

TECHNOLOGY DEPT:

AMERICAN

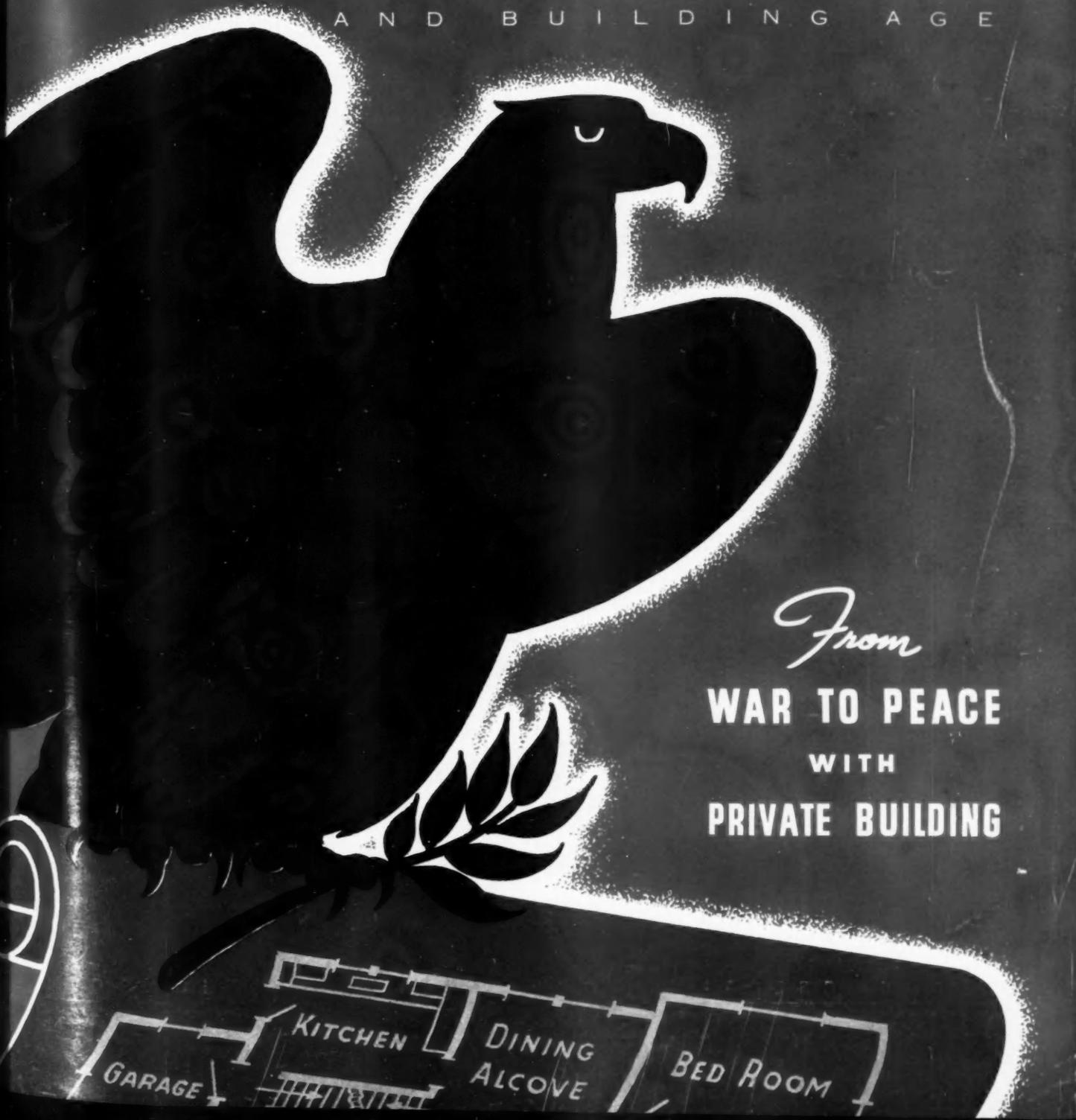
OCTOBER, 1943
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BUILDER

WORLD'S GREATEST
BUILDING PAPER

A N D B U I L D I N G A G E

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From
WAR TO PEACE
WITH
PRIVATE BUILDING





CELOTEX

REG. U. S. PAT. OFF.

ROOFING • INSULATING BOARD • ROCK WOOL
GYPSUM WALL BOARD • LATH • PLASTER
SOUND CONDITIONING PRODUCTS

THE CELOTEX CORPORATION • CHICAGO

Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago 3, Ill. Subscription price, United States, Possessions, and Canada 1 year \$2.00; 2 years, \$3.00; foreign countries: 1 year, \$4.00; 2 years, \$7.00. Single copies, 25 cents. Entered as second-class matter Oct. 11, 1920, at the Post Office at Chicago, Illinois, under the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Illinois. Address communications to 105 W. Adams St., Chicago 3, Ill.

Celotex Advertising *Sets the Pace* For the Building Industry!

Helping You Get Business Now!



Celotex is running the greatest advertising campaign in its history, urging Americans to keep their homes in good repair—to turn waste space into rooms for war workers—to build and repair farm buildings. Still another campaign reaches military and industrial buyers and architects as well as other groups from which your business comes today.

Both programs are designed to help the industry and you even though some Celotex products may not always be immediately available. Results have been outstanding! Thousands of requests have been received for the booklet, "Wartime Guide to Better Homes." This is real proof that Celotex advertising is setting the pace for the industry and packs the kind of selling force that gets fast action.

Creating Post-War Home Building for You

After the war, Americans will have billions of dollars saved up to buy the things they need. Month after month, Celotex is running the biggest advertising campaign in the industry to assure builders a major share of these saved up billions. Many people in your territory will *want* to build new homes with War Bonds bought today, because Celotex advertising is creating that desire *now*.



As a result of this advertising, requests for the booklet, "Your Miracle Home of Tomorrow," have been received from tens of thousands of prospective home-owners. The inquiries from your town are sent on to the Celotex dealer. Join with him in developing these interested prospects so that when "V" day arrives you can start building *at once!*

(Advertisement)



One-Panel Walls

Their development and what they offer the builder of postwar homes

By W. H. Upson, Jr.

Secretary and Treasurer
The Upson Company



well as new materials not extensively used in building before. Numerous great wartime housing projects have provided the proving ground for faster construction and lower-cost building plans.

Because our product has been used on many of these projects, it has been our privilege to observe many of the new techniques under test, and to assist with the development of those related to the use of our product.

Are Changes Coming?

Anyone who has watched American building during the last two years cannot have missed the unmistak-

How will homes be built after the war?
For a moment, let's detach ourselves from the whirling merry-go-round of predictions now confusing the minds of so many in this grand old industry. For a moment, let's stand aside on firm ground and take a common-sense viewpoint.
This we all know! War and the necessity for an unprecedented amount of housing in a short time has accelerated the research, the improvement and the increased production of materials used in building as

Quality walls and ceilings even under the low-cost specifications of war housing. Below: war worker's home at Bristol, Pa. An FPHA project.

Alluring eye appeal, efficient insulating value and crackproof qualities add dollar value to pretentious interiors like this one in an \$18,000 home.



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able trend toward simplifying housebuilding techniques. It has largely come about through the development of larger sizes and a greater number of parts which can be mass-produced in factories. What has happened is that the building industry is depending to a greater degree than ever before upon industrial methods to produce quantity, speed, accuracy and the more efficient utilization of materials and labor.

So changes are coming in postwar home construction. Practical changes for the better in both materials and processes. But we see nothing in these changes to be feared by progressive elements in the industry.

An opportunity to produce better homes faster at lower cost should be welcomed by everyone. The goal is to make possible a modern livable home within financial reach of those millions of families who have not been able to afford one before. In doing this, the industry opens a vast new market for itself in which all elements will share in one way or another.

Of this we can be sure. Whatever the form or design of the postwar low-cost home; whatever methods are employed in its construction, it will be an *improved* home providing more value and comfort and livability at a *lower price* than has ever been offered before.

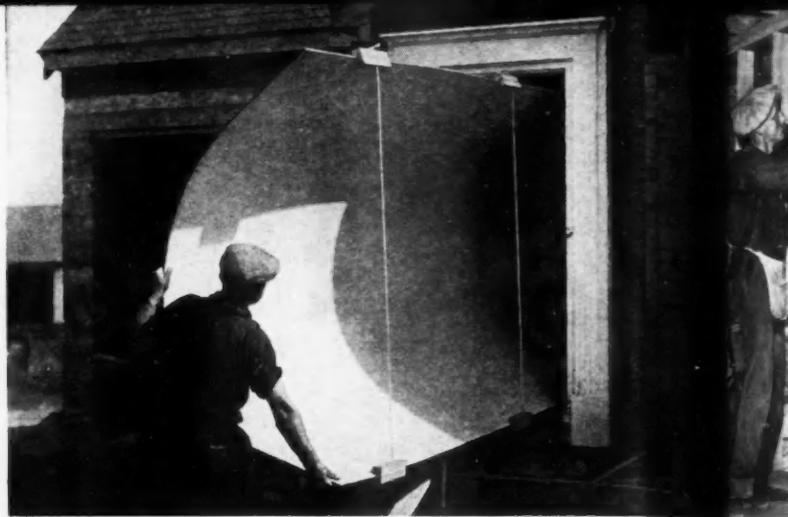
Changes To Expect First

Naturally, no one wants changes of questionable merit. Changes to come first, logically, therefore, are those whose worth has been tested and proved in actual practice on many jobs.

One of these we sincerely believe is dry-built full-wall construction; the one-panel interior wall. Since it involves one of our products, STRONG-BILT Panels, it is the improvement which we know most about and on which we feel most qualified to offer an opinion.

Please note that we are not referring to dry-built walls in the accepted sense, which is the assembly of several or many panels to make a single wall. Dry-built full-wall construction means the use of a *single* panel to cover an *entire* wall.

When we developed our first full-wall size panels in 1937, they were used to line the interiors of numerous



IN CONVENTIONAL CONSTRUCTION, use of "U" clamps enables two men to quickly handle a full-wall size panel. Large sizes easily go through an ordinary door opening 2' 6" x 6' 8" and through an open stair well.

test homes in 28 states where their qualities were carefully checked and observed.

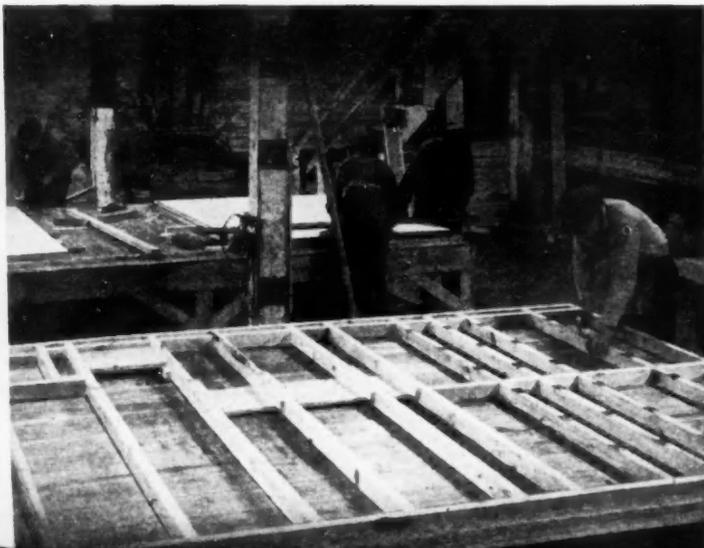
At the outbreak of the war they were enjoying a steadily growing usage. Under FHA acceptance, a limited number of project builders tested them in the high-speed construction of war homes. Success there led to their widespread adoption on housing projects built by conventional methods and through all degrees of prefabrication. Thus, it has been demonstrated that dry-built full-wall construction produces desired advantages in both individually built homes, as well as in mass produced communities as built by FPHA.

Technique of Dry-Built Full-Wall Construction is Simple

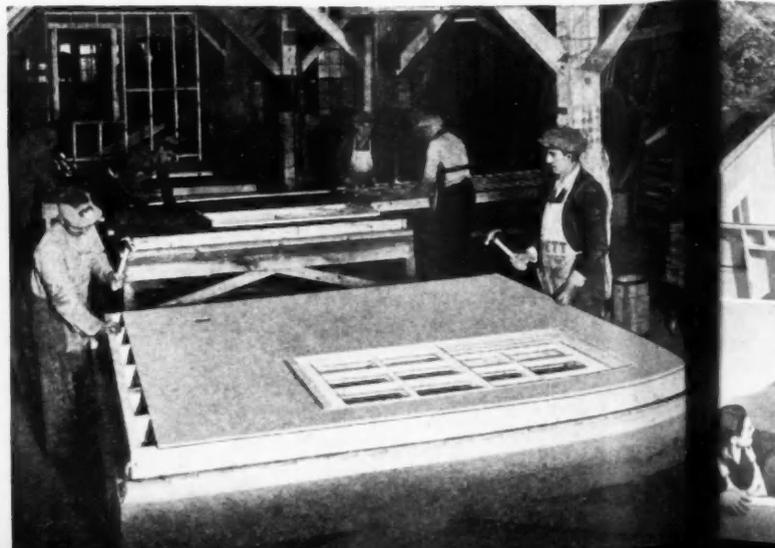
Specifically, the main advantages named by builders with experience in dry-built full-wall construction, are: reduced building time, lower labor cost, crackproof construction, no moisture trouble, efficient insulation, no joints and a cleaner job. STRONG-BILT Panels give added value to any home.

Lest there be some who think that full-wall construction calls for a new skill and technique, it should

IN PREFABRICATION, faster assembly and lower costs. Below: Nailing of Upson Floating Fasteners to framing in plant of Bennett Lumber Corporation, North, Tonawanda, New York.



"Full wall panels eliminated costly joints. Your cutting to exact size saved us considerable grief as well as money," writes F. R. Roginson, President, Bennett Lumber Corporation.

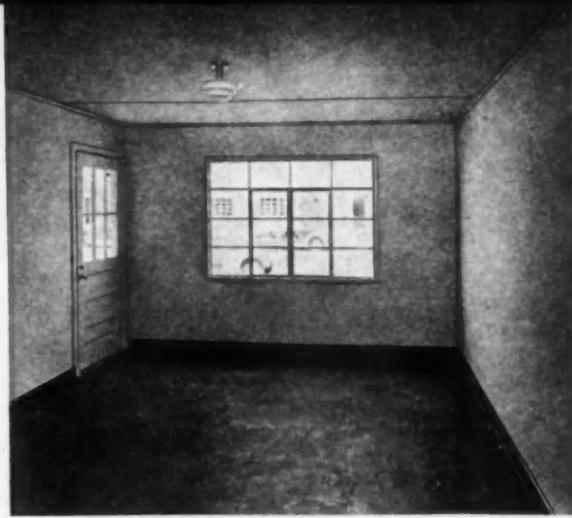




Upon Floating Fasteners are nailed directly to studs and joists for anchoring Strong-Bilt Panels securely from the back.



A unique feature permits movement of the panel to compensate for normal structural settlement. No face nailing. No taping of joints. No nail holes to fill. No battens.



Painting of panels can start immediately after application. No muss or fuss of plastering. No waiting for plaster to dry. No destructive moisture to damage trim or flooring.

be made clear that the application of STRONG-BILT Panels is much simpler than most home construction operations now in use. Every builder, contractor and carpenter has applied dry-wall panels of some type. STRONG-BILT Panels can be sawed and nailed like wood . . . and with the same tools.

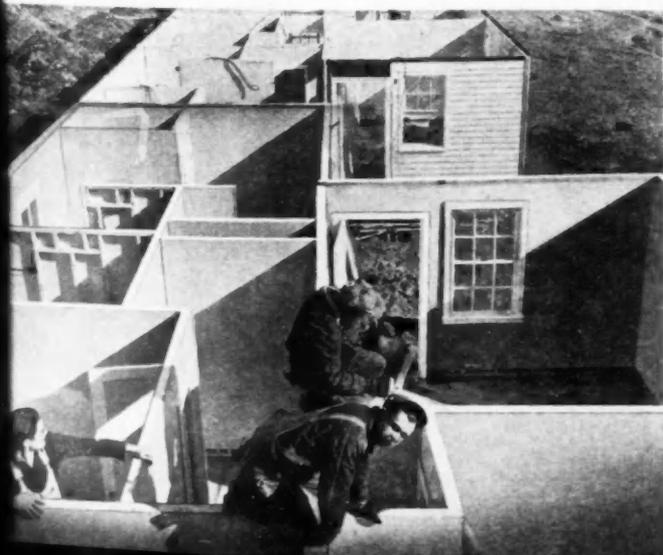
Application is Easy . . . Fast

Application is made with fasteners nailed to framing. These fasteners anchor the panels securely *from the back*. There are no nail holes to fill because there is no visible surface nailing. And there are no joints to tape or hide because the entire wall is in one unbroken piece.

Where application is a site operation, cutting to exact wall size is done at the site or in the builder's yard. On projects of 100 or more houses wall sizes can be cut at our factory prior to shipment. Openings usually are cut after application, although some prefabricators cut openings before application.

While the builder is thus able to reduce his costs by dry-built full-wall construction, the buyer in turn gets more for his money.

Wall sections in place. Concludes Mr. Roginson: "Our experience has been so very satisfactory that we will, of course, continue to use and recommend Strong-Bilt Panels on all future jobs."



Appealing Advantages

Due to the nature of the material used, and because of an unique feature of the fasteners, our panels adjust themselves to normal settling movements in a house. Walls made of these panels therefore remain forever free from cracks. In consequence, maintenance expense is lower.

Although STRONG-BILT Panels are designed primarily for interior finishing purposes, they have in fact an insulation value up to $3\frac{1}{2}$ times that of plaster. Less special insulation is needed on jobs where they are used.

At the factory the surface is given an attractive pebbled finish and then pre-sized. After application to framing, one coat of good washable paint usually is sufficient to produce a durable lasting finish. Painters say that these panels provide an unequalled painting surface, thus speeding up the job and reducing the number of coats normally required. Our finished walls have drawn high praise for their beauty and attractiveness at public exhibitions.

Builders using STRONG-BILT Panels for the first time are pleasantly surprised to find this strong, rigid panel material to be so light in weight. STRONG-BILT weighs less than a pound per square foot . . . about half that of $\frac{1}{2}$ " material with a mineral core.

Ideal For The Prefabricator

In the manufacture of prefabricated houses, the flexibility of our full-wall panel sizes has proved an important aid to the designer . . . (8 ft. high and room length). We furnish the panels in needed sizes for projects.

The prefabricator saves labor and waste material involved in cutting from standard size materials. Shipping schedules can be arranged so that the right sizes arrive at the right time, with a resultant saving in storage and inventory. As unloaded, proper sizes can be stacked conveniently near the jig table where they will be used.

Quick application by means of our fasteners and the elimination of such time-consuming operations as face nailing, countersinking and the filling of nail holes, speed up the assembly line. Because STRONG-BILT

(Advertisement)

Smooth, beautifully pebbled surface of Upson Panels closely resembles conventional wall finishes.



A 50-pound bag of sand dropped from a height of six feet fails to harm a Strong-Bilt Panel supported on centers 28 inches apart. Strong-Bilt Panels withstand impact blows up to 6 times that of boards with a mineral core.

Panels are comparatively light in weight, and not brittle, they facilitate handling of finished house sections, reduce shipping weight and practically eliminate breakage of interior wall linings.

Public Acceptance

STRONG-BILT has a beauty of surface found in no other wall and ceiling material. Home owners are highly enthusiastic over its rich, smooth, pebbled surface. They find it so easy to decorate and keep clean. STRONG-BILT walls mean walls of lasting beauty.

To date, our best information indicates that more STRONG-BILT Panels have been used by America's builders than any other material providing dry-built full-wall construction. With experience behind us, gained in supplying and supervising the application of these panels in thousands of housing units from coast to coast, there is no longer any question of the economy, utility and practical value of dry-built, full-wall construction.

As executed with our product and method of application, dry-built full-wall construction has successfully met both requisites which every product and process must meet to qualify for the postwar home: namely, lower cost and added dollar value to the buyer.

SPECIFICATIONS

Thermal conductivity B. t. u. per hour, per square foot, per degree F., per inch thickness	0.43
Weight per square foot in pounds	0.92
Thickness in inches	0.34
Tensile strength, long way of panel, in pounds per square inch	2,033
Tensile strength, short way of panel, in pounds per square inch	928
Nail-holding strength in pounds	145



Experienced painters say Strong-Bilt Panels have an unexcelled painting surface. Pre-sized at the factory, the surface takes paint smoothly and evenly.

For informative booklets which picture and describe dry-built, full-wall construction methods for both conventionally-built and prefabricated houses, address

THE UPSON COMPANY
LOCKPORT, NEW YORK



THE CRACKPROOF BEAUTY SURFACE WITH EFFICIENT INSULATING VALUE

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AND BUILDING AGE

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Letters

From a tent in New Guinea

Somewhere in New Guinea.

To the Editor:

Yes, we over here are thinking of home building too.

I receive the *American Builder* and pass it on—am helping fellows over here on their future home plans.

After living in a tent on this island for a year, you can rest assured that we want comfortable homes when we get back.

Your magazine is doing a lot of good work for future building. Keep it up.—CPL. WILLIAM E. WELLS.

In the Navy, but still interested in post-war building

Great Lakes, Ill.

To the Editor:

All of us who are planning post-war building now find your magazine extremely interesting, particularly the July issue. I am hoping you can mail this issue to Lt. Comdr. L. D. Reaves (DC) USNR, Fleet Post Office, New York City.—MRS. L. D. REAVES.

Must not stifle

Sabina, Ohio.

To the Editor:

To finance a war, you must not stifle business with endless red tape and regulations. America will not stand for suppression of initiative.

Up-to-the-minute ideas of the trades, and the opinions of experienced builders are interesting and worth reading.

I was about disgusted with your paper up and until the last few issues. Senseless accounts of changes of personnel of different firms do not interest the construction trade.

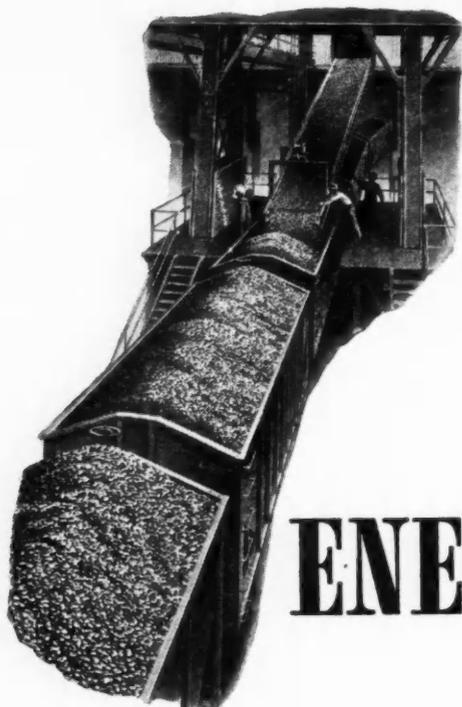
Put in your paper practical suggestions and the good things others are doing, and we will read.—C. FRED KELSO, Architect and Contractor.

FHA vs. Savings & Loan

Berkeley, Calif.

To the Editor:

As one who has built hundreds of homes, and financed the construction of thousands of others and therefore having been on both sides, I suppose I could qualify as umpire
(Continued to page 134)



PUBLIC ENERGY NO. 1

BITUMINOUS coal is America's No. 1 source of power and heat, so you can easily see how important it is to our successful conduct of the war.

You may be surprised to know that coal develops more power—pulls more trains—warms more homes—turns more wheels—generates more light than any other fuel, and does it at lower cost.

But the men who own and operate the mines are keenly aware of these facts—and of the responsibilities that go with them.

That is why, during the lean years of the thirties, they dug down in their pockets

to launch a modernization program. Thanks to that job, *more coal was produced in 1942 than ever before in history*, despite the loss of some 70,000 trained workers to the armed forces and other war plants.

And again in the first 7 months of 1943, America's bituminous coal industry managed to beat all previous records for a like period.

