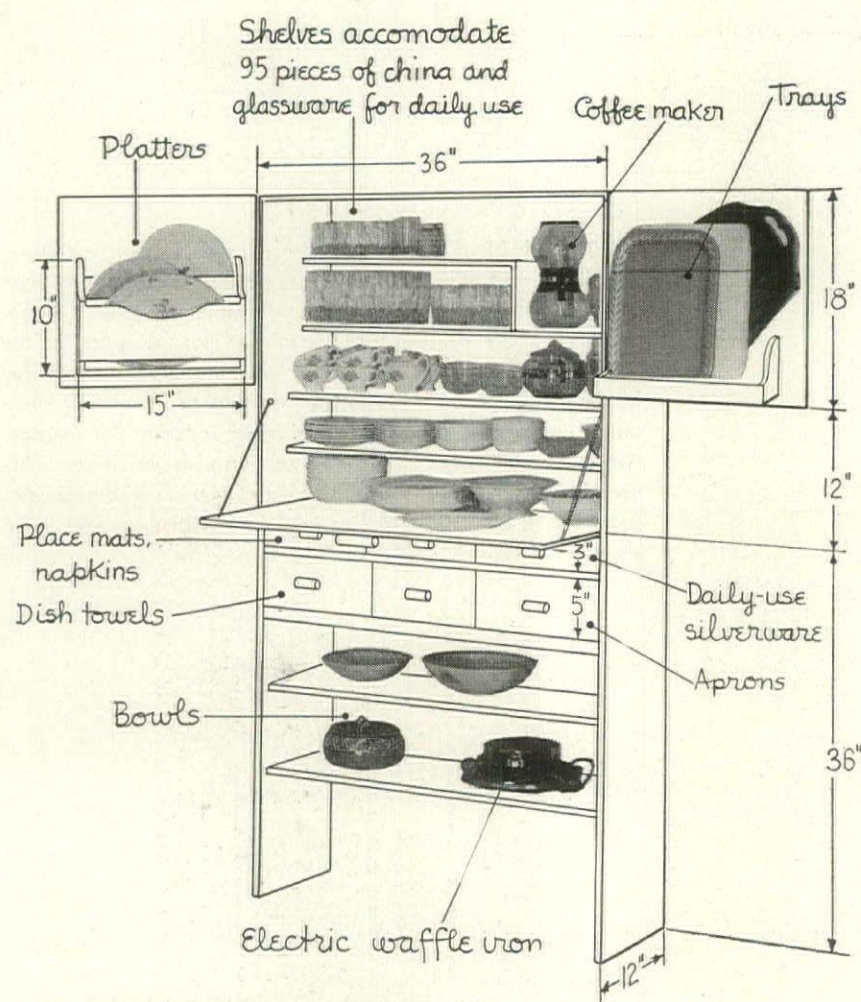
This section carries 207 items of glass & china ware for occasional use, silverware & linen.



← **DINING ROOM SIDE** of serving unit. By dividing the cabinet longitudinally down the center of the 48 in. section, adequate storage space is created for 205 items of china and glassware for occasional use. All shelves in this unit are 8 in. deep except bottom one, where an additional 4 in. is borrowed from the kitchen side for dinner plates. As in all their units, Heiner and McCullough have concentrated the heaviest and/or most used items as near counter height as possible. The ingenious shallow drawers for flat silver and linen pull out into both the dining room and kitchen: this device alone will save the house-keeper many a step.

SERVE CENTER

The largest group of items in the kitchen is involved in the serving of food after it has been prepared. Even the family in the moderate income group will use over 300 eating utensils—and this does not include knives, forks and spoons nor such items of occasional use as candlesticks, fruit bowls, etc. Storage here is also required for table linen, place mats, etc., and for certain foods which go directly to the table. In the small servantless house there is apt to be only one sink, and that in the kitchen, so that the distance between it and the table should be held to a minimum. Many families make a clear distinction between everyday tableware and that for "company"; and most family meals are apt to be eaten in the kitchen. Hence storage of tableware should be divided, with everyday pieces in the kitchen.



TWENTY-INCH DISH CABINET. A minimal solution for storing the 95 pieces of glass and china, plus flat silver and linen for everyday use. This unit does not provide complete serve center facilities and would be used in conjunction with other units. All the serve center units assume that range-first supplies and equipment would be combined with or in close proximity to them, just as sink-first and mix center supplies and equipment would be.

DROP FRONT SERVE CABINET. This unit accommodates all tableware for everyday use and includes in addition extra drawer space for items like kitchen towels and aprons. It is suitable for a small kitchen where the drop-front could provide serving or eating space, or in situations where china might be stored in living room.

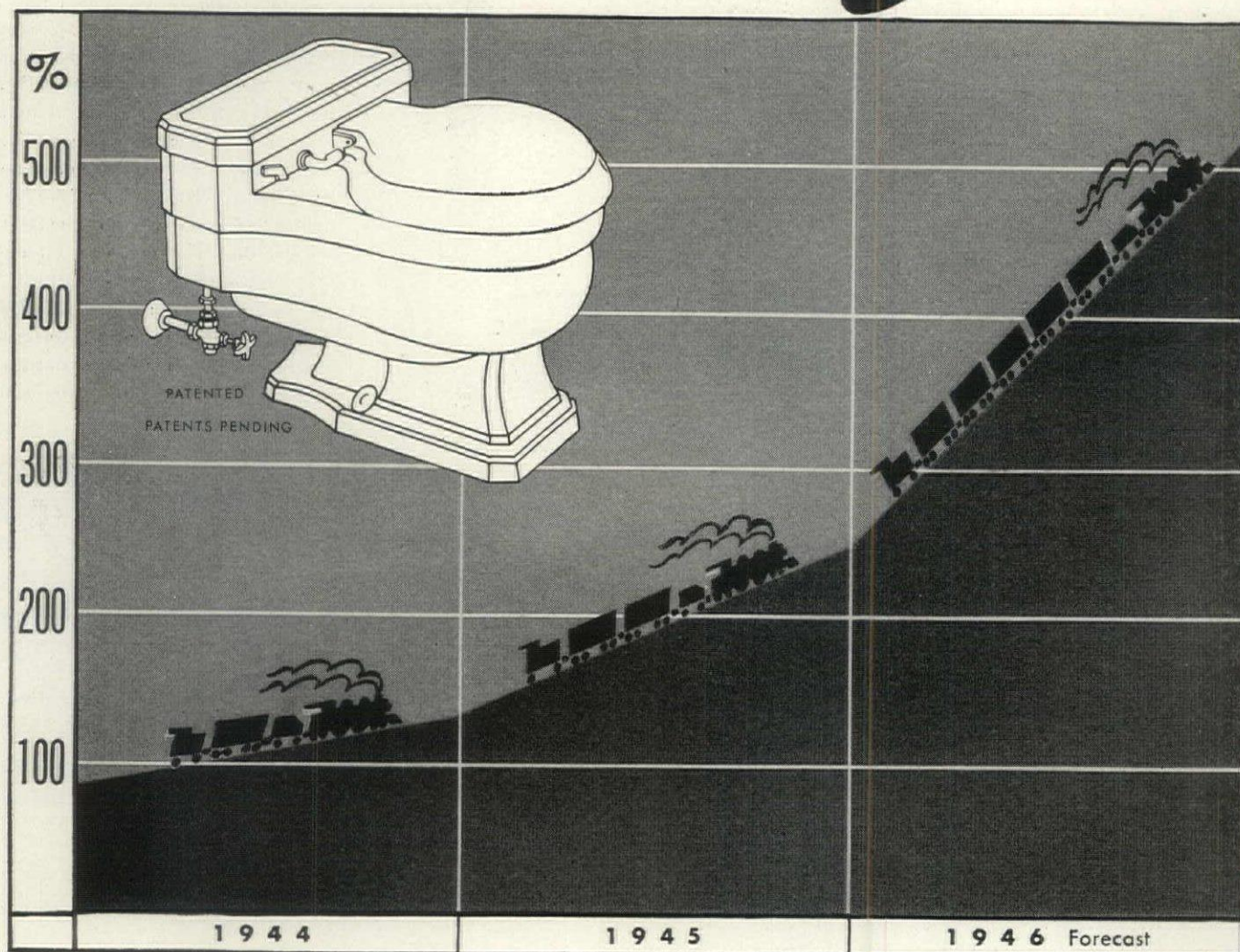
ITEMS TO BE STORED AT SERVE CENTER

PACKAGED FOODS	57	5 pkg. cookies	Service pieces	13	Individual pieces	5
Canned	19	1 pkg. donuts	3 Cream pitchers		8 Dinner or luncheon plates	
7 (no. 2) cans fruit		4 pkg. crackers & wafers	3 Sugar bowls		8 Breakfast (salad or dessert)	
2 (no. 2½) cans fruit		1 pkg. honey spread	2 Open vegetable bowls		8 Bread and butter or pie	
4 qt. cans—juice (fruit or veg.)		1 pkg. wax paper	1 Covered vegetable bowl		8 Soup or cereal bowls	
1 can steamed bread			1 Large platter		8 Fruit or sauce dishes	
1 can mints		UTENSILS	1 Medium platter		8 Cups	
1 can ginger			1 Chop plate		8 Saucers	
2 cans sardines		Regular use	1 Gravy boat		Service pieces	
1 can ripe olives		4 Trays			2 Open vegetable bowls	
Glass	20	Occasional use	Glassware	56	2 Platters—1 medium 1 small	
1 qt. salad dressing		Electric coffee maker	Individual pieces	48	1 Sugar bowl	
1 pt. French dressing			12 Goblets—8 oz.		1 Cream pitcher	
1 jar peanut butter		OCCASIONAL WARE	12 Stemmed ice tea or 10 oz. Tom Collins		1 Chop or cake plate	
2 jars sandwich spread			12 Sherbet or cocktail 4 oz.		Glassware	
1 jar pickles (sweet)		China	12 Stemmed fruit juice 4 oz. or wine		Individual pieces	
1 jar pickles (sour)			Service pieces	8	8 Ice tea glasses—10 oz.	
1 jar green olives		Individual pieces	2 Sets salt and pepper		8 Milk or water—8 oz.	
1 jar prepared mustard		12 Dinner plates	2 Small bowls condiment		8 Fruit juices—4 oz.	
1 jar preserves		12 Breakfast or tea	2 Small bowls jellies or sauces		Service pieces	
1 bottle ketchup		12 Salad plates	1 Oblong condiment		1 Milk pitcher—1 qt.	
1 bottle worchestershire sauce		12 Bread and Butter	1 Tall (2 qt.) water pitcher		1 Water pitcher—2 qt.	
5 jars jelly		12 Soup, cereal or bowls			1 Tea pot—6 cups	
2 bottles gingerale		18 Dessert plates			2 Small bowls condiment or jelly	
1 bottle sherry		18 Coffee cups			1 Set pepper and salt	
Cartons	18	18 Saucers	DAILY WARE	95	1 Coffee pot—6 cup	
6 pkg. ready-to-eat cereals		12 Cream soups	China	63		
		12 Cream soup saucers				

IN ANSWER TO THE GREAT DEMAND

Production and
Shipments are

JIP



... of the one and only **T/N**

The graph tells only part of the story. Not only is T/N production increasing steadily but in quality, too, this most popular of water closets is better than ever.

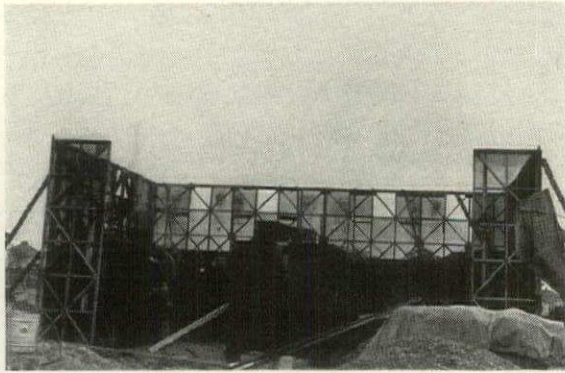
In appearance and performance you are giving your customers the best when T/Ns are installed in

their homes...an improved vitreous china fixture of one-piece construction, non-overflow, quiet in action, and non-syphoning.

As you can see, we're making a most determined effort to keep pace with the public demand.

W. A. Case & Son Mfg. Co., Buffalo 3, N. Y.

Case LIFETIME PLUMBING FIXTURES

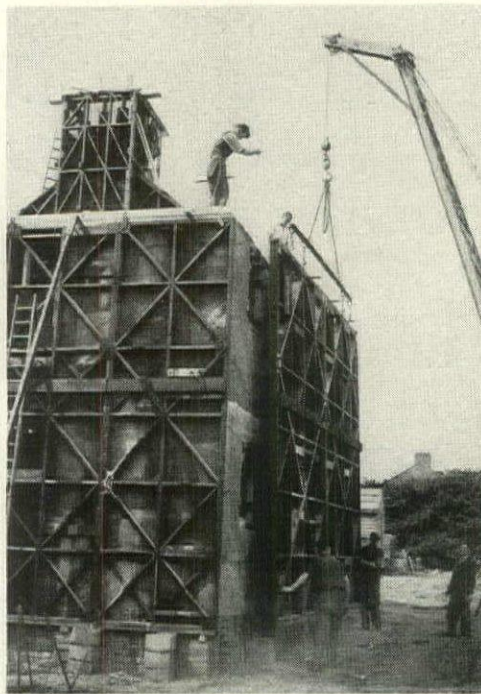


FORMS IN PLACE FOR POURING FIRST LIFT

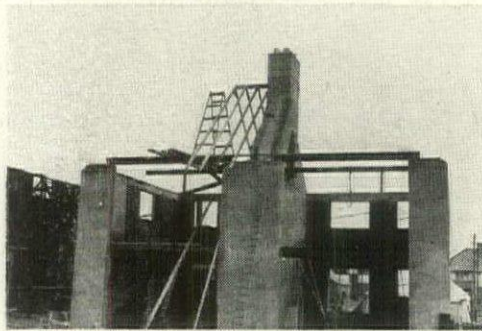
BRITISH rationalize conventional methods.

Both these English houses are of concrete—the Wimpey house (right) poured in place, the Mulberry (below) of precast panels. Both employ a combination of formwork, scaffold and jig which guarantees precise dimensioning, speed and a minimum of skilled labor. In the Wimpey house, special prefabricated forms, faced with a wire mesh, are swung into place atop footings with a small crane. For outer faces of end and rear walls, forms reach to cornice line; for inner faces—except party wall and chimney—they are story height and serve as scaffolding for pouring. Openings for all doors, windows, joists, piping, etc., are automatically located by inserts in the form. The three walls are poured in two 8 ft. lifts, forms removed by the crane and roof framed. Front wall is bricked in last. In the Mulberry house, (below) metal scaffold is erected on floor slab, serving as jig for assembly of precast wall and floor panels.

Photos: British Combine



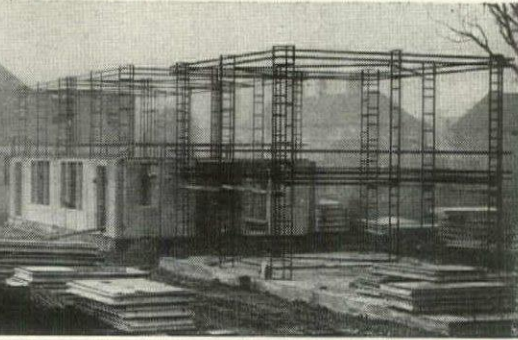
FORMS REMOVED, READY FOR NEXT HOUSE



ROOF CARRIED BY BEAM ACROSS FRONT



FRONT IS CLOSED UP WITH BRICK WALL

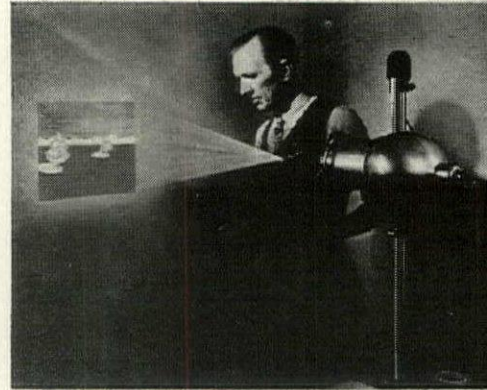


SCAFFOLD ACTS AS JIG FOR PANEL ASSEMBLY

NEW PROCESS makes possible direct photographic transfer to many surfaces.

Photographs may be printed directly upon almost any type of surface—metal, wood, cloth, plastic or leather—with a new process shortly to be commercially available. The process—a wartime development of the Glenn L. Martin Co., of Baltimore, Md.—is based upon a sensitizing emulsion which can be spread on a wide variety of surfaces, thus preparing them for photographic printing. The process and the emulsion were both thoroughly tested during the war at the Martin plant where full-scale shop drawings were printed rapidly, accurately and in number directly upon metal, wood and plastic surfaces.

In its normal state, according to the Martin announcement, the emulsion is a thin jelly-like substance: when heated to 125 F. it becomes a liquid which may be applied with a camel's hair brush, soft sponge or rag. Allowed to dry, the sensitized surface is then ready for projection of the print. Development is the same as with commercial papers, all working being done under dark room conditions with ruby lights. The emulsion may be heated any number of times without damage to its printing qualities. The finished print may be weatherproofed with lacquer or varnish. Though the process prints both line and half-tone reproductions, at the present it is restricted to black and white. Presumably, the process is applicable to any surface chemically neutral to the emulsion.



PRINTING DIRECTLY ON SENSITIZED WALL

BUILDING REPORTER

SANDWICH CONSTRUCTION MATERIAL is extremely strong and lightweight.

A new lightweight, waterproof, construction material which is structurally stronger than anything of the same weight now being manufactured, has been developed by the Glenn L. Martin Co. and United States Plywood Corp. It is composed of a honeycomb of paper, cotton cloth, fiberglass or linen, sandwiched between thin sheets of aluminum, stainless steel, wood veneer or plastic. The honeycomb material is impregnated with a phenolic resin before the core is formed. Weight of the core material can be varied from as little as 4 lbs. per cu. ft. to conform to the weight which the finished product will be required to carry. Thickness may vary from 1/8 in. upward. The type of facing material and thickness also will vary with the load requirements. Various aluminum alloys,

stainless steel, wood veneers and plastic sheets can be used either singly or in combination. A door or wall panel, for example, may have a wood veneer finish on a metal base. The wood veneer, however, can be applied directly to the honeycomb when no heavy strains are to be placed on the panel. Sheets as large as 7 ft. by 30 ft. have been manufactured but the eventual size will be limited only by the size of the skin material or size of presses. Many uses for the new material are visualized, but initial developments will be in the transportation field. Experimental pieces used for flooring by several airlines have proved very satisfactory. Walls, ceiling and partitions in railroad cars, automobile bodies and panels for motor trucks are other fields which are being explored. Doors, frames and wall panels for home construction will soon be available. Experiments (Continued on page 194)

There's No Guesswork

in **UNIVERSAL GAS RANGES**

Architects who specify or recommend Universal Gas Ranges know that proven performance has always been a watchword and a standard requirement. All elements of chance have been eliminated from Universal Gas Ranges every year for three generations.

No fuel cooks like gas—no range like Universal.

YESTERDAY—
TODAY—
TOMORROW—
THE LEADER:
UNIVERSAL GAS RANGES!



1946

Still the **UNIVERSAL**
Selection of Cooking
Perfection



CRIBBEN & SEXTON
UNIVERSAL *Gas* RANGE

700 N. SACRAMENTO BLVD.

CHICAGO 12, ILLINOIS

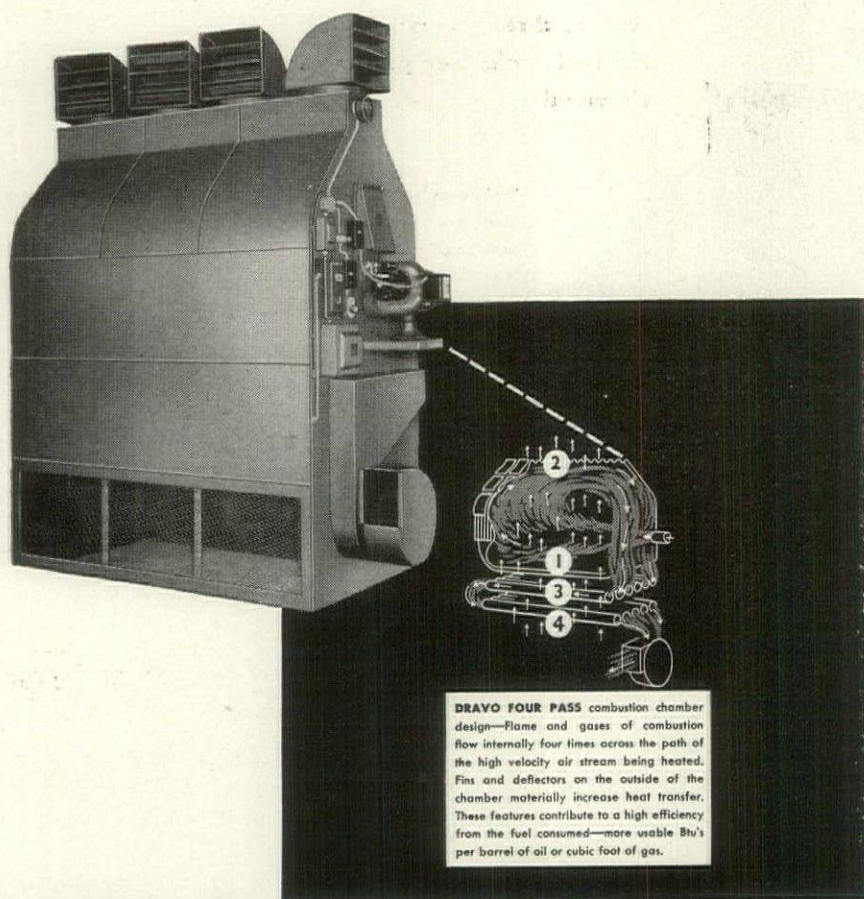
TL-36

at present are being conducted with honeycomb in flat sheet form, but the developers are trying out manufacturing techniques which will make possible fabrication of curved sections. *Manufacturers:* Glenn L. Martin Co., Baltimore 3, Md., U. S. Plywood Corp., 55 W. 44th St., New York, N. Y.

CERAMIC TILES in sheets for direct adhesion setting.

Sparamics are natural clay ceramic mosaics mounted on flexible plastic sheets, 12 in. by 24 in., which can be applied to existing wood, concrete or other new or worn surfaces with an adhesive binder which reacts with the plastic sheet to form the permanent bond. Total thickness of the Sparamic is between $\frac{1}{4}$ in. and $\frac{5}{16}$ in. depending upon the thickness of the adhesive coating. To lay, the special adhesive-setting compound is applied to the surface. The sheets are placed tile face up, pressed down with the foot and grouted. For unusual spaces,

sheets are cut to size before setting. Using a high early strength cement that sets quickly the floor may be used immediately. Thus Sparamics are suitable for remodeling kitchens, restaurants and service areas where business cannot be stopped for more than a few hours. Weighing approximately three lbs. per sq. ft. installed, they open new fields for the use of tile, such as on floors for elevators, railroad cars, buses, and for application in buildings which would not stand the weight of the cement setting bed required for conventional ceramic application. Sparamics are furnished in three sizes; 2 in. by 2 in., 2 in. by 1 in., 1 in. by 1 in., and in regular Sparta mosette colors—light grey, dark grey, black, ivory, blue, green, red, golden pheasant, ember glow, moki, and several patterns. *Manufacturer:* The Sparta Ceramic Co., East Sparta, Ohio.



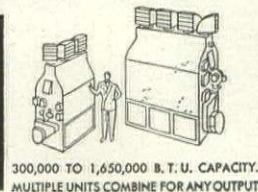
Economical Heat Exchanger Uses Direct Fuel-to-Air Principle For Large Scale Space Heating

This heater employs an efficient direct heat transfer method - through only one thickness of metal - the cool air crosses the path of the flame and gases four times before it is discharged by high velocity fans into the area to be heated.

Efficiencies run high - 80 to 85% - this fact together with minimum requirements of maintenance and care, makes the Dravo designed direct fired warm air heater a logical choice where large,

unobstructed areas are to be heated.

Dravo heaters are shipped from the factory complete, with refractory material installed. When gas or oil is the fuel they need only be connected to the fuel and power lines and they are ready to operate. They can be moved from place to place to meet supplementary heat requirements. They can be operated individually if a portion of the plant is shut down. Maintenance is negligible. No specialized attendance is required. For the whole story ask for Bulletin 509-A. Address Dravo Corporation, Heater Department, 300 Penn Avenue, Pittsburgh 22, Pa.



PRE-CATALYZED, Low cost urea resin for hot press plywood.

Uformite 501, a pre-catalyzed urea formaldehyde resin for hot press plywood, permits high extension with flour thus providing glue costs comparable with soybean and vegetable glues. The resin also eliminates the adjustment of type and amount of catalyst necessary to accommodate various degrees of flour extension. It is water resistant and insures an accurate and adequate catalyst ratio with a one component adhesive. Tan-colored, the powder is readily dispersed in water. Catalyst content of the resin provides adequate cure in both unextended and highly extended hot pressing mixtures. Low gluten wheat flours are preferable for easy mixing and smoothness of the resulting mixture, but advance tests are necessary to determine the exact water content required to provide the most spreadable mixture. Moisture content of veneers is not a critical factor with this resin, but minimum spread permissible depends on the texture and density of the veneers as well as on the degree of extension. Pressure requirements depend on the species and uniformity of the veneer thicknesses. From 150 to 200 lbs. per sq. in. for softer woods, to 200 to 250 lbs. per sq. in. for maple and birch, are adequate. Slight compression is desirable, the softest layer in the assembly controlling the allowable pressure. Uformite-bonded plywood should not be dipped and should be well weighted down during cooling.

Manufacturer: Resinous Products & Chemical Co., 222 W. Washington Square, Philadelphia, Pa.

WALL COVERING is stainproof.

Soap and water will remove almost any type of dirt, grease or stain from Varlon, a new stainproof wall covering. Tests have proved that heretofore indelible stains such as lipstick, hot grease, ink, etc. can be removed with soap and water without fading the surface. This is due to the fact that such stains do not penetrate the surface. Manufacturers of Varlon stress the fact that it is not to be confused with wall paper. Varlon is a wall covering made with a synthetic resin built into the paper, rather than impregnating it. It will be packaged in rolls, but will be sold by the sq. ft. A special adhesive is required for hanging it.

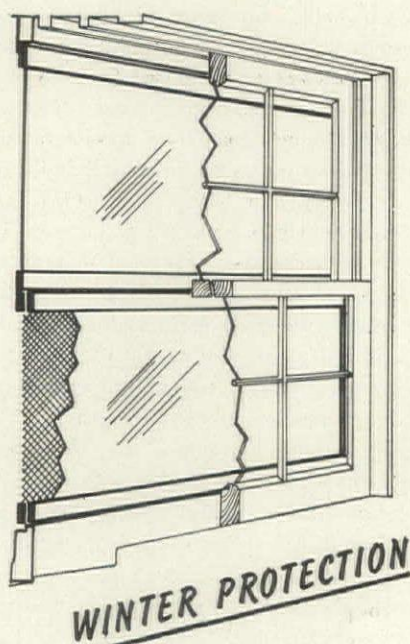
Manufacturer: Varlon, Inc., Div. of United Wallpaper, Inc., 3330 W. Fillmore St., Chicago, Ill. (Continued on page 196)



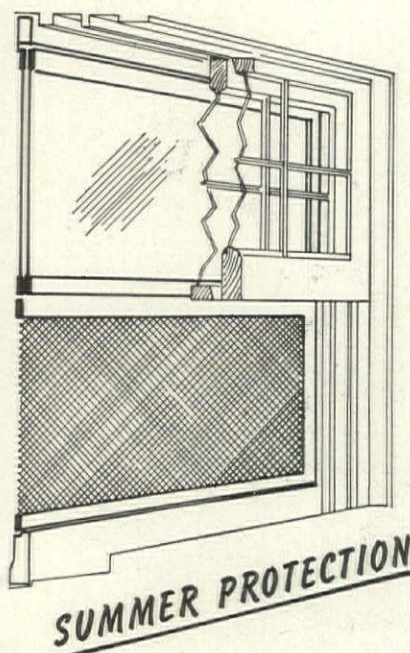
SPECIFY RUSCO ALL-METAL

COMBINATION SCREEN and STORM SASH

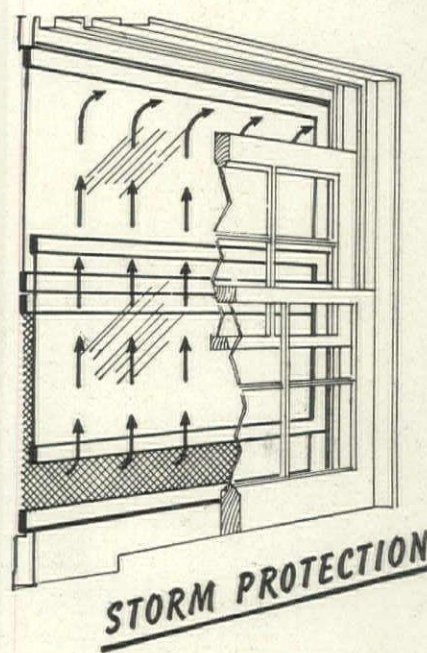
Only this modern, self-storing window insulation gives your clients these year-around advantages!



In winter, perfect window insulation is attained instantly by merely lowering Rusco storm sash. Reduces heat loss and infiltration by more than 50%—Rusco permanently insulates and weatherproofs entire window opening.



In summer, Rusco storm sash simply slides up into storage position, giving full, direct ventilation through permanent Rusco screen.



Stormproof, draft-free ventilation winter or summer by raising lower Rusco sash part way, lowering upper inside sash. Air deflects upward into room—permits open window ventilation with complete safety from storm damage or drafts.

Fits existing windows without alterations

- You can specify Rusco for new buildings or old! The famous patented, self-adjusting all-metal Rusco frame fits flush with the existing window frame—provides perfect weatherproof fit. Patented Rusco invisible seep hole drainage prevents sill decay. And here are other advantages you give clients when you specify Rusco:
- ends seasonal changing, storing, repairing, fitting of screens and storm sash.
- controls steaming and frosting.

- simplifies cleaning; glass and screen inserts are easily removed inside.
- cuts winter fuel bills up to 35%—permanently.
- aids summer air conditioning by offering instant choice of complete window insulation or direct through-screen ventilation.

For engineering specifications, see Sweets' 18a-7 or write direct for free book and name of nearest distributor.

RUSCO ALL-METAL *Self Storing* Combination Screen & Storm Sash

THE F. C. RUSSELL CO. • 1836-AF Euclid Ave. • Cleveland 15, Ohio

LAMINATING PLASTICS for surfacing decorative laminates.

Bakelite Corp. announces a new type of laminating plastic which is highly versatile in that a wide latitude of molding temperatures and pressures is practical. Bakelite C-5 Laminating Resin XJ-17694, the first of the C-5 family, is designed specifically as a surfacing material for decorative laminates. In physical form it is a xylene-toluene solution with a resin content of 50 per cent. It has a broad color range and imparts an extremely high gloss and lustrous surface. C-5 Resin surfaces provide hard continuous films yet retain good flexibility; thus a laminated structure may be postformed within limits. The laminated surfaces are highly scratch-, scar- and stain-resistant, and are resistant to organic solvents, soap solutions, citric and other fruit acids and boiling water. Versatility of the C-5 Resins also extends to the methods by which the resin surfaces may be applied. Although the full range of applica-

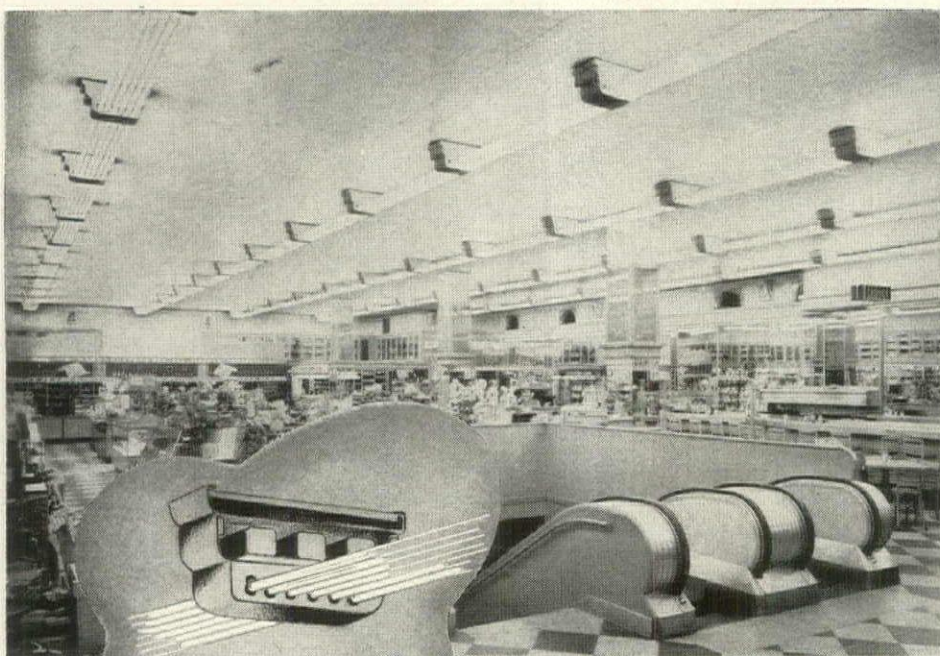
tions is not yet complete, proposed applications include table tops and wallboards having cores of plywood or asbestos fiber. The good flexibility characteristics show potentialities for shaped articles such as wallboard moldings, instrument cases, etc.

Manufacturer: Bakelite Corp., 300 Madison Ave., New York 17, N. Y.

SUN SWITCH for controlling lighting.

The electronic Sun Switch is designed for the effective control of outdoor lighting on streets, public buildings, airports, outdoor advertising, etc. Using a photo-electric cell, it can insure illumination regardless of weather fluctuations and the twilight hour. It is low enough in price to permit installation on each light, and thus eliminates heavy investments in series circuits. Under ideal conditions of daylight, it provides a minimum "lights on" period from 25 minutes after sunset to 25 minutes before sunrise, and adjustment is provided to meet customers' specific requirements. Operating unit is compactly built on a chassis to which a round, non-rusting, grey aluminum housing is attached by 3 screws. The housing with chassis is fastened to a permanently wired base with a single 30° rotary turn which provides a perfect plug-in connection and a weatherproof joint. A similar turn in the other direction removes the entire unit. The swivel bracket and the round shape of the housing permits direction of the photo-cell of each unit to north light without interfering with symmetry in installation. A minimum safety factor is incorporated in all components, principal of which are standard amplifier tubes, a photo-electric cell and relay. These factors, coupled with special tungsten alloy contacts on the relay, insure unfailing dependability and efficiency.

Manufacturer: The Ripley Co., Torrington, Conn.



Walgreen Drug Store, State and Randolph Streets, Chicago
An Acme-Wiley Installation

SOLA TRANSFORMERS provide constant lumen output for Cold Cathode lighting

The SOLA Cold Cathode transformers used in this distinctive Walgreen Drug Store installation incorporate the famous SOLA Constant Voltage principle in their design. This exclusive SOLA feature makes possible the maintenance of maximum lumen output regardless of voltage fluctuations as great as $\pm 10\%$ in the primary supply line.

Without this regulation, which ordinary types of transformers do not have,

every one volt-drop from the normal, rated voltage would result in a light loss of from 1% to 2%.

SOLA Transformers, incorporating the exclusive SOLA Constant Voltage principle, are now available in single and two lamp sizes for the operation of 93 inch cold cathode lamps. Their small, compact dimensions are ideal for installations in restricted areas. Ample knockouts are designed to permit leads to be drawn

from top, bottom, end or sides.

Here is an important transformer you will want to know more about before designing your next installation whether for store, show-room, hotel lobby, factory or office. For complete details and electrical and mechanical specifications, write for new bulletin.

Ask for Bulletin 37 CC-107



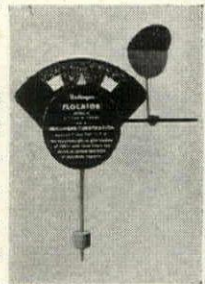
SOLA Cold Cathode TRANSFORMERS

SOLA ELECTRIC COMPANY • 2525 CLYBOURN AVENUE, CHICAGO 14, ILLINOIS

AIR FLOW INDICATING INSTRUMENT for use in any air ventilating system.

The Dollinger Flocator is an inexpensive air flow indicating instrument which supplies information on the percentage of maximum flow being maintained in the ventilating system at all times. Scientifically constructed and requiring little or no attention for continuous operation, it warns against any loss of air flow from any cause whatsoever. According to the manufacturer, initial cost and installation expense of a Flocator are below that of any type of flow indicators now available. It is designed for use in any air ventilating system: Model 45 is for small capacity ventilation, and Model 75 for large capacity systems.

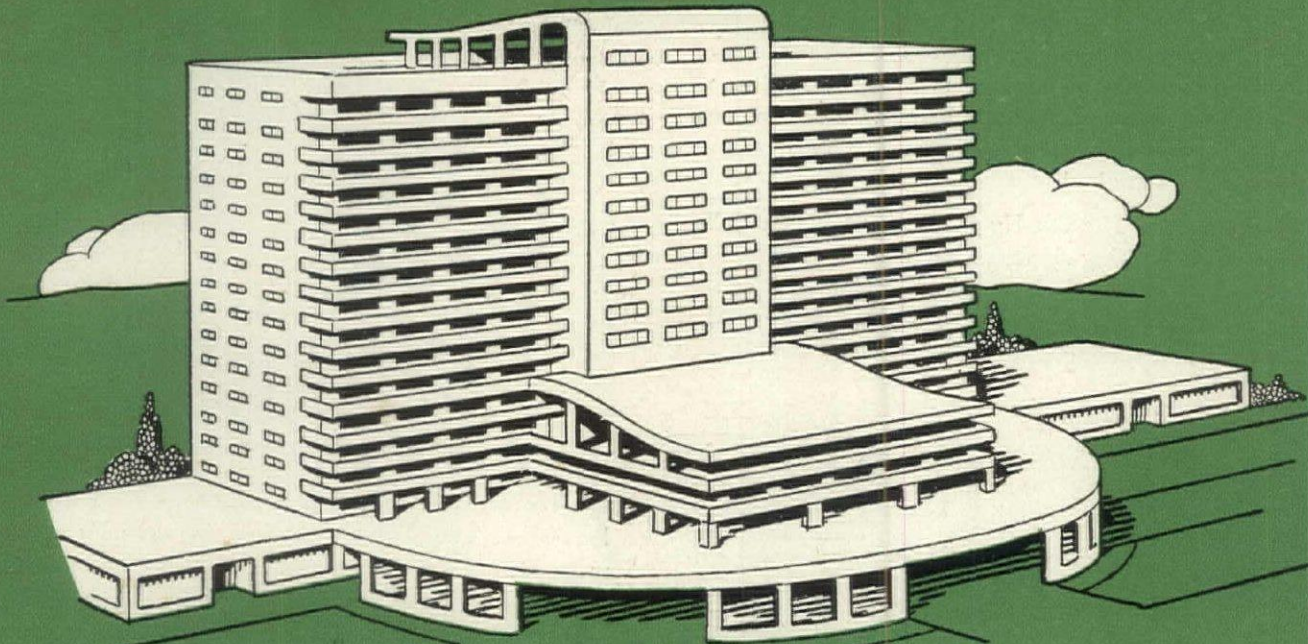
Manufacturer: Dollinger Corp., Rochester 3, N. Y.



BOILER FEEDWATER CONTROL cuts off fuel and sounds alarm at low-water level.

Fireye Boiler Feedwater Control Type B177N, electronically maintains desired water level through valve or pump control and instantly cuts off the fuel supply and sounds an alarm at a predetermined dangerous low-water level. Operating without any moving mechanical elements, it requires no maintenance. An auxiliary fitting, Fireye Probe Fitting Type H53C, containing three probe rods (Continued on page 200)

How Up-to-Date are you on ALUMINUM?



For the great postwar building projects all over the country, aluminum, through its new battle-tested alloys offers increased freedom of design combining beauty and lightness with great structural strength.

REYNOLDS ALLOYS GIVE GREATER STRENGTH... REDUCE LOAD ON WALLS AND FOUNDATIONS

ALUMINUM now takes its place as a modern structural metal. Thanks to great new Reynolds alloys,* advanced architectural ideas of today can be transformed into the structures of tomorrow.

Postwar projects—housing, office buildings, hospitals, stores—all will benefit through these new lightweight, high-strength alloys developed by Reynolds to meet the needs of war.

See catalog in Sweet's or write for Catalog No. 104A, "Reynolds Aluminum. Its Important Role in Architecture." Consider aluminum . . . consult Reynolds. Reynolds Metals Company, 2528 South Third Street, Louisville 1, Kentucky.

*To aluminum's recognized beauties Reynolds Alloys add greater strength . . . open up scores of new uses for aluminum. Reynolds produces structural shapes and corrugated sheet for roofing and sidings; furnishes aluminum to manufacturers for products such as awnings, Venetian blinds, ceilings, doors, concrete forms, escalators, lighting fixtures, stair nosings, windows, etc.



REYNOLDS

The Great New
Source of **ALUMINUM**

7787

INGOT • SHEET • SHAPES • WIRE • ROD • BAR • TUBING • PARTS • FORGINGS • CASTINGS • FOIL • POWDER

CONCRETE Offers Mass Production of Individually Designed Houses and Non-Residential Buildings

Research and field development have made the Tilt-Up system of concrete construction available *now* for urgently needed one and two-story houses and non-residential buildings. In the course of its development, several hundred buildings have been completed by variations of this method.

FOR IMMEDIATE NEEDS — The Tilt-Up process is "tailor-made" to help solve the current housing shortage immediately.

A minimum of critical materials is required. Reinforced concrete is used for floors and walls—cement-asbestos siding and shingles for gable ends and roofing.

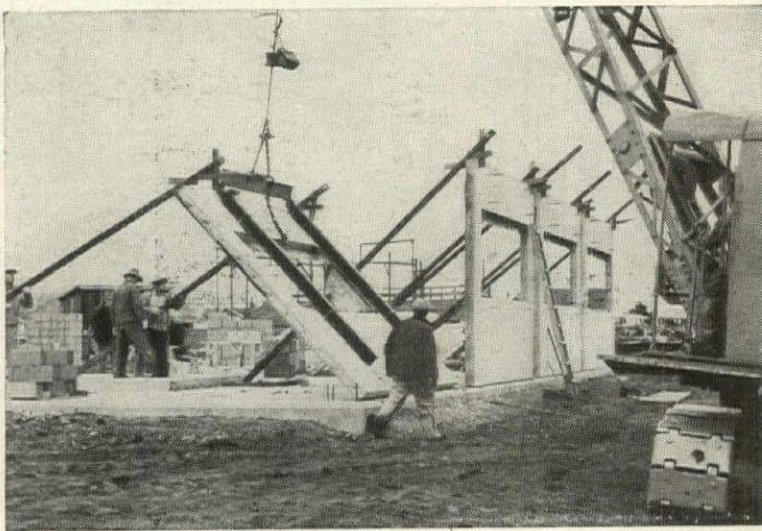


Photo by Myron Hall, St. Cloud Times
Mobile crane raises concrete wall panel in a matter of minutes.

The walls are cast in a horizontal position on the concrete floor of the building. Vapor seal, insulation, door and window bucks, electrical conduits and outlets are set before the concrete is placed.