Make no mistake about it, the men who made these records are working shoulder to shoulder with all American industry, keenly aware of their obligations as citizens, as employers, and as suppliers of the fuel that is "public energy No. 1."

BACK THE ATTACK • WITH WAR BONDS

BITUMINOUS COAL
Institute

60 East 42nd Street

New York 17, N.Y.

 *Sunshine and fresh air for tomorrow's better living*



**BETTER LIVING
Will Cost No More
Than Ordinary Living**

Through the years leading up to the war, Ceco learned how to build good steel casement windows and sell them at a cost equal to that of ordinary windows. The easy ventilation, fine operating hardware and graceful, slender muntins could be included by the architect or builder at no extra cost. Right now the Ceco Manufacturing Division plant is devoted to war production! But Ceco will return to the making of all types of windows including residential casements . . . just as soon as the war is over! Tomorrow, you will be offered Ceco Windows that are better than ever, costing less than ever, bringing more and more comfort and livability to the home you will build!

Other Ceco Peacetime Products:

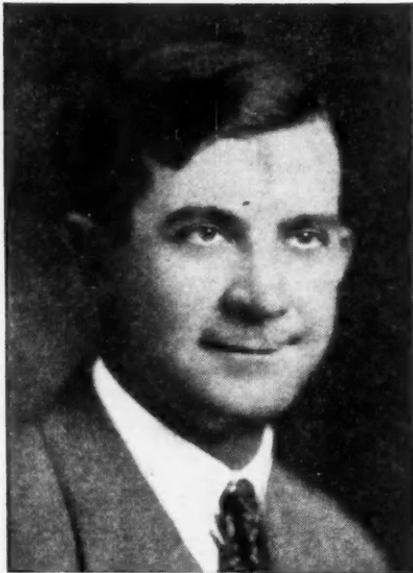
- Commercial, Industrial, Casement & Basement Windows
- Metal Lath & Accessories Welded Fabric
- Steel Joists & Roof Deck Column Clamps
- Metal Frame Screens, Weatherstrip Meyer Steelforms
- Adjustable Shores Concrete Reinforcing Bars

Ceco STEEL Windows

CECO STEEL PRODUCTS CORPORATION, MFG. DIVISION, 5701 W. 26TH ST., CHICAGO

These Men...

Originated, Developed and Pioneered the



A. R. WUEST
President and General Manager



A. R. WELCH
Vice-President in Charge of Production

Manufacture of

Exterior

DOUGLAS FIR WATERPROOF Plywood

TRU-BILT EXTERIOR is a resin Bonded, waterproof plywood manufactured by an entirely new process developed by the West Coast Plywood Company. Its manufacture comprises a special spreader, an exclusive continuous assembly line, a stacker and newly devised loader and press. All units entering into the manufacture of this waterproof plywood are minutely synchronized to assure a uniform, superior product.

When you use TRU-BILT

EXTERIOR PLYWOOD you get . . .

- Minimum of Warping
- Minimum of Checking
- Minimum of Shrinkage
- Smoother Finishing Surface
- IMMUNITY TO MOISTURE
- A SUPERIOR EXTERIOR PLYWOOD

TRU-BILT

WEST COAST Plywood COMPANY

Manufacturers of DOUGLAS FIR and SPRUCE PLYWOOD, Aberdeen, Washington

The Name **HOPE'S** *Guarantees*
1818 WINDOWS 1943



RESIDENCE OF J. S. NICHOLS, VIRGINIA FOREST, FALLS CHURCH, VA.

FOR BETTER AMERICAN HOMES

Whatever novelties in home construction or mechanical equipment may come after the war, the practical builder knows that compact, comfortable homes at moderate cost will form the largest residential market. New developments in Hope's Windows will bring the many advantages of metal casements to this class of building. Our service will make windows for a wide variety of layout conveniently available and lower prices will help the builder offer values that the public will accept with enthusiasm.

While they last, Steel Windows from our warehouse stocks are available without priority certificate.

HOPE'S WINDOWS, Inc., Jamestown, N. Y.

★ ★ ★ ★ ★

THIS YEAR
 BUY
 WAR BONDS

★ ★ ★ ★ ★



I'M PLANNING MY POST-WAR BUILDING AROUND THE NEW COLEMAN HEATING DEVELOPMENTS!

THEY'LL HELP SELL HOMES FASTER!



You Can Offer Prospects the "tops" in circulating warm air heating—backed by national advertising that will help make sales for you . . . in advance!

THEY'RE PRICED TO FIT HEATING BUDGETS!



No Budget Worries, trying to fit this new, low-priced equipment into your plans! These compact units do a complete job and preserve your profit!

"PACKAGED HEAT" FOR EASY INSTALLATION!



Ready-Made, Packaged Heating for new or old homes. Coleman ships complete. Factory engineered to make your work easier, more profitable!

Why Thousands Will Plan Post-War Buying With Coleman In Mind

We're already "selling" this post-war market, with pages and half-pages in national magazines. These "previews of post-war heating" are going into 24,000,000 magazine messages this fall, alone! You'll find Coleman a name that sells for you, when post-war building gets into full swing.

Coleman Plans to Serve You Quickly WHEN POST-WAR BUILDING STARTS

Today—in Coleman's Heating Research Laboratory your post-war building job is being made easier! Here are different types of furnaces, some half the size of an icebox—powerful, compact, low-priced—for quick installation in wall, floor, basement or closet! . . . Packaged heating, ready-made, shipped you complete! Coleman's market is YOUR big market—homes from the lowest price

bracket up to the \$10,000 class.

You will find new comfort to sell—plus "heating flexibility"—a choice of automatic fuels, gas or oil—low fuel bills—new operating ease!

Factory engineered to reduce your installation problem to bed-rock minimum—backed with a nation-wide service organization of factory-trained engineers. Watch for new Coleman developments!

Coleman

THE COLEMAN LAMP AND STOVE COMPANY
WICHITA • CHICAGO • PHILADELPHIA • LOS ANGELES

LEADERS IN HOME HEATING



SPACE HEATERS



FLOOR AND WALL FURNACES



CENTRAL HEATING PLANTS



WATER HEATERS



- ← ASPHALT-SEALED SHEATHING
- ← INSULATION LATH
- ← BUILDING BOARD
- ← THRIFTEX WALLBOARD
- ← ROOF INSULATION
- ← DECOBLEND TILE AND PLANK
- ← COLORED TILE AND PLANK

IN your present and post-war plans, Flintkote Insulation Board Products can be as important and profitable a factor as Flintkote's long-famous roofing materials.

Uncle Sam's demands have until now put practically all of Flintkote's tremendous production of Insulation Board Products into war construction. Ever since completion of the huge Flintkote Insulation Board Plant, at Meridian, Miss., these products have been proving themselves "in active service."

Dealers and builders who have used them and seen their ability to go up quick and their unusually attractive appearance are enthusiastic "salesmen" for all Flintkote Insulation Board materials.

In both the structural and decorative fields, it will pay you to check the advantages of Flintkote's Insulation Board Products today . . . *for tomorrow!*

The Flintkote Company, 30 Rockefeller Plaza, New York 20, N. Y.

Flintkote

INSULATION BOARD PRODUCTS

NEW YORK...ATLANTA...BOSTON...CHICAGO HEIGHTS...DETROIT...LOS ANGELES...NEW ORLEANS...WACO

On and Off the Record

by **STRUCTOR**

News, Views and
Comments

FIFTH FREEDOM—How builders feel about post-war private enterprise was indicated at the National Association meeting at Washington where they unanimously endorsed Fulton Lewis, Jr.'s "Fifth Freedom" statement as follows:

"Freedom of initiative and individual enterprise—the right to own and enjoy what you work for—the right to work harder than the man next door and have a better HOME than he has—the right to bring up your children with better opportunities than you had—this is America's Fifth Freedom."

NO FAILURE—The cold facts show that home building has not been a failure in this country. We have built more homes and better homes than any nation in the world. We reached a peak of 715,000 in 1941, about 90 per cent of which were single-family dwellings—and they were attractive, well built, comfortable houses that averaged about \$4,000 in price.

GOLDEN EGGS—To listen to the criticism of public housers and visionary architects and planners, you would think home building in this country had been a miserable failure. So let the Government take over and do all the building? Not by a long shot. This goose may have its faults, but we are not going to let the golden eggs of good, private home ownership be lost through too much tampering by government control or competition.

POST-WAR SETUP—I have heard builders vigorously expound their arguments for a completely independent FHA. Still, I think the country needs one over-all housing agency—but the right kind. It should be set up by Congress and the top man approved by it. Its objectives should be clearly stated to be *maximum private enterprise and private home ownership*. FHA and the Home Loan Bank System, which both help financed private home building, should have a dominant vote—not the public housers.

FHA'S RECORD—Most of us want FHA to continue in post-war, but in all honesty its record has

some serious blemishes. It has constantly lost its best men—such men as Miles Colean, Babcock, Fisher, William Flanders, Ward Canaday, Ray Cahill, and others. Its first head was a playboy ex-oil executive, the next an ex-motor car maker. It's a wonder that FHA has really done as well as it has.

When we ask for a revitalized FHA in post-war we mean just that—rebuild it from the ground up with competent non-political personnel, including experienced executives from the building industry who know what goes on.

ARMY INVENTORY—If the war should end suddenly, army inventories of building materials might prove a big help to a quick home building start. These are said to be very great, and rightly so.

There will also be considerable second-hand material available from barracks, temporary buildings, housing, etc., which may alleviate any critical shortage.

Consensus of opinion is that small construction such as repairs, remodeling and small homes will be able to go ahead very fast. After the last war home building practically tripled the first year.

THE REAL THING—It looks as though the National Association of Home Builders is the real thing—a vigorous, strong group devoted entirely to the interests of residential builders and nothing else. There was a general air of enthusiasm, determination and good spirits at the Washington meeting. Some of the fellows who a little while ago were calling each other names have become good friends.

The Executive Board is made up of as smart and determined a group of individualists as ever agreed to enter the same room together. They all have ideas, and they are all accustomed to fighting for what they want, so it takes quite a lot of talking to get a decision. But the important thing is, they eventually do.

SNAFU—One of my friends in Washington who gets out numerous bulletins to the building industry continues to start or end them with the cryptic letters SNAFU. His

slightly expurgated version of the meaning, which you may have heard, is "Situation Normal, All Fussed Up."

FOOD AND HOUSING—Cheap food, according to my economist advisor, means more housing. He claims that when food prices are low, people have more to spend on housing, and do. That is one reason why he expects a building boom after the war, because an abundance of food will result in low prices.

Another important point he makes is that the spread between the earnings of the average prospective home buyer and the wages paid building workers has greatly narrowed during the war. This means, he says, that more industrial workers who are making, and will continue to make (he believes) good wages will be able to afford houses. Construction wages and material costs have not gone up nearly as much as consumer purchasing power.

MASS HOUSING?—When I look at the recent population census figures, I wonder where some of these experts get all their dope about mass housing. Twenty-three per cent of the population, or 30 million, live on farms—there's no mass housing there. Another 21 per cent, or 27,000,000, live in places under 2,500 or in the country, but not on farms. Very little "mass" there. About 22 per cent, or 29,000,000, live in cities between 2,500 and 50,000. I doubt whether there will be many 500-home projects in cities of that size!

About 16 per cent, or 23,000,000 people, live in cities 50,000 to 500,000. There is room for some mass housing there, but not much.

That leaves only 14 big cities of 500,000 and up, where 22,000,000 live—17 per cent of the population. Mass housing might apply to these areas but, as a matter of fact, what is meant there is rebuilding and urban redevelopment calling for the tearing down of slums and remodeling of thousands of old structures.

Anybody who can afford to buy a home will leave the big cities to go out into the smaller communities nearby. The core of the big cities is already rotten, and is going to get worse because people are continuing to move away.



Bring the outdoors inside with **DAYLIGHT ENGINEERING**

What features do postwar home builders want in their homes? Next to the top in a long list of wants, a recent study revealed, are larger windows and more natural light indoors.

The answer to this desire is found in *daylight engineering*, a new development that promises to revolutionize building design.

Through daylight engineering cramped rooms become spacious in feeling... dark and dreary interiors brighten and cheer up. It's accomplished by using large areas of transparent glass on outside walls and translucent or

decorative glass on interior walls. Mirrors properly placed inside add to the atmosphere of light and spaciousness. Nature's own out of doors becomes a living room picture, and its welcome light is transmitted throughout the home.

Libbey-Owens-Ford Glass for windows, mirrors, wainscoting and work surfaces, and Blue Ridge Glass for partitions are available in a wide variety of types and colors. Opportunities for designing and building with glass are multiplied many times by this modern glass L·O·F now provides. Libbey-Owens-Ford Glass Company, 25103 Nicholas Building, Toledo 3, Ohio.



LIBBEY · OWENS · FORD

QUALITY *Flat Glass* PRODUCTS



We'll Answer "READY" to Post-War Builders

The day when Victory comes and peace-time living returns to our Nation, WARM MORNING Heaters will be ready for the builders of America...ready on a greater scale than ever, to supply homes everywhere with the best in modern coal heating at low cost.

Right now, in war-time, WARM MORNING is doing a big job. Hundreds of thousands of these heaters that employ advanced, exclusive, patented heating principles, are in use in army barracks and homes the length and breadth of the Nation. To help supply vital heating requirements, they are being rationed to those who need them most. Naturally, the supply is limited.

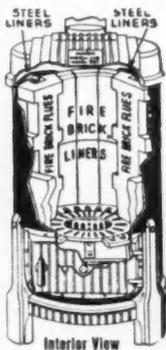
But our factories are geared to go. When whistles shriek the voice of Victory, the clang and clatter of WARM MORNING production lines will resound again, calling "Ready" to the home builders of the Nation!



Model 520

Pat. No. 2255527, Name Reg. U.S. and Can. Pat. Off.

(LT-4)



Interior View

WARM MORNING COAL HEATER

A Product of LOCKE STOVE COMPANY. 114 W. 11th St., KANSAS CITY, MO.

★

New Answers... "FROM THE GROUND UP"

TO THESE **IMPORTANT INSULATION QUESTIONS**



Thickness

Efficiency

Fuel Savings

Comparative Values

Actual Performance

Laboratory tests give approximate indexes of insulation value. But to get the real truth about insulation requires scientific study under *actual conditions* . . . with every influencing factor subjected to the most precise control.

To get such facts "from the ground up,"

Wood Conversion Company built four identical test houses . . . equipped them with elaborate testing devices . . . collected and checked data month after month in one of the most elaborate tests ever conducted on insulation.

Today the results of these findings are available to you . . . valuable, important data which will answer once and for all your vital questions about insulation efficiency—thickness—performance—value. Embodied in the report of the American Society of Heating and Ventilating Engineers, this data is yours for the asking. Mail the coupon for a copy of this authoritative report.

Balsam-Wool
SEALED INSULATION

WOOD CONVERSION COMPANY
Dept. 119-10, First National Bank Bldg.
St. Paul, Minnesota

Please send me complete scientific data on the Wood Conversion Company insulation tests.

Name.....

Address.....

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

"Thanks No...

we don't crave

'Ducky Wucky Home No. 6' "

"I've seen a lot lately about miracle houses after the war but . . . they leave me cold.

"Maybe materials and gadgets will go in one end of a factory and come out the other in sections, ready to bolt together into six rooms and bath which the catalog will say is 'Our Bride's Dream—Ducky Wucky Home No. 6' . . . but they can have it.

"That number would be just daisy for those peas-in-a-pod row houses near big factories, but it's not the kind of home we'll build to live in happily ever after. Ours is going to express us . . . not a common denominator. I've got a whole scrapbook full of ideas. When Jack gets back from the war we'll huddle with our architect and builder. Those ideas will go into *their* heads and come off *their* pencils in blueprints of *our* plans for *our* home."

She means just that and she's one dictator this war is not going to change. Meaning that when her Jack comes home again, you contractors will be back at your regular peacetime business of building individual homes for individual people with materials furnished by your lumber dealer.

We're ready to help you lay the ground work for that day . . . now, with construction details, stress tables, specifications, painting and finishing formulas and a group of well planned small and medium size homes designed by qualified architects, always useful in talking preliminaries with clients. Also included are facts about soft textured Arkansas Soft Pine lumber and Satin-like Interior Trim which have earned good profits for builders for more than forty years. Write now for this practical, useful information, enclosing 25 cents.



★ ★ ★ **Arkansas Soft Pine Bureau** ★ ★ ★

1034 Boyle Building

Little Rock, Arkansas

Strong Ally of a Strong America

With few exceptions, the changes and developments which can be anticipated in American life after the war must depend in some measure on the building industry. Better educational opportunities will require new school buildings; decentralization of industry will necessitate new communities of homes, industrial buildings, commercial buildings and municipal buildings; social rehabilitation will call for vast programs of slum clearance; and improved living conditions will demand large numbers of homes and housing projects.

Stran-Steel is well qualified to serve a progressive building industry, strong ally of a strong America. As a key supplier of military buildings, Stran-Steel has developed new techniques and acquired valuable engineering knowledge in the use of strip steel.



STRAN STEEL

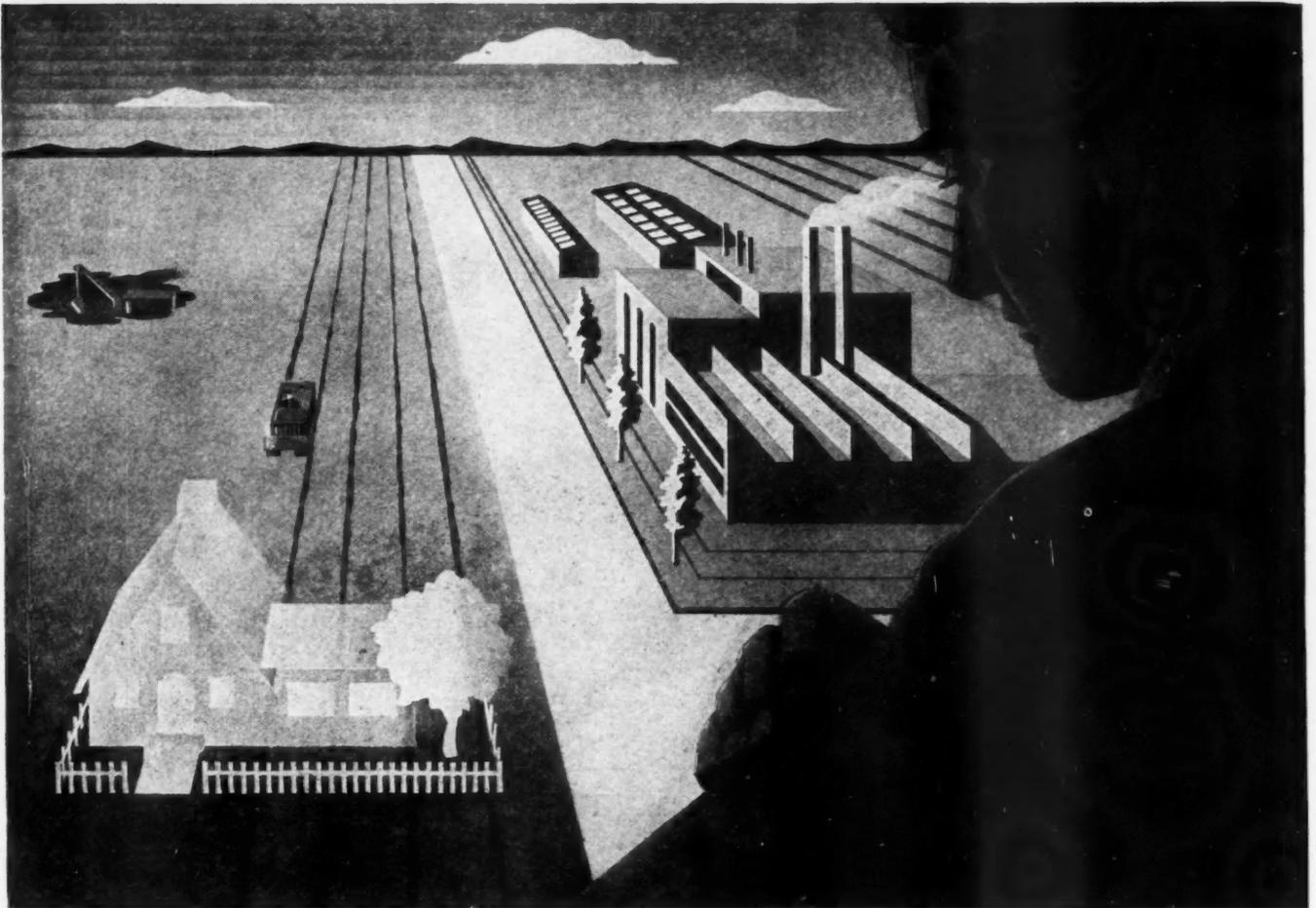
DIVISION OF GREAT LAKES STEEL CORPORATION
1130 PENOBSCOT BUILDING, DETROIT 26, MICHIGAN

UNIT OF NATIONAL
STEEL CORPORATION

ND for
useful
NOW!



Mr. Chekovski looks at his new home



If this war housing project comprising up to 100 or more houses were in your hands, you probably could complete it faster with Atlas High-Early cement—and save time in wartime.

STAN CHEKOVSKI and thousands of others enrolled in our industrial "army" must have new homes so that war production can be increased in nearby plants. But how soon? Uncle Sam wants war production on the double-quick. New housing for war workers was needed yesterday.

You know an answer to the question. *Atlas High-Early cement.*

Despite cold weather, this speedy cement will help hurry up completion of war housing. This cement has had an important role in helping to place

this country on an all-out war basis not only in housing, but in factories, airports, naval bases, cantonments, access roads.

Check the facts in the adjoining box. Use Atlas High-Early cement whenever you need durable, serviceable concrete—in a hurry. Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York City.

OFFICES: New York, Chicago, Albany, Boston, Philadelphia, Pittsburgh, Minneapolis, Duluth, Cleveland, St. Louis, Kansas City, Des Moines, Birmingham, Waco.

CHECK ON ATLAS HIGH-EARLY for Wartime Construction

Atlas High-Early cement gains strength rapidly—produces serviceable concrete in one-fifth the usual time on some jobs. So it—

1. **Permits earlier use of concrete**, and thus gives owner earlier occupancy.
2. **Saves manpower** when such conservation is needed most—releases men for new jobs more quickly.
3. **Conserves lumber.** Forms may be stripped sooner—often in 24 hours instead of from 3 to 5 days—and re-used. Hence fewer sets of forms may be needed, saving time, labor, and lumber.
4. **Shortens time required for protection and curing** as much as 70%. This saves fuel and releases tarpaulins and salamanders for other work.
5. **Reduces overhead** by saving time, manpower and equipment.

AB-H-52



SAVE TIME IN WARTIME WITH
Atlas High-Early Cement

A UNIVERSAL ATLAS PRODUCT



salute our paratroopers

Nervy chaps, these boys, who certainly know what it means to "go off the deep end."

▶ Action! The command is "jump." With nothing between them and the earth but several thousand feet of air, they step into space.

▶ Dropping over enemy territory, they're exposed targets until they land. On the ground, they're subject to attack . . . perhaps annihilation. For they are expendable, their command's investment in disrupting the enemy behind his lines, to divert him while mounting the main frontal attack.

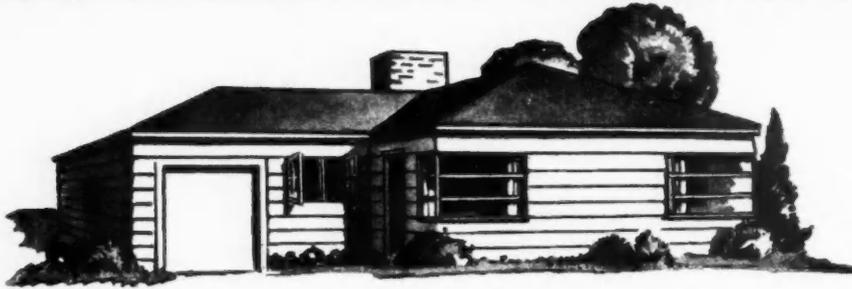
▶ Salute America's paratroopers, men of stamina and guts who accept the perilous hazards of their assignments as all in the day's work of winning the war. Having dedicated themselves to the supreme sacrifice for their country, we on the home front owe them a supreme debt which, by our own material sacrifice, must and can be paid only through our purchase of War Bonds . . . now and for the duration!