MASS LINE PRODUCTION — Whether there is one building or 1,000 required, the project can be readily laid out for mass line production. Traveling mixers deliver the concrete—mobile cranes



Five-room concrete house, built by Tilt-Up method.

* t the walls into vertical position as soon as the concrete has hardened. The Tilt-Up method is virtually a housing factory moved to the building site. The larger the job the greater the opportunity for economies.

In the hands of skillful architects, experienced contractors and large-scale realtors, Tilt-Up construction will provide rugged, fire-safe, durable concrete buildings at low annual cost.

PROVIDES DESIGN FLEXIBILITY — Wide architectural design flexibility is provided. Every house in the block can be of individual design—no two stores alike.

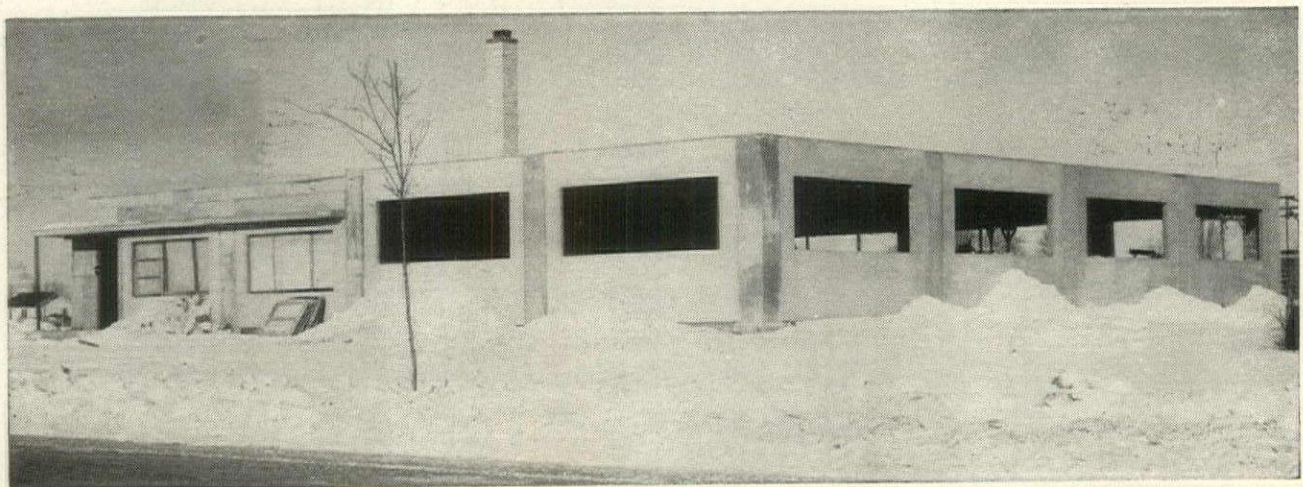
These are not temporary, make-shift buildings. They embody all the desirable features of firesafe, beautiful, low maintenance cost construction suitable for the finest residential developments.

Write for illustrated information sheets on Tilt-Up Construction for industrial buildings and housing projects. Free in United States and Canada.

PORTLAND CEMENT ASSOCIATION

Dept. 3-7, 33 W. Grand Ave., Chicago 10, Ill.

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



Holes-Webway Co. plant in St. Cloud, Minn., designed by Architect Louis Pinault, recently constructed of concrete by Tilt-Up method.

GLOW LAMP

MERCURY LAMP

INDICATOR

SUN
LAMP

G-E LAMPS

... for the latest lighting!

Many new G-E lamps are on the market today. You'll find them helpful in carrying out your own modern lighting ideas. And all of them bring you the benefits of G-E lamp research whose constant aim is to make G-E lamps stay brighter longer!

PROJECTOR
FLOODHEAT
LAMP

GENERAL SERVICE

PROJECTOR
LAMP

LUMILINE

FLUORESCENT

GERMICIDAL

REFLECTOR LAMP

SILVERED
BOWL

SLIMLINE

GET THE FACTS OF LIGHT!

A lighting consultant from our nearest G-E Lamp office will be glad to help you — just call or write!

ATLANTA 3, GA., 187 Spring St., N.W., WALnut 9767
BOSTON 10, MASS., 50 High St., HANcock 1680
BUFFALO 2, N. Y., 901 Genesee Bldg., CLEVELand 3400
CHICAGO 80, ILL., 842 So. Canal St., HARRison 5430
CLEVELAND 14, OHIO, 1320 Williamson Bldg., CHerry 1010
DALLAS 2, TEXAS, 1801 North Lamar St., Central 7711
DENVER 2, COLO., 1863 Wazee St., MAin 6141
DETROIT 26, MICH., 1400 Book Tower, CHerry 6910
KANSAS CITY 8, MO., 2100 Wyandotte St., VICTor 7671

LOS ANGELES 13, CALIF., 601 West Fifth St., Michigan 8851
MINNEAPOLIS 13, MINN., 500 Stinson Blvd., GRanville 7286
NEW YORK 22, N. Y., 570 Lexington Ave., WICKersham 2-6300
OAKLAND 7, CALIF., 1614 Campbell St., Highgate 7340
PHILADELPHIA 2, PA., 1405 Locust St., KINGSley 3336
PITTSBURGH 22, PA., 535 Smithfield St., GRant 3272
PORTLAND 9, ORE., 1238 N. W. Glisan St., BEacon 2101
ST. LOUIS 1, MO., 710 No. Twelfth St., CHestnut 8920
General Offices, NELA PARK, CLEVELAND 12, OHIO

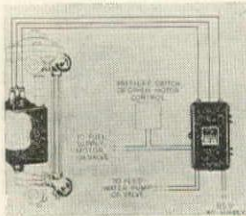
G-E LAMPS

Stay Brighter Longer!

GENERAL  ELECTRIC

which determine the control levels, is mounted parallel to the water column and is wired to the Fireye Control. The probes within the Fitting, mark boiler feedwater pump-on and off levels, and a low water danger point. When the water falls below the middle probe, Fireye closes the circuit controlling the pump and water feeds into the boiler until the top probe is reached. The lowest probe is the danger point and should the water drop below this safety probe, Fireye immediately shuts off the fuel supply and sounds an alarm. Operating on 115-230 v., 60 cycles, A.C., it is rated at 10 amp. at 115 v., or 5 amp. at 230 v.

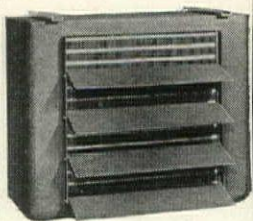
Manufacturer: Combustion Control Corp., 77 Broadway, Cambridge 42, Mass.



OVERHEAD BLOWERS for low temperature cooling.

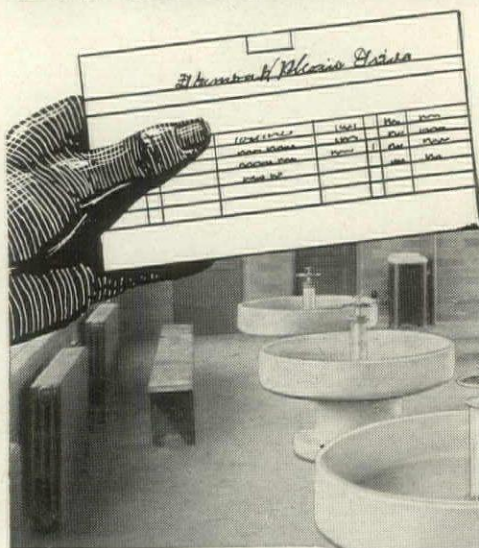
This new postwar line of overhead blowers is being built for use with all types of refrigerant including brine and pres-tone. They provide different velocities of air speed to furnish the right volume of air for various and specific cooling jobs, and the coils are designed so that the outlet velocities of the refrigerants are well within safe limits. Tubes and bends have no obstructions and are of full area. All blowers are housed in a modern steel bonderized case of baked enamel, and louvers are individually adjustable to permit a controlled flow of air for proper and uniform distribution.

Manufacturer: Rempe Co., 340 No. Sacramento Blvd., Chicago 12, Ill.



Modern Plants Everywhere Have Gone ON RECORD FOR CLEANLINESS

with
Bradley Washfountains



IMPORTANT USERS OF BRADLEYS INCLUDE:

Brown & Sharpe Mfg. Co.
The Bullard Company
Kearney & Trecker
Gisholt Machine Co.
Gidding & Lewis Co.
Cincinnati Milling Mach. Co.
Barnes Drill Co.
Jones & Lamson Mach. Co.
Ex-Cello-Corp.
The Fellows Gear Shaper Co.
R. K. LeBlond Mach. Tool Co.
Monarch Machine Tool Co.
Nat. Auto. Tool Co., Inc.
The New Britain Mach. Co.
William Sellers & Co., Inc.
Warney & Swasey Co.
The Sidney Mach. Tool Co.
Kent Owens Machine Co.
American Casting Co.
McLagen Foundry Co.
Rupert Diecasting Co.
Hutchinson Foundry
Central Brass Foundry
United Die Casting Co.
Duncan Foundry
Doehler Die Casting Co.
Keego Die Casting Co.
Federal Die Casting
Lake City Malleable
Mountain City Foundry
Detroit Steel Castings
Precision Casting Co.
Arcade Malleable Iron Co.
Marrin Foundry
Sundstrand Foundry
Portland Foundry
International Harvester
Foundry Division, Ford
Foundry Division, Buick
Michiana Alloys

America's plants have established a proud Record for safeguarding workers' health. This is undoubtedly the reason why so many industries recognize the superiority of Bradley Washfountains.

These modern wash facilities exemplify the maximum in sanitation: hands touch only clean running water; self-flushing bowl eliminates contaminating collections; convenience of operation promotes cleanliness and health.

Additional benefits from a Bradley installation include savings in space since one 54" Washfountain serves 8 to 10 workers simultaneously, reduction of water consumption by 70%, lower hot water heating costs, and the elimination of numerous piping connections. BRADLEY WASHFOUNTAIN CO., 2235 W. Michigan Street, Milwaukee 1, Wisconsin.

Celebrating 25th Anniversary
Write for Catalog 4308 and Washroom
Survey Sheet.

BRADLEY
Washfountains



HUMIDIFIER for hot water and sub atmospheric pressure heating systems provides proper degree of humidity.

This simple humidifying apparatus which attaches to the radiator, maintains a relative humidity of 30 per cent to 40 per cent. On hot water systems it utilizes water circulating through the radiator, while on sub-atmospheric pressure systems a small copper tube connected to the nearest water source brings the water to the humidifier. In both types, the water trickles onto an absorbent cloth in the unit which is wrapped around three heated coils. The coils provide a rapid rate of evaporation. Flow of water is regulated by a weighted valve as evaporation demands, the temperature of the heating medium circulating through the humidifier coils determining the rate of evaporation. The hot water model serves an area of approximately 10,000 cu. ft., capacity allowing for a change of air every hour. For larger areas multiple installations can be made. The vapor model comes in two sizes, one to serve an area of 10,000 cu. ft., the other model to serve approximately 15,000 cu. ft.

Manufacturer: Skilbeck Manufacturing Co., Kenosha, Wis.

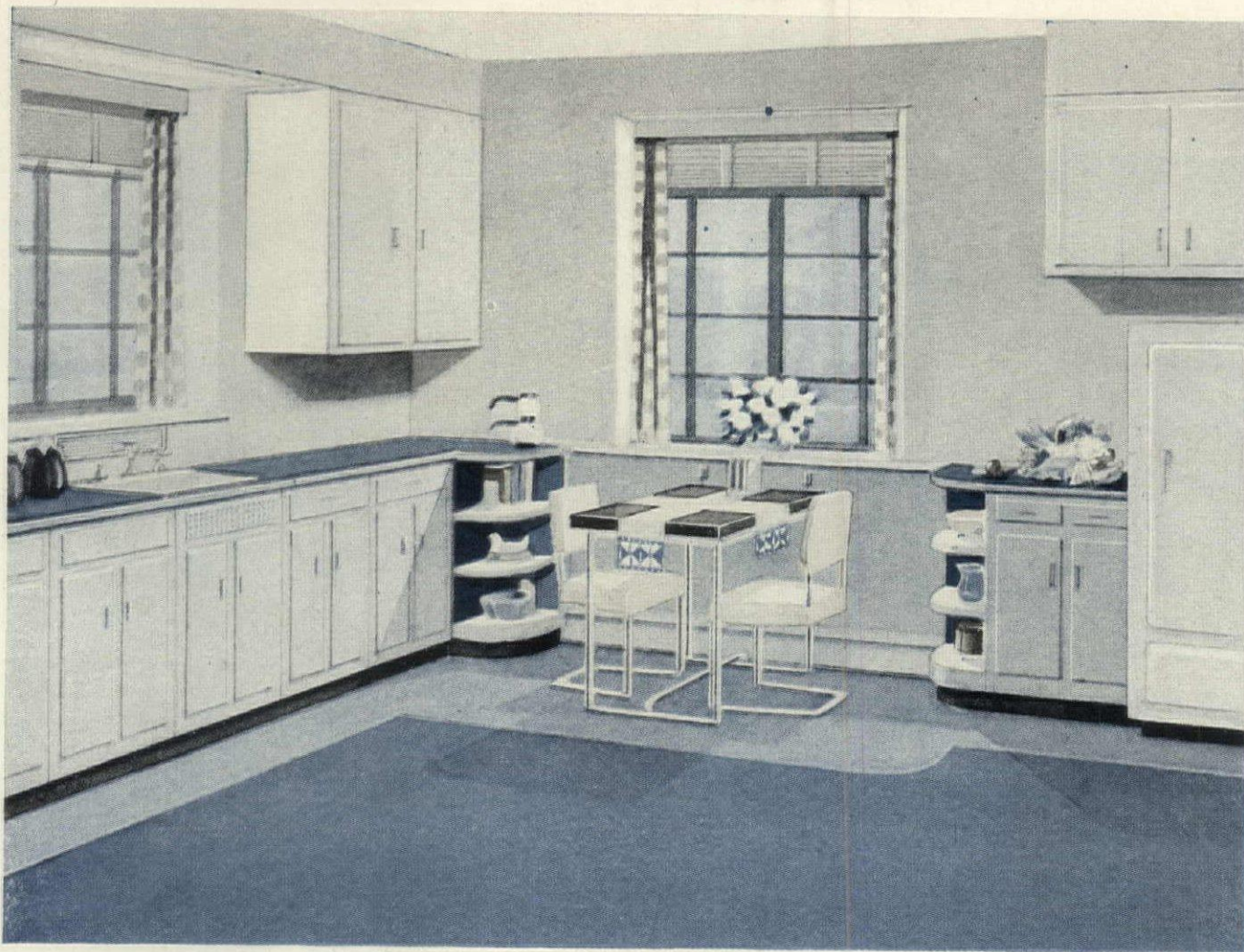
WASHER automatically washes, rinses, dries and fluffs clothes.

The new vibrationless Apex Automatic Washer employs a "bouncing basket" washing technique which bounces vigorously but does not revolve. Replacing the cylinder or agitator type of action used in other washing machines, the new washing technique carries clothes through a 4-cycle process of washing, rinsing, drying and fluffing. Up to 8 lbs. of clothes may be placed into the perforated aluminum and magnesium basket through an opening in the top. Soap flakes are added, and the dials are set for proper water temperature and washing time. Washing, rinsing, drying and fluffing operations are automatic, and the machine shuts itself off when they are completed. The entire cycle is completed in 17 to 25 minutes, the washing time depending upon the fabric. Clothes being washed revolve slowly as they are tumbled and turned by baffles. At the same time they are bathed in geysers of sudsy water spurting from the bottom of the basket. Thorough and complete rinsing is accomplished by three cycles of alternate bouncing and spinning action. For damp drying, the basket revolves for five minutes at 600 r.p.m. then reverts to the bouncing action to fluff the clothes for easy individual



(Continued on page 204)

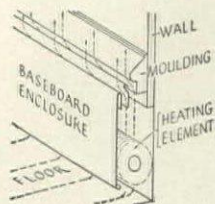
Where is the Radiator?



This is the Home of Tomorrow. This is the home free of radiators, where the heating element is so small that it fits behind the baseboard—completely out of sight.

In this new Webster Baseboard Heating, hot water circulates through the heating element, a copper tube around which are coiled fins of fine copper. This heating element is installed in a continuous line all around the exposed walls of the room. The Baseboard enclosure is removable for cleaning.

Air goes in at the floor line, passes over the heating element, is warmed and comes out at the top—a constant, even circulation.



With Webster Baseboard Heating there's nothing to mar the beauty of the room or limit your plans for interior decoration or furniture arrangement. And the

absence of radiators adds considerably to the usable space in the room.

Tested installations of this new Webster Baseboard Heating show a variation of less than 2° from floor to ceiling. No cold corners. No hot spots.

Webster Baseboard Heating has been under development for several years and has met the most severe operational tests. Deliveries are limited at present and will be increased as rapidly as materials can be made available.

A leading architect collaborated with a noted interior decorator in preparing a series of paintings showing application of Webster Baseboard Heating to different types of rooms. These paintings have been reproduced in full color. Let us send you a copy of this brochure on Webster Baseboard Heating. Address Dept. AF-3

Make this test:

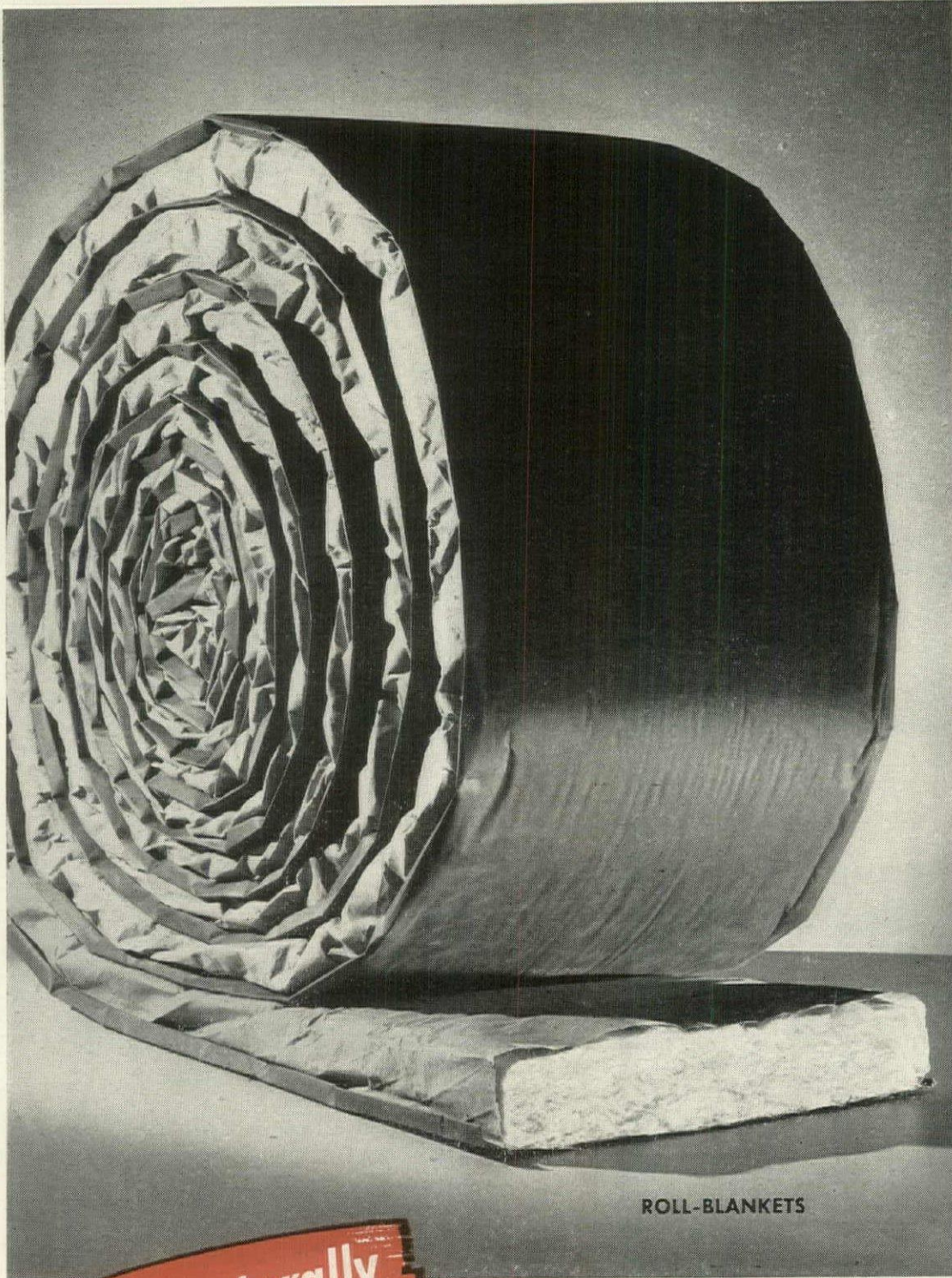
Cut out illustration of radiator at right. Place cut-out picture in position under window in the illustration above. See how the presence of a radiator in the room interrupts the scheme of decoration.

WARREN WEBSTER & COMPANY, Camden, New Jersey
Pioneers of the Vacuum System of Steam Heating: Established 1888
Representatives in principal cities: Darling Brothers, Limited, Montreal, Canada



FIBERGLAS^{*} IS

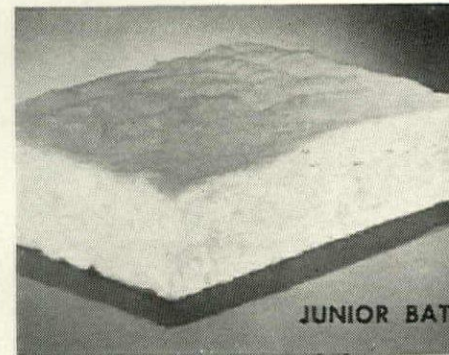
—WITH THE MOST OUTSTANDING PERFORMANCE



ROLL-BLANKETS



BATT-BLANKETS



JUNIOR BATT



BLOWING
WOOL

POURING WOOL

"Just naturally
BETTER"

FIBERGLAS

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

BACK FROM THE WAR!

RECORD EVER ACHIEVED BY AN INSULATION MATERIAL

PROVED in War and Peace

Every American naval vessel launched during the war used Fiberglas Insulation. So did B-29 Bombers. Arctic and Tropical Shelters were kept more comfortable with Fiberglas in all temperatures. Fiberglas was the *only* material that could pass rigid Army and Navy insulation specifications for many applications.

Most leading manufacturers of home appliances used Fiberglas Insulation before the war. Now, even more specify Fiberglas for their new ranges, refrigerators, home freezers, and other insulated appliances. Fiberglas is also the "first choice" insulation for air-conditioned trains, airliners, ice cream cabinets, commercial refrigerators, refrigerator trucks, water heaters, boilers, etc.

In fact, throughout America, industry recognizes Fiberglas as the "standout" material wherever insulation is needed—and in thousands of American homes the superior advantages of Fiberglas Building Insulation have been proved.



And now Fiberglas is ready
to do a better job of insulating
buildings!

ONLY FIBERGLAS HAS THIS COMBINATION OF NATURAL ADVANTAGES

RESILIENT—WILL NOT SETTLE—Fiberglas Building Insulation retains its installed thickness under vibration.

LIGHTWEIGHT—Fiberglas is one of the lightest of all insulation materials.

HIGHLY EFFICIENT—Fiberglas is recognized as one of the most efficient of all insulation materials.

MOISTURE AND CORROSION-RESISTANT—The individual Fiberglas fibers do not absorb moisture and will not rot.

NONCOMBUSTIBLE—Fiberglas is made of glass fibers. They do not burn. They need no flameproofing. They are "naturally" and permanently firesafe.

ODORLESS—Fiberglas is odorless and does not absorb odors.

NO FOOD FOR VERMIN—Fiberglas provides no sustenance for insects, rodents or vermin.

EASY TO HANDLE—Its light weight, precision manufacture and variety of sizes permit more efficient warehousing, delivery and job application.

LONG LIFE—The combination of these "natural" Fiberglas advantages assures top performance and long life. Fiberglas Building Insulation lasts!

3 INDUSTRY LEADERS now distribute Fiberglas Building Insulation!

UNITED STATES GYPSUM COMPANY
USG Red Top Insulating Wool

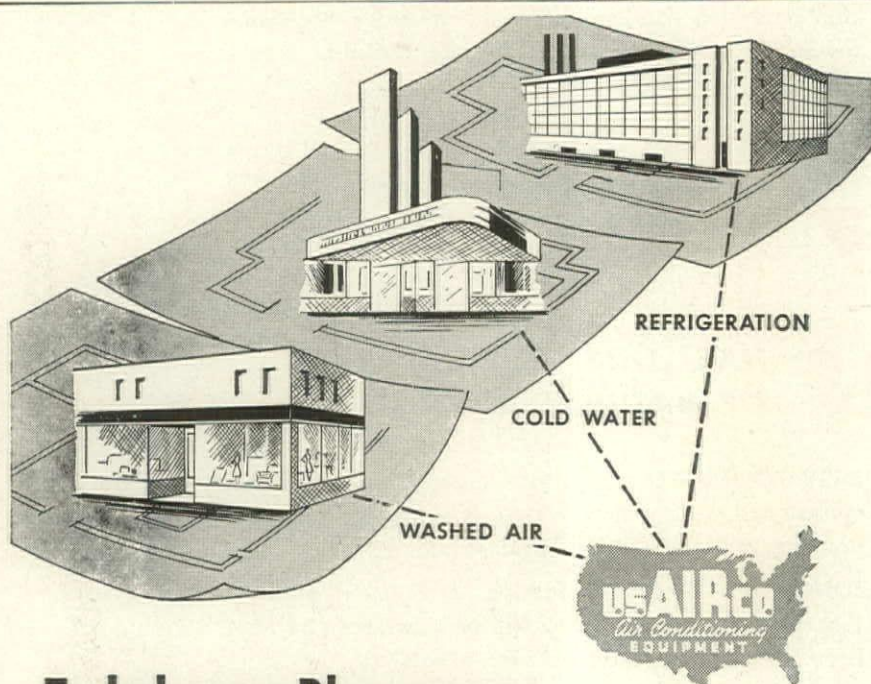
ARMSTRONG CORK COMPANY
Armstrong's Insulating Wool

FLINTKOTE COMPANY
Flintkote Insulating Wool

These national organizations now distribute Fiberglas. You can specify Fiberglas in full confidence that you are recommending an insulation that is "just naturally better". Additional information is available from them, their dealers or write Owens-Corning Fiberglas Corporation, 1830 Nicholas Bldg., Toledo 1, Ohio.

BUILDING INSULATION

removal. Washing water may be varied from 130° for fast color cottons to 100° for woollens by an adjustable thermostat. Rinse water is automatically maintained at 100°. A unique water balancing action which automatically compensates for any out of balance load in the cleansing basket makes the Apex Automatic free of vibration. Resting on hydraulic feet, efficient operation is obtained without bolting to the floor. Should the lid be opened while the machine is in operation, an automatic cut-off safety switch on the lid cover stops all action. When it is again closed, the cycle continues as though not interrupted. The unit, functionally styled, is 25½ in. square and of standard kitchen cabinet height. It is finished in white enamel and is equipped with interior lighting for viewing the clothes through the transparent cover. *Manufacturer: Apex Electrical Manufacturing Co., 1070 E. 152nd St., Cleveland 10, Ohio.*



To help you Plan every... AIR CONDITIONING JOB

●As in the past, engineers, architects and contractors today look to usAIRco for the right equipment for each job.

Whether it be an economical washed-air cooling system, a cold water unit for deep well operation, or a refrigeration system for complete air cooling and dehumidification, there's a usAIRco system engineered for your job. Year 'round air conditioning is also available, cooling in the summer and heating in the winter.

usAIRco systems are designed for "packaged" installations, central station systems, or remote type units. Auxiliary equipment such as unit heaters, heat

coils, centrifugal blowers, fans, evaporative condensers provide you with complete system responsibility. It will pay you to get in touch with your usAIRco representative . . . take advantage of specialized experience and engineering leadership.



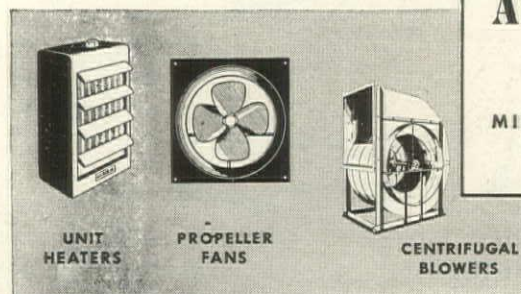
Factory Representatives
in Principal Cities

**United States
Air Conditioning
Corporation**

MINNEAPOLIS 14, MINNESOTA



Makers of the most complete line
of air handling equipment



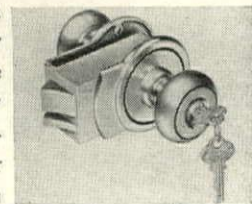
ELECTRIC RANGES embody new developments in surface heating units.

Fast heating Corox surface units, which are designed for efficiency, long life and maximum economy, are features of Westinghouse's 1946 electric ranges. They have five heat positions to provide the right heat for each type of cooking and continuous correct heat is maintained for each switch setting. The unit is easily removable for cleaning and locks securely into the surface recess when replaced. A chromium trim ring on the surface unit, fitting flush with the surface, facilitates cleaning and improves the range's appearance. Tel-A-Glance switch knobs indicate only the heat setting to which the control has been set. Other settings are covered by the switch knob. The oven is operated for the type of cooking to be done by a single turn of the control which starts the oven, and sets the temperature for baking, roasting or broiling.

Manufacturer: Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa.

UNIT LOCK features easy installation.

The new one-piece Corbin Unit Lock slips into a prepared slot 1¾ in. by 3¼ in. in the edge of the door, and is held by two bolts. Mortising for the lock is eliminated and adjustments to the mechanism by the carpenter is unnecessary. The only labor involved in the lock's installation is two saw cuts to make the necessary slot, tightening the bolts, and the installation of the strike in the usual manner. Other features of the Corbin Unit Lock include a pin-tumbler cylinder in the outside knob of the entrance door which gives security and at the same time offers convenient masterkeying with side, rear and garage doors. An auxiliary turn button on the entrance door provides

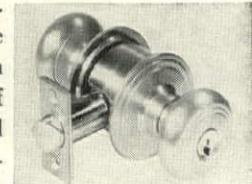


dead lock security. Bedroom and bathroom sets incorporate a "Privacy" lock which is operated by a button in the center of the inside knob. When pushed in, this locks the door against outside operation, releases with the turn of the inside knob. Accidental locking while the door is open is made impossible by an automatic release which functions when the latch-bolt contacts the strike in closing. For emergencies, such as sudden illness, or a child locking itself in, a special release is provided so the door may be opened from the outside. Latchbolts are of the pivoted swinging type to reduce friction and permit quiet closing. The Corbin Unit Lock, made of corrosion proof bronze metal throughout, will be available in several designs.

Manufacturer: P. & F. Corbin, New Britain, Conn.

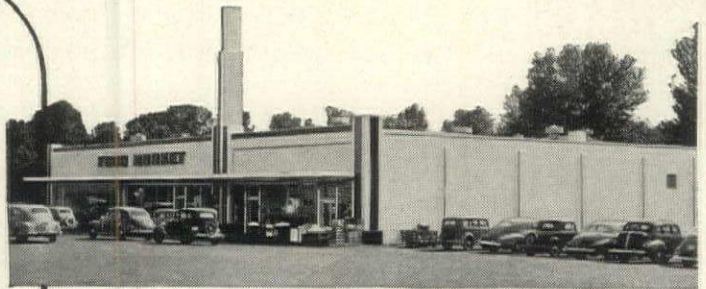
ALUMINUM LOCKS feature tarnishproof finish.

A new line of Luster Sealed Aluminum locks that will resist staining, tarnishing, and the corrosion effects of weathering, are among the first postwar adaptations of aluminum to builders' hardware. They retain indefinitely a distinctive satin silver appearance that harmonizes with aluminum trim and accessories in modern buildings. According to the manufacturer, the Schlage Luster Sealed process, an adaptation of the Aluminum Co. of America's Alumilite process, will open new fields for architectural application of aluminum. To achieve this corundum-hard finish, aluminum (Continued on page 208)



Why a prominent property-owner writes an ad for KIMSUL* Insulation

Read this letter of appreciation to an insulation contractor from Mr. J. A. Zehntbauer, President of Jantzen Knitting Mills:



KIMSUL-insulated food store at Jantzen Beach, Portland, referred to in Mr. Zehntbauer's letter below.



Home of Mr. J. A. Zehntbauer—maker of famous Jantzen Swim Suits—at 3627 N. E. Couch St., Portland, Oregon, where KIMSUL Insulation provides so much comfort.



Mr. Steward Griffith and Mr. George Barbeau, contractors to whom Mr. Zehntbauer wrote his letter, inspect one of their typical snug KIMSUL installations.

Specifying KIMSUL pays big dividends in home owner satisfaction—and for definite reasons. KIMSUL is a top-quality insulation. It has a high degree of thermal efficiency—"k" factor 0.27. And its scientifically superior construction—many layers stitched together to form a flexible, tough-covered blanket—assures continuous, uniform insulation coverage. For full technical data on KIMSUL, see Sweet's 1946 Architectural and Builders' Catalogs, or write Kimberly-Clark Corporation, Neenah, Wisconsin.

Jantzen

KNITTING MILLS
Portland, Oregon USA • Sales offices throughout the world

Steward Griffith Company
2615 N. Gammans Street
Portland, Oregon

November 5, 1945

Well, Mr. Griffith:

Everything you said KIMSUL Insulation would do for my house has been fully realized. We save fuel and are more comfortable, both in summer and winter. It is a pleasure to tell you about this and to recommend KIMSUL as an insulation material and also to recommend your workmanship, which is most excellent.

The KIMSUL which you installed in the store building at Jantzen Beach is another good job and is meeting expectations in every respect.

We believe insulation pays for itself and gives added comfort. We believe KIMSUL is unexcelled for insulation and your workmanship tops, and it will be a pleasure to recommend you and your product to anyone needing insulation.

Sincerely,

J. A. Zehntbauer

President
JANTZEN KNITTING MILLS

JAZ:pr

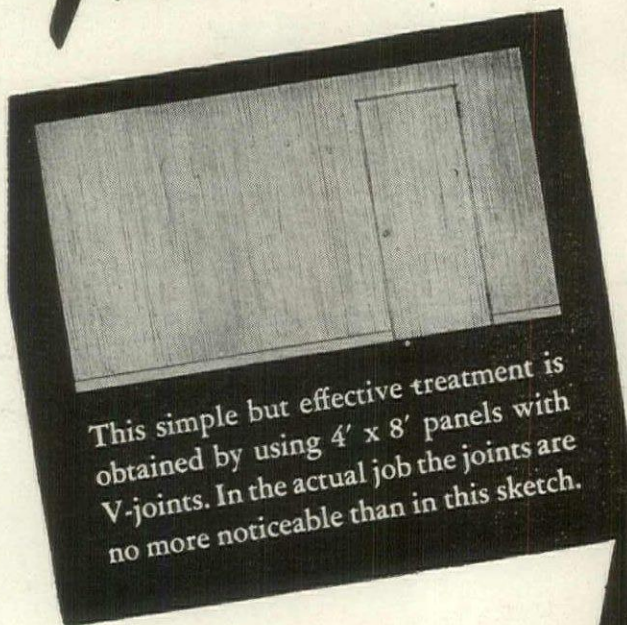
KIMSUL
INSULATION
REG. U.S. & CAN. PAT. OFF.

A PRODUCT OF
Kimberly-Clark
RESEARCH

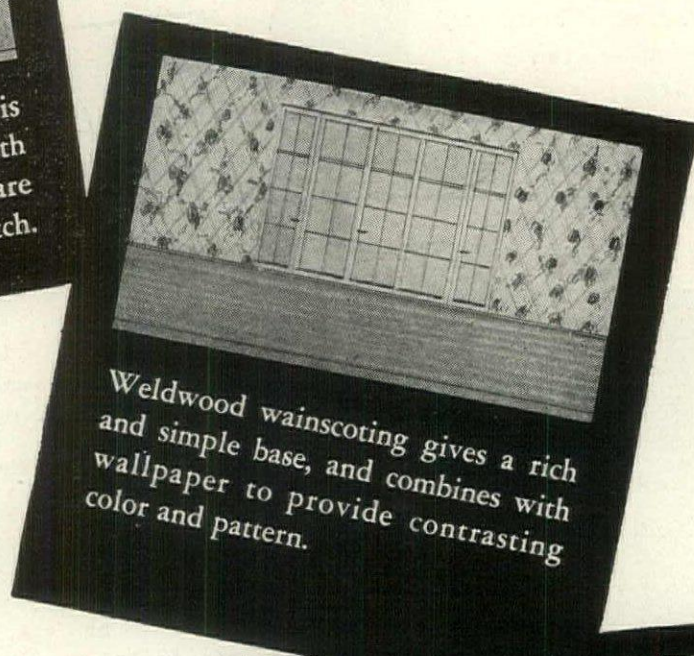
*KIMSUL (trade-mark) means Kimberly-Clark Insulation

Three ways to use Weldwood

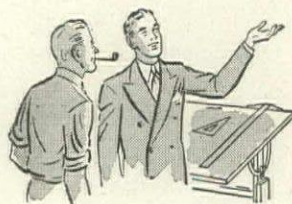
IN MODERATE PRICED INTERIORS



This simple but effective treatment is obtained by using 4' x 8' panels with V-joints. In the actual job the joints are no more noticeable than in this sketch.



Weldwood wainscoting gives a rich and simple base, and combines with wallpaper to provide contrasting color and pattern.



The warm, friendly beauty of Weldwood interiors can be drawn into the plans of houses in practically any price class.

In addition to its purely decorative features, Weldwood Plywood has many other advantages, including great structural strength . . . economy . . . and speed of erection.

The three illustrations shown are typical of scores in a new Weldwood installation manual. This booklet shows in detail the many ways you can use this modern plywood to advantage in both remodeling and new construction.

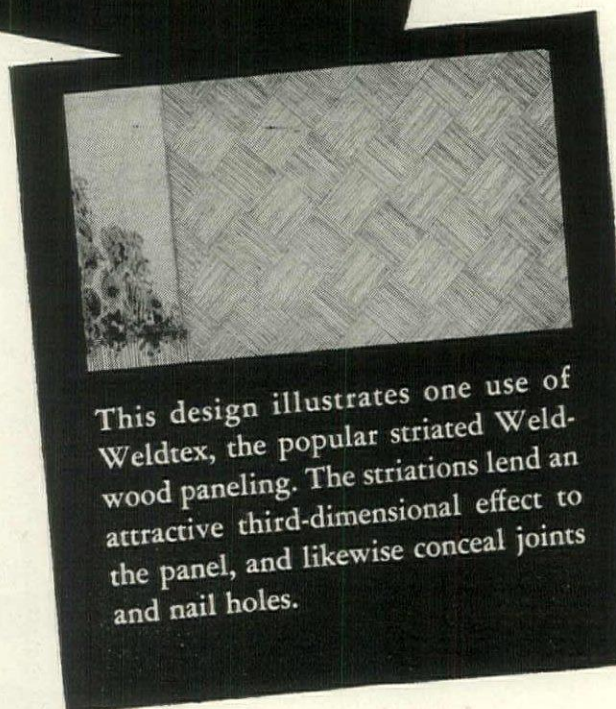
It also gives full information on how joining can be done without wastage or unsightly cracks . . . how playrooms, dens, living rooms and bedrooms can gain the friendly warmth that only genuine wood offers.

Send for your copy today.

WELDWOOD Plywood

Weldwood Plywood and Mengel Flush Doors are products of
UNITED STATES PLYWOOD CORPORATION New York 18, N. Y.
THE MENGEL COMPANY, INCORPORATED Louisville 1, Ky.

Distributing units in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle. Also U.S.-Mengel Plywoods, Inc. units in Atlanta, Houston, Jacksonville, Louisville, New Orleans. In Canada: United States Plywood of Canada, Limited, Toronto. Send inquiries to nearest point.



This design illustrates one use of Weldtex, the popular striated Weldwood paneling. The striations lend an attractive third-dimensional effect to the panel, and likewise conceal joints and nail holes.

Waterproof Weldwood for exterior use is bonded with phenol formaldehyde synthetic resin. Other types of water-resistant Weldwood for interior applications are manufactured with extended urea resins and other approved bonding agents.





Warm, draftless floors.



Draperies and walls stay clean much longer.

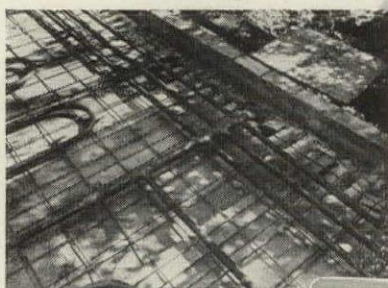


FOR COMFORT AND ECONOMY NEVER KNOWN BEFORE

Hydro-Flo Radiant Panel Heating



Typical floor installation of radiant pipe coils, just before pouring concrete.



3-pipe perimeter supply main with connections to feed inner coils. This close spacing at building perimeter puts heat where needed most.



Send today for this free booklet on B&G Hydro-Flo Radiant Panel Heat.

Designers and builders of tomorrow's homes should get the facts at once on B&G Hydro-Flo Heat! This great advance in living comfort has demonstrated a tremendous appeal—offering utterly new features which sell both men and women on the spot.

B&G Hydro-Flo Radiant Panel Heat does away with radiators and grilles—there is not the slightest evidence of the heating system in any room. A constant flow of modulated warmth is spread evenly throughout the house by radiant pipe coils in the floor or ceiling . . . ending drafts . . . keeping floors snugly warm. The air itself feels fresher—not dry and stuffy.

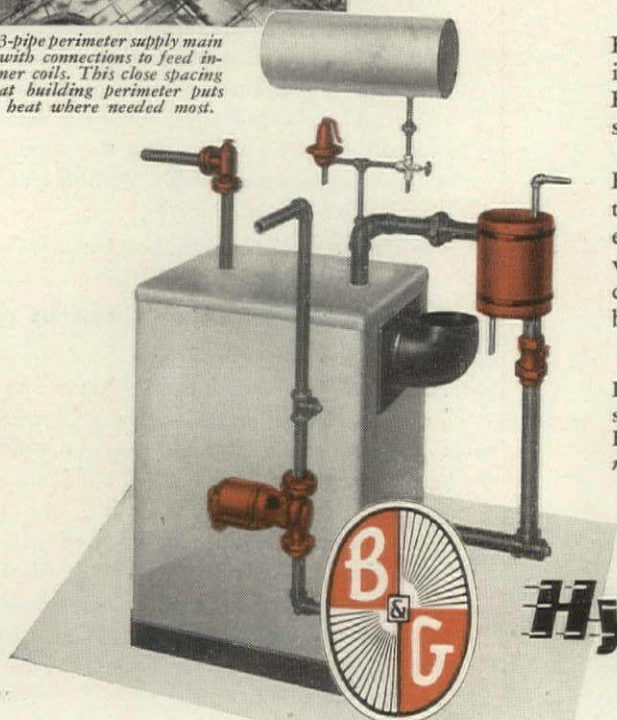
With all this new comfort, heating cost is reduced, for Radiant Panel Heating is noted for fuel economy. Cleaning and decorating expense, too, is smaller, because Radiant Panels do not create dust-carrying air currents to streak the walls and ceilings.

B&G Hydro-Flo Radiant Panel Heat is not restricted to residential applications. Its comfort, economy and space-saving features warrant investigation by commercial, institutional and industrial builders.



Year 'round hot water—a plus feature

In the modern home there is no substitute for a bountiful supply of ever-ready hot water for kitchen, laundry and bath. B&G Hydro-Flo Heat provides it in ample quantities—every month of the year—at a cost so low it can be used unsparingly.