BRADLEY LUMBER
Warren



COMPANY of Arkansas
Arkansas

FOR TOMORROW'S HOMES..

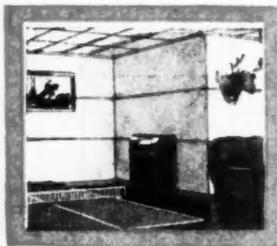


After the war—watch home-building skyrocket!

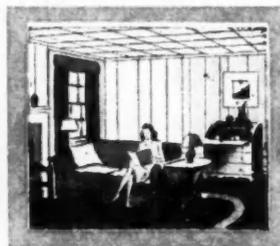
And—watch the number of homes built with the Insulite Approved Wall of Protection also skyrocket. In post-war building, structural soundness, effective insulation and vapor control will be primary considerations.

The Insulite Approved Wall of Protection will be used in the construction of post-war homes because this modern wall gives *all* the needed factors. The Insulite Approved Wall of Protection has been tested and proved in thousands and thousands of pre-war homes. Its outstanding advantages make it a *must* in post-war construction.

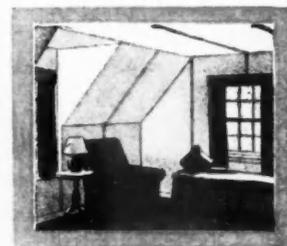
Begin now to plan the homes you will build after the war. If you are not familiar with the many advantages of the Insulite Approved Wall of Protection, write for complete information.



(1) Some prefer Insulite Interior Finish for interior walls and ceilings. Supplied in a wide variety of designs, shapes and colors, many interesting and beautiful interiors may be built with Insulite. Insulite also insulates, thus enabling you to do two jobs at one cost—insulate and beautify at one operation.



(2) Unusually attractive designs and patterns can be obtained in the application of Insulite Interior Finish. *Period*, or conventional treatments to fit the type and style of home or desire of owner are easily accomplished.



(3) Waste space in attics or basements may be turned into livable quarters. Insulite interior finish will help to provide more livable, comfortable interiors . . . insulating and decorating the house, giving warmer rooms in winter, cooler rooms in summer. Insulite interiors require no plastering, papering or painting.



INSULITE
DIVISION OF MINNESOTA AND ONTARIO PAPER COMPANY, MINNEAPOLIS, MINNESOTA

THE INSULITE APPROVED WALL OF PROTECTION

INSIDE...

INSULITE SEALED GRAYLITE LOK-JOINT LATH

Insulite Sealed Graylite Lok-Joint Lath, with an asphalt barrier on the stud side, effectively retards the passage of vapor, and provides an inner wall of insulation.

OUTSIDE...

INSULITE BILDRITE SHEATHING

Insulite Bildrite Sheathing allows what little vapor may enter into the stud space to pass naturally toward the outside, thus effectively guarding against condensation within the wall itself. Asphalt treated throughout, Bildrite is waterproofed and windproofed.



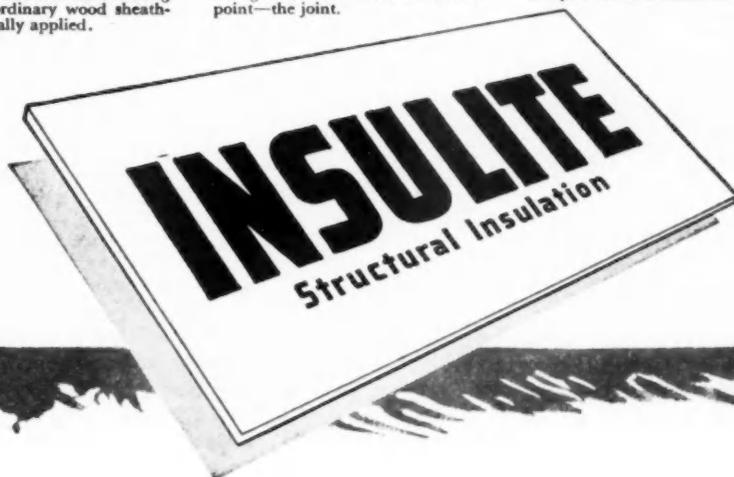
The big panels of Insulite Bildrite Sheathing fit quickly into place and cover a large surface in one operation. Insulite Bildrite Sheathing provides four times the bracing strength of ordinary wood sheathing, horizontally applied.



Insulite Sealed Graylite Lok-Joint Lath is a safe base for plaster. The patented "Loks" bind adjoining lath units together, provides strength at the most vulnerable point—the joint.



Brown stain or paint blisters can be an indication of destructive condensation within the walls. With the Insulite Approved Wall of Protection this problem is minimized.



THE ORIGINAL WOOD FIBRE STRUCTURAL INSULATING BOARD



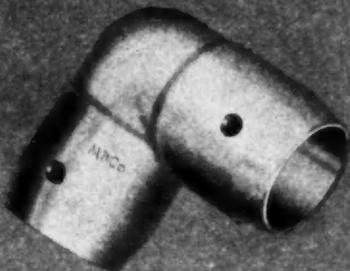
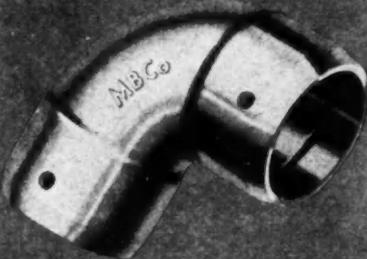
PRECISION * * *

Strict laboratory control plus the most modern equipment fortified by many improvements during 25 years of "know-how" are the reasons for the reputation for quality that the Mueller Brass Co. enjoys today—Yes, precision starts at the very beginning in the manufacture of STREAMLINE fittings—PRECISION STARTS WITH THE CORE.

We Americans, no matter in what walk of life, realize that armament work must come first. IT MUST TAKE PRECEDENCE OVER EVERYTHING ELSE IF FOR NO OTHER REASON THAN THIS—THAT WE MAY PRESERVE FOR THE FUTURE THOSE VERY BUSINESSES OF WHICH WE ARE NOW TEMPORARILY DEPRIVED. If we fail, everything is lost—our businesses, our freedoms and our democratic way of life.

In a happier yesteryear STREAMLINE copper pipe and bronze solder type fittings were installed in thousands of buildings where a permanently reliable plumbing or heating system was essential. They were used for air conditioning, for water service piping from main to building—for sewage disposal systems and a thousand other uses where dependability and long service life were of prime importance. They were, and still are, universally considered the finest materials that money can buy. TODAY MODERN EQUIPMENT AND MASS PRODUCTION HASTEN STREAMLINE FITTINGS TO OUR ARMED FORCES FOR INSTALLATION IN TANKS AND FIGHTING SHIPS OF ALL KINDS.

When the postwar period dawns, STREAMLINE bronze fittings and STREAMLINE copper pipe will once more protect the health of the nation as they are now protecting the health and lives of our men in the service.

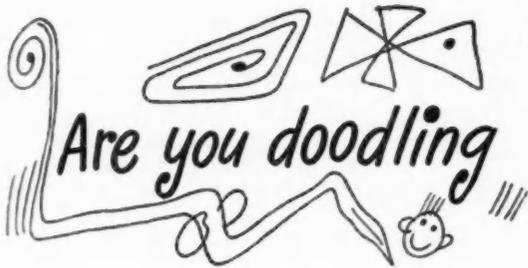


— MUELLER BRASS CO — PORT HURON MICH — STREAMLINE — H TYPE M

STREAMLINE
PIPE AND FITTINGS DIVISION
MUELLER BRASS CO.
PORT HURON, MICHIGAN

DOODLED IN 1556.

Agricola was the Renaissance Diesel who designed this air-conditioning engine. He waited and waited for some mine owner to recognize the need for it. But it never gave out the creaks and clumps, the hisses and groans that would have been music to his ears—because it never got built.



Are you doodling
or planning for that
building boom?



BETTMAN ARCHIVE

NOWADAYS a lot of builders are dreaming sweet dreams about tomorrow.

Wired for sound, their dreams go like this:

- “Building Boom Coming—it can’t miss.”—“80% of our prewar plants are obsolete and need replacement.”
- “Industry is on the move, and needs new plants in new locations.”
- “Hundreds of new products are clamoring for plants in which they can be made.”—

Maybe so.

But many a building boom has fizzled before—because need does not neces-

sarily mean demand. *If it's an industrial building boom you want, you'll have to help set it off.*

How? By showing executives that the building industry can now produce plants so much more efficient and economical that business simply can't afford not to build them.

And the most economical and effective way to tell your story is through the pages of **TIME**—the first-choice magazine of business executives, plant owners and managers—the magazine they

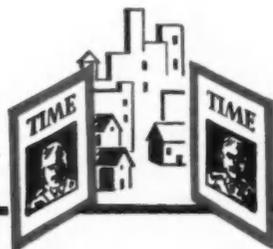
turn to for information to help them think ahead and plan ahead and see the shape of things to come...the magazine they believe in and vote their favorite over all the others they read*.

What's more, TIME is the magazine in which business and industry prefer to tell their own product stories!

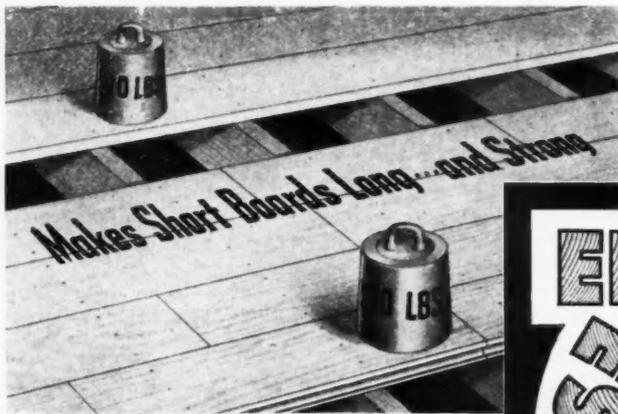
*Among these people are executives and engineers, Government officials, mayors, bankers, architects, and 22 other groups of leaders—all of whom recently voted “**TIME** is America's most important magazine.”

TIME

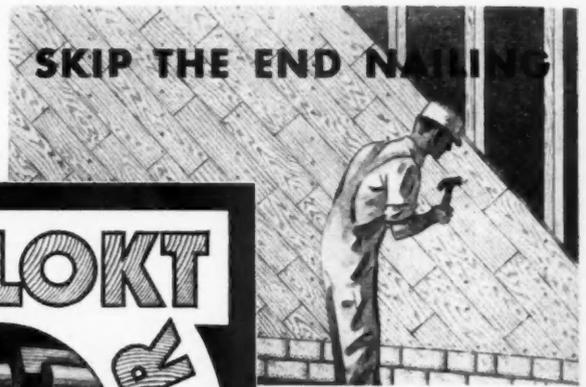
THE GATEWAY



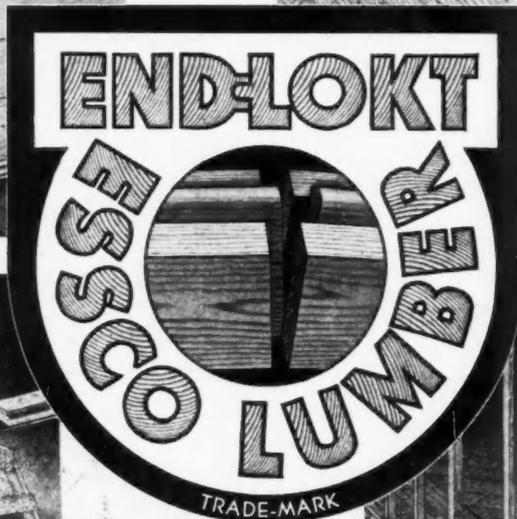
TO THE BUILDING MARKET



SKIP THE END NAILING



SAVE SAWING ...
LET THE JOINTS FALL
WHERE THEY WILL



This Wonder-Working Lumber Will Bring You **12 MONEY-IN-YOUR-POCKET ADVANTAGES**

The war effort is still taking more tons of wood than of steel or any other commodity. The use of wood is expanding in all directions. Chemicals, for instance, are made from it. However, contractors and builders need not be alarmed. The supply of lumber will be ample for your post-war operations. It will be better lumber so designed and milled as to cut your on-the-job costs of labor, material and time. It will stand you in good stead to talk over with your dealer the 12 money-in-your-pocket advantages of Essco End-Lokt lumber now.

1. End-Lokt, the lumber of tomorrow, makes possible greater recovery of better grades. This elimination of waste to a great extent offsets the extra cost of extra milling. Thus, End-Lokt milling operates as an economic factor in the supplying of plus value lumber at no premium in price. Especially is this true when the saving in labor costs it effects are taken into consideration.
2. End-Lokt lumber saves the extra cost and waste involved in diagonal sheathing, sub-flooring and roof decking. Ends need not be sawed except at windows, doors and the end of the run. Any piece sawed off at these points can be used as the starter for the next run.
3. The cutting, handling and mailing costs saved by End-Lokt lumber brings the extra strength, continuous surface advantages of all diagonal sheathing at little or no extra cost.
4. Equal savings and advantages are gained in the use of End-Lokt drop siding, ceiling and porch lining lumber.
5. End-Lokt lumber forms solid, continuous floor, sub-floor, wall or deck surfaces because ends as well as sides interlock.

6. End-Lokt lumber eliminates close end nailing and consequent splitting and lessened nail holding strength.
7. End-Lokt lumber eliminates chatter resulting from one plain butted end joint falling over another.
8. End-Lokt joints can fall where they may, i. e., they need not break over a joist or stud bearing. This saves sawing, nails and nailing necessary to make two ends of plain end lumber butt over joists, studs or rafters.
9. End-Lokt joints falling between stud or joist bearing are as firm and practically as strong as if the piece fully spanned the stud or joist bearing points.
10. Bundled in shorter lengths, End-Lokt lumber is handled easier and more speedily by one man on the job.
11. Bundled End-Lokt lumber gains freight advantage in shipping and "yards" in less space with less handling.
12. Bundled End-Lokt lumber simplifies the inventory by reducing the necessity of carrying large assortments.

EXCHANGE SAWMILLS SALES CO.

1111 R. A. LONG BUILDING

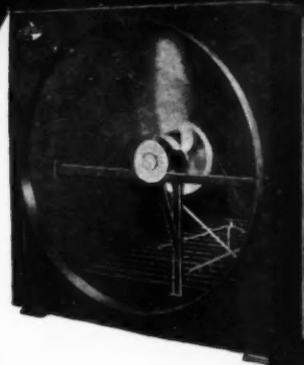
KANSAS CITY, MISSOURI

TRADE-MARKED — GRADE-MARKED

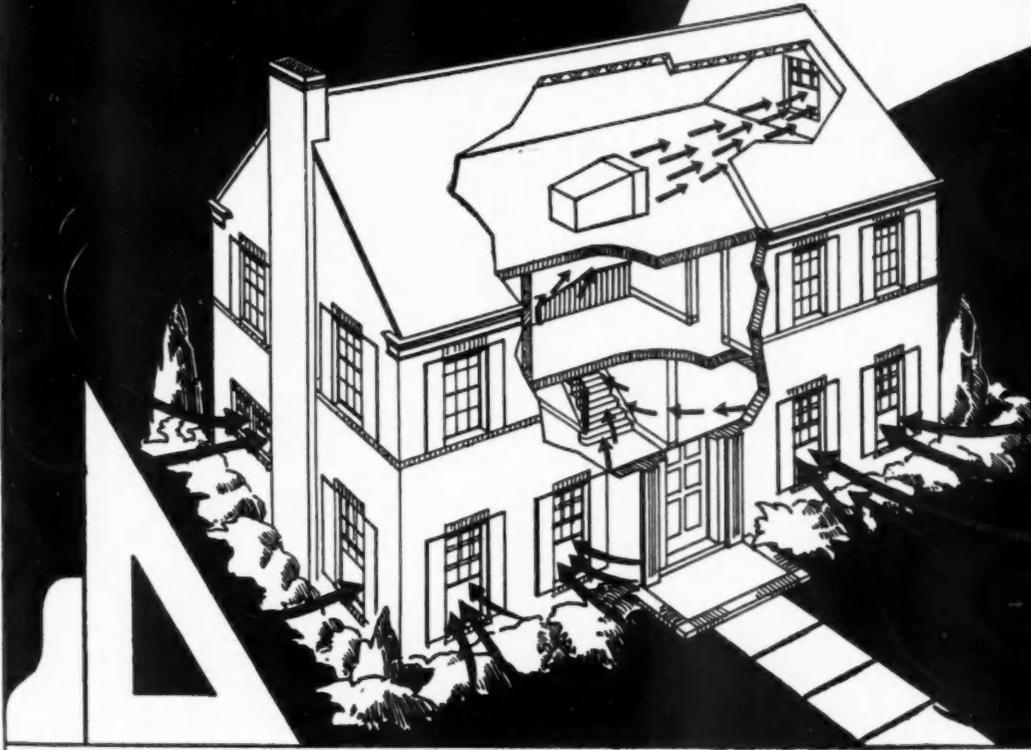
SOUTHERN PINE • SOUTHERN HARDWOODS • PONDEROSA PINE
WEST COAST WOODS • OAK FLOORING



Design for Summer Comfort



Direct drive, 12 to 30-inch.
Belt drive, 24 to 48-inch.
Capacities up to 20,000 CFM.



BEFORE drawing "After Victory" home plans, get full information concerning the complete line of Emerson-Electric Home Cooler Fans. . . . Turned on after sundown, these powerful, quiet home coolers expel excessively hot air trapped in the attic and living rooms, draw cooler outside air into and through the house from open windows and doors. This vital circulation is assured without expensive special construction features or complicated mechanisms. Write for complete information. Emerson-Electric home cooler fans and kitchen ventilating fans will again be available "After Victory" in the same dependable quality which has characterized all Emerson-Electric equipment for more than 53 years.

THE EMERSON ELECTRIC MANUFACTURING CO.
SAINT LOUIS

Branches: New York • Chicago • Detroit • Los Angeles • Davenport

Now 100% War Production



KITCHEN VENTILATOR FANS
A "must" in all post-war homes! The ruggedness, long life and operating efficiency of Emerson-Electric kitchen ventilators have been proved in thousands of homes throughout the country. . . . 9-inch, 10-inch and 12-inch sizes.



EMERSON ELECTRIC

HOME COOLER FANS • • KITCHEN VENTILATORS

Post-War...

It is our opinion that post-war products will be 1942 models. Check the facts supporting that belief. You will learn that to go into war production—it was necessary to convert our plants and develop our producing personnel and our thinking almost entirely away from normal production. And when peace comes—time, money and energy shall be consumed in re-conversion. Introduction of new products, new models and new designs will follow in orderly fashion after that period.



Our conception of the post-war period does not call for nor contemplate any change in our pre-war method of distributing our products.



AMERICAN & Standard RADIATOR & Sanitary

New York CORPORATION Pittsburgh

Cast Iron and Steel Boilers and Furnaces for Coal, Oil, Gas • Radiators • Cast Iron Enameled and Vitreous China Plumbing Fixtures and Plumbers' Brass Goods • Winter Air Conditioning Units • Coal and Gas Water Heaters • Oil Burners • Heating Accessories

Is His "Case of Sniffles" A Clue to Better Post-War Windows?

Anyone who has ever caught cold from sitting too near a drafty, heat-leaking window, will answer "yes!" The No. 1 requirement in post-war window design is *weather-tightness*—ability to reduce wind infiltration and heat loss.

Designing that kind of window isn't simple. It takes elaborate testing equipment, extensive laboratory facilities. It takes years of research and field experience.

Curtis has made this investment in time and research.

Consider, for example, the Curtis Silentite window. It represents the first basic window improvement in 300 years. It is a complete pre-assembled unit—factory-fit for extreme accuracy. It is made of wood—a non-conductor of heat and cold. It operates without weights or pulleys—and hence with no cuts in the jamb to allow heat leakage. Its efficient weatherstripping is built-in, an integral part of the unit.

But what about the window of tomorrow? We can say only this: Curtis research is still going on . . . still centered on making even further improvements in window weather-tightness.

Whatever tomorrow may bring, Curtis will continue a leader in better window design . . . with *weather-tightness* a primary Curtis advantage. Curtis Companies Service Bureau, Dept. AB-10S, Clinton, Iowa.



Here is one of the famous Curtis Silentite window designs. It's an insulated, pre-fit, pre-weatherstripped window . . . free of weights and pulleys, free of sticking or rattling. It's a typical Curtis achievement in designing windows that keep heat inside—and bar out cold.



TOMORROW'S WINDOWS WILL HAVE GREATER WEATHER-TIGHTNESS

*New!
Low Cost!*

Fenestra[™] EASY-SET



SAVES FUEL

ADDS WINTER COMFORT

CHECKS CONDENSATION

Here's good news about Steel Casement windows!

Now, homeowners and builders can save fuel, add winter comfort and check condensation, with the new Fenestra "Easy-Set" Inside Wood-Frame Storm Sash. It's designed for **ALL MAKES** of Steel Casement Windows; priced low—less than half that of former storm sash for Steel Casements.

WHY LOW COST? Low price of the "Easy-Set" is due to simplicity of design and construction, standardized sizes, large quantity purchases and volume production. Besides, it saves installation expense—installed simply, quickly, safely, without screws or clips or ladders, by homeowners; no fitting, sawing, planing by a trained crew.

- 1. Installed Safely Inside.** No ladders to climb.
- 2. No Fitting.** Prefit at factory. No sawing or planing. No screws or clips.
- 3. Saves Installation Expense.** No trained crew necessary—as even a housewife can install them in a jiffy.
- 4. Top Quality.** First class materials and workmanship.
- 5. Good Looking.** Neat and trim in appearance.
- 6. Low Cost.** Priced at less than half that of former types for steel casements.

WHY Fenestra

It isn't foolish optimism to plan now for the day when this war will end. It's just good sense. And everyone will benefit.

For example, tomorrow's home buyer. He'll get better planning now than he can hope for in the scramble of postwar building. When Victory does come, he'll be ready—with blueprints—to break ground.

You'll benefit, too. Doesn't the idea of having jobs lined up, ready to go, look good to you? Won't you

DETROIT STEEL PRODUCTS COMPANY

"EASY-SET" Storm Sash

FOR *all*
STEEL
CASEMENTS

You hear a lot about the comfort, convenience and efficiency that people will expect in postwar homes you'll be building someday. In windows, that means Fenestra. And the new "Easy-Set" Storm Sash brings extra comfort—extra convenience—and greater efficiency to steel casement windows.

That's why this new storm sash opens

up new and bigger prospects for steel casement windows in the postwar period. And it's another reason why you'll want to include Fenestra Steel Casements in your plans for postwar homes. Remember, the comfort and fuel savings that "Easy-Set" Storm Sash provides will help make owners more satisfied with the houses you build... Write for free literature.

Adds *another* big advantage to Fenestra's Six Popular Features

SUGGESTS



profit by having houses under way while competitors still are planning?

And there's our fighting men. They want to come home to jobs—not handouts to carry them over while plans are worked out. And it's fair to expect the building industry to provide a big share of the jobs that must be ready.

Everyone stands to gain—and we don't see how anybody can lose—by planning now.



Better ventilation—catch the breezes.



Secured in a jiffy—safely on inside.



Safe working—both sides from inside.



Easy opening—never wrap or stick.



More daylight—larger glass areas.



Clearing appearance—old beauty inside and out.

DEPT. AB-10 • 2260 EAST GRAND BOULEVARD • DETROIT 11, MICH.
Pacific Coast Plant at Oakland, Calif.