BELL & GOSSETT CO.

Dept. L-10, Morton Grove, Ill.

Hydro-Flo HEAT

FORCED HOT WATER HEATING FOR RADIATOR, CONVECTOR, UNIT HEATER, BASEBOARD AND RADIANT PANEL SYSTEMS

for lock trim is treated anodically in a suitable electrolyte to secure a dense, adherent coating of aluminum oxide. This process differs from electroplating in that oxygen is deposited on the article to be treated, instead of metal. The oxygen combines with the aluminum to form aluminum oxide, integral with the surface of the metal.

Manufacturer: Schlage Lock Co., 2201 Bayshore Blvd., San Francisco, Calif.

MEDICINE CABINET has built-in compartments.

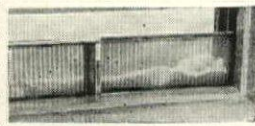
The Parkway medicine cabinet resembles a conventional cabinet with the addition of a pair of chrome-plated, swinging doors below the mirror. The backs of these doors are equipped with built-in compartments for everyday needs such as shaving equipment or cosmetics. When they are open, the

bottom shelf of the cabinet becomes a utility shelf for the various items in use. A Safe-T compartment in the upper left hand corner, opening by a release button on the top of the cabinet, keeps poison drugs out of the reach of children. Other features of the Parkway include an inside tooth brush rack, razor blade disposal slot, adjustable glass shelves, full length piano hinges and a polished plate mirror. The cabinet is steel, zinc coated with a baked white enamel finish.

Manufacturer: Faries Manufacturing Co., Decatur, Ill.

ADJUSTABLE WINDOW VENTILATOR utilizing plastic baffles, is stormproof.

Air-In Ventilator mounts vertically, reinforced-plastic baffles fixed over a layer of copper screening, in a lightweight, adjustable, aluminum frame. Virtually stormproof, it provides protection against drafts, dust, snow and rain, admitting at the same time maximum quantities of air and daylight. The baffles are made of Vim-lite, a lightweight, weatherproof, wire reinforced, plastic glazing material. The aluminum frame is adjustable to window sizes up to 36 in., the adjustment channels also acting to catch dust. This is easily removed by wiping with a cloth or running water through the dust trough. *Manufacturer:* Salmonson & Co., 1107 Broadway, New York, N. Y.



SOLID ALUMINUM FURNITURE is light and durable.

This new line of garden, lawn, patio and swimming pool furniture is made of highly polished, 3/4 in. diameter, solid aluminum alloy rod stock, which is acid, corrosion and water resistant. The rods are fastened together with countersunk screws to form a rigid, lightweight, durable fabrication. Springs are hooked into flanges extruded as an integral part of the seat or back frame, thus eliminating drilling through the body of the metal. Reversible cushions are filled with high quality staple cotton, and upholstery is a high-grade, water repellent, vat dyed duck which is available in California blue, gold, seafoam green and terra cotta. The line comprises eight pieces—a deluxe chaise lounge, arm chair, loafers' lounge, coffee table, cocktail table, folding director's chair, folding assistant director's chair, and a tray stand. Illustrated is the loafers' lounge which weighs 28 lbs., and the deluxe chaise lounge which weighs 48 lbs.



Manufacturer: Deeco, Inc., Los Angeles, Calif.

TIME SWITCH automatically controls radio, heater and other electrical appliances.

The Select-O-Switch automatically turns appliances on or off for a pre-selected interval over any 12 hour period. It makes possible automatic control of the radio, coffee maker, portable heater, roaster or any electrical appliance or combination of appliances, rated at 1,650 w. or less. The clock consists of 48 selection keys placed around an ivory dial, each key controlling a 15 minute operating interval of the 12 hour period. To operate, the desired key is pulled out, the clock is plugged into a convenience outlet and the appliance to be controlled is plugged into an outlet in the back of the clock. The appliance is turned on, although it

(Continued on page 212)

Shake Hands WITH THIS UNSEEN GUARDIAN



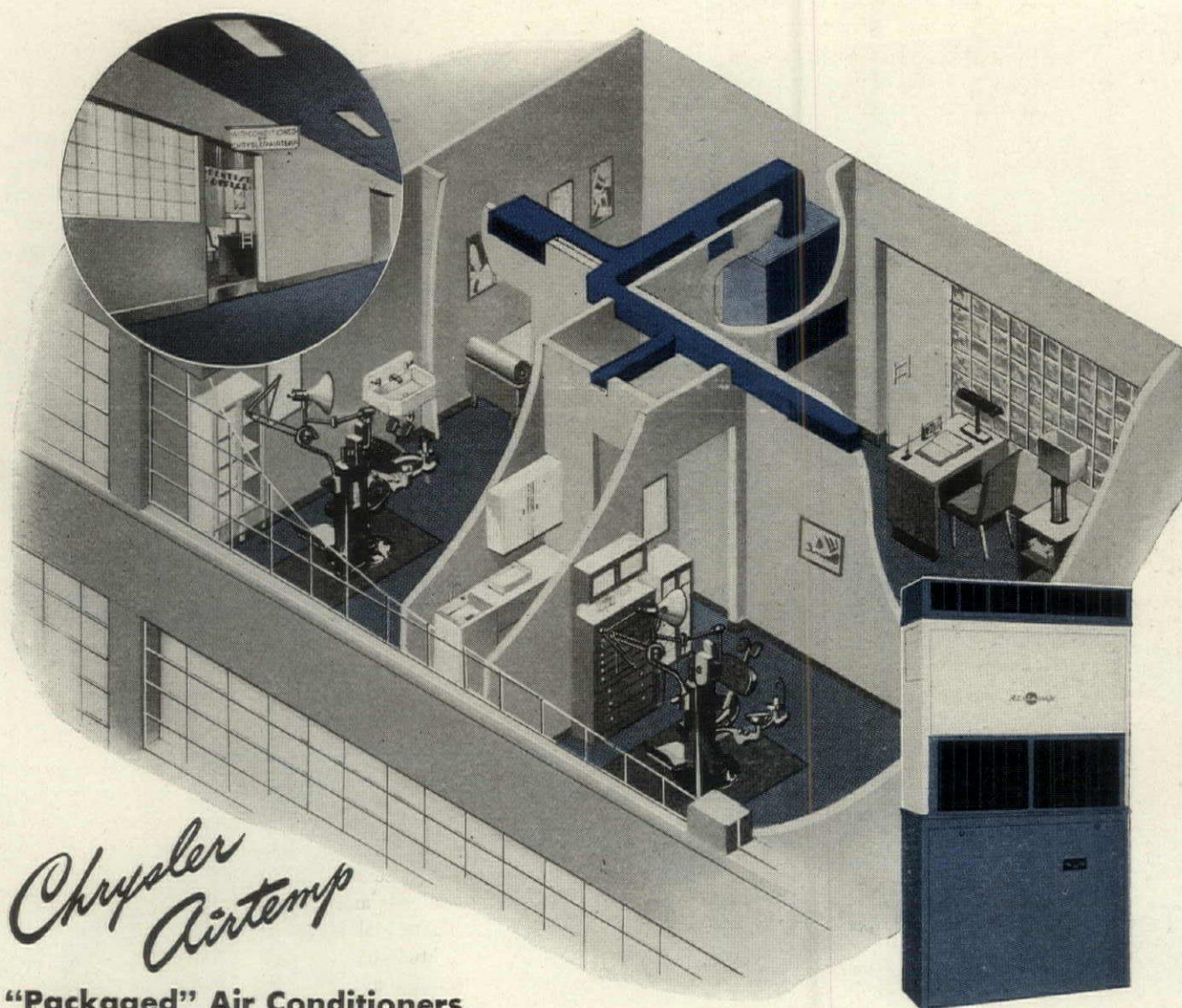
SISKRAFT BUILDING PAPER

GUARDIAN of the walls of a house . . . protector against moisture, dust, dirt and driving winds . . . *good building paper* is as important to house construction as air brakes to a speeding locomotive. Just because this "guardian" can't be seen doesn't mean it is not one of the most important materials in home construction. It's too important a job to entrust to any but the *best building paper* . . . Siskraft* . . . especially when the cost is so little more.

The SISKRAFT Co., 205 West Wacker Drive, Chicago 6, Illinois
New York • San Francisco • London • Sydney

ONLY **16¢** *Siskraft Building Paper . . . applied over sheathing on a \$7,000 house, costs only a few dollars more than ordinary building paper . . . only 16¢ a year more for the estimated life of a house.

MORE PER YEAR FOR THE LIFE OF THE HOME



"Packaged" Air Conditioners

Low-Cost Controlled "Weather" for Dentists and Doctors

Probably in no other place is air conditioning more essential than in dentists' and doctors' offices. It has become so necessary that progressive architects today are including it in all plans and specifications for the dental and medical professions.

The ideal equipment is the "Packaged" Air Conditioner pioneered by Chrysler Airtemp. First of all, operating and service costs are amazingly low. These "Packaged" Air Conditioners are rugged, engineered for long life and dependability . . . they contain the famous Chrysler Airtemp sealed radial compressor.

These compact, self-contained air conditioners are great space savers and can be easily and quickly installed, singly or in multiple. They supply an abundance of clean, cool, properly de-humidified and gently circulated air. A heating coil can be added for year 'round air conditioning. It can be connected to existing hot water, steam or vapor systems, or to a quick-heating, automatically-fired Chrysler Airtemp Boiler.

For details about controlled "Weather", write Airtemp Division of Chrysler Corporation, Dayton 1, Ohio. In Canada: Therm-O-Rite Products, Ltd., Toronto.

Invest in Your Future—Buy U. S. Savings Bonds! "REMEMBER THURSDAY NIGHT! The music of Andre Kostelanetz and the musical world's most popular stars—Thursdays, CBS, 9:00 P.M., E.S.T."

CHRYSLER  **AIRTEMP**
HEATING • COOLING • REFRIGERATION



Where shall we eat?

That's the question you're commissioned to answer!

The restaurant owner is well aware of the part his storefront plays in answering the frequent question of where to eat.

He calls on his architect—to put appeal into his restaurant design.

It's not just a matter of today's competition. He wants a front that will be up-to-date for years to come.

The Visual Front is modern in every sense of the word. It merchandises the interior by providing a sidewalk view of the color and charm of the decoration. It permits a view of people enjoying themselves, urges others to *come in*. It's always "open house" with a Visual Front.

A Visual Front is up-to-date in its use of materials, too. It's easy to keep new-looking, for glass is quick to clean, doesn't need refinishing. To save fuel, and to reduce the possibility of condensation on the glass, use *Thermopane**, the transparent insulating unit. For eye-catching color, use *Vitrolite** structural glass on the bulkhead and facade. And for transparent doors, use *Tuf-flex**, the tempered glass of unusual strength.



Before you design your next front—for any type store—write for our free Visual Front book. Libbey-Owens-Ford Glass Company, 3536 Nicholas Building, Toledo 3, Ohio.

*Reg. U.S. Pat. Off.



LIBBEY · OWENS · FORD
a Great Name in **GLASS**

Savings and Loan Home Financing

First IN HOME LOANS TO VETERANS

Eighty-five per cent of all home loans guaranteed by the Veteran's Administration have been made by Savings, Building and Loan Associations and Co-operative Banks. In addition, thousands of homes have been financed for veterans with regular Savings and Loan amortized mortgages.

Why is this fact important to you? Today, veterans are your most important market. And Savings and Loan specialists in home financing, *as local businessmen, feel they have a special obligation to help veterans with their home financing problems.*

But still more important! Leadership in helping veterans with their home financing problems is your assurance that these institutions will devote the time, energy and patience necessary to meet the exacting requirements of your buyers.

In addition, you get quick, friendly service; maximum loans; the most favorable terms; and personal consideration.

For home loans, go FIRST to your Savings, Building and Loan Association or Co-operative Bank.



LEADERS IN HOME FINANCING FROM COAST TO COAST

YOUR SAVINGS & LOAN ASSOCIATION OR CO-OPERATIVE BANK

MEMBER OF THE UNITED STATES SAVINGS AND LOAN LEAGUE

does not start operation until the clock permits. The timer automatically turns on the connected appliance for the indicated 15 minute interval. At the end of the operating period, the power is automatically turned off unless the next key in a clockwise direction is also pulled out. All keys automatically return to off-position after use. The clock, enclosed in a mottled chestnut plastic case, measures approximately 6½ in. wide, 5 in. high and 3 in. deep. It is self-starting, has a sealed-in-oil mechanism, operates on 60 cycle, 110-125 v. A.C. To be available in April, it will sell for \$9.95.

Manufacturer: General Electric Co., 1285 Boston Ave., Bridgeport 2, Conn.

AIR HOSE is strong and supple.

Wartime developments in rubber hose processing have been applied to the new peacetime Emerald Cord Air Hose. Manu-

factured under an exclusive method of bonding cover, carcass and tube together with greater adhesion-strength than previously obtainable, the result is a lighter, more rugged, flexible longer life hose with a thinner wall gauge. Another wartime development, super-strong cabled cotton yarn, steps up burst strengths, cuts down bulk and is laid at an angle to give greater strength and resistance to shock blows. Emerald Cord Air Hose is also oil-resistant, non-porous, seamless, not affected by lubricants. Manufactured in light, medium and heavy duty types, it provides a wide range of adaptability to various jobs.

Manufacturer: Goodyear Tire & Rubber Co., Akron, Ohio.

COMBINATION INSTRUMENT performs the duties of eight

This handy, convenient, plastic letter weigher and combination ruler offers many various uses for the architect, draftsman, carpenter, engineer or handy man around the house. It may be used as a letter weigher, ruler, magnifying glass, French curve, compass, protractor, level or mitre. Boxed as a gift, is priced at \$2.00.

Manufacturer: Parva Products Co., West Haven 16, Conn.

MAGNESIUM PORTABLE SAW is versatile and easily operated.

This magnesium portable 12 in. radial saw, weighing only 200 lbs. complete with frame and 1½ h.p. electric motor, has a 3 in. by 16 in. crosscut and 20½ in. wide ripping capacity. Its manufacturers state that its simpler operation and all-purpose versatility increases man hour output at the construction site, and that it will handle the different kinds of work the heavy radial saws perform. It embodies the principal features of the stationary Monarch Uni-Point radial saws, including the Uni-Point cutting principle. This permits the entire column of the machine to tilt vertically and to pivot to right or left through a horizontal arc so that regardless of how the machine is adjusted for a bevel, miter or compound miter crosscut angle, the saw blade always travels through the guide fence and cuts the lumber at the same point on the table. Another feature of the new saw is its heat-treated, hardened-steel safety arm which insures safety, speed and accuracy. When making a cut, the saw assembly and arm move forward on steel ball bearing self-aligning rollers. Vision is unobstructed while cutting and at the completion of each cut, the assembly moves back out of the way leaving the table clear. Five simple adjustments make possible maintenance of permanent accuracy throughout the machine without the need for expensive replacement of parts. Other new speed up and safety features include a specially designed saw guard with a telescoping undercarriage that keeps the teeth covered all the time, and a kick back preventer for ripping, that is positive and cannot slip. Corners and edges of the saw are rounded, projections are eliminated, and locking levers are within easy reach from the front of the machine. Special attachments for notching, routing, shaping, dadoing, sanding, boring and many other jobs are easily installed and operated with speed and precision.

Manufacturer: American Saw Mill Machinery Co., Hackettstown, N. J.

(Technical Literature, page 216)

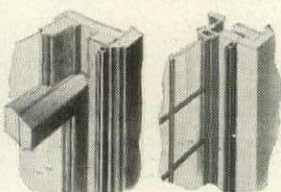
NOW AVAILABLE

the original inside screens
that roll up and down
like a window shade

ROLSCREENS in a house are a "trademark" of good planning. They are a year 'round advertisement for the architect who specifies them. They help to keep a house up-to-date and protect its salability over the years. A big part of your business is selling CONVENIENCE. ROLSSCREENS help you to do it like no other window appurtenance.

EASY TO INSTALL

ON ALL TYPES OLD AND NEW WINDOWS



Double-Hung Application Casement Application

No special mill work, no special fitting or cutting required. Installation made to either of the above windows quickly and easily . . . thanks to new type guide channels.

GOOD DELIVERIES — ROLSSCREEN orders are being filled and shipped with reasonable promptness. Materials are back to prewar quality standards. On your next new or remodeling job, include ROLSSCREENS. Write for interesting FREE literature and planning information — or see ROLSSCREEN Data in Sweet's. Address Dept. 736

CONVENIENCE of ROLSSCREENS 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.

10 YEAR GUARANTEE

This is your assurance that your clients will be satisfied and enthusiastic about ROLSSCREENS over the years.



Pella ROLSSCREENS

ROLSSCREEN COMPANY • PELLA, IOWA

Made by Makers of Famous Pella Venetian Blinds and Casement Windows

HAGERTY



MARKUS AND NOCKA DESIGN

The Story of the Three Chairs

Once upon a time there were Three CHAIRS. Extraordinarily enough the chairs belonged to Three Bears; a little chair for the Little, Small, Wee Bear; and a middle-sized chair for the Middle Bear; and a great chair for the Great, Huge Bear. Unfortunately all three chairs were very stiff and straight—chairs that, even in *those* days, only a Bear could bear.

Nevertheless, everyone has had to put up with chairs of pretty much the same sort from that day to this, chairs which have produced a race of wrigglers and of wigglers given to doodling on hardwood surfaces, particularly in school. A lot of people came out of these chairs

mis-shapen and mal-formed for life—and *some* even avoided going to church, through remembered terrors of hard seating, and sought refuge in the movies where the seats were found to be much more comfortable.

Little people were even known to “play hookey” from school because it was so extremely difficult to make both ends meet the rugged demands of higher learning!

So that our chair story can have a happy ending Hagerty has now produced in three sizes, a Comfortable, Modern, Laminated, Flexible, Adjustable, PLYWOOD Chair. Designed primarily for school use, the Three Chairs adjust

themselves to seat, correctly and comfortably, all sorts and sizes of people—little people, medium people, big people; people with long trunks and short legs, medium trunks and long legs, short trunks and medium legs—each and every kind or variation of people. Since Hagerty chairs accommodate motion, they end the monotonous strain of inflexible seating, they discourage restlessness and wiggling, and promote universal good posture, repose and concentration.

Moral: You will want Hagerty chairs in new projects and school modernization. *Send today for information about models and prices.*

Hagerty Design Pioneers and Innovators Cohasset, Massachusetts



TIME Subscriber 10-50-ZHR-402-174, A. W. Rossiter, Jr., owns this summer house on the south shore of Long Island. It was selected by editors of Architectural Forum as one of the recently constructed homes most likely to influence new trends.

Architect: Moore & Hutchins
Photo: Samuel H. Gottscho

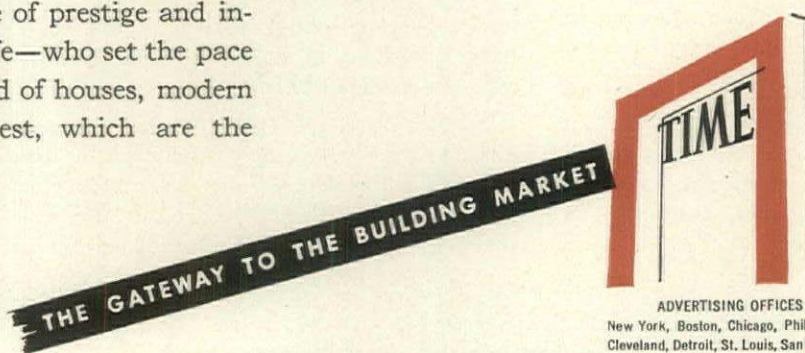
Presenting

The Show-Room Homes of the Nation

YOUR BEST PROSPECTS first see your building products in the new homes of families they respect and like to copy—in new homes such as this one owned by TIME-subscriber Rossiter.

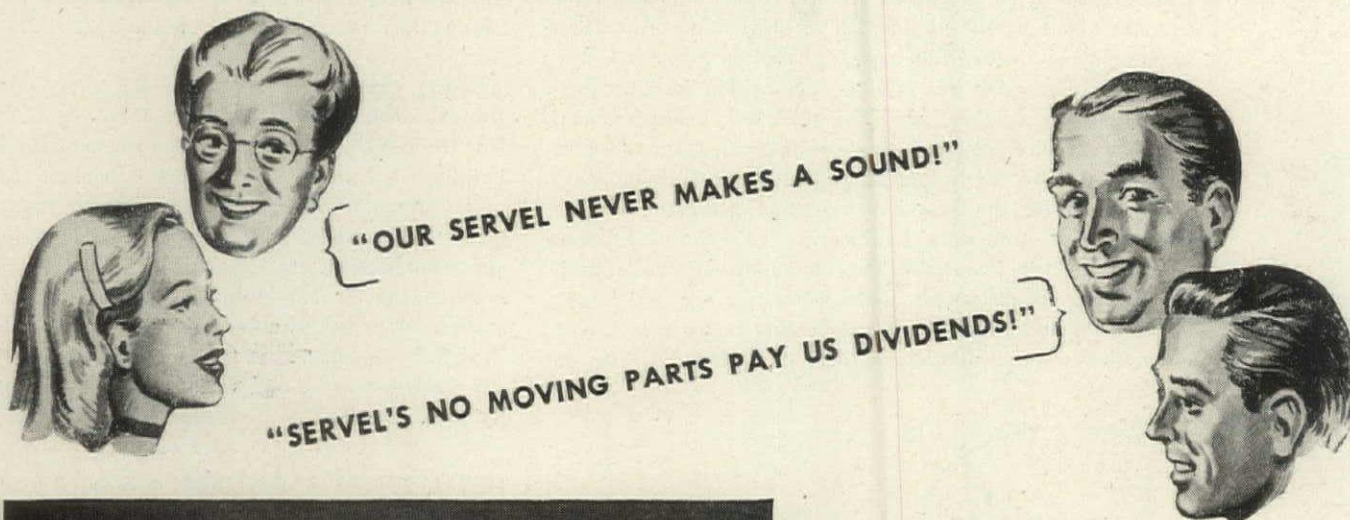
Of course, not all TIME readers have homes like Mr. Rossiter's. But by and large the 1,300,000 families who read TIME are people of prestige and influence in business and social life—who set the pace in the art of living—in the kind of houses, modern or traditional, costly or modest, which are the show-room homes of America.

Surveys of test-groups reveal that more than 300,000 TIME-families definitely plan to buy or build when conditions allow them to. And in the homes of families like these, your products will be seen by millions of other families who follow their lead.



ADVERTISING OFFICES:
New York, Boston, Chicago, Philadelphia,
Cleveland, Detroit, St. Louis, San Francisco

Neighbors are telling neighbors...



THAT'S WHY THOUSANDS NOW DEMAND SERVEL GAS REFRIGERATORS

Thousands of families who put up with noisy, troublesome refrigerators during the war have made up their minds. When they get a new refrigerator, they want a Servel. For they've learned from friends and neighbors, the Gas Refrigerator never gets noisy . . . gives dependable, low-cost service year in and year out.

Gas Refrigeration's unmatched performance is the result of Servel's simpler method of operation. There are no moving parts in its freezing system. A tiny gas flame circulates the refrigerant that produces constant, steady cold and sparkling cubes of ice. There's no machinery to cause noise, wear or need costly repairs. And Servel's low operating cost stays low. These unique advantages are good reasons why you can recommend Servel with confidence.

Important: Be sure to provide gas outlets for Servels in your current designs. For installation data and complete information, consult Sweet's Catalog or write to Servel, Inc., Evansville 20, Indiana.

STAYS SILENT
LASTS LONGER

Servel GAS REFRIGERATOR

INSULATION. Economics of Insulation, Bulletin No. 23, by Frank B. Rowley and Richard C. Jordan. University of Minnesota, Institute of Technology, Minneapolis 14, Minn. 70 pp. 6 in. by 9 in. \$.40 cents.

This discussion on the justification of higher building costs brought about by the application of insulation with certain expectancy of lowered fuel costs, is based on a research program whose purpose was to show how, within certain calculated limits of weather, insulation thickness, heating plants, etc., in a specified region, the costs of insulating a house would be amortized by yearly fuel savings. It makes recommendations based on the extensive research conducted by the University of Minnesota Engineering Experiment Station. The many factors involved in the calculations of a dollar-and-cents saving are discussed. These factors include heat losses, degree days and the estimation of heating requirements, cost of application of insulation, savings through application of

insulation, annuity value of yearly fuel savings, amortization of insulation cost, savings through reduced heating plant costs, effect of cold walls on comfort and insulation economics, and summary of procedure for economic analysis of insulation. Many tables and charts illustrate the text.

SCHOOL CONSTRUCTION. A Brief for the Unit System of Designing Schools, 20 pp., 8½ in. by 11 in.

The Holmes Unit System of design and construction for school buildings is briefly described in this booklet. In this system, an H-column, which is the spinal column of the system, carries the floor and roof loads, forms exhaust flues for ventilation, space for heating, etc. Thus the 10 ft., 11 ft., or 12 ft. units between the columns form rooms when partitioned off or sections provided with heat, ventilation and electric lights. Text fully explains what the unit system does, what the construction system is, and various construction and economic features. The Warren S. Holmes Co., Lansing, Mich.

METAL STAIRS & RAILINGS. Preprint of Stairs-Railings of the Architectural Metal Handbook, 32 pp., 8½ in. by 10½ in.

Designed to help architects prepare plans and specifications, this stairs-railings section of the *Architectural Metal Handbook* offers descriptions and large scale details of various types of stairs produced by the architectural metal industry—general purpose, service, exit, industrial, apartment, residence, circular, entrance, and spiral type stairs. It also includes details of stair platform construction, newels, string sections, treads and risers, etc. The section on railings lists the advantages of metal railings, and gives details of ornamental, tube, pipe and bridge railings. Large size reproductions of the handbook pages are also available for use on the drawing board. National Association of Ornamental Metal Manufacturers, Dept. F, 209 Cedar Ave., Takoma Park, Washington 12, D. C.

ORNAMENTAL METAL. Julius Blum & Co., Inc., 116 pp., 8½ in. by 11 in.

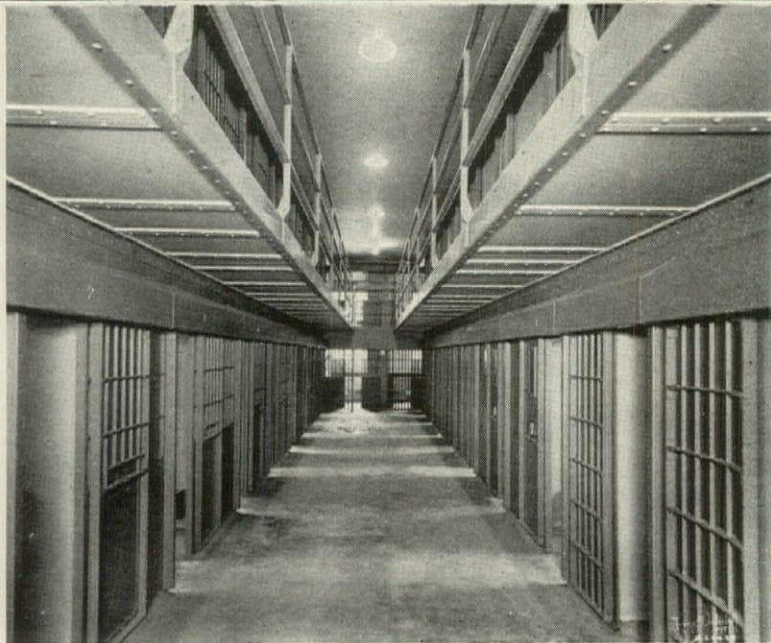
A line of products applicable to the requirements of the ornamental and industrial metal working trades is presented in this catalog. It includes details, sizes, weights, etc. on a collection of ornamental metal products used for railings, treillage, mouldings, saddles, ornaments and miscellaneous uses. Contents, divided into seven sections, includes—many shapes and items in aluminum, bronze or steel for railing construction; ornamental double faced castings for grilles, balconies, etc.; number of molding designs for numerous applications; rolled steel, architectural bronze, and aluminum shapes for door sills and elevator saddles; cold drawn and hot rolled tubing and shapes; ornaments for fabricators of furniture, lighting fixtures, etc. and a miscellaneous section. Julius Blum & Co., Inc., 532 West 22nd St., New York.

CHIMNEYS and FIREPLACES. Chimneys and Fireplaces, Circular Series F-7.0, Small Homes Council, Mumford House, University of Illinois, Urbana, Ill. 8 pp. 8½ in. by 11 in.

This informative booklet gives valuable information on safe, efficient fireplace and chimney construction. Correct methods of chimney construction are illustrated with cut-away diagrams, and include a discussion of shapes, sizes and typical flue lining applications. Other chimney features covered include several types of flue construction, chimney tops, spark arrestors, uses and construction of lightweight chimneys, etc. Advice on how to prevent fires in chimneys is also given. The section devoted to fireplaces lists the essential duties of the various fireplace parts, and discusses flue sizes, built-in fireplace circulators, new fireplace developments, location of the fireplace and necessary accessories. (Continued on page 218)

Stewart

JAIL AND PRISON EQUIPMENT

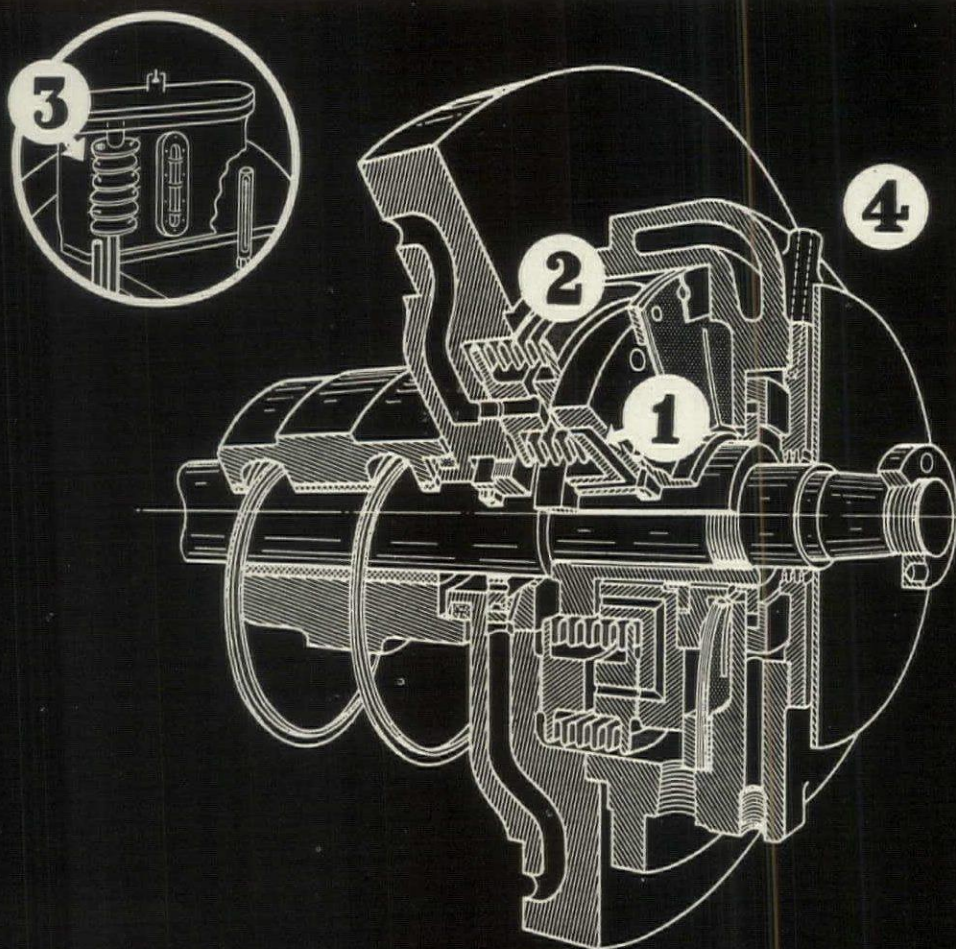


Our engineers will gladly give architects, builders and penal authorities the benefit of many years' experience in the jail building field. Layouts, estimates and complete information on grating and plate cells, doors, lock and locking devices, bunks, tables, seats and every accessory for new construction or the remodeling of old buildings. Stewart Non-Climbable Chain Link Wire Fence is ideal for jail yards and exercise areas. Full details sent on request.

THE STEWART IRON WORKS COMPANY,
INCORPORATED

1365 Stewart Block - Cincinnati 1, Ohio

"Designers and Builders of Jail and Prison Equipment Since 1886"



The Centrifugal with the Dollar-saving Seal

The centrifugal refrigerating machine pioneered by Carrier has the money-saving advantages of a positive, simple, fully automatic seal without surface contact while in operation. This seal—of revolutionary Carrier design—saves thousands of dollars in refrigerant losses . . . reduces corrosion and power loss by keeping out moisture and air.

The passage of refrigerant and air along the high-speed shaft is prevented by a pressure oil film. This oil holds the seal faces apart when the compressor is operating, making metal-to-metal contact im-

possible. By the elimination of surface wear the seal is assured long life and perfect adjustment. Maintenance costs are kept at a minimum.

The dollar-saving Carrier seal—like the centrifugal itself—is the product of the most experienced engineering staff in the whole field of air conditioning and refrigeration. You can count on Carrier centrifugal refrigeration units. They're designed and built to deliver years of uninterrupted service. That's been proved by 25 years' successful operation. Carrier Corporation, Syracuse, N. Y.

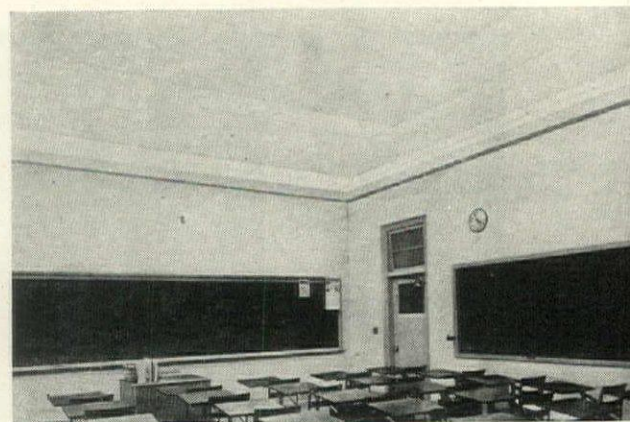


**{ AIR CONDITIONING
REFRIGERATION
INDUSTRIAL HEATING**

- ① Oil under pressure forces seal faces apart when compressor is operating. This forms an effective seal against loss of refrigerant and admission of air and water, prevents wear due to metal-to-metal contact. Thin oil film is maintained between stationary and rotating seal face during shutdown periods.
- ② Fatigue of metal bellows is overcome by design of seal. Bellows move to a fixed position when compressor is starting or stopping and are not subject to the movements of shaft and rotating seal faces.
- ③ Seal is supplied continuously with clean oil. Both strainer and cloth filter remove all impurities, extending seal life.
- ④ Inspection of seal is fast and simple. Access to it is by removing six nuts.

LIGHTING. Ceilings Unlimited, 72 pp., 8 $\frac{3}{8}$ in. by 10 in.

Ceilings Unlimited describes the Miller Fluorescent Troffer Lighting System which consists of a continuous wireway recessed troffer, a patented hanger assembly and other accessories. In this system, the hangers attached to the structural ceiling are incorporated in the hung ceiling design to provide support for the furring of the hung ceiling. Contents of the book is divided into three sections—what the systems look like, how they are installed and how they are specified. The first section illustrates how Miller Troffer Units may be used as the "building blocks" of ceiling lighting. It shows how simple arrangements of these units supply light in strips, squares, rectangles and irregular shapes. Section two gives complete engineering and installation details. It illustrates and describes the four basic methods of ceiling suspension for the lighting system. Installation data for the various methods,



Schoolroom application of Miller Troffers

details of the furring hangers, etc. are included. Section three gives tables of illumination performance in various size room areas for planning installations. It also includes a catalog of the different types of hangers, brackets, connectors, end plate channels, reflectors, etc. The Miller Co., Meriden, Conn.

LIBRARY EQUIPMENT. Breeze Metal Bookstacks Library Equipment, 58 pp., 9 in. by 11 $\frac{1}{2}$ in.

Architects and librarians interested in library planning will find a storehouse of valuable information in this comprehensive brochure on Breeze metal bookstacks. It includes general information on bookstack design and construction, ranges of available or recommended sizes, types of shelves, accessories and fittings, and data on dimensions to which stacks should be laid out for economy in use. Informative chapters are titled—The Bracket Stack, Wide-Upright Stacks, Newspaper Shelving, Archival and Record Storage Shelving, Multi-Tier Construction, Stairs, Stack Area Communications, Accessories, Ventilation and Lighting, Bookstack Finishes, Stack Carts and Studies, Wire Enclosures, Standard Dimensions and Basic Engineering Data and Determining Depths and Capacities of Shelving. Various types of stacks, shelves, construction, etc. are illustrated with photographs, diagrams and sections. Breeze Corporations, Inc., 41 South Sixth St., Newark 7, N. J.

BOTTLING EQUIPMENT. Looking Ahead With the Bottling Industry, 24 pp., 10 $\frac{1}{2}$ in. by 13 $\frac{3}{4}$ in.

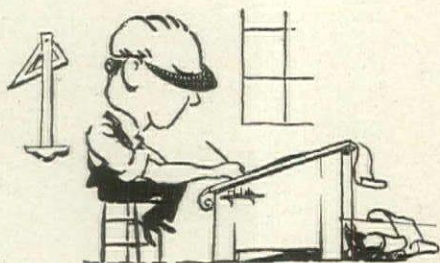
Prepared primarily to assist bottlers in installing their postwar bottling equipment to best advantage, this brochure contains helpful information for those concerned with the design of bottling plants. Important considerations in planning are offered, and a variety of layout plans show basic arrangements of equipment for bottling plants of every type and size. Crown Cork & Seal Co., Machinery Div., Eastern Ave. & Kresson St., Baltimore, Md.

FILM REVIEW

SAFETY. It's Your Home—Plan It Safely. National Safety Council, 20 N. Wacker Drive, Chicago, Ill. Price \$7.50.

This film illustrates to prospective home owners ways to reduce accidents in the home by safety planning. Narrated by an architect, it points out faulty design of kitchen cabinets, steps, lighting and other features responsible for the 32,000 killed in home accidents last year. It recommends windows that can be cleaned from the inside, steps with normal height risers, handrails where there are more than two steps, non slip surface in bath tubs and grab bar for support, lights at top and bottom of stairs, electrical, plumbing and heating services approved by Fire Underwriters and installed according to local building codes. Emphasizing many other helpful safety factors, this film with sound can be bought or rented for community showings.

(Continued on page 220)



Monarch is the name to remember when you specify weatherstrips. With Monarch, you eliminate "Cold Zones" around windows and doors ... make sure of even temperatures less soot, less dirt and lower fuel costs. With Monarch, windows and doors operate easily. Write for information about Monarch's latest designs, types, materials.



MONARCH

METAL WEATHERSTRIP CORP.

6331 Etzel Avenue

St. Louis 14, Mo.

FOR A BETTER INVESTMENT FROM THE START...

BUILD WITH **STRAN STEEL**

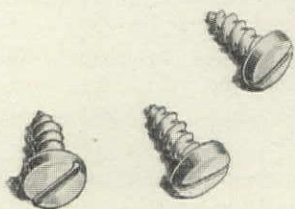
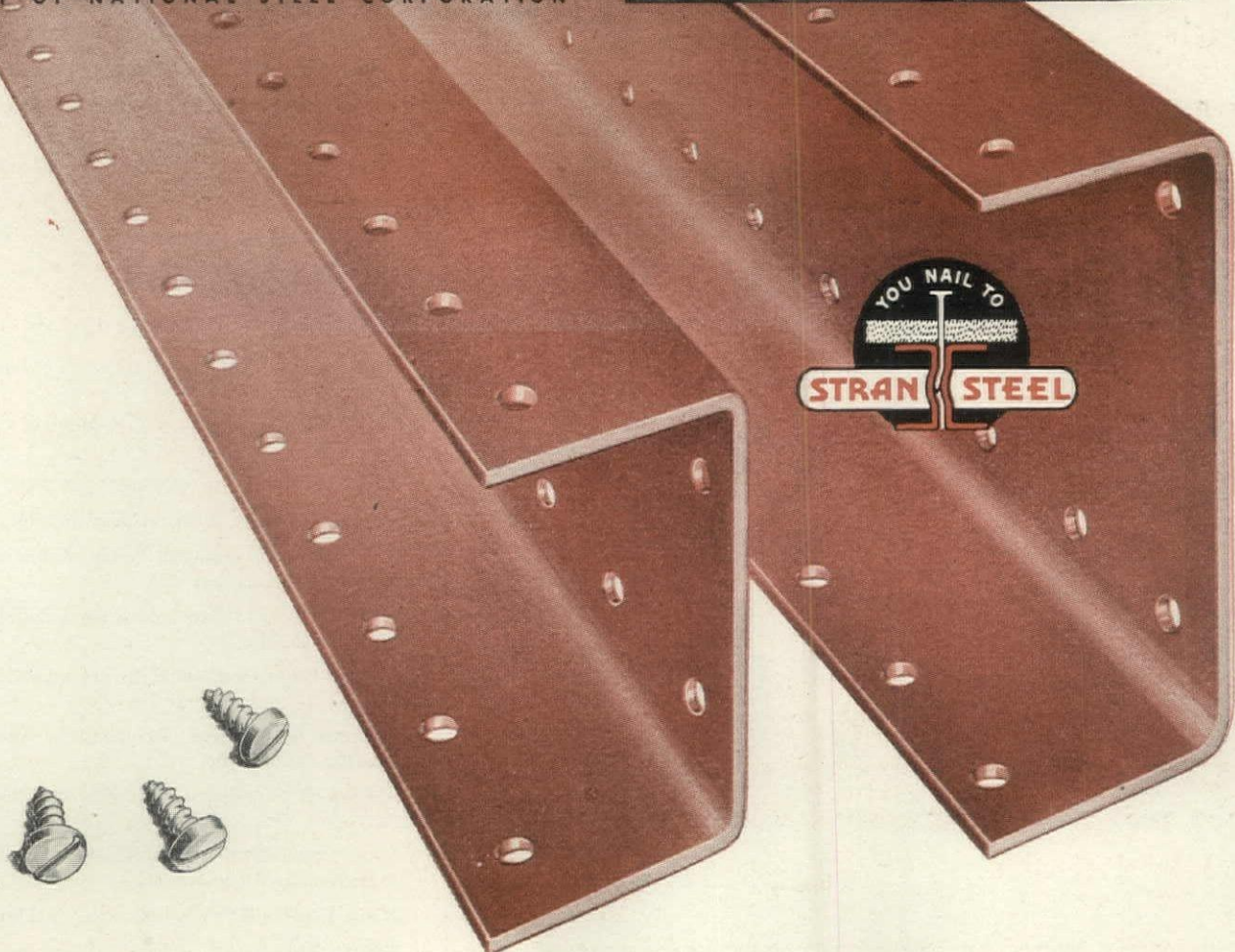
The initial cost of Stran-Steel framing is low, but additional savings—progressively greater as the years go by—manifest themselves in the form of lower upkeep and maintenance costs.

An efficient, lightweight, all-steel framing method, the Stran-Steel system is truly practical for light-load buildings . . . chiefly by virtue of the patented nailing groove, which permits collateral materials to be nailed directly to framing members. Economy and fast erection are especially evident in apartments and housing projects, but in other structures—such as individual homes, stores and industrial buildings—owners are quick to appreciate the additional Stran-Steel advantages of fire-safety, permanence and uniform quality . . . of freedom from sag, warp and rot.