Marlite

**FITS INTO ALL POST-WAR
BUILDING PLANS**

Practical - Colorful - Versatile

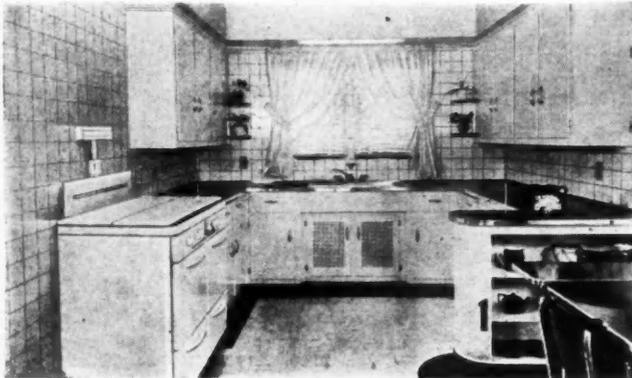
**IT'S YOUR ASSURANCE OF PERMANENT
CUSTOMER SATISFACTION**



FINAL STEP IN THE BRIGHT DIRECTION!

Modern Marlite, ideally suited for interior wall and ceiling surfaces, is gaining added prominence in War Construction . . . and this wartime experience on military jobs, in war plants and aboard fighting ships, plus an outstanding record of pre-war dependability, promises much help in your post-war plans. Are you one of the leading dealers, builders and contractors coast to coast who already know how completely plastic-finished Marlite wall panels are the satisfying solution to many interior

construction problems? A colorful, comprehensive catalog is yours on request. Marsh Engineers are ready to help you in post-war planning. Write today for complete information!



Marlite's practical, wall-size panels are quickly, easily adaptable to homes of all types . . . for kitchens, bathrooms, living rooms, rumpus rooms, bed-rooms, hallways. In commercial and industrial buildings; in fact, wherever a practical wall or ceiling surface of attractive originality is desired, Marlite enjoys enviable leadership.

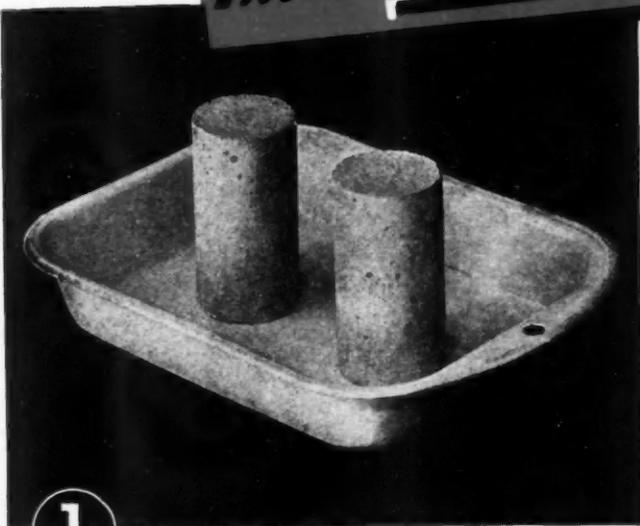


duty-ful
for creating ~~beautiful~~ interiors

Plastic-Finished WALL PANELS

MARSH WALL PRODUCTS, Inc., 103 Main Street, Dover, Ohio

**MAKE THIS TEST—
Prove BRIXMENT is BEST!**



1 Above: A cylinder of Brixment mortar (left) and a cylinder of mortar made with 50-50 cement and lime mortar (right). Both specimens were made at the same time, and subjected to exactly the same treatment. After curing for 30 days, $\frac{1}{4}$ " of water

was put into the tray and the cylinders were alternately frozen and thawed 15 times. Note in photo 2 that Brixment mortar remains intact, whereas the other mortar has crumbled badly. This simple test can be made in any ice-manufacturing plant.

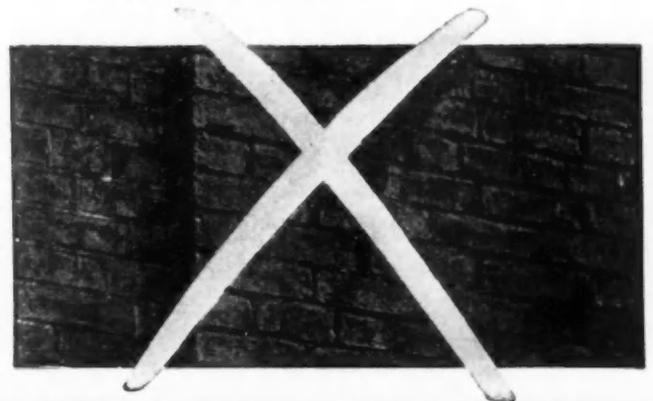
BRIXMENT Makes More DURABLE Mortar!

FOR permanent strength and beauty, mortar must be *durable*—must be able to withstand the alternate freezing and thawing to which it is subjected many times each winter.

Brixment mortar *is more durable*. This greater durability is due partly to the strength and soundness of Brixment mortar, and partly to the fact that Brixment is waterproofed during manufacture. This waterproofing helps prevent the mortar from becoming saturated—therefore protects it from the destructive action of freezing and thawing.

Walls built with Brixment mortar therefore *retain* their original strength and appearance. Even in

parapet walls and chimneys, where exposure is particularly severe, Brixment mortar will almost never require re-pointing.



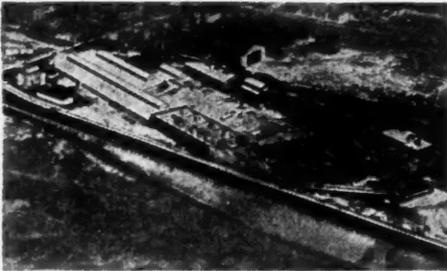
BRIXMENT

For Mortar and Stucco

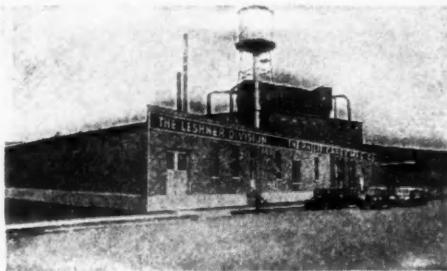
Louisville Cement Company, Incorporated, Louisville, Kentucky. Cement Manufacturers for Over a Century.



The mammoth Carey plant at Lockland, Cincinnati, Ohio, is the largest individual roofing factory in the country



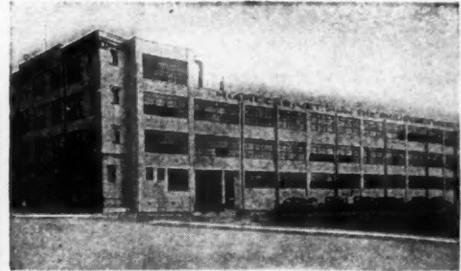
Perth Amboy, N. J. Plant



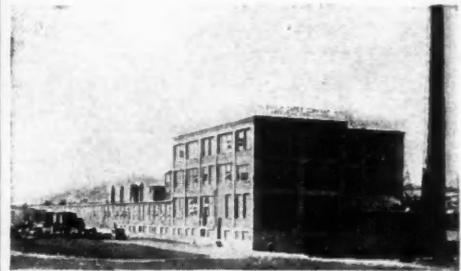
Lechnier Division, Hamilton, Ohio



Plymouth Meeting, Pa. Plant



Miami Cabinet Division, Middletown, Ohio



Canadian Plant, Lennoxville, P. Q.



Mines, East Broughton, P. Q., Canada

At 7
BIG, BUSY PLANTS
 ☆
Carey
PRODUCTS
VITAL to AMERICA'S
WAR INDUSTRIES
AND HOMES

A wide variety of high quality Asphalt, Asbestos, and Magnesia products flow in a steady stream from these Carey Plants, to America's vast war industries . . . There they help step-up production, conserve fuel and manpower, protect plants against wear and weather.

From these factories, too, come the Carey "Long-Life" Products used in the repair and maintenance of American homes—products whose dependable quality every Carey Contractor and Dealer can vouch for!

Write Dept. 10 for details

THE PHILIP CAREY MFG. COMPANY
 Dependable Products Since 1873
 Lockland . . . Cincinnati, Ohio

★ *Insulate!*

★ **★ CONSERVE FUEL** ☆ **HELP SPEED OUR FIGHTING FORCES TO VICTORY!** ★

U. S. BULLETIN ★ OCTOBER

**★ PUZZLED BY CONSTANT CHANGES IN
★ THE HEATING EQUIPMENT PICTURE?**

★ Check with your U. S. Radiator Branch Office or Wholesaler
★ . . . It's their job to give you any help they can

★ **Conditions** in the heating equipment picture
★ are changing constantly. But U. S. Radiator and
★ Pacific Steel Boiler Division are continuing to
★ produce as much equipment as possible for
★ essential civilian service.

★ **U. S. RADIATOR** Branch Offices and Whole-
★ salers stand ready to help you in any way they
★ can. Don't hesitate to consult them when you
★ have a heating equipment problem.

★ **Under war** conditions, no one can guarantee
★ how much equipment will be available, or
★ exactly when it can be delivered, but you can
★ rest assured they will give you their best.



U. S. Radiator plants are helping to meet important
needs for healthful, economical heating by turning
out boilers, radiators, as well as repair and
replacement parts to the best of their ability and
the limit of their capacity under wartime regula-
tions. Many of these plants are also engaged in
the production of vital war material.



★ UNITED STATES RADIATOR CORPORATION

AND

★ PACIFIC STEEL BOILER DIVISION

Detroit, Michigan • Branches and Sales Offices in Principal Cities

Manufacturing Plants At:

Bristol, Pa. • Detroit, Mich. • Dunkirk, N. Y. • Edwardsville, Ill. • Geneva, N. Y. • Waukegan, Ill. • W. Newton, Pa.

MEMO FOR POST WAR PLANNING

Household operating and upkeep expenses come out of the same pocketbook as mortgage amortization payments. High-quality equipment, as supplied by General Electric, usually reduces monthly operating bills more than it increases monthly payments on the house...so actually it costs less to live better.

REMEMBER, General Electric high-quality equipment will best serve the interests of your after-Victory clients or customers.

GENERAL ELECTRIC
HOME BUREAU BRIDGEPORT, CONN.



1. LAND



2. STRUCTURE



3. OPERATING EQUIPMENT



A HOME



Dinky, unused attic space can be transformed into beautiful, livable rooms with Fir-Tex Colorkote Panels.



Attractive results like this create satisfied customers and put profits in your pocket.

THERE'S *Volume* *and Profit*

IN BUILDING EXTRA ROOMS WITH FIR-TEX

THERE'S an urgent need for extra rooms within existing homes. Don't overlook the opportunity presented by this market. Don't overlook the fact that Fir-Tex Insulating panels fit into this program. They are clean and easy to handle. There's no muss with Fir-Tex. The rest of the house is not

disturbed when a Fir-Tex job is in progress. The range of five pastel colors—Ivrykote, Wheatkote, Greenkote, Blukote and Aprikote—permits each job to be individual. These combined qualities insure satisfied customers which means more jobs and more profits for you.



TOUGH WOOD FIBERS
Tough, long fibers from natural wood are thoroughly sterilized and felted together into firm, solid boards. Each square inch of Fir-Tex contains millions of insulating air pockets.



BETTER SHEATHING
Fir-Tex Firkote Sheathing seals out summer's heat rays and seals in wintertime furnace heat. Use on roof and outer walls. Sheathing and insulation in one board, at one cost.



BETTER PLASTER BASE
Fir-Tex Insulating Board Lath is the modern and economical way to prepare walls for plaster. This solid insulating plaster base eliminates lath marks . . . greatly reduces plaster cracks.

FIR-TEX

INSULATING BUILDING BOARD

* **FREE — 28-PAGE FIR-TEX CATALOG IN COLOR.**

* **Mail to FIR-TEX**
* Porter Building, Portland, Oregon.
* New 28-page catalog in color illustrates how you can build extra rooms within homes.

* Name _____

* Address _____

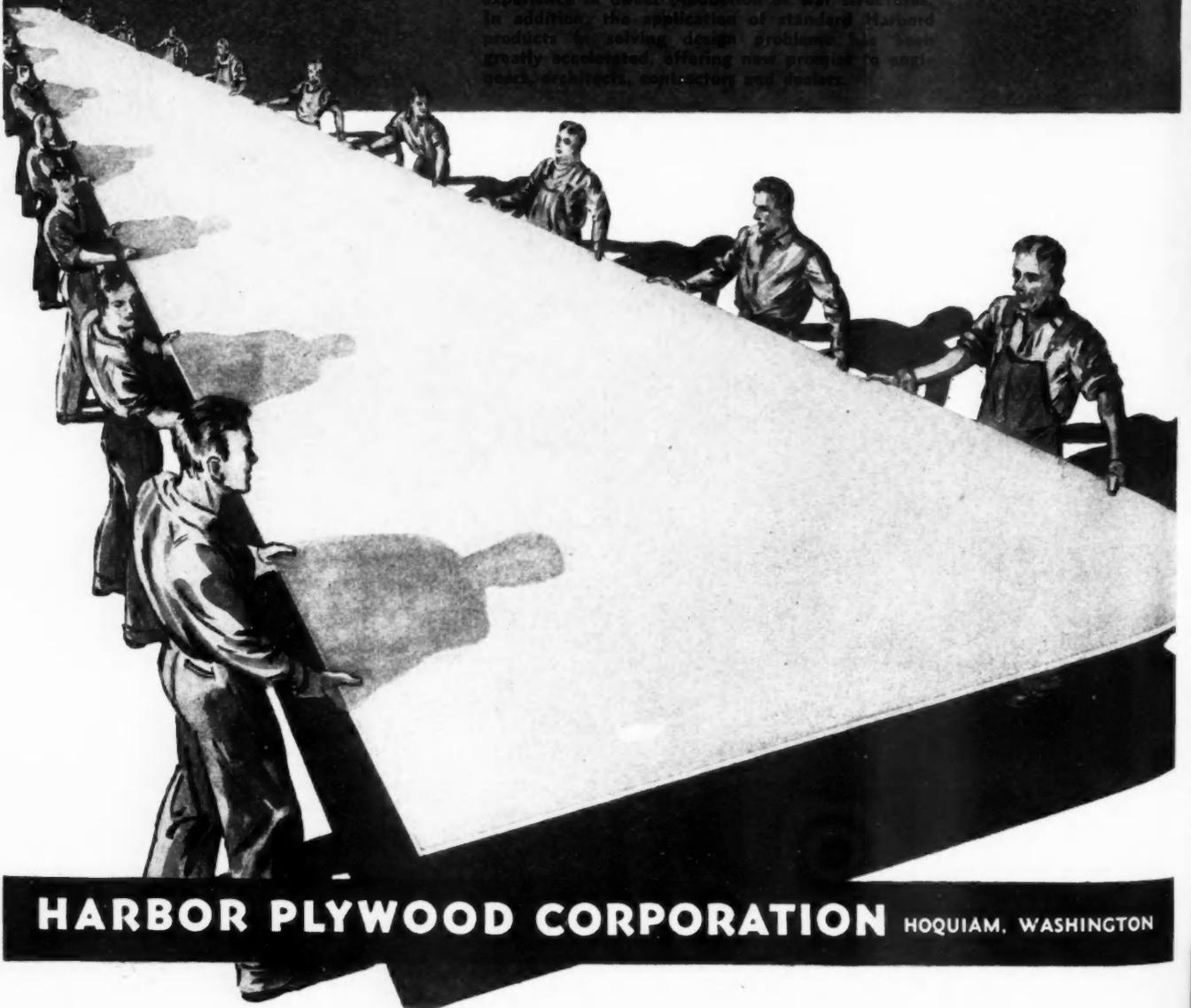
AB-043

**GIANT
SUPER Harbor
PANELS**

Typical of the Super Harbord specialties that will be available for better construction after Victory are these Giant Panels—panels that are being made as wide as nine feet, in any standard thickness and in **ANY LENGTH DESIRED.** The face grain of these panels may run across the panel or

lengthwise to fit the exact need of the designer. These huge new panels are now being manufactured on special precision machines (designed by the Harbor Plywood engineering staff) and are being produced for direct war uses in a manufacturing unit set up for this specific operation.

Harbor Plywood research engineers are now developing many new products as a result of wide experience in direct production of war structures. In addition, the application of standard Harbor products in solving design problems has been greatly accelerated, offering new products to architects, engineers and builders.



HARBOR PLYWOOD CORPORATION HOQUIAM, WASHINGTON

43.

DeWALT

CUTTING MACHINES

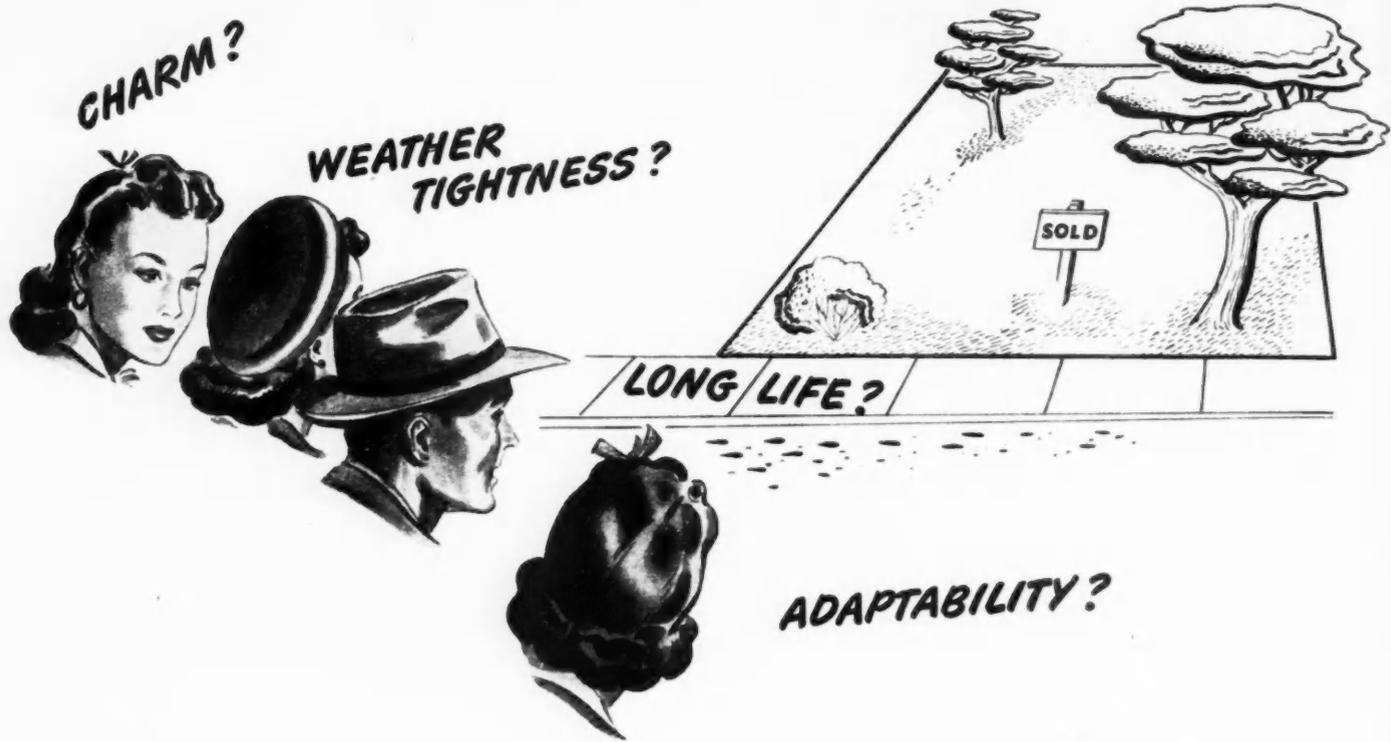
are pioneers in pre-fabrication



Long before pre-fabrication methods attained widespread attention as a solution to our housing problems... DeWalt machines were *custom-cutting* houses in quantity. DeWalt stands out among the pioneers who set the pace for our building trend today! In the plant or on the job, DeWalt Cutting Machines, for metal and wood, are serving in our nation's war-time building program. Sturdy, flexible, dependable, they do their cutting with a precision heretofore unknown.

TON

DeWALT PRODUCTS CORPORATION
Lancaster, Pennsylvania



For the home they are ready to plan

...WATCH WOODwork!

They know what they want—these homeowners-to-be. Results of actual surveys indicate that they have formed definite ideas on their homes of tomorrow.

Many of those wants will be met by wood, at once the most familiar and most modern of building materials. And here's why doors, frames and windows of Ponderosa Pine will prove most acceptable.

ADAPTABILITY—Windows, properly placed or grouped, can make any room seem larger. Stock windows of Ponderosa Pine are offered in a great variety of styles and sizes, for any architectural style.

WEATHER-TIGHTNESS—Tomorrow's windows *must* be weather-tight. Ponderosa Pine stock windows, with their natural insulating qualities, are precision-built for a better fit . . . easily weather-stripped.

LONG LIFE—Always a durable building material, wood is now longer-lasting than ever, when it has been given toxic treatment. What's more, Ponderosa Pine takes paint easily — and *holds* it.

CHARM—For beauty in architectural detail, wood stands second to none. Its surface texture has not been successfully imitated. People will want the beauty and charm of wood in their postwar homes.



Send for your free copy! This book, "The New Open House," is a storehouse of ideas for postwar housing. It shows how—and why—Ponderosa Pine meets the needs of tomorrow. Mail the coupon for your free copy!



Ponderosa Pine
WOODWORK

PONDEROSA PINE WOODWORK
Dept. YAB-10, 111 W. Washington Street
Chicago 2, Illinois

Please send me a free copy of "Open House."

Name

Address

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

THE BEST IS YOURS . . . WITH PINE

BRIEFLY TOLD:

August was another big month for Timken service schools. Forty-seven were held at as many different points.

★

LIFE magazine will be used for TSA's Fall magazine advertising. First ad of series appeared in August 23 issue. Thousands have requested their copy of new folder on D. Allen Wright's "Victory Home," featured in ad.*

★

Thirty-seven metropolitan papers, with a circulation of close to 10,000,000, will be used for Fall newspaper ads. Dealers' names will be listed.

★

OPA official calls new Timken fuel oil rationing digest folder "A splendid contribution offering little possibility of improvement." Folder was mailed a short time ago to all Timken owners.*

★

August issue of Timken's house magazine, TIMKEN HEAT, now in the mails to TSA dealers. Filled with helpful hints on profitable wartime selling.

★

"How to Recondition Water Soaked Equipment" is title of new bulletin of special interest to dealers in lowlands and coastal areas.

★

Timken dealers have a new service letterhead featuring "7 Ways to Save Fuel, Now or Any Time." One dealer writes, "Does a swell selling job all by itself."

★

*We'd like to send a sample copy to you, also. Please write on your letterhead and mention this ad.



YES, even if Timken field men have to "hoof it," Timken still will maintain close personal contact with its dealers.

Personally working with dealers and personally helping them with their problems *always has been* the biggest plank in Timken's dealer cooperation platform . . . *always will be!*

Although there's plenty of hard work involved in this, it has been made much easier by the built-in ability of Timken Products to stand up and deliver dependable performance under the most trying conditions.

And—we're proud of other things we're doing for and with Timken

dealers—such things as regular territory service schools . . . helpful mailings to Timken owners . . . prompt service on replacement parts . . . field-tested service and accessories sales programs . . . a new pocket-size service handbook . . . and a strong magazine and newspaper advertising campaign to keep Timken's name and dealers' names before prospects during the war period.

Right now we're planning prosperity for Timken dealers in the post-war era with an improved, expanded line of heating and air conditioning equipment and other new products for the home. Your request for information will receive prompt attention.

TIMKEN *Silent Automatic*

Quality Home Appliances—for Comfort, Convenience and Economy

Division of THE TIMKEN-DETROIT AXLE COMPANY, Detroit 32, Michigan

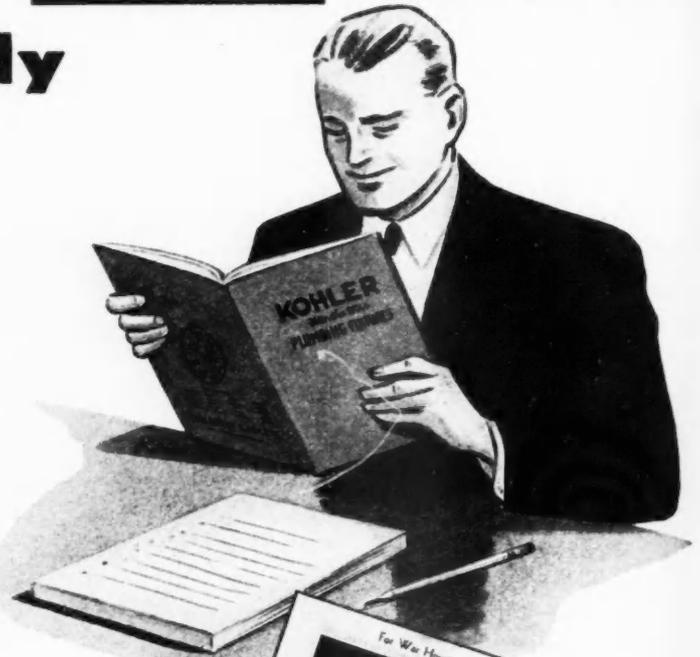


Your catalog of reliable wartime plumbing is ready

CONSTANT pressure of building maintenance and repair plus the demands of war construction make dependable *plumbing*—fixtures and fittings made of *non-critical* materials—a wartime “must.”

The new Kohler Win-the-War catalog offers 16 pages of such facilities for your approval . . . fixtures and fittings that are taking the worst that bases, cantonments, hospitals, war housing can dish out—with no service let-up.

In offering a complete line of well designed fixtures and fittings for wartime demands, Kohler Co. is sustaining the 70-year-old policy of doing things well. Write for the new Kohler Win-the-War catalog *today*. Kohler Co., Kohler, Wisconsin.



★ BUY UNITED STATES WAR BONDS ★

KOHLER OF KOHLER

PLUMBING FIXTURES AND FITTINGS • HEATING EQUIPMENT • ELECTRIC PLANTS



BACKING UP

The Star in the Window

ABERDEEN PLYWOOD'S ANSWER TO THE AXIS

At this moment the 375 employees of the Aberdeen Plywood Corporation are hitting the enemy on the front lines, on the ground and in the sky; for Aberdeen Plywood is an important part of the fabric and structure of many implements of war. Its uses in global war stretch all the way forward from the barracks to the fighting front.

An amazing number of new uses have

been developed for plywood, adaptable to peace-time needs. When the war is over, Aberdeen Plywood will be immediately available for all these uses. The same machinery that produced it for war will produce it for peace, without retooling or plant conversion. Ours is a modern plant with an adequate personnel, trained in precision production. Remember the name Aberdeen Plywood.

ABERDEEN PLYWOOD

MANUFACTURERS OF HOT PRESS DOUGLAS FIR PLYWOOD



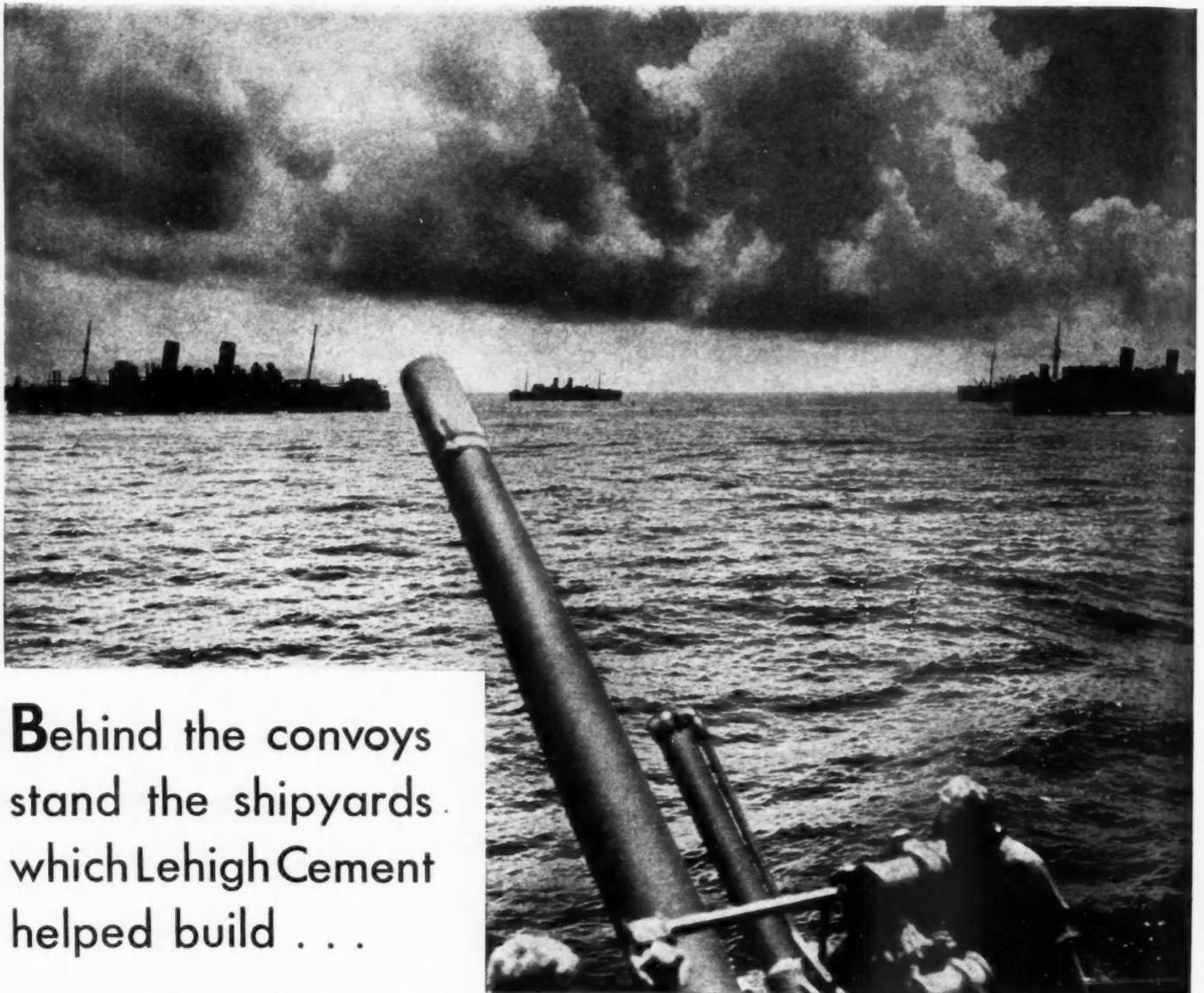
Corporation

FOOT OF ALDER STREET

Aberdeen, Washington

R

ANTS



Behind the convoys stand the shipyards which Lehigh Cement helped build . . .



LEHIGH EARLY STRENGTH CEMENT
for **service-strength** concrete in a **hurry**



MINUTES are precious in shipyards today. Vessels to carry world-wide cargoes, and fighting ships to guard the sea-lanes, are being turned out at amazing speeds. That's only possible with the help of every American industry, and Lehigh Cements share the job.

Concrete for vital shipyard installation is quickly and efficiently made with Lehigh Portland Cement. In cases where speed is of the essence, Lehigh Early Strength Cement comes to service-strength 3 to 5 times faster than normal cement, and gives a finer, denser concrete, too.

There's a place for Lehigh Cements in every industry, whether for war or private work. Lehigh's Service Department specializes in solving special problems. Why not write and let us help you?



Take the UNI-POINT Short Cut to INCREASED PRODUCTION

More work per man hour is the goal of every plant superintendent and construction foreman today. We cannot increase the number of hours in a day, but Uni-Point Radial Saws enable one man, on most types of construction, to turn out 20% more work in a given time.

ONE POINT CUTTING* with Uni-Point offers the operator a mechanical simplicity that saves time. But, more than that, it provides adaptability to short cuts in production methods which can double or triple the output on some types of work and substantially increase it on every job.

Give a good machine to a good woodworker with good ideas, and here is what you get! (Note sketches at right.)

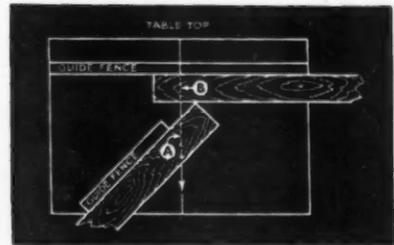
*Uni-Point is designed so that the saw blade always enters the material at the same point in the table regardless of whether it is set for a vertical, horizontal, or compound-miter cross cut angle.

Write for Catalog No. 60

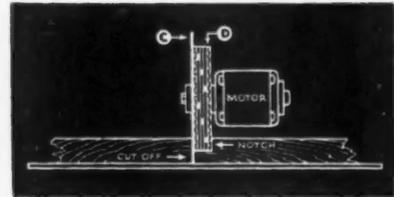
We also manufacture "modern design" Saw Benches, Band Saws, Jointers, Planers, Lathes, Shapers, Mortisers, Sanders, Swing Saws. Also a complete line of Saw Mill machinery.



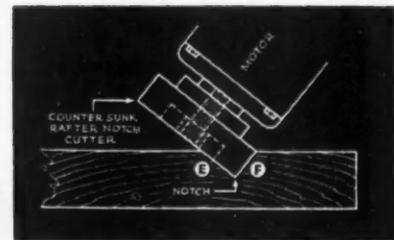
AMERICAN SAW MILL MACHINERY CO.
HACKETTSTOWN, NEW JERSEY



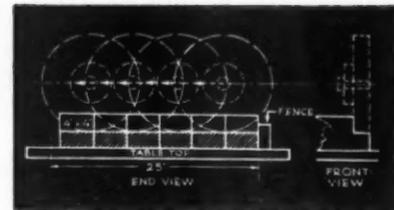
1 An angle cut (a), and a cross cut (b), with one stroke of saw—100% increase.



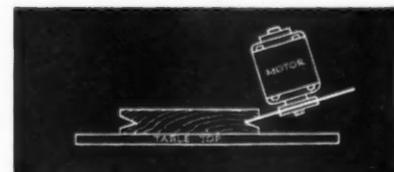
2 A cross cut saw (c), combined with a dado head (d), cut off and notch one end with one stroke of saw—100% increase.



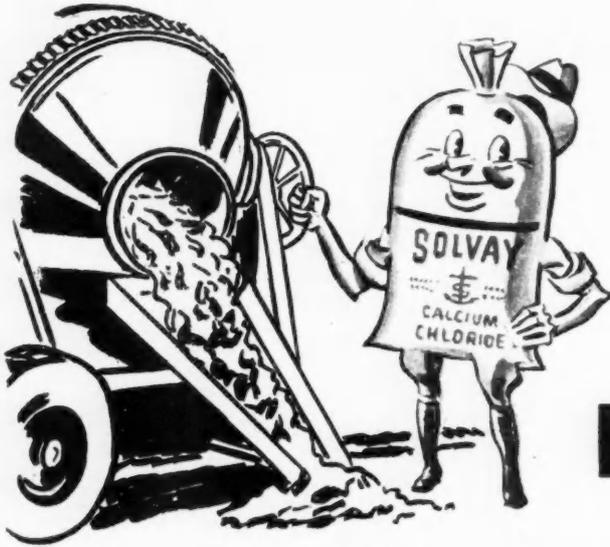
3 Instead of cutting angle (e), then angle (f), use a countersunk dado or rafter notch cutter and cut both angles with one stroke of saw—100% increase.



4 Notch six 4" rafters with one stroke of saw—500% increase. Uni-Point has 75" cross cut capacity.



5 Whatever the job—Uni-Point can do it! Yes, the answer is multiple cutting, the Uni-Point way.



FASTER!
STRONGER!
SAFER!

FALL CONCRETE

Avoid 50° Slow-up* In Your Fall Concreting Operations

*Chilling Fall temperatures from 50° to 32° seriously affect both the development of strength and the ultimate quality of concrete. SOLVAY Calcium Chloride serves largely, if not entirely, to offset the effects of temperature drops and provides extra cold weather protection.

Use SOLVAY Calcium Chloride to increase early and final strength of concrete. It does not change the normal chemical action of Portland cement. It is low in cost.

Send for complete information. Write to Dept. 34A-10.

FOR
BETTER
CONCRETE

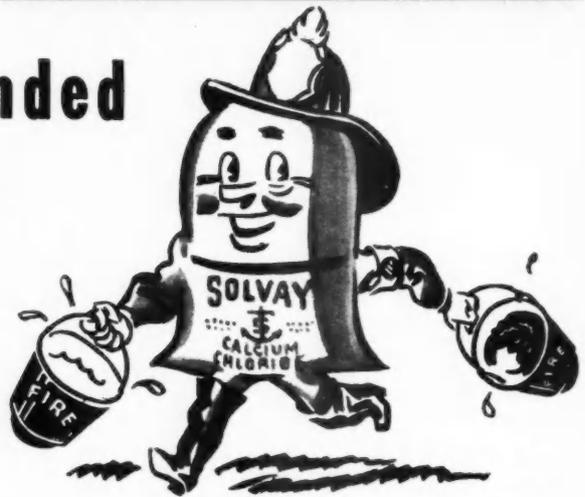
**SOLVAY CALCIUM
CHLORIDE**

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

**Dependable, Recommended
FIRE PROTECTION
at LOW COST!**

Use Pails, Barrels, Pumps

NON-FREEZING • EASY TO USE • EASY
TO PREPARE • CAN'T GET OUT OF
ORDER • WON'T FOUL, FREEZE, EVAP-
ORATE, DETERIORATE • RECOMMENDED
BY FIRE DEPARTMENTS AND INSURANCE
COMPANIES



LOW COST—The cost of Solvay Calcium Chloride solutions ranges from 3c to 8c per gallon. This means that complete units consisting of pails and solution can be obtained for one dollar or less.

Fire Department, City and O.C.D. officials send for complete information. Write to Dept. 34B-10.

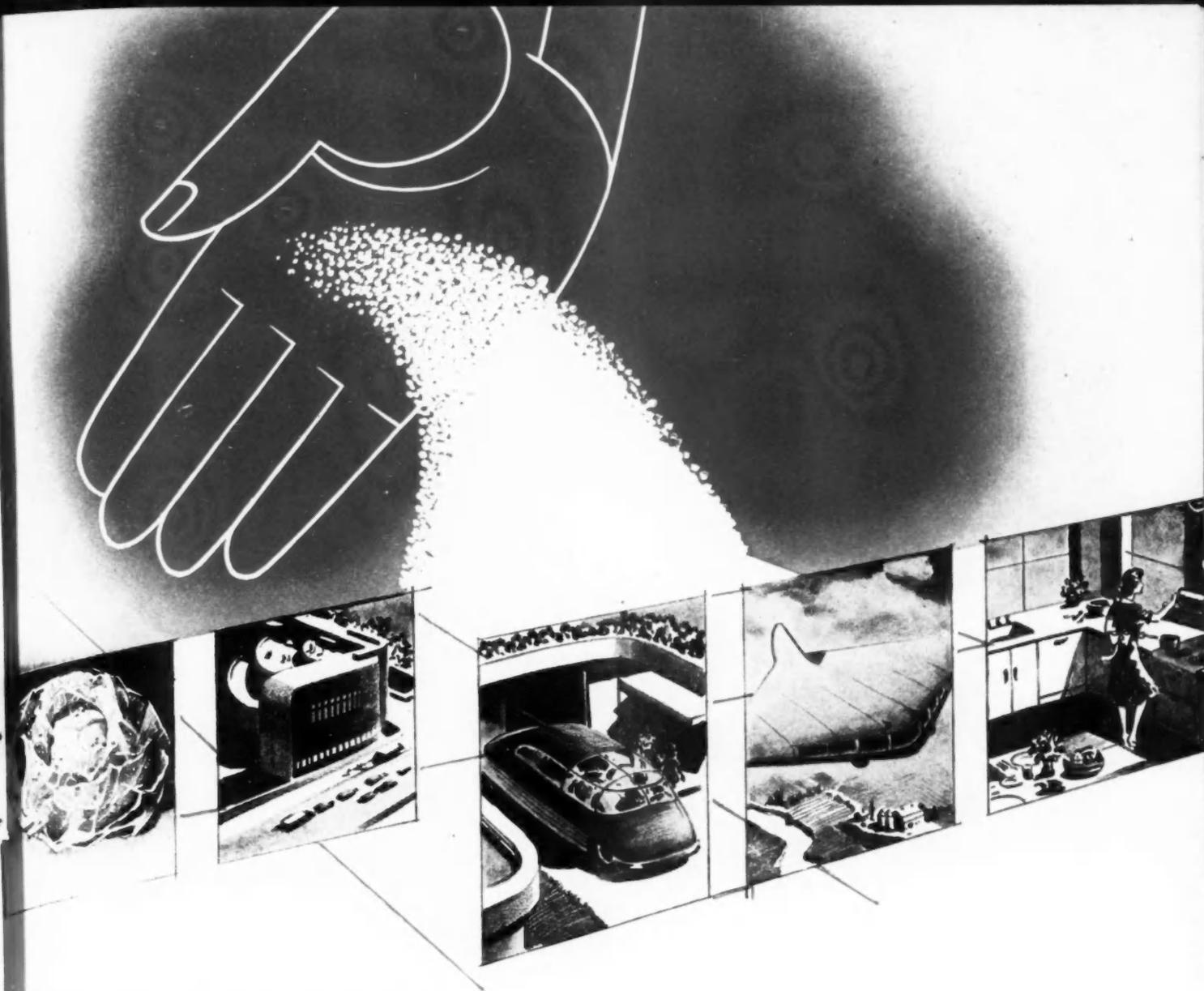
SOLVAY SALES CORPORATION

40 Rector Street

New York 6, N.Y.

**SOLVAY CALCIUM
CHLORIDE**

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



PLASTICS—products of industrial initiative

Plastics are a stimulating source of inspiration for architects and industrial designers in search of new ideas. When these intriguing materials are released from their military commitments, innumerable applications for the home front will arise. No products offer a better example of how progress can be accomplished when industry is given free rein to its initiative.

As a producer of basic chemicals needed for the manufacture of plastics, Dow is in a particularly fortunate position to promote their development. Three major Dow plastics—Styron, Ethocel and

Saran—have already been produced. They possess distinctive properties that permit a bewildering array of uses in almost every field of human activity. There are also varieties of Dow plastic materials for coatings, finishes and other purposes in the electrical, textile and many other industries.

These plastic products do more than supplant other materials. They are veritable points of departure that lead to fresh fields. When normal conditions return, self-reliant industry, expanding on its own resources, will develop and apply them for the greater well-being of all America.

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

New York • St. Louis • Chicago • Houston • San Francisco • Los Angeles • Seattle

DOW PLASTICS

ETHOCEL • STYRON • SARAN



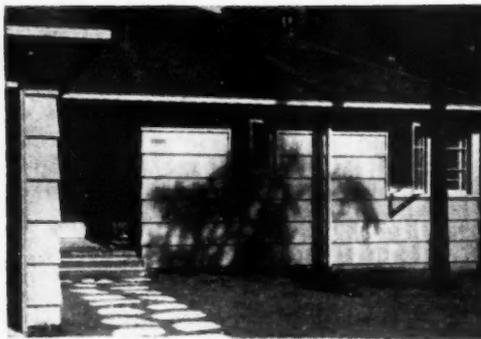
**CHEMICALS INDISPENSABLE
TO INDUSTRY AND VICTORY**

Free-

BLUEPRINTS
RED CEDAR SHINGLE APPLICATION

A COMPLETE SET OF BLUE PRINTS

Those Buying War Bonds Today
Will be Buying Shingles Tomorrow



Be prepared for Post-War building . . . a set of these blueprints of correct shingle application should be in your files for ready reference.

Fill in the coupon below for your set of the above blueprints, together with your copy of the Certi-grade Handbook of Red Cedar Shingles. Address:

RED CEDAR SHINGLE BUREAU

White Building, Seattle, Wash., U. S. A., Canadian Office, Vancouver, B. C.

RED CEDAR SHINGLE BUREAU, 5508 White Bldg., Seattle, Wash. AB 10-43

Please send me, free, a complete set of Blueprints which show how Red Cedar Shingles are properly applied on roofs and sidewalls.

Name

Address

City State



Red Cedar
SHINGLES

After the WAR TIDE -- -- the BUYING TIDE



WHEN the tremendous tide of home building begins to rise — it may be sooner and stronger than we think — foresighted building contractors and architects will have their plans well laid for meeting the needs of their market and for securing the necessary building materials.

Youngstown Pressed Steel realizes the value of foresightedness from both the manufacturer's and the buyers' standpoint and, through their YPS dealers, will be ready to supply the builder with modern, time-tested Youngstown Kitchens and Cabinet Sinks that make such complete, efficient, trudge-free installations.

While the entire production department of Youngstown Pressed Steel is completely occupied with war materials, the Post-War Planning Committee is busy preparing for the responsibilities of peace — designing improvements for Youngstown Kitchens to be incorporated into the production schedule as rapidly as possible without delaying delivery.

Youngstown Kitchens

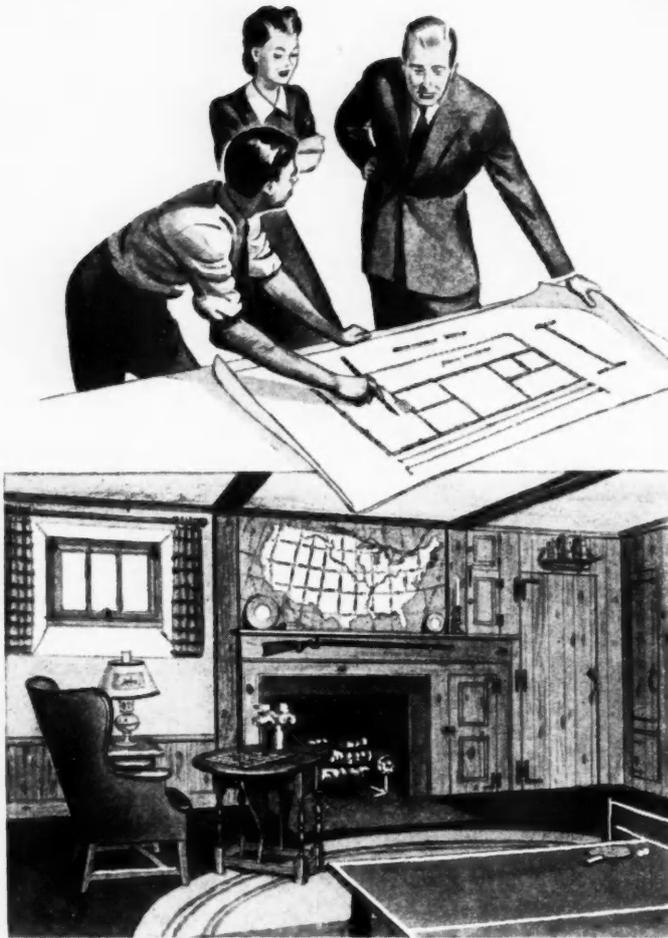
YOUNGSTOWN PRESSED STEEL DIVISION
MULLINS MANUFACTURING CORP. • WARREN, OHIO

IT'S OUR WAR • LET'S FIGHT IT NOW



Youngstown
"SERVICE
UNIT"
Kitchens
will be worth
waiting for.