Investigate this modern framing material. For detailed information, see Sweet's File, Architectural, or Sweet's File for Builders . . . or refer to the January issue of Building Supply News.

GREAT LAKES STEEL CORPORATION

STRAN-STEEL DIVISION • PENOBSCOT BUILDING, DETROIT 26, MICHIGAN
UNIT OF NATIONAL STEEL CORPORATION



CEMENT DISPERSION. Concrete Facts, Master Builders Co., 7016 Euclid Ave., Cleveland, Ohio.

Concrete Facts explains the action and benefits of cement dispersion and air entrainment, showing how the curability of concrete can be increased as much as 500 per cent. Many photographs illustrate projects where Pozzolite, the cement dispersion agent, has been employed.

REQUESTS FOR INFORMATION

AMERICAN INDUSTRIAL RESEARCH BUREAU, 212 5th Ave., New York, N. Y. would like to receive in duplicate, catalogs, information, prices, etc. on machinery, equipment, and all kinds of manufactured articles for Australian subscribers to the Research Services.

CLIFFORD ATKINSON, c/o Barclay Bank Ltd., Marble Arch, 556 Oxford St., London, W. 1, England, would like to receive information on cast iron porcelain enamel bathroom equipment, building material and plumbing equipment for export to Europe.

CAPTAIN WILLIAM T. BURNIE, 599 Humboldt St., Rochester 10, N. Y. would like to receive information from house prefabricators.

FRIENDS Co., 201 Hennessy Road, Wanchai, Hongkong, China, building materials and plumbing equipment agents, would like to receive information from building material manufacturers.

H. W. HUGHES, 11 Dunluce Mansions, Joubert St., Vereeniging, Transvaal, So. Africa, would like to receive literature and data on refrigerators having vegetable racks included in the unit.

THEO. N. INCRAHAM, engineer, P. O. Box 32, Wilmington, N. C. would like to receive information on prefabricated houses.

LOUIS KINSEL, plumbing & heating, 213 West Washington St., New York, Ill., would like to receive catalogs and information on plumbing.

GORDON A. NIEDERHAUSER, 178 Wedgewood Ave., Cincinnati 17, Ohio, would like to receive information on prefabricated houses and literature on construction equipment and products.

S. NOVICK, engineering student, 264 E. Broadway, New York 2, N. Y., is preparing a study on methods for the structural analysis of small house construction, and would like to receive technical information or comments.

REQUESTS FOR LITERATURE

JOSEPH N. BOAZ, architect, First National Building, Oklahoma City, Okla.

GORDON F. BURK, general contracting and engineering, 2691 King St., Denver, Colo.

BURNS & SHAW CONSTRUCTION Co., home alteration contractors, Merrick Rd. at Liberty Ave., Jamaica 10, N. Y.

G. MALLORY COLLINS, architect, Highland Park Village, Dallas, Tex.

S. H. CROCHET, architect & engineer, 1624 Gen. Taylor St., New Orleans 15, La.

LORÉN CURTIS, P. O. Box 310, Carson City, Nev.

LEO L. FISCHER, architect, 17 Academy St., Newark 2, N. J.

ULRICH J. FRANZEN, architect, 63 West Cedar St., Boston, Mass.

ROBERT GLASBERG, architect, 25 Chen Blv., Tel Aviv, Palestine.

LOUIS HATKOFF, architect, 356 W. 22nd St., New York, N. Y.

JONES & HUNTER, architects, 2049 Broadway, Boulder, Colo.

LT. COMMANDER PAUL E. KOHLER, JR., 253 Worth Ave., Palm Beach, Fla.

E. GEORGE LAVINO, architect, Lantern Lane, Penllyn, Pa.

SAMUEL A. LIEBERSON, architect, 356 Fulton St., Brooklyn, N. Y.

DABNEY LIPSCOMB, architect, P. O. Box 308, Longview, Tex.

CHARLES M. MATTHEWS, Bride Hill, Hampton-Exeter Rd., Hampton, N. H.

McCOOK & BOLTON, architects, Lake Charles, La.

THOMAS F. McNULTY, 5th yr. Arch. Student, N.A.S. Box 12, Eng. Dept., Miami, Fla.

GEORG MODJESKA, design & decoration, Box 2368, Carmel-By-The-Sea, Calif.

GILBERT MUIR & SON, architects, 809 Park St., McKeesport, Pa.

BRYAN W. NOLEN, architect, Key Building, Oklahoma City, Okla.

WAYNE PORTER, industrial design, Administration Bldg., Municipal Airport, Wichita, Kan.

CLIFFORD L. REYNOLDS, designer & builder, 4828 Fairview Ave., St. Louis 16, Mo.

CARL E. RIEMENSCHNEIDER, architect, 2659 N. 27th st., Milwaukee 10, Wis.

WILLIAM SHINDERMAN, architect, 805 Kales Bldg., 76 W. Adams St., Detroit 26, Mich.

MILTON B. WEISSMAN, architect, 164 Montague St., Brooklyn 2, N. Y.

WEST CONSTRUCTION & APPLIANCE Co., Pepper Bldg., P. O. Box 1119, Winston-Salem 1, N. C.

WICK, HILGERS & SCOTT, architects, Spalding Bldg., Portland 4, Ore.

ROBERT NOLD YODER, architect, 19 Farview Drive, Brecksville, Ohio.



WHITE-RODGERS
Controls Insure **COMFORT**
in your buildings

Heating and air-conditioning in the houses you build mean just one thing to the users... **HEALTH** and **COMFORT**. White-Rodgers controls with their high degree of accuracy and dependability can insure these vital factors with the equipment you install. It will pay you to specify them in your building plans. Write for catalog and installation data.

WHITE-RODGERS ELECTRIC CO.
ST. LOUIS 6, MISSOURI

Controls for Refrigeration • Heating • Air Conditioning

See what's
happened to
KENCORK
since 1941!



Time was, before the war, when Kencork was considered exclusively the flooring for important public buildings (but a few smart architects did brilliant things in homes with it).

Today—with the resumption of manufacture—Kencork becomes something new, something newly important—in *any* home.

Architects—alert to new uses for trusted favorites—are discovering that the qualities which make Kencork ideal for museums, churches, executive offices, clubs—are the very qualities a man wants in his home flooring.

Kencork's impressive tones of golden tans and nutty browns, for instance. Kencork's noise-deadening, shock-absorbing qualities. Its easy feel under foot. Its resistance to moisture and assurance of safe walking!

Already, Kencork is appearing on the floors of bedrooms, nurseries, bathrooms. Already, forward-looking prospective home owners are asking about Kencork's place in their homes. And progressive stores are setting up display rooms showing Kencork's wonderful decorative value in homes.

In keeping with this trend, we're bringing the Kencork story to the attention of your clients—through full color, full page ads in American Home, House & Garden. We're telling about Kencork's place in modern living.

May we tell you, too? A handsomely illustrated, factual folder on Kencork is yours for the asking. Get it today.

KENCORK
the friendly floor
TRADE MARK REG.

WHY KENCORK IN THE HOME?

In nurseries and children's playrooms

Kencork deadens sounds, cushions falls, keeps dry.

In bedrooms

Kencork's rich tones of leafy tans and nutty browns add distinction to any decor; proves warm in winter, cool in summer.

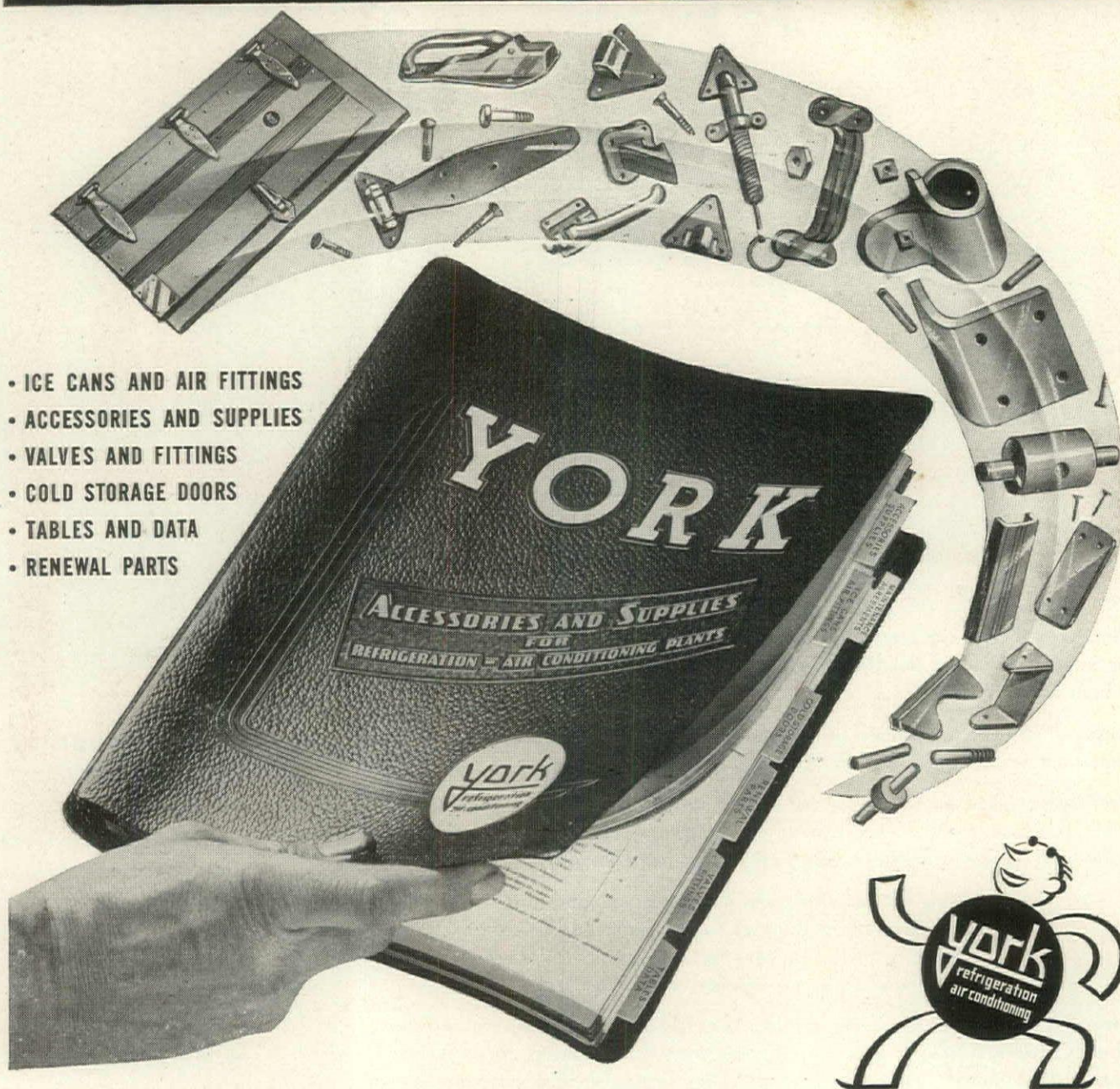
In the Bathroom

Kencork is warm to bare feet, non-slippery, resists moisture.

Kencork is ALL cork—with all of cork's natural insulating qualities and long life.

Available in various size tiles with Factory Waxed finish.

Teeming with facts about COLD STORAGE DOORS and other ACCESSORIES and SUPPLIES!



- ICE CANS AND AIR FITTINGS
- ACCESSORIES AND SUPPLIES
- VALVES AND FITTINGS
- COLD STORAGE DOORS
- TABLES AND DATA
- RENEWAL PARTS

ALL THE essential information you need for placing an efficiently handled order is in the "York Catalog of Accessories and Supplies." Sizes, weights, performance data, mechanical drawings, descriptions, net prices—all are included.

York keeps it up to date for you by issuing new pages which can be inserted in a "jiffy." It's yours for the asking. Just drop us a note on your letterhead today.

York Corporation, York, Pennsylvania.

Here are just a few more subjects you find in its easy-to-locate sections: expansion valves, brine testing sets, thermostats, relief valves, welding flanges, copper tubing, V-belts, leak detectors, and door gaskets.

YORK REFRIGERATION AND AIR CONDITIONING

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

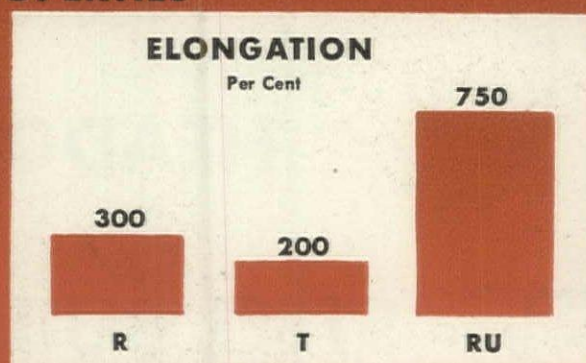
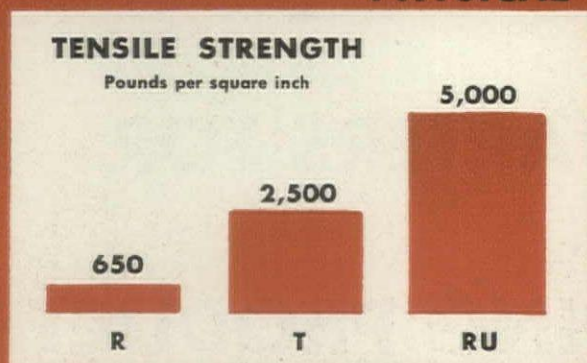


COMPARE *Laytex* (RU)

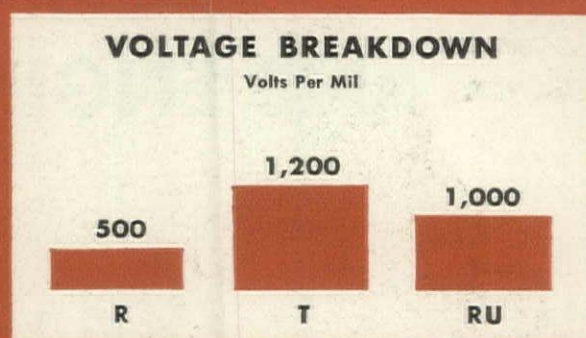
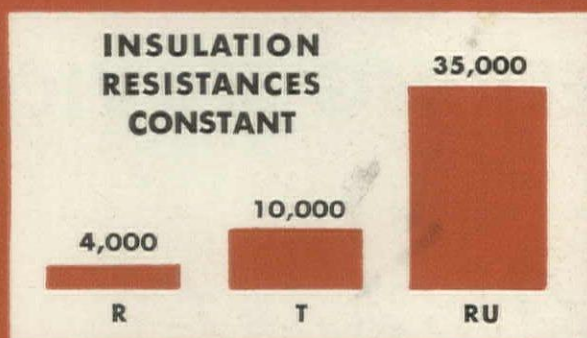
Reg. U. S. Trade Mark

Electrically and Physically
(60° Operation)

PHYSICAL PROPERTIES



ELECTRICAL PROPERTIES



THREE TYPES of building wire are authorized under the new Electrical Code. These are:

R—Used by the Industry since its inception. The copper conductor has a Code rubber insulation and fibrous overall cover.

T—A copper conductor with VINYLITE (a synthetic compound) insulation.

RU—The classification under which LAYTEX now falls. This type has a copper conductor, *natural rubber insulation* and fibrous cover.

The charts above show the wide margin by which LAYTEX leads in physical and electrical qualities. This is America's lightest weight, smallest diameter, natural rubber covered wire. *Now available without restriction.*



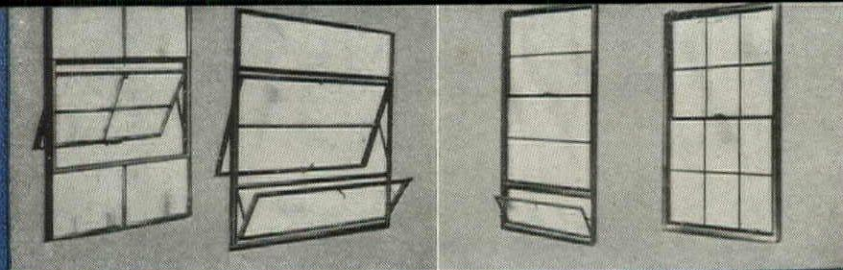
SERVING
THROUGH
SCIENCE

Nothing Insulates like Rubber

UNITED STATES RUBBER COMPANY

1230 AVENUE OF THE AMERICAS • ROCKEFELLER CENTER • NEW YORK 20, N. Y.

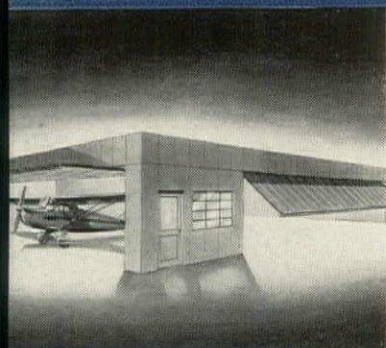
**22 Different Truscon Steel
Products to Meet Almost Every
Airport Construction Need**



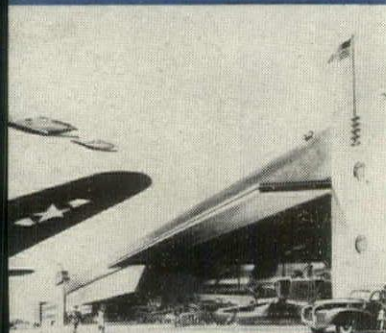
Truscon Projected Windows

Truscon Double-Hung Windows

Truscon Canopy Doors and Complete
Buildings for Private Plane Hangars



Truscon Vertical Lift Canopy Doors



Truscon Braced Canopy Doors

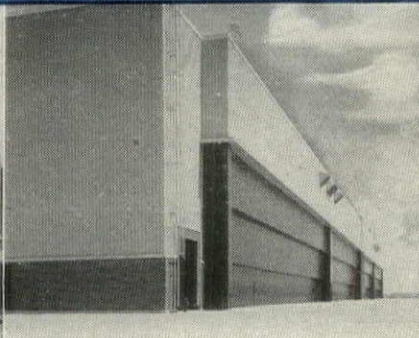


Truscon Unbraced Canopy Doors



Truscon Straight Slide Doors

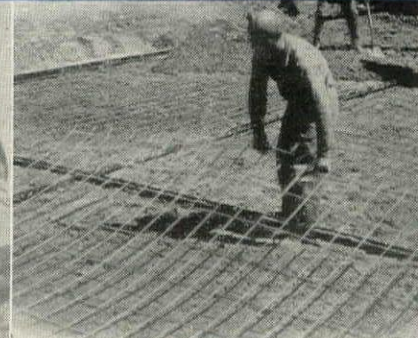
Truscon Three-Section
Vertical Lift Doors



Truscon Metal Lath



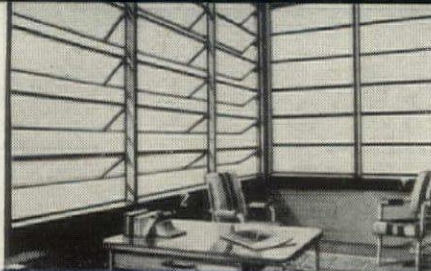
Truscon Welded Steel Fabric



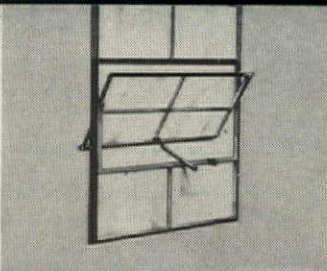
TRUSCON

**HEADQUARTERS FOR
STEEL BUILDING PRODUCTS
AND ENGINEERING SERVICE**

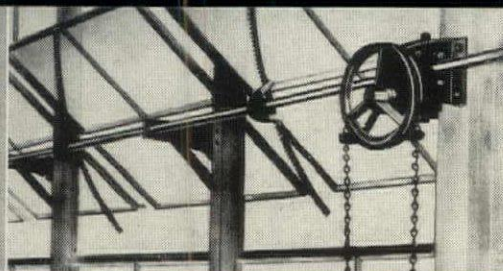
*For Airport
Construction*



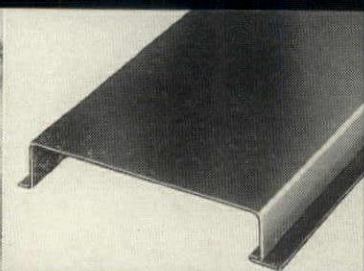
Truscon Maxim-Air Windows



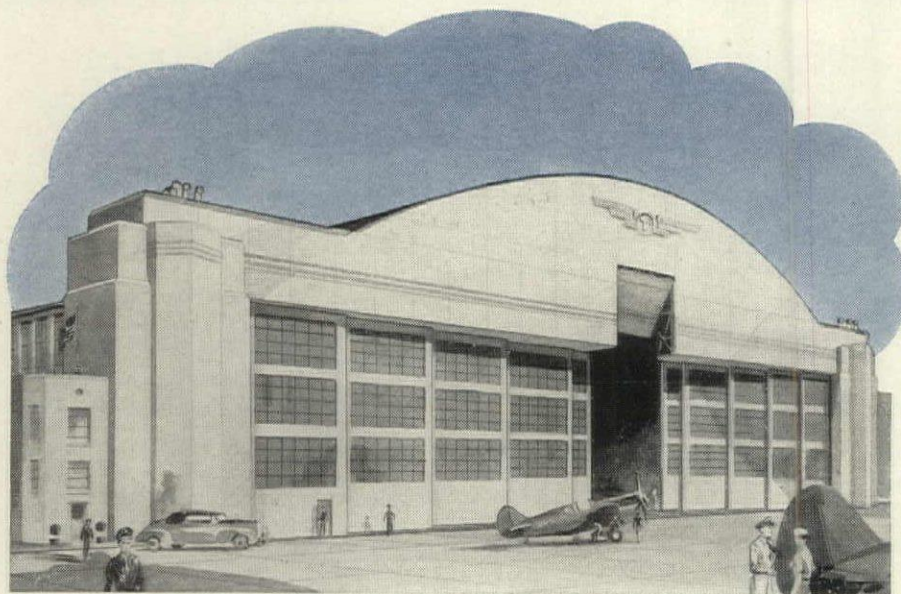
Truscon Pivoted Windows



Truscon Mechanical Operators



Truscon Ferrabard® Steeldeck Roof



Truscon is the only single source from which you can secure so many major steel building necessities . . . together with such capable, experienced engineering assistance.