HARDWARE for the "After the Victory" GAME ROOM



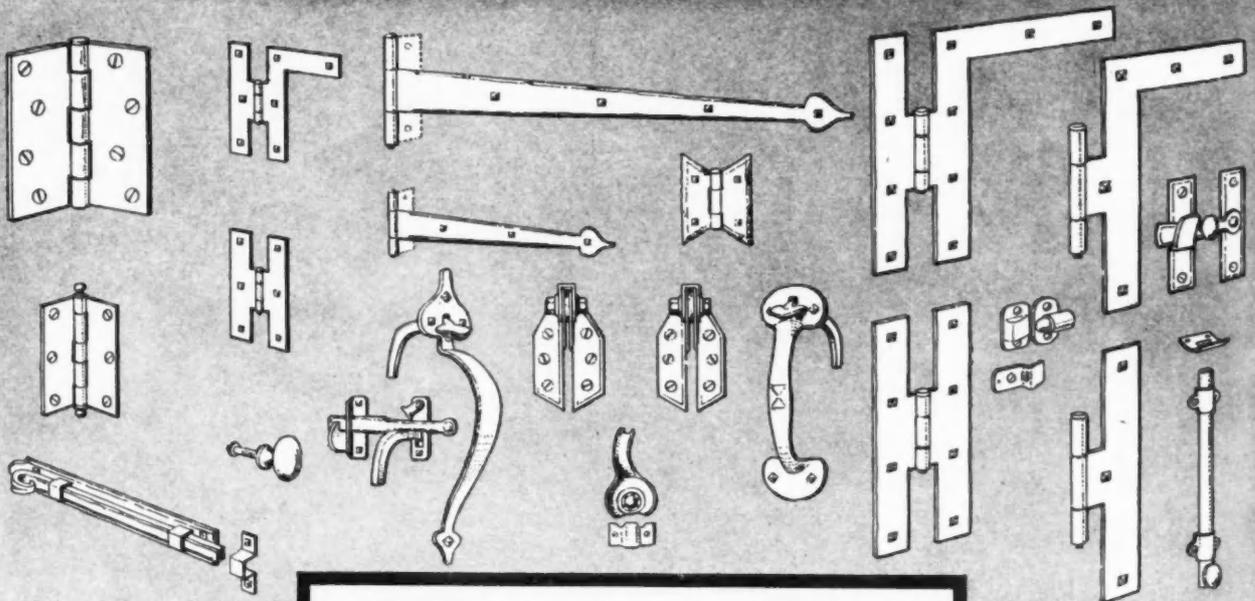
Since gas rationing changed the traveling American into a "stay-at-home" many people are studying their homes—finding improvements to make, or thinking of how they will build their new homes, once the war is over.

One of the rooms that will get careful consideration is the playroom. Here, home owners are inclined to give way to their originality. Pine paneling with built-in closets for games and sports equipment, benches with hinged tops to hold toys, cabinets for bar supplies, and other ingenious features will be developed by architects and home-planners.

Whatever the hardware requirements of a post-war building are, STANLEY will be in a position to fill them. All of the resources which have made STANLEY the best known name in hardware will be directed to supplying the needs of home builders.

Due to government restrictions on metals it is impossible to supply civilian needs in hardware at the present time. We are certain that you understand why the present shortage exists, and realize that when our big war job is done you will have all the STANLEY hardware you need. The Stanley Works, New Britain, Connecticut.

Typical Stanley Hardware Items for the Game Room



1843

STANLEY

1943

3 Jumps Ahead

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FIREPROOF—Made from Gypsum rock that will not burn, Sheetrock walls and ceilings form a fire-seal that fights the spread of fire and protects the building framework underneath.



TAKES ANY FORM OF DECORATION—Any finish that is sprayed, brushed or pasted on may be successfully applied on Sheetrock; or it may be purchased already decorated—ready to apply.



WELDED WALLS—Panel joints concealed and welded together by Perf-A-Tape ... stronger than the panels of Sheetrock themselves.



VERMIN-PROOF—Sheetrock is made from rock ... it does not attract or support vermin of any kind.



WON'T WARP OR BUCKLE—Sheetrock is like a stone wall. It does not twist and pull out of shape with changes in temperature and humidity conditions.

SHEETROCK

"Fire-Sealed" WALLS AND CEILINGS

ONE . . . Walls and ceilings of Sheetrock*, the fireproof wallboard, form a "fire-seal" that fights the spread of fire and protects the building framework.

TWO . . . The Pre-cast panels go up fast . . . save time and money—trim and decoration can go on immediately.

THREE . . . Broadest choice of color, texture and treatment is possible—Sweeping, unbroken surfaces may be had—joints concealed and "welded" with Perf-A-Tape* "joint system" or made a part of the decoration with "Panel-wall" method. The ivory surface takes any form of decoration or

the panels may be purchased already finished in color or woodgrain effects.

Established through twenty-five years of use, improved with an eye to the future . . . research and development have made Sheetrock lighter, stronger, and provided many edge-treatments, thicknesses, sizes and types adaptable to every modern use.

Always stepping ahead . . . living up to the finest building traditions, providing fire protection, adaptability and enduring beauty—Sheetrock stands alone today as the best known and most widely used gypsum wallboard in the world.

*Trademarks Reg. U. S. Pat. Off.



UNITED STATES GYPSUM

300 WEST ADAMS STREET, CHICAGO, ILLINOIS

This famous trademark identifies products of United States Gypsum Company—where for 40 years research has developed better, safer building materials

GYPSUM WALLBOARD • SHEATHING • LATH • PLASTER

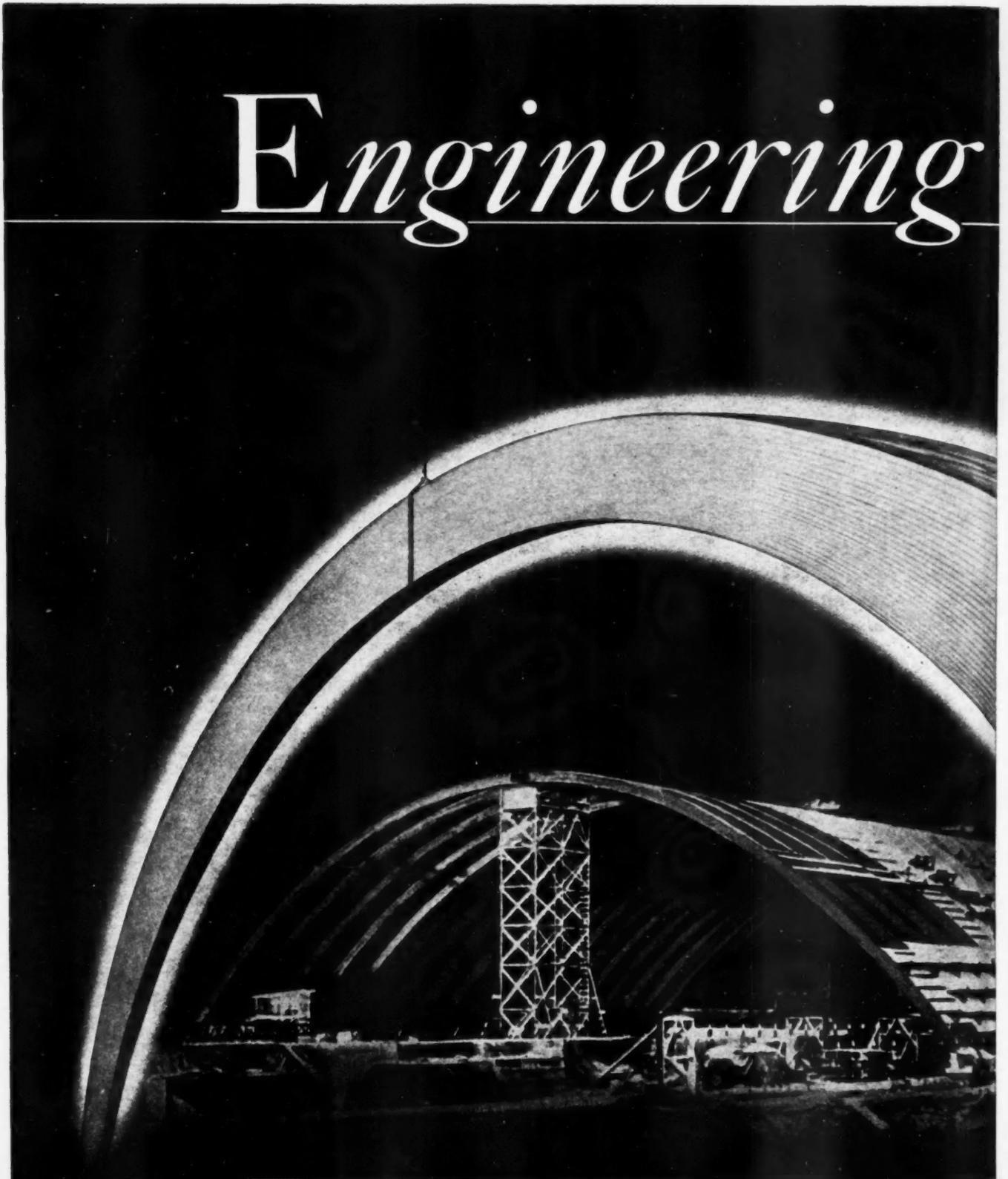
FIREPROOF GYPSUM

The World's most widely used Mineral for building Fire-Sealed Walls and Ceilings

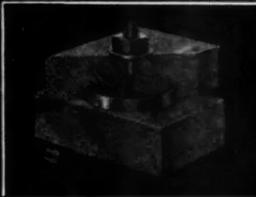
GYPSUM FIREPROOF ROOF DECK AND PARTITION TILE

GYPSUM PRODUCTS • STEEL • INSULATION • ROOFING • PAINT

Engineering



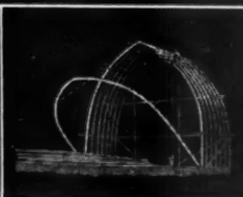
Engineering in Lumber is progressively increasing the efficiency of wood as a structural material. . . Modern wood products are making important contributions to better, more economical construction.



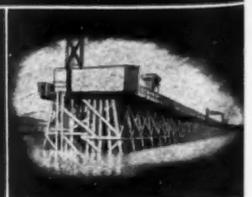
Teco Metal Timber connectors make it possible to join wood members; utilize 80% or more of the working strength of wood.



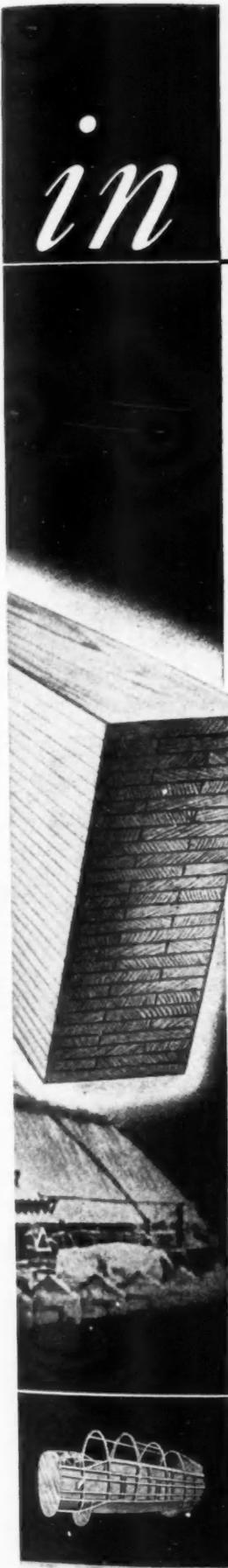
Modern structural glues make possible Glued Laminated Wood roof trusses, arches, plybeams and other structural members.



Glued wood laminated framing members combine roof and side-wall in a unit, giving stronger, more wind-resistant buildings.



New processes for the treatment of wood extend its service life, broaden its uses, and increase its value in many fields.



in

Lumber

produces the Laminated Wood Arch for vast post-free spans

THE STRONG, graceful laminated wood arch is the outstanding feature in a high percentage of the currently built structures used by the Army and the Navy. But the origin of wood laminated structural members antedates both this war and the last. Such vast post free buildings as airplane hangars, drill halls, chapels are not war-time discoveries. In Europe, many years ago, engineers used wood laminated members to erect auditoriums, railroad stations, small bridges, factories and other structures. In America, research in wood and the development of modern structural glues have combined to produce today's strong, economical, efficient wood laminated structural members.

Long before the war, the speedy erection of large structures of wood lamination made front page news. American companies were engineering and fabricating laminated wood arches, trusses, rafters and ply-beams which were used in service and commercial structures and in the erection of farm buildings.

When construction for civilian use again becomes the business of the day, wood lamination, the Teco connector system of construction and other improvements in the use of wood products, resulting from continuous Engineering in Lumber will bring new opportunities to your business.

YOUR 4-SQUARE DEALER IS HEADQUARTERS FOR ENGINEERED 4-SQUARE BUILDING SERVICES

The 4-Square Home Building Service contains fifty designs of modern homes featuring convenience, comfort, and economy. The 4-Square Farm Building Service features farm buildings and equipment engineered for low cost, long life, and greater utility. Your 4-Square Lumber Dealer will be glad to cooperate with you in use of these services, as well as in providing modern Budget Payment Plans.

WEYERHAEUSER SALES COMPANY

FIRST NATIONAL BANK BUILDING • SAINT PAUL, MINNESOTA

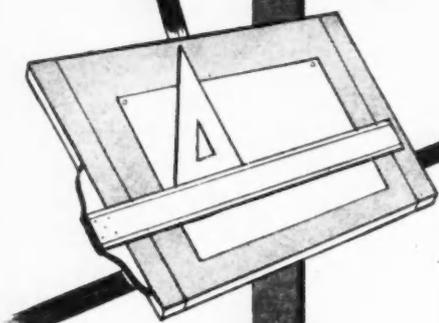
Plywood is proving its versatility in countless applications. Shapes and strengths can be predetermined for specific uses.

4-SQUARE LUMBER

Plan with Paine

REZO

Doors



The *biggest name* on the market for flush type doors — the largest producer — with the *greatest reputation* for success behind it

The flush type door is here—for all types of building construction. More modern, more practical, more economical than the installed cost of ordinary doors, flush design is sweeping the country. Best of all flush doors is the Paine Rezo, a patented, precision built door with a proven record of more than a million successful, trouble-free installations in all parts of the country—from coast to coast.

You, too, will find greater satisfaction and make more money working with this progressive, economical line —made and guaranteed by a major wood-working factory geared to give you the service you need. Rezo doors are sold by leading dealers everywhere.

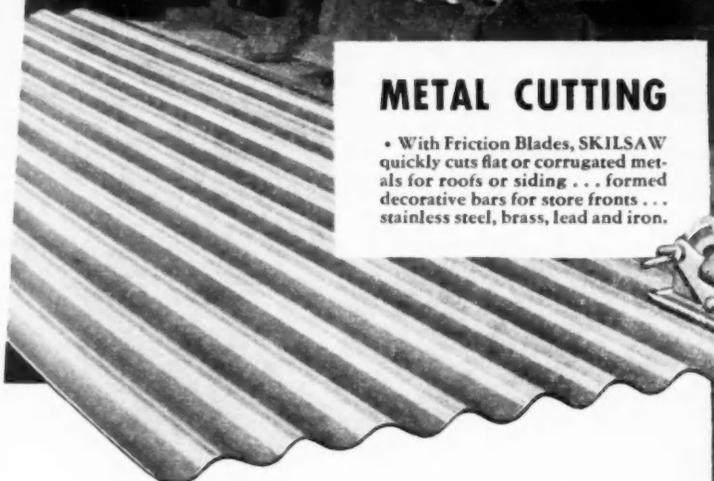
Manufactured by the **PAINE LUMBER CO., Ltd.** Oshkosh, Wis.
ESTABLISHED 1853

When you build homes again
 you'll want **SKILSAW**
 TO SPEED UP ALL THESE JOBS!



METAL CUTTING

• With Friction Blades, SKILSAW quickly cuts flat or corrugated metals for roofs or siding . . . formed decorative bars for store fronts . . . stainless steel, brass, lead and iron.



Smart builders are planning *now* for the day Peace comes and the rush for new homes is on. They're figuring just how SKILSAW will save hours and dollars on countless cutting jobs in addition to the regular lumber sawing they've always preferred it for. They know that when SKILSAW gives them *extra* savings through *extra* use, they'll get more jobs at lower, more profitable bids!

Start learning now about all the different operations you can speed up with SKILSAW. Ask for a demonstration of how fast SKILSAW cuts flat or corrugated metals . . . grooves and bevels . . . cuts stone, tile, concrete and compositions. Phone your distributor *today*.

GROOVING

• With a special Grooving Blade, SKILSAW grooves for stairs, shelves, and weather-stripping . . . slots speeds up rabbeting, mortising and many other jobs.



CUTTING CONCRETE

• With Abrasive Discs, SKILSAW swiftly sizes concrete blocks and limestone sills . . . cuts slate, brick and Terra Cotta . . . saws Asbestos Cement sheets for walls and sidings.



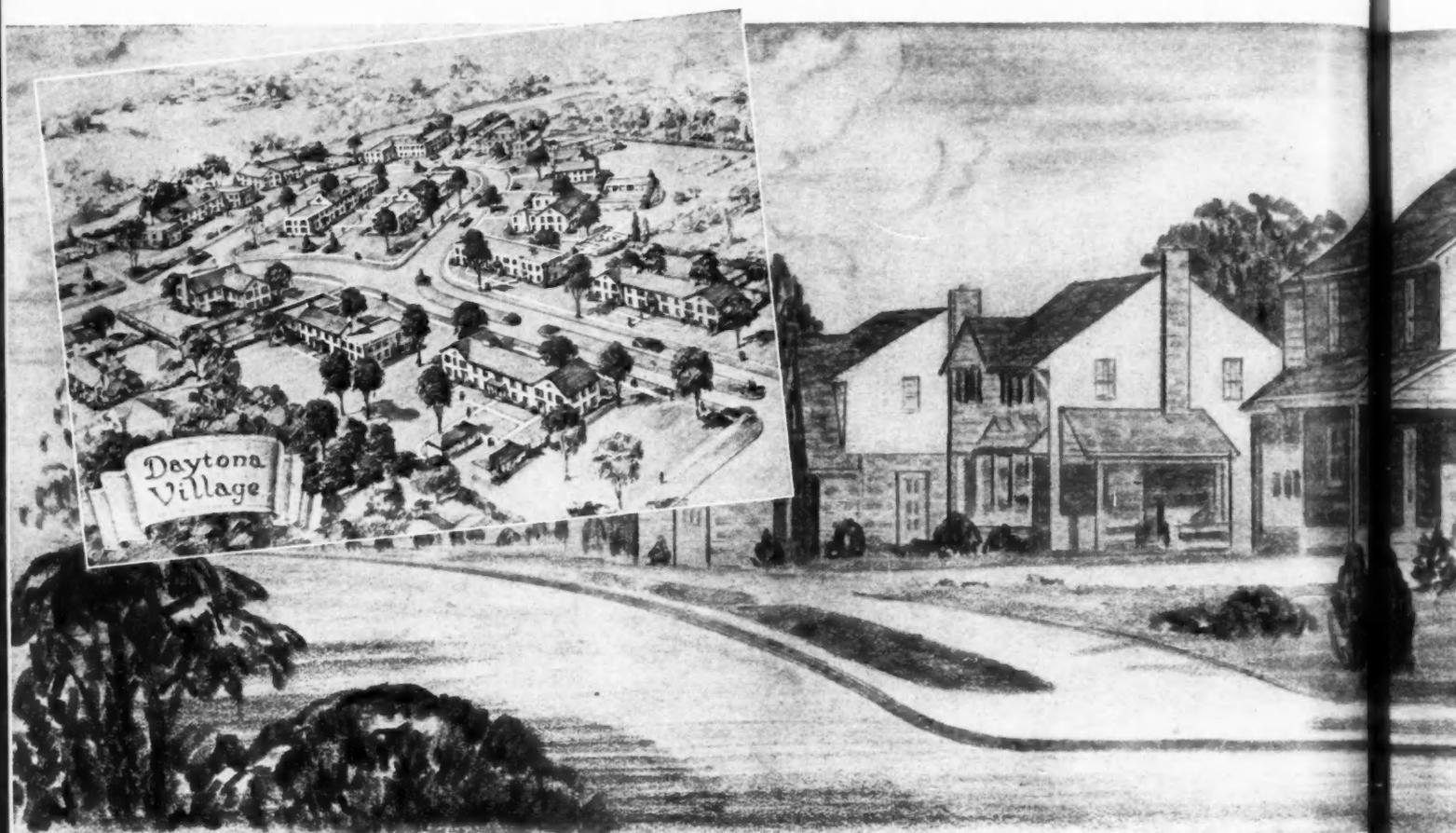
SKILSAW, INC.
 5031 Elston Ave., Chicago 30, Ill.

Sales and Service Branches in All Principal Cities

SKILSAW PORTABLE ELECTRIC **TOOLS**

★ MAKE AMERICA'S HANDS MORE PRODUCTIVE ★

Are you going to specify a gleam in so me



Clean air is one of the greatest assets of any community, one of the first goals in community planning. All-gas communities, such as the Daytona Village private housing project (inset above) or the Haddon, N. J., development, have no smoke soot, or residue problem. Both of these developments use JANITROL one hundred per cent.

THE day that Hitler surrenders may be a long time before the end of the war, but indications are that building restrictions will be modified or relaxed long before Tokio surrenders. In this post-Hitler period, we believe you will want

1. **Good Furnaces**—Furnaces you can recommend without hesitation.
2. **Fast Delivery**—If you are to resume your rightful place in the building world you will have to enter the market quickly.

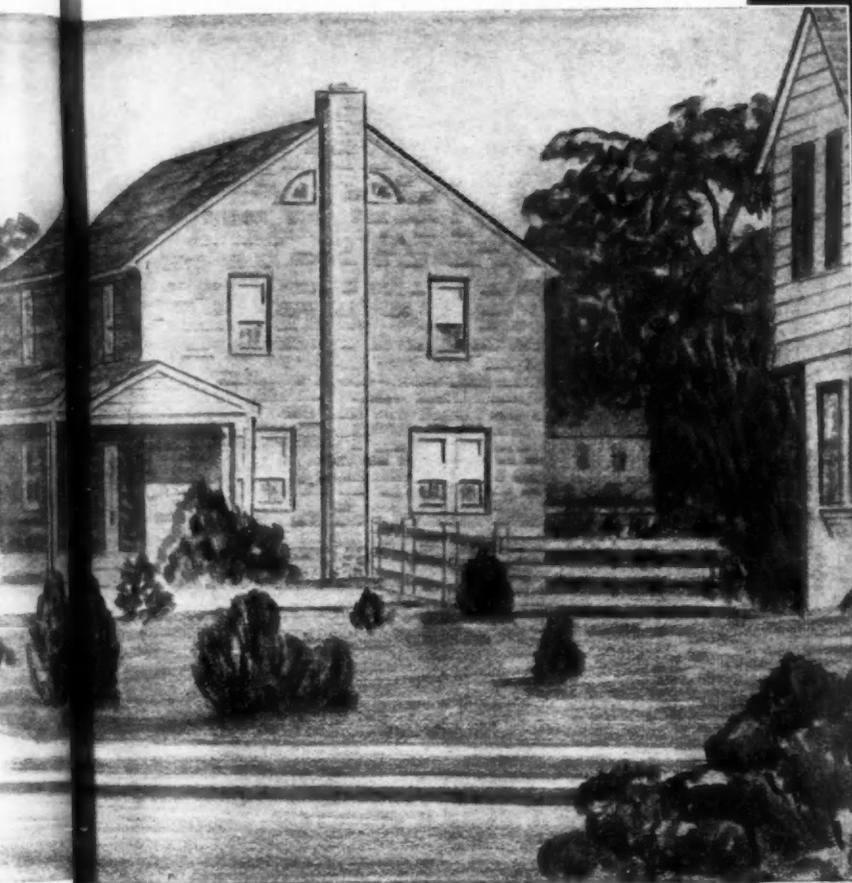
The JANITROLS we will make in this period will be small, compact, efficient, fully automatic furnaces, beautiful in appearance. Introduced just prior to the war, they

have features that most manufacturers are still only promising for their dream furnaces after the war. With Amplifire burners and Multi-Thermex heat exchangers, they represent a marked advance in furnace engineering.

In different sizes and types, thousands were installed—in big community projects—in private homes and apartments—in commercial establishments. In addition to conventional basement installations, they were installed in attics, in closets, in kitchens, in utility rooms, or were walled up out of sight in living rooms. With architects and builders Janitrol engineers worked out low-cost efficient installations to give more

SURFACE COMBUSTION • Toledo 1, Ohio

So me designer's eye?



Fully automatic, efficient, compact, styled for installations anywhere in your home and tested by three years of practical service, the new JANITROL winter air conditioner is the last word in proven heating comfort.

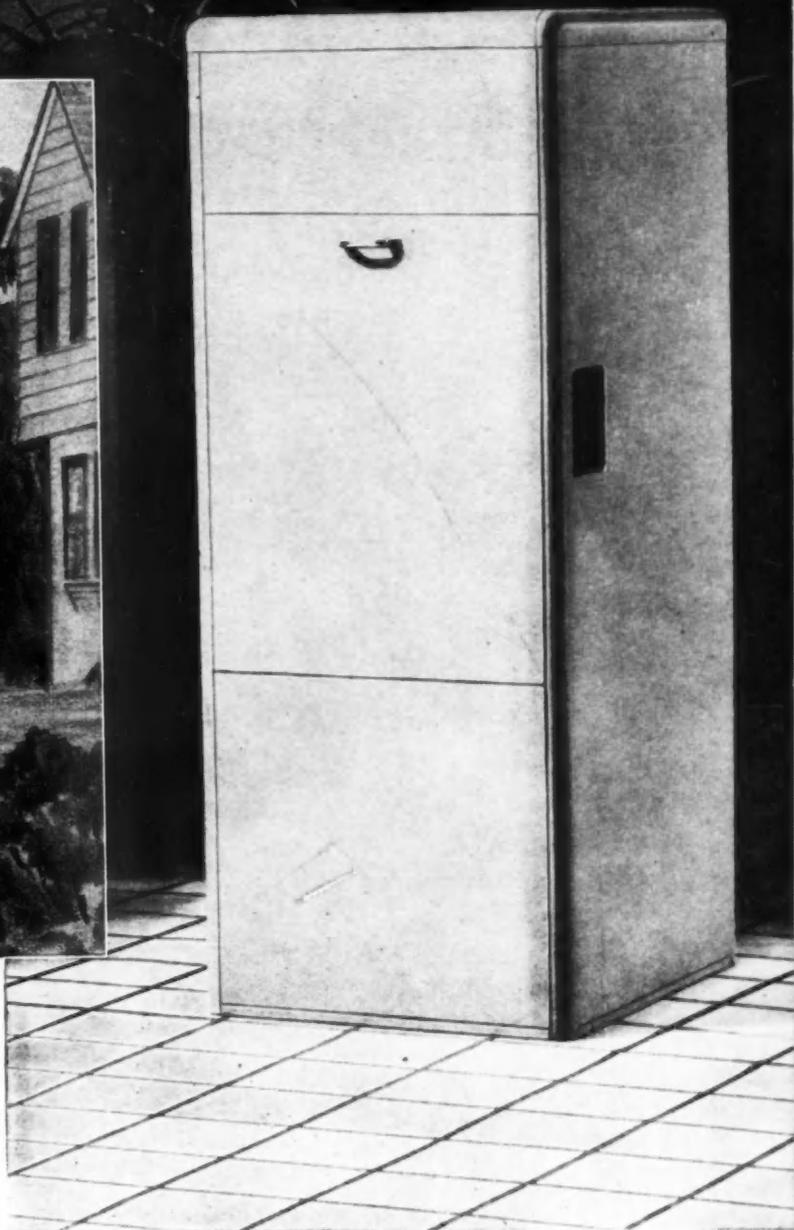
house with better heating for less money.

Now proven by three years of service, these various types of JANITROL furnaces, will be available in about 60 days from the time that materials are released. No furnace excelled JANITROL before the war, and nobody has had time to make extensive field tests since.

Everyone has ideas about miracle furnaces of the future (and we've got a few ourselves) but you can't heat a house with ideas. For real furnaces see the JANITROL listings in Sweet's Catalog.

Specify JANITROL for approved projects on which materials have been allotted.

**Offices and Engineering Service
in Principal Cities**



JANITROL

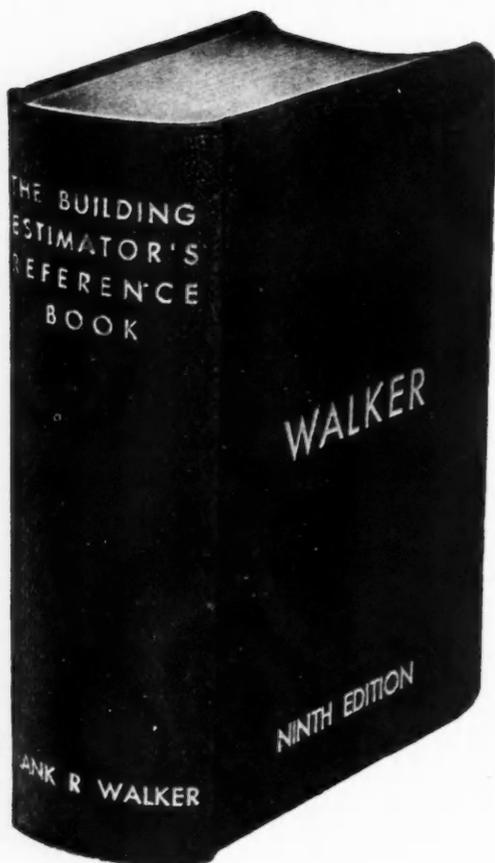
WINTER AIR CONDITIONERS
CONVERSION BURNERS • UNIT HEATERS
GRAVITY FURNACES

*Also Makers of Industrial Furnaces and
Kathabar Humidity Control Systems*

Ninth Edition . . .

The Building Estimator's Reference Book

By Frank R. Walker



1700 pages, 1000 illus., 1000 tables,
25-page index, 4 1/2 x 6 1/2, flexible

COVERS

Excavating, Foundations, Reinforced Concrete, Framing, Millwork, Lathing and Plastering, Painting and Decorating, Glass and Glazing, Structural Steel, Masonry, Sheet Metal, Marble and Tile, Heating and Air Conditioning—and many other subjects.

The new Ninth Edition contains latest estimating and cost data on everything that goes into house construction, from foundation to the finishing coat of paint. It can be used in any locality, regardless of local prices or wage scales. *American Builder* "Tru-Cost" estimates can be used for accurate quantities and the new "Walker" for accurate material prices and labor costs.

For 25 years this book has furnished contractors and estimators the most complete compilation of estimating and cost data available. The new Silver Anniversary Edition has been completely revised and improved throughout. Thousands of items that enter into the making of present-day construction estimates are arranged for ready reference. A cross-index enables the user to locate any item without delay.

HELPS PREPARE BETTER ESTIMATES

A copy of this new edition helps figuring and performing work at minimum costs. New methods of doing various kinds of work and new building materials that have come into the market during the past three years are fully described. With this book at hand there is no need for searching or guessing. The chance of overlooking any item in an estimate is reduced to the minimum.

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Send for a copy of the new Ninth Edition of THE BUILDING ESTIMATOR'S REFERENCE BOOK today. Take advantage of the opportunities it offers for increasing your profits through better estimates. Money back if not satisfactory.

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Enclosed find \$10 for which send me a copy of the New Ninth Edition of The Building Estimator's Reference Book, and a copy of The Vest Pocket Estimator FREE. If I do not find the books entirely satisfactory I will return them within 5 days of receipt and you are to refund my \$10.

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This is one of the most popular little books contractors have ever used. Contains 220 pages of up-to-the-minute estimating and cost data in condensed tabular form. Fits in the vest pocket and can be instantly referred to on the job or in the office.





There'll be **NO** PRE-FABRICATED BASEMENTS

We don't pretend to know how many of the new and revolutionary products and processes predicted for the building field will come to pass—but this we do know, *there'll be no pre-fabricated basements.* And basements will be an important asset to the American home, and you will have to build them.

We believe you will want to build better basements in your postwar houses, basements that will be waterproofed—waterproofed with Medusa Waterproofed Gray Portland Cement. The use of this cement in all concrete, concrete building units and mortar, will assure a dry basement



for the life of the house. Medusa waterproofing lines the pores of the concrete or mortar with a waterproofing material that repels all water at the surface. The use of Medusa Waterproofed Concrete instead of ordinary concrete represents only a small increase in the

cost—an increase that is definitely less than the expense a home owner may be put to in repairing a leaky basement.

Now is the time to plan for Medusa Waterproofed Basements in your postwar homes. The preliminary step in this planning is to send now for your copy of the book "How to Waterproof Concrete, Stucco and Masonry."



MEDUSA PORTLAND CEMENT COMPANY
1002 Midland Building • Dept. F • Cleveland, Ohio
Also made by Medusa Products Co. of Canada, Ltd., Paris, Ont.

MEDUSA

WATERPROOFED

GRAY PORTLAND CEMENT

BUILDERS

Where Will You Be

AFTER THE WAR?

"Saved me thousand's of dollars."
 "He'ped me stay in business."
 "I need it. The industry needs it."

That's what builder members say about the NAHB Washington Letter that they receive each week. This letter is edited by Frank Cortright, Executive Vice-President. It is the eyes and ears of the home-building industry in Washington. It tells you of every development that concerns the building industry. It tells you about legislative changes. It analyzes, clarifies and interprets government directives. It tells you what to expect and what not to expect. It gives you valuable information that otherwise might cost thousands of dollars to get. The National Association of Home Builders also is the mouthpiece of the home-building industry in Washington. It sees that your views are expressed and that your needs are considered. You can get all of these valuable services—full membership in the National Association of Home Builders to the end of 1944, and weekly copies of the Association's Washington Letter for the next 14 months—all for less than 72c a month. Think of it! Full membership for 14 months for only \$10.00!! You will find it the best \$10.00 *You* ever spent.

FREE SPECIAL OFFER!

Act now. Send the coupon today with your check. If you desire further information about the Association, ask for the special Free Trial Offer.

This advertisement sponsored by American Builder and Building Age

The National Association of Home Builders is Helping You Stay in Business

AT LONG LAST your industry is organized. There now is *one* big National Association of Home Builders. It is the mouthpiece of the home-building industry in Washington. You must have what this organization offers you. And the National Association of Home Builders must have your support.

Powerful, highly competitive interests are eying post-war building. They would take over a large part of your business. You and our industry must do more than just keep pace with these interests—we must keep ahead. This

can be done *only* through a national organization.

The National Association of Home Builders is definitely committed to combating public housing by providing post-war America with the finest possible privately built houses in all price classes at the lowest possible prices consistent with sound construction standards.

And remember, this is *not* a big-builder organization. It is an *every-builder* organization. And that means *You*. It is working for *You* and for *Your* interests—present and future.

ARE YOU DOING YOUR PART ?

National Association of Home Builders

USE THIS COUPON NOW

National Association of Home Builders of the United States AB 10
 1737 K Street, N. W., Washington, D. C.

CHECK ONE

- Please enroll my name as a Member of the National Association of Home Builders. Check enclosed () Send invoice () Payment of \$10.00 entitles me to all membership privileges and weekly copies of the Washington Letter for the balance of this year and all of 1944.
- Without charge or obligation please send me the next four issues of your Washington Letter and full information about the National Association of Home Builders.

Name

Firm

Street & No.

City and State



POST-WAR HOUSING



"100 homes sold this week!"

100 house contracts a week—for local builders—promises to be a typical report from key department stores all over the nation, once Victory is won.

For the Homasote-pioneered campaign to sell Homasote Precision-Built Homes through the mass merchandising markets of the department stores has produced significant results.

The public response to the Homasote exhibits of quarter-scale models, already held in 30 stores, has been amazing. More than 70% of the people visiting these exhibits expressed their desire for a permanent post-war home. Thousands are placing their names on Homasote's preferred list—joining Homasote's Own-Your-Own Home Club.

Through this constructive merchandising, Homasote is developing a tremendous and eager post-Victory market for local builders.

Engineered housing

For Homasote Homes not only assure consistent profits to builders, but every Homasote Home they erect enhances the builder's reputation for reliability and quality.

For seven years and at a research outlay to date of more than \$300,000,

Homasote Company has been applying sound engineering principles to the problem of building a home. Homasote's purpose: to help the builders who use Homasote Building and Insulating Board (and the dealers who distribute it) sell more and better houses, with *assured* profits.

Result of this thorough study is Homasote Precision-Built Construction—a system which:

- (1) enables the local builder to achieve *for himself* all the engineering economies of prefabrication;
- (2) produces a machine-perfect house at lower initial and operating costs; (one benefit of decentralized prefabrication is lower transportation expense);
- (3) is based on the use of Homasote Board—oldest and strongest building and insulating board on the market—

and other *standard* materials readily available in the local area;

(4) eliminates guesswork and the profit hazards of inexact estimating;

(5) is adaptable to any style, any size of house.

\$36,000,000 experience

The soundness of Homasote Precision-Built Construction has been proved in \$6,000,000 worth of pre-war, private homes erected by independent builders all over the country—and in \$30,000,000 worth of government war housing.

To the foresighted independent builder, Homasote Precision-Built Construction is the key to new post-emergency markets: low-cost housing projects constructed at a profit, large realty developments, machine-perfect homes in all price classes.

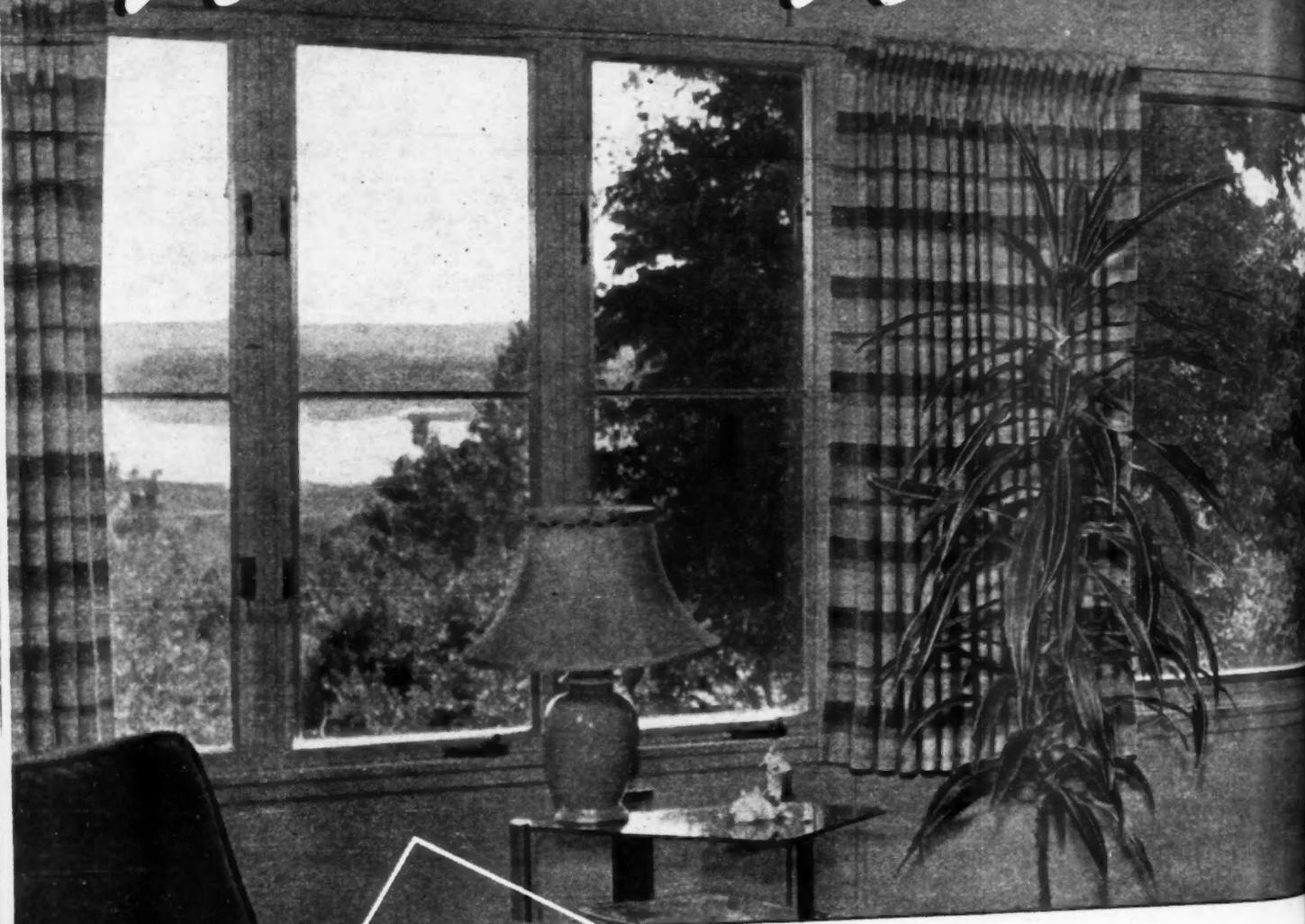
For more details, write HOMASOTE COMPANY, Trenton, New Jersey

HOMASOTE

Precision-Built

HOMES

Window Walls.



... with **ANDERSEN**
COMPLETE WOOD WINDOW UNITS

Window walls in the 194X home will bring the beauty of the outdoors to the comfort of the indoors. Arranged in groups, these window-walls will frame for a lifetime the sun-drenched beauties of the outdoors. This wider use of wider windows will impose greater responsibilities upon the capacity of windows to act as a transparent barrier against the weather, protecting inside comfort while opening up new vistas. Here, then, is the function of windows in the 194X home—to be-

come an integral operating part of the entire structure, adaptable to any architectural design.

While designs may change . . . while innovations may develop . . . builders and architects alike may rely upon the unchanging quality and precision-built excellence of Andersen Complete Wood Window Units to meet the exacting requirements of the 194X home. Sold, as always, through regularly established millwork channels. For details, consult Sweet's Architectural cat. log, or write:

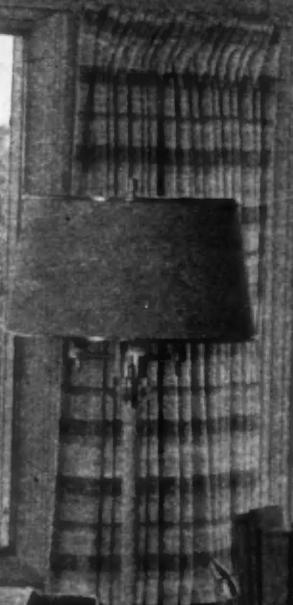
Andersen Corporation

BAYPORT • MINNESOTA

S.

ALIVE FOR A LIFETIME

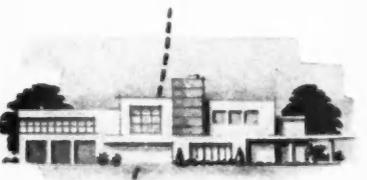
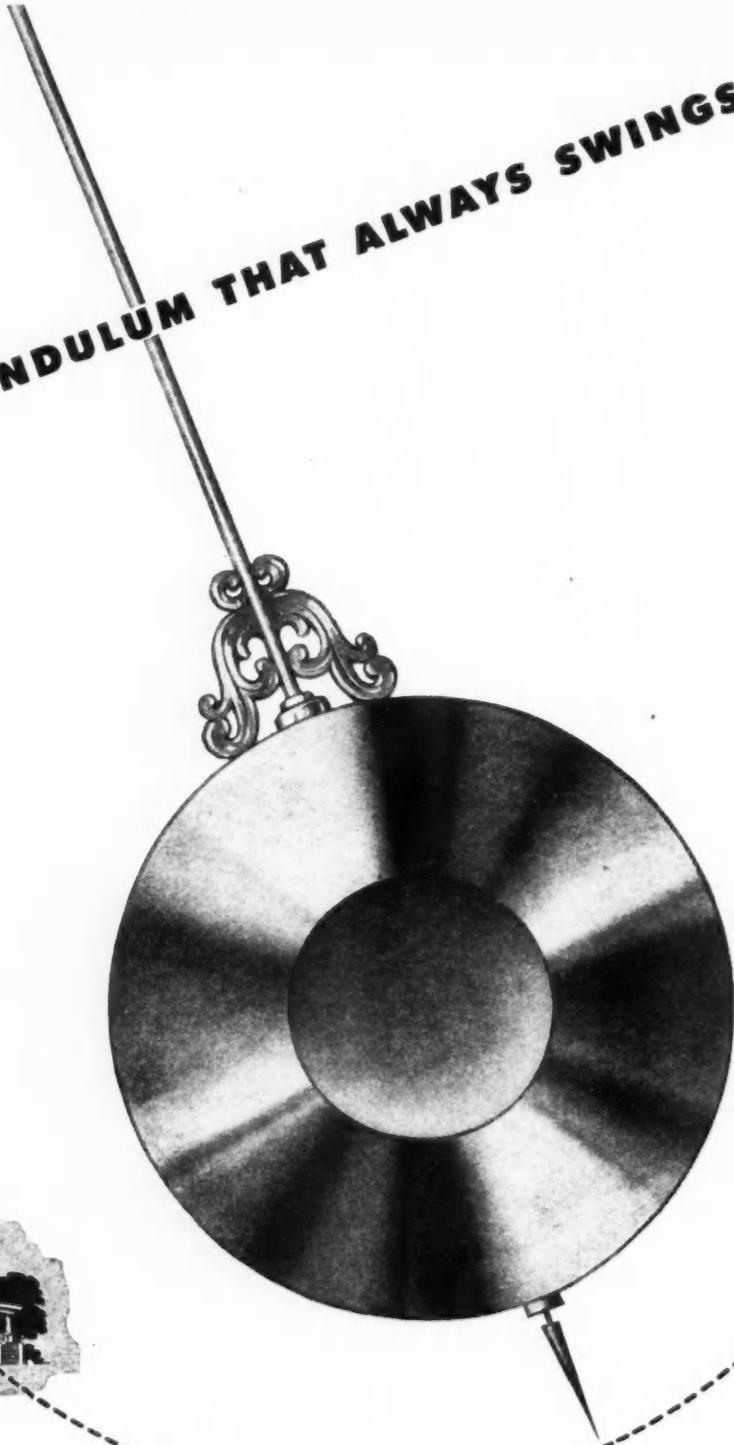
in the 194X HOME



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ONLY THE RICH CAN AFFORD POOR WINDOWS

THE PENDULUM THAT ALWAYS SWINGS AHEAD . . .



Vision to sense the trends of tomorrow—revision of products to meet present needs—provision for service throughout the nation—of such things is U.S.G. leadership made.

Striving for perpetual improvement through 40 years of research and development . . . drawing upon a past rich in construction experience—the United States Gypsum Company has a way of “taking time by the forelock” and creating building products that anticipate the forward swing of the pendulum and America’s demand for better and safer shelter.

- GYPSUM BASECOAT PLASTERS • FINISHING PLASTERS AND LIME
- GYPSUM LATH • METAL LATH • EXTERIOR STUCCO • GYPSUM WALLBOARD • GYPSUM SHEATHING • ACOUSTICAL MATERIALS
- INTERIOR PAINTS • MASONRY PAINTS • INSULATION PRODUCTS • HARDBOARDS • ASPHALT ROOFING • ASBESTOS SIDING



UNITED STATES GYPSUM
300 WEST ADAMS STREET, CHICAGO, ILLINOIS

This famous trademark identifies products of United States Gypsum Company—where for 40 years research has developed better, safer building materials.

GYPSUM PRODUCTS • STEEL • INSULATION • ROOFING • PAINT

GYPSUM WALLBOARD • SHEATHING • LATH • PLASTER

FIREPROOF GYPSUM

The World's most widely used Mineral for building Fire-Sealed Walls and Ceilings

GYPSUM FIREPROOF ROOF DECK AND PARTITION TILE



Sheet metal suggestions for your 194X buildings

Sheet metal is only one of the many materials you will specify for your 194X buildings, but you will want to make sure that you use the right one for the right purpose.