All Truscon Steel Company products are "made under one roof", under the same capable supervision. When you deal with Truscon, you concentrate at one point all the responsibility for the value and performance of the materials you specify. Your clients are assured of better, faster service; they save time and money; they can depend upon quick attention to additional requirements as they arise.

Truscon engineers are especially trained to help solve airport design problems. Their experience is broad and varied—it will be of benefit to you in many ways.

Take advantage of this important, valuable combination of services, to help you attain high standards of efficiency in the design and operation of your structures.

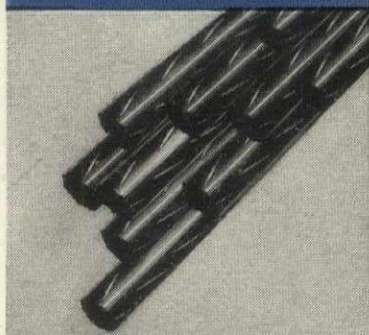
TRUSCON STEEL COMPANY • YOUNGSTOWN 1, OHIO

Subsidiary of Republic Steel Corporation.

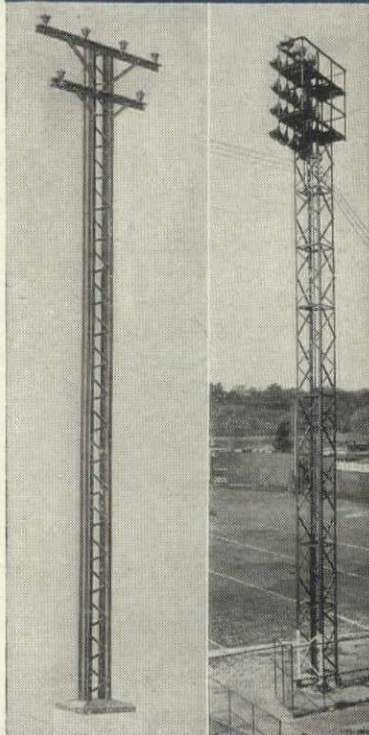
*Reg. U. S. Pat. Off.



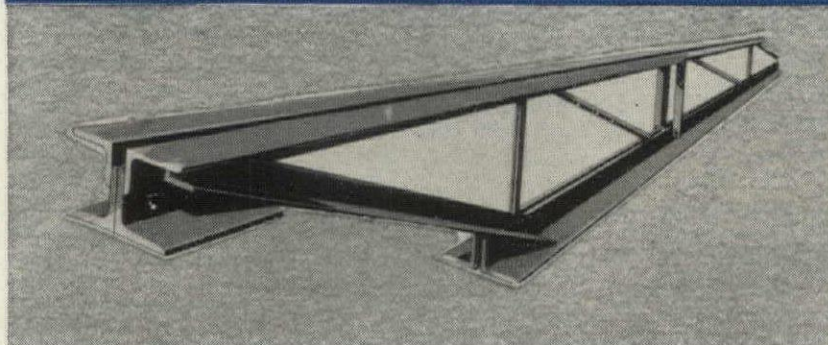
Truscon Curb Bars



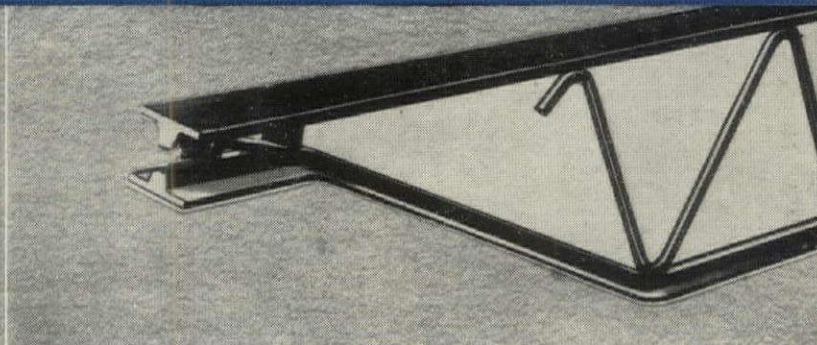
Truscon Concrete Bars



Truscon Clearspan Joists



Truscon Open Truss Steel Joists



Truscon Steel Poles

Truscon Floor Light Towers

The advertising pages of FORUM are the recognized market place for those engaged in building. A house or any building could be built, completely of products advertised in THE FORUM. While it is not possible to certify building products, it is possible to open these pages only to those manufacturers whose reputation merits confidence. This FORUM does.

Adams and Westlake Company, The.....	21
Airtemp (Division of Chrysler Corporation).....	209
Alberene Stone Corporation of Virginia.....	148
Aluminum Company of America.....	181
American Brass Company, The.....	60
American Central Manufacturing Corporation.....	55
American Hot-Dip Galvanizers Association, Inc., The.....	155
American Lumber & Treating Company.....	176
American Radiator & Standard Sanitary Corporation.....	51
American Rolling Mill Company, The.....	79
American Skein & Foundry Company.....	84
American Stove Company.....	175
American Telephone & Telegraph Co.....	161
Anchor Post Fence Company.....	58
Andersen Corporation.....	94
Armstrong Cork Company.....	34, 35
Barrett Division, The (Allied Chemical & Dye Corporation).....	87
Bell & Gossett Co.....	207
Bendix Home Appliances, Inc.....	73
Best Devices Co.....	227
Bilco Manufacturing Company, The.....	54
Bituminous Coal Institute.....	228
Bohn Aluminum and Brass Corporation.....	47
Bradley Washfountain Co.....	200
B & T Metals Company, The.....	28
Burnham Boiler Corporation.....	25
Cabot, Samuel, Inc.....	62
Cambridge Tile Mfg. Company, The.....	37
Carey, Philip Company, The.....	59
Carrier Corp.....	217
Case, W. A. & Son Mfg. Co.....	191
Casein Company of America (Division of The Borden Company).....	83
Ceco Steel Products Corporation.....	156, 157
Celotex Corporation, The.....	Cover II
Central Surety & Ins. Corp.....	33
Chamberlin Company of America.....	58
Cheney Flashing Co.....	32
Chicopee Manufacturing Corp.....	69
C. F. Church Mfg. Co.....	57
Clayton & Lambert Mfg. Co.....	68
Columbia Mills, Inc., The.....	40
Coolstream Corp., The.....	54
Corbin, P. and F.....	85
Coyne and Delany Co.....	174
Crane Co.....	183
Cribben & Sexton Co.....	193
Curtis Companies.....	2, 3
Dow Chemical Company, The.....	Opp. 65
Dravo Corp.....	194
Eagle-Picher Lead Company, The.....	14
Eclipse-Moulded Products Co.....	164
Edison General Electric Appliance Company, Inc.....	86
Eljer Co.....	Cover III
Faries Mfg. Co.....	74
Fiat Metal Manufacturing Company.....	172
Fir Door Institute.....	61, 78, 151
Firestone.....	182
Flintkote Company, The.....	39
Flynn, Michael, Manufacturing Co.....	29
Formica Insulation Company, The.....	Opp. 33
Fortune Magazine.....	90, 91
General Electric Company.....	153, 171, 199
General Luminescent Corporation.....	62
Grand Rapids Hardware Co.....	42
Hagerty.....	213
Hall-Mack Company.....	80
Hendrick Manufacturing Co.....	227
Homasote Company.....	20
House & Garden.....	44
House Beautiful Magazine.....	66, 67
International Business Machine Corp.....	70, 71
Johns-Manville.....	170
Just Mfg. Co.....	226
Kennedy, David E., Inc.....	Opp. 32, 221
Kewanee Boiler Corporation.....	149
Kimberly-Clark Corporation.....	77, 205
Kinthead Industries.....	15
Kohler Co.....	76

Architects everywhere are making

SCALE MODELS

the PLAN-A-HOME way



A model of the Jones' ranch style home.



The Richmonds are studying this two story plan.



Actual photo of model of Allisons' 8 room house.

HERE'S a new, simple way to make a professional looking scale model of any 4 to 9 room plan, complete with furniture groupings. Plan-A-Home model kit includes everything you need: 140 pre-cut heavy cardboard wall, window and door sections, slotted wood footings PLUS furniture cut-outs for every room. Model disassembles quickly. Changes are easy to make, so a Plan-A-Home model in reality is a "proving grounds" for new ideas, desirable changes.

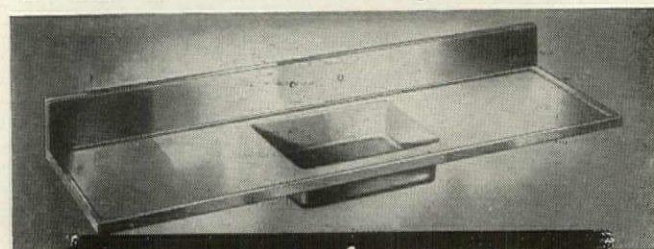
NO TOOLS NEEDED
model any plan in a few hours



Order a sample kit Today
Send check or money order for \$4.75 and kit will be mailed post-paid.

PLAN-A-HOME model co.
ELKHART INDIANA

TWO WAY Improvement



DOUBLE-PITCH plus ANTI-SPLASH
in Radiuluxe
STAINLESS STEEL CABINET SINKS

1. DOUBLE-PITCH DRAINBOARDS—A gradual, invisible pitch at all angles toward the bowl provides smooth, even, complete drainage. No channels to clean, no grooves to endanger fine glassware.

2. IN-BUILT ANTI-SPLASH RIM ON BOWLS—Top of bowl is curved slightly inward and joined to the sink top in a seamless welded joint, polished to a smooth, satin finish. This forms an anti-splash rim around the entire perimeter of bowl.

NEW FREE BULLETIN describes Radiuluxe Sinks with single or double bowls, with or without drainboards; straight, "U," or "L" types...standard sizes or custom-fabricated to your specifications. Write today.



Stainless Steel
CABINET SINKS
CABINET TOPS
SCULLERY SINKS
SINK BOWLS
TOILET SHELVES
LAVATORIES
STRADDLE STANDS
and Special Units

Just Manufacturing Co.
4610-20 W. 21st Street, Chicago 50, Illinois

BUYING INDEX

Libby-Owens-Ford Glass Co.	210
Liquidometer Corp., The	32
Lockport Cotton Batting Co.	158
Majestic Company, The	28
Masonite Corporation	22
McQuay, Inc.	49
Mengel Co., The	206
Milcor Steel Company	166
Minneapolis-Honeywell Regulator Co.	65
Minwax Company, Inc.	24
Monarch Metal Weatherstrip Corp.	218
Morse Boulger Co.	24
Mullins Manufacturing Corporation (Youngstown Kitchens)	81
National Association of Ornamental Metal Manufacturers	165
National Chemical & Manufacturing Co.	54
National Cotton Council of America	93
National Electrical Manufacturers Association	62, 63
National Gypsum Company	17
National Radiator Co., The	36
Norge Division, Borg-Warner Corporation	43
Nu Tone Inc.	13
O'Brien Varnish Co.	50
Ohio Hydrate & Supply Co., The	46
Otis Elevator Company	72
Overhead Door Corporation	Cover IV
Owens-Corning Fiberglas Corporation	82, 202, 203
Owens-Illinois Glass Company	159
Paine Lumber Company	16
Parents Magazine	177
Payne Furnace & Supply Co., Inc. (Member, Dresser Industries, Inc.)	92
Pittsburgh Plate Glass Company	31, Opp. 64, 162, 163
Plan-A-Model Corp.	226
Portland Cement Association	198
Pratt & Lambert, Inc.	96
Propellair, Inc.	50
Reynolds Metals Company	197
Ric-Wil Co., The	173
Robertson, H. H. Company	52, 53
Roddis Lumber & Veneer Co.	56
Rolscreen Company	212
Roper, George D. Corporation	88
Rowe Manufacturing Co.	145
Russell & Erwin Mfg. Co.	154
Russell, The F. C., Company	195
Servel, Inc.	18, 19, 215
Sisalkraft Company, The	208
Sloan Valve Company	64
Smith Corporation, A. O.	20
Snead & Company	186
Sola Electric Company	196
Speakman Company	27
Stanley Works, The	26
Stensgaard, W. L., and Associates, Inc.	58
Stewart Iron Works	216
Stran-Steel Division (Great Lakes Steel Corporation)	219
Surface Combustion Corporation	41
Sylvania Electric Products, Inc.	23
Taylor, Halsey W., Co., The	50
Tile-Tex Company, The	147
Time	214
Todd Shipyards Corporation (Combustion Equipment Division)	30
Tomlinson	48
Trane Company, The	152
Truscon Steel Company	224, 225
United States Air Conditioning Corp.	204
United States Gypsum Co.	184, 185
United States Rubber Company	223
United States Savings and Loan League	211
U. S. Machine Corp.	180
Upton Company, The	4
Walworth Company	45
Wasco Flashing Company	28
Webster, Warren & Co.	201
Weis, Henry, Mfg. Co., Inc.	146
Westinghouse Electric Corp.	178, 179
White-Rodgers Electric Co.	220
Whiting Stoker Sales Co.	150
Wood Conversion Company	89
Woodruff, F. H., and Sons, Inc.	32
Worthington Pump Co.	95
York Corporation	75, 222
Young Radiator Co.	160



In the model home of Eastman Associates at Miami Beach, Florida, Hendrick grilles furnish a distinctive lead-glass effect for linen closet door panels. The grilles solved the decorative problem of open door panels, so

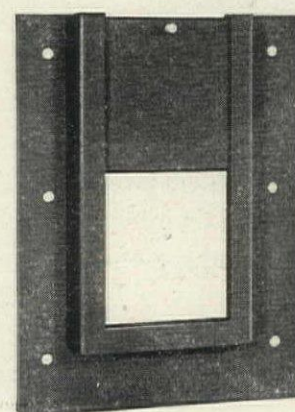
necessary in the tropics to combat humidity and mildew. The 194-page Hendrick Grille Handbook illustrates over 100 standard and exclusive designs. Write for your copy today, on your letterhead.

Perforated Metals
Perforated Metal Screens
Architectural Grilles
Mitco Open Steel Flooring,
"Shur-Site" Treads and
Amorgrids. Sales Offices in Principal Cities

HENDRICK
Manufacturing Company

35 DUNDAFF STREET, CARBONDALE, PA.

Designing A THEATRE OR AUDITORIUM?



Projection room porthole fire shutters, which prevent fire and smoke from spreading into the auditorium during projection room emergencies, need not be made locally.

"Best" PORTHOLE FIRE SHUTTERS

and automatic control apparatus come complete and ready to install. Shutters are designed by experts, of all welded construction to meet all requirements and inspection laws. Grooves for glass are included on all shutters and spotlight ports are properly counter-weighted.

Ports for ventilation ducts with automatic controls also available. Consult us with your problems.

Literature and estimates without obligation.

BEST DEVICES COMPANY

10516 Western Avenue

Cleveland, Ohio

Be sure the plans for
your home make possible a
Bonus Basement



The picture above shows the kind of attractive and ingenious layout most prospective home builders are planning as recreation rooms in their new homes. And if you have something of the same sort in mind, we'll tell you how your plans can provide such a room on mighty attractive terms: *plan to heat with Bituminous Coal* when you build or remodel your home. Then you can have a "Bonus Basement"—furnished and paid for in only a few years' time by the substantial savings that come from using this most economical and dependable of all home-heating fuels!

Into the bargain, you'll also find Bituminous Coal gives the steadiest,

most uniform heat. And, when burned in one of the marvelously efficient new stokers, it becomes an "automatic" fuel—even to the point of ash removal! Clean, quiet, odorless, smokeless!

Better than 4 out of every 7 homes in the U. S. heat with coal. Let it work for you, as it does for over 18 million home-owners. And let it also buy you a "Bonus Basement." For information and helpful suggestions, take advantage of the special offer described opposite. Then talk it over with your architect or builder.

BITUMINOUS COAL INSTITUTE
60 East 42nd Street, New York 17, N. Y.

ARCHITECT: FREDERICK W. STRITZEL,
COLUMBUS, OHIO

SPECIAL OFFER! The "Bonus Basement" shown above was modeled from one of 20 architects' plans for an ideal basement of a modest home. All 20 designs—showing basement and upper floor plans—have been reproduced in a helpful and informative book. While the edition lasts, we will send you a copy for the special price of only 10¢ postpaid. Mail your request to the address printed below.

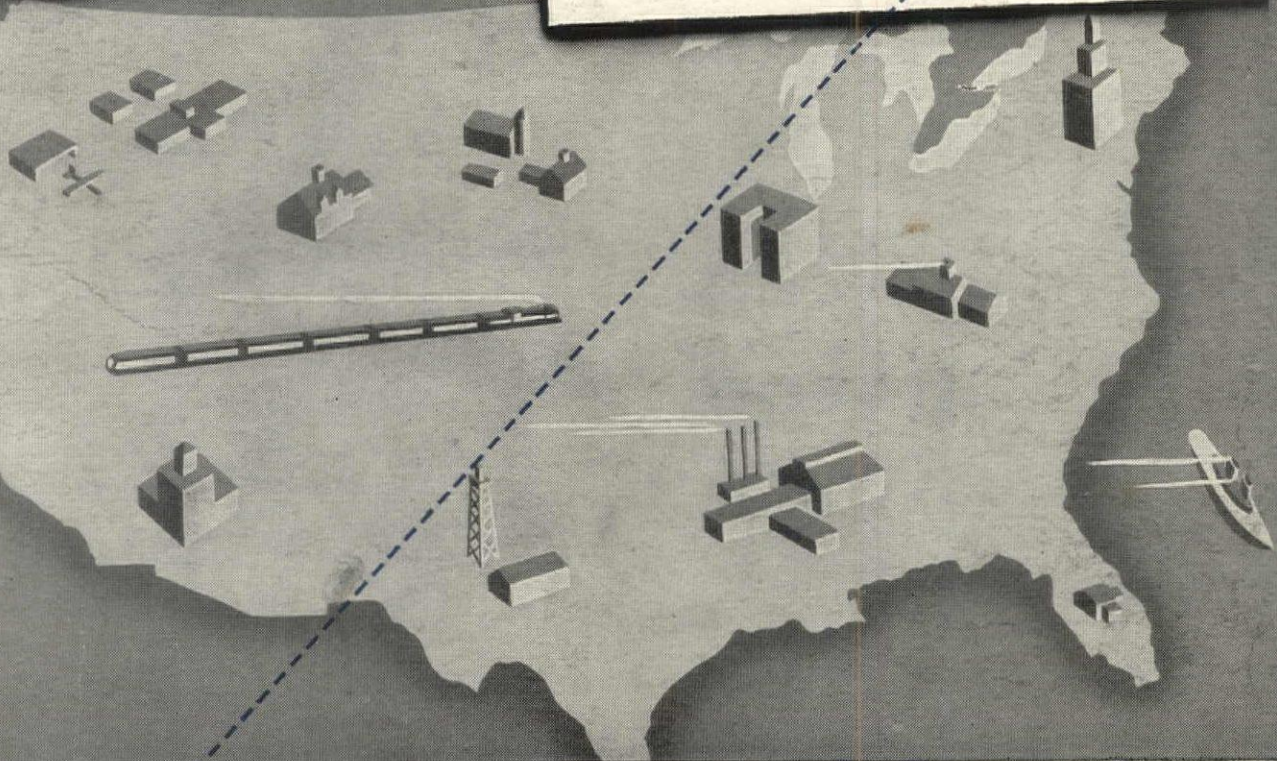
A WORD TO THE WISE! Most houses are now designed to permit the use of Bituminous Coal. Be sure you can have the advantages of this low-cost, dependable fuel in your new home. A little care in planning for coal storage and a chimney flue of normal size will assure that you can enjoy the health, comfort and dependability that only modern coal heat can give you. And it will also assure you of *economical* heating for the life of your house, because this country's 3,000-year coal supply makes certain that shrinking reserves will not force coal prices upward.

FOR ECONOMY, DEPENDABILITY, AND HEALTHFUL HEAT . . . YOU CAN'T BEAT BITUMINOUS COAL

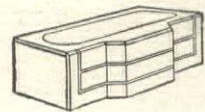
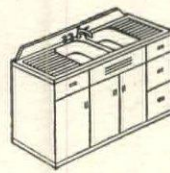
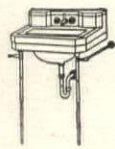
(This is one of a series of advertisements now appearing in home-makers' magazines)

Every structure WHERE MEN
WORK AND LIVE...

...requires good
plumbing fixtures



and ELJER makes Quality Plumbing Fixtures
for every need



ELJER CO. . . . FACTORIES AT

FORD CITY, PA. . SALEM, OHIO . LOS ANGELES, CALIF.

SINCE 1907 MAKERS OF FINE PLUMBING FIXTURES

Filed in Stacks

Service Uninterrupted!



Free, easy operation in all weathers and all climates is insured by the expert engineering and superior materials of The "OVERHEAD DOOR". The ideal opening action is provided by the exclusive, patented feature, the Miracle Wedge, with inclined vertical tracks. This quality door is constructed of clear, edge-grained Sitka spruce, stronger than steel of equal weight. Built as a complete unit for any size opening in all residential, commercial, and industrial structures, The "OVERHEAD DOOR" may be depended upon for fast, efficient service year in and year out.

TRACKS AND HARDWARE OF SALT SPRAY STEEL

The

OVERHEAD DOOR
TRADE MARK
WITH THE
MIRACLE WEDGE

OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U. S. A.

COPYRIGHT, 1946, OVERHEAD DOOR CORPORATION

Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales — Installation — Service.