So consider these brief suggestions from ARMCO:

PAINTGRIP: This is the *original* bonderized, galvanized sheet. Use wherever you want the protection of zinc and the beauty and extra protection of paint. No acid-etching or weathering. Paint clings firmly and is preserved much longer than on ordinary galvanized or uncoated sheets—thanks to the neutral surface. PAINTGRIP will be supplied with base of durable ARMCO Ingot Iron, copper-bearing steel or open hearth steel. Use for roof-drainage and exposed air-ducts.

GALVANIZED ARMCO INGOT IRON: The oldest and most widely used of the low-cost, durable ferrous metals. Its high refinement, uniformity, and high-quality zinc coating assure utmost durability and low cost per year of service. Has excellent ductility, which means easier and quicker forming and fidelity to detail.

ARMCO STAINLESS STEELS: There are many grades of these popular alloy steels, the most frequently specified for building purposes being ARMCO 18-8 (18% chromium, 8% nickel) and ARMCO 17 (17% chromium). Rustless, ductile, and readily welded or soldered. The polished grades have been widely used for kitchen and dining-room equipment as well as for decorative work of all kinds. Also

used for roof-drainage systems in better class residences and commercial buildings where long, trouble-free service is desirable.

Like most other manufacturers, ARMCO's entire production is going to the war effort. But we are learning much about improving the older steels, even as we create steels with new properties. All this will benefit you and your clients of 194X. Is there any specific information we can give you? The American Rolling Mill Co., 1211 Curtis Street, Middletown, Ohio.

WRITE FOR THIS GUIDE



Would you like a copy of Armco's Sheet Metal Specification Guide? Just write on your firm letterhead and we'll send one without charge.



THE AMERICAN ROLLING MILL COMPANY





Learn about the Dexter Bit-Guide — the tool that gives streamlined, factory production method to Dexter-Tubular installation. Simply clamp the Bit-Guide on the door — self-centering, no measuring — guides the boring straight and true. Ask your dealer for a demonstration and complete details.

... neither can a Philadelphia lawyer. There are no jokers in the Life Time Warranty that goes with every DEXTER-TUBULAR lock and latch. The Dexter-Tubular **Life Time Warranty** means exactly what it says — your guarantee of performance for the life of the installation in which it is used — simple, straight forward, honest, and to the point.

Today, when there are so many substitutes for so many things, recommend and use Dexter-Tubulars — and available National Brass products — with the confidence that they are engineered and built to give enduring performance. For you, for your customers, this warranty is your absolute assurance.

DEXTER TUBULAR LOCKS and LATCHES

DEXTER-TUBULARS conform with WPB Regulations, including Hardware Order L - 236. You are invited to write for full details. Let us send you the "Commander Line" Catalog illustrating DEXTER-TUBULAR Locks and Latches, and Cabinet Hardware that conform with Federal regulations. Write today — no obligation.

Manufactured by **NATIONAL BRASS COMPANY**
GRAND RAPIDS, MICHIGAN

Washington News Summary

Down Payment on Homes Reduced to 20% of Price

Lumber Consumption Is Up Production at Half, Even, Gross Lumber Stocks Down

Lumber production during the first six months of 1943 totaled 16,023,743,000 board feet, according to estimates released by WPB's Lumber and Lumber Products Division.

This figure represents half the 1943 domestic production goal of 32 billion board feet set by the Division last January, but it does not assure that revised 1943 requirements will be met, Division officials stated. The year's lumber consumption for military and essential civilian needs is now estimated at about 36 billion board feet. Moreover, a normal seasonal decrease in production is to be expected in the fourth quarter of the year.

Estimated gross lumber stocks at sawmills totaled 3,879,040,000 board feet at the close of the second quarter of 1943 (June 30), a decrease of 21.7 per cent since beginning of year.

Copper Wire to Meet Minimum Repair Needs

Retailers in business August 1, 1943, may order up to \$100 worth of wire in any calendar quarter, or up to one eighth of sales of copper wire in 1941, whichever is greater.

Under this order a retailer may sell copper wire that has been obtained under CMP Regulation 9 to anyone, without regard to ratings (except AAA). However, he must fill orders supported by farmers' certificates in the manner provided in Priorities Regulation No. 19. Dealers' inventory of copper wire is restricted generally to a thirty-day supply. The purpose of the regulation is to provide copper wire to meet the minimum repair needs of the general public.

Woods Workers "Essential"

A worker in the woods industries may qualify as a "necessary man" if (1) he is or would be engaged in war production or in support of the war effort except for a seasonal or temporary interruption; (2) his removal would cause a serious loss of production effectiveness; and (3) he cannot be replaced.

Recognizing some abatement in the acute pressure for housing in centers of war production for the country as a whole, the Office of Price Administration recently amended the provisions of the Rent Regulation for Housing to permit bona fide purchases of housing accommodations with a down payment of 20 per cent of the purchase price in place of the previous 33 1/3 per cent required.

Tenants continue to be protected under the requirement of a three months' notice before eviction.

Liberalization of the down payment requirement, set forth in Amendment 7 to the Rent Regulation for Housing, is in line with settled OPA rent control policy to relax provisions of the rent regulation affecting sales where the situation permits it. Previous relaxations have permitted sales where equivalent housing accommodations are available to which a tenant can move without hardship, or where there is substantial necessity for the sale, or where special hardship would result without the sale.

OPA stated that the 20 per cent payment requirement is a trial measure. If OPA finds that the liberalized procedure does not afford proper protection to conform with the Rent Control Act, it will be necessary to go back to the original figure of 33 1/3 per cent.

Farm-Owned Woodlands to Furnish Wood Products

A program to increase sharply the production of forest products from farm-owned woodlands as part of the nationwide drive to meet wartime military and essential civilian needs for lumber has been announced by the War Food Administration.

WFA officials stressed that it is necessary for farm woodlands to furnish a larger part of the total national requirements for wood products. Before the war, one third of the nation's forest products came from the 139 million acres of commercial farm woodlands. It was pointed out that while the general aim of the program is to obtain greater production of farm forest products to help meet so far as possible the critical need for all military and essential civilian requirements for lumber, logs, pulpwood and other products, farmers themselves have a vital and special interest in the availability of lumber and its production.

War Industry Still Needs Housing; But Building Is Now Scheduled to Decline

While almost 1,500,000 new war housing units have already been completed or placed under construction, expanding employment needs in many key war industries will require a substantial additional volume of housing to accommodate incoming workers during the next 10 months, according to John B. Blandford, Jr., Administrator of the National Housing Agency.

This survey indicates that additional war housing needs will be concentrated largely on the *West Coast* and in *Southwestern* and *Southeastern* areas, where new industrial facilities are being brought into large-scale production or where existing plants are stepping up their operations. In other sections of the country, except at scattered points, the war housing already available or under way appears to be generally in balance with the present or prospective requirements of incoming war workers.

The volume of construction activity in the United States declined virtually as scheduled during the month of June to \$710,260,000, the War Production Board has announced. This was 1 per cent below the May volume and a 43 per cent drop from the \$1,244,047,000 total in the corresponding month of last year.

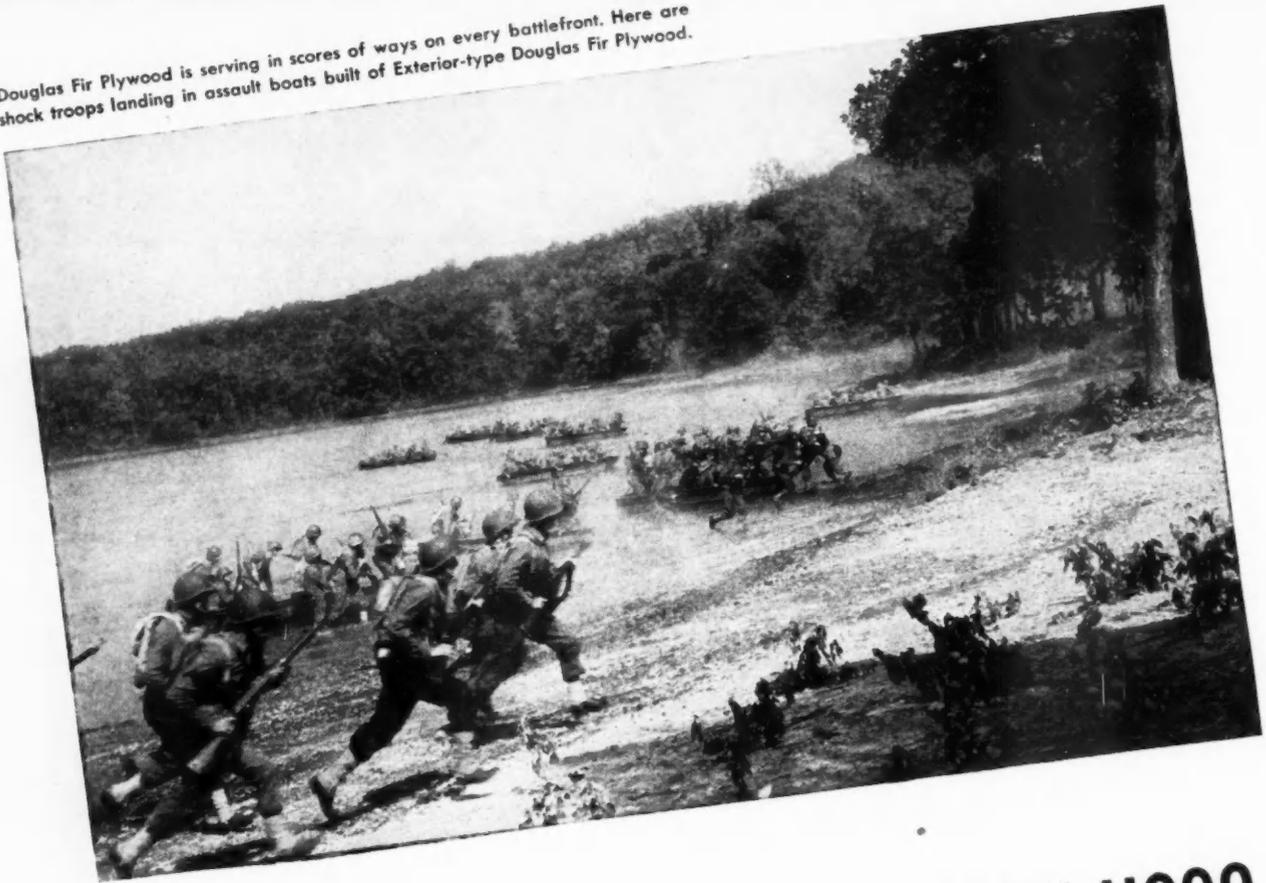
July figures when available are expected to show a 5 per cent decrease from the June level, and progressively sharper decreases are anticipated in subsequent months. The activity for the last half of the year is expected to be 33 per cent below the level of the half year just completed.

Plumbing and Heating Equipment for Repairs

Preference rating assigned for repair and replacement of plumbing and heating equipment was raised to AA-5 from A-10 by the War Production Board, Aug. 23, in an amendment to Order P-84.

The revised order requires a certification of need by the ultimate consumer for purchase of plumbing and heating equipment or parts costing over \$5.00. Previous restrictions required certification only when cost of equipment was \$50.00 or more. Any person making sales of items costing less than \$5.00 may use the AA-5 rating to replace his stock.

Douglas Fir Plywood is serving in scores of ways on every battlefield. Here are shock troops landing in assault boats built of Exterior-type Douglas Fir Plywood.



Douglas Fir Plywood's many war uses are sti

88% OF THE "DESIGNS FOR POSTWAR LIVING" ENTRIES SPECIFIED PLYWOOD

The "Designs for Postwar Living" Contest sponsored by California Arts & Architecture, trade magazine for architects, designers and others in the building industry, drew entries from every one of the 48 states and from 10 foreign countries. Here are a few of the several hundred entries received. First prize went to Eero Saarinen.



● The war has brought about a fuller realization that Douglas Fir Plywood is a material with a separate and positive identity. It isn't just a bigger board or just another type of wallboard . . . but a basic and versatile material that combines unique structural advantages along with large size. The buoyant stressed-skin hull of a plywood combat boat—the rigid, weather-proof construction of a plywood hutment—the weight-saving durability and protectiveness of a plywood engine crate—these and hundreds of other plywood war uses have stimulated the imaginations of architects, engineers, designers and builders. They see in Douglas Fir Plywood an improvement on conventional practices. They see in it the means of providing more efficient housing. For plywood's

are stimulating vital new design applications

characteristics invite functional construction and encourage the elimination of unessentials.

● California Arts & Architecture's "Designs for Postwar Living" Contest exemplifies this trend. Eighty-eight per cent of the entrants—including 7 out of the 8 winners—specified plywood. Many designed all-plywood structures. Others used this Miracle Wood for interior or exterior walls, sub-floors, built-ins and many other purposes. Sixty-six per cent of the entries were totally or partially prefabricated units. Because plywood has long been preferred by prefabricators, this tried and proven material was naturally specified in these designs.

● The Douglas Fir Plywood Industry is devoting its entire capacity to war production, which means that this engineered lumber is unavailable now for civilian use. But it will be immediately available after Victory since the Industry faces no conversion problems. If you haven't been seriously considering how Douglas Fir Plywood can serve you after the war, write for our War Use Folder today. It contains a photographic review of plywood's war jobs and will doubtless be as interesting and thought-provoking to you as to the thousands who have already sent for it. This folder is free, of course.

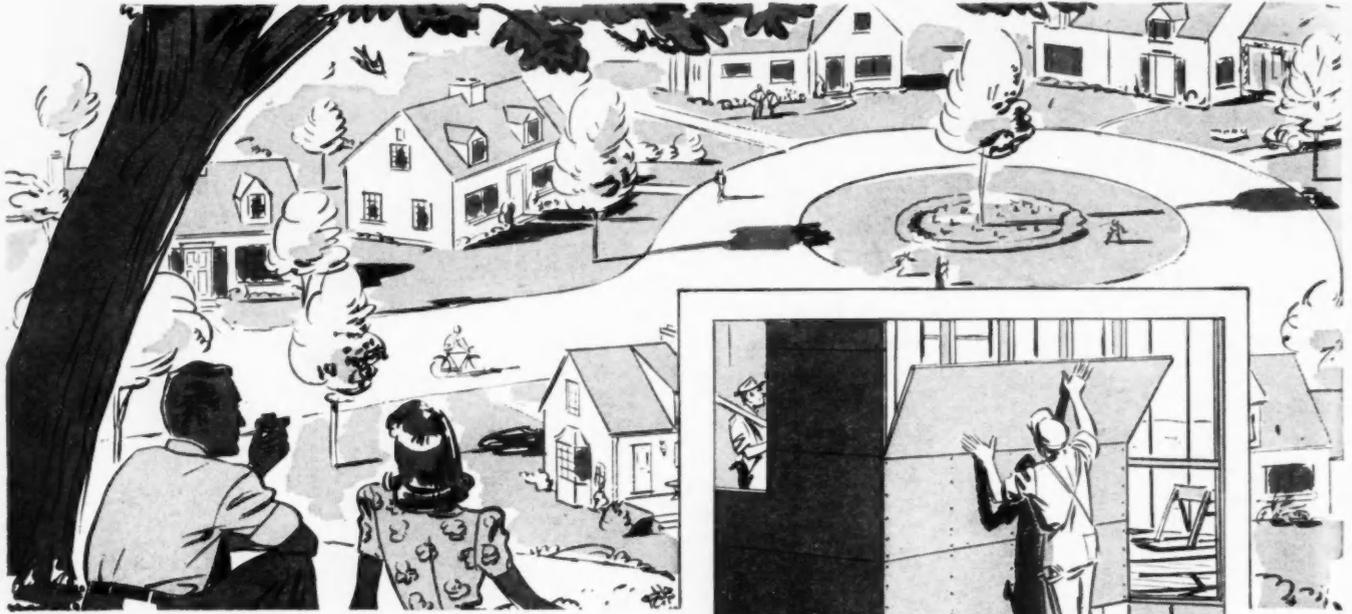
Douglas Fir Plywood Association, Tacoma, Wash.

FOR YOU TO REMEMBER . . .

Douglas Fir Plywood enjoys the most secure future of any element in the building field. It is used in conjunction with steel and wood and other materials; it serves as the mold which shapes concrete and as a base for synthetics. It finds its place in new work and is adaptable in alterations. It has structural value; it has appearance value. It is not a substitute nor an imitation of anything else. It is genuine in its own right, and it stems back into people's sentiments because it is wood.

**DOUGLAS FIR
PLYWOOD**

Real Lumber
**MADE LARGER, LIGHTER
SPLIT-PROOF
STRONGER**



PROBLEM: FIND THE MIRACLE IN THIS POSTWAR PICTURE

THE miracle lies in the speed and economy with which these postwar homes will be built—by practical builders and contractors just like you!

The demands of war have taught builders many things about time and labor-saving methods. It has taught manufacturers of building materials a lot about improving their products, too.

Take the two Gold Bond products shown here, for instance. Gold Bond Gypsum Sheathing has proved itself a thousand times over on big emergency government war jobs. It will be a "must" in many of the millions of homes which will be built after the war.

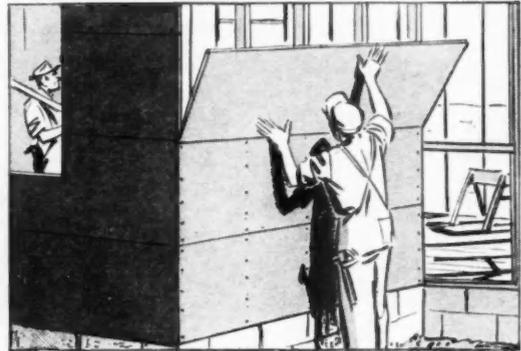
Gold Bond Insulation Board is another of over 150 Gold Bond products for walls and ceilings which will play a leading part in the postwar building boom. Today it is doing its share of "war work" in housing soldiers and sailors both at home and abroad.

Both of these improved Gold Bond products are available now for any wartime construction you're working on. For complete details see your Gold Bond Dealer.

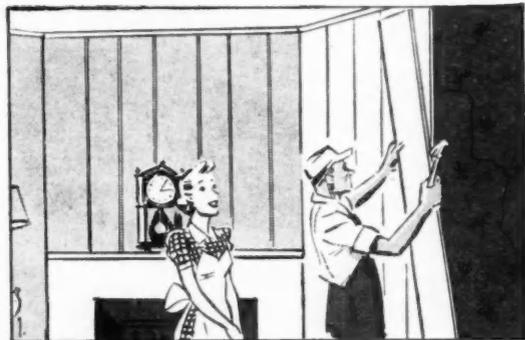
Plenty of Gold Bond Gypsum Boards Available!

For emergency duration building and repair there are still plenty of Gold Bond Gypsum Building Boards available. These amazing Gold Bond wartime developments build fire-resistant roof decks, exterior walls and interior partitions in a hurry. Gold Bond Roof Plank is fireproof and forms the base over which the roofing is applied. No waiting for material to dry. Gold Bond Exterior Board builds complete outside walls, sheathing and siding, in one operation. Solid Partition Panels for quickly erected permanent or demountable partitions in offices, plants, etc.

SEE YOUR GOLD BOND DEALER



GOLD BOND GYPSUM SHEATHING. These husky rock-like panels cost no more than ordinary sheathing. They build the exterior walls in less time and provide effective fire protection for wood framing.



GOLD BOND INSULATION BOARD. Converts ugly old interiors into "dream houses" like magic. Choice of large panels, tiles and planks in various surface finishes and colors that require no further decoration.

BUILD BETTER WITH
Gold Bond
Everything - for walls & ceilings

More than 150 different products for
MODERN CONSTRUCTION
AND WAR PRODUCTION

WALLBOARD...LATH...PLASTER...LIME
METAL PRODUCTS...WALL PAINT
INSULATION...SOUND CONTROL

NATIONAL GYPSUM COMPANY . . EXECUTIVE OFFICES, BUFFALO, N. Y.

21 Plants from Canada to the Gulf . . . Sales offices in principal cities

AMERICAN BUILDER

Editorial

The magic formula for post-war

HOME construction can easily become post-war America's No. 1 producer of jobs.

No boondoggling or made-work projects are involved. No pump-priming or public funds are called for.

The need for better homes and related structures lies all about us. This ninety-five billion dollar housing plant of America's needs overhauling, rebuilding and vast additions. A million homes a year for a decade after the war's end are needed and are a definite possibility.

But let us not delude ourselves. There is no automatic guarantee that this need will be fulfilled. The obstacles are many, and it is the tough job of individual enterprise to overcome them. This entire issue of *American Builder* is devoted to proposing definite action to permit private enterprise to function.

Need liberal finance

The two greatest threats to post-war building are RESTRAINTS (both public and private) on the one hand and ULTRA-CONSERVATIVE FINANCE on the other. They are strange bedfellows, but they are deadly twins that can stifle the ingenuity, enterprise and job-creating vision of post-war builders.

Long before the war's final end, government controls should be removed one by one to permit construction to absorb unemployment that is sure to develop. Stop order L-41 should be modified soon to permit some types of building to proceed, and when the end of the war is more clearly in sight, the ban on new homes should be removed.

Federal controls and competition must not be carried over into the permanent peacetime economy. The ingenuity, drive and skill of individual enterprise, if given a chance, will produce homes and jobs in record breaking numbers.

Other restraints on individual enterprise and inventive progress must be removed. These include obsolete building codes, price fixing agreements, labor restrictions and racketeering. The anti-trust laws should be vigorously enforced.

An unfettered building industry will make rapid technological progress. The magic formula for a vigorous post-war home program is *individual enterprise plus liberal finance*.

The right kind of a post-war finance setup could make a million homes a year by private builders

easily possible—homes for the very poor as well as the successful wage earner and well to do.

Let us not make little plans. If the builders of this nation can obtain adequate long-term home financing at low interest rates so that they can make such terms available to home buyers, they will turn out a volume of houses that will astound the world.

Trend of interest rates down

The trend of interest rates in this country is inevitably down. The spread between the present low cost of money and the 4½ to 6% charged by home lending institutions is too great, especially when the home mortgage is guaranteed by a government-backed insurance fund.

The down payment on houses must be brought lower. England's great pre-war home boom was largely due to the fact that small home buyers could get a house with only 5% down.

When any system of finance becomes so inhibited by habit, by custom, or by vested interests that it materially interferes with the working of private enterprise for a vast industry, it must be changed.



It CAN happen. The European war can collapse almost overnight. Then post-war planning will turn into post-war ACTION.

Entire contents of this War-to-Peace issue are dedicated to post-war JOBS and HOMES by private enterprise. Permission is freely granted to building men to reprint or republish articles in the interest of the home building industry.—The Editors.

Building enterprise can be stifled by ultra-conservative finance, and the memory of builders vividly recalls the pre-FHA days when it was impossible to get a reasonable mortgage loan regardless of the soundness of the project.

Builders want a vigorous, non-political, well managed FHA after the war. But they do not want it to be the *only* form of home finance. FHA needs competition from other types of private home finance to keep it on its toes. Competition in finance is desirable.

Want FHA and Home Loan Banks

In many ways throughout this issue *American Builder* has attempted to suggest action that needs to be taken to permit post-war private enterprise to solve the housing problem. None is more important than the establishment of a permanent over-all housing agency charged with aiding private enterprise building, not competing with it. Such an agency should be set up by Congress, and its objectives clearly defined. Its head should be appointed by the President and approved by Congress, which would make sure that he is a thorough believer in individual enterprise and private home ownership.

American Builder proposes continuance and expansion of both the Federal Housing Administration and the Home Loan Bank System as vigorous parts of a permanent housing agency. They should both be charged with developing more flexible, liberal, long-term methods of financing private homes. The Federal Public Housing Authority, now devoted to public housing, should be transformed to an agency charged with developing broad programs to assist and co-ordinate private enterprise in rebuilding cities and, of equal importance, rehousing the rural slum dwellers.

Homes for heroes will be a popular slogan after the war. No doubt there will be many ideas proposed to give returning service men special assistance in buying a home. There will also be proposals by public housers for vast subsidy raids on the treasury to rebuild whole cities or rural areas. Such proposals can best be met by a private enterprise program such as *American Builder* proposes.

"As little government in building as possible" should be our slogan.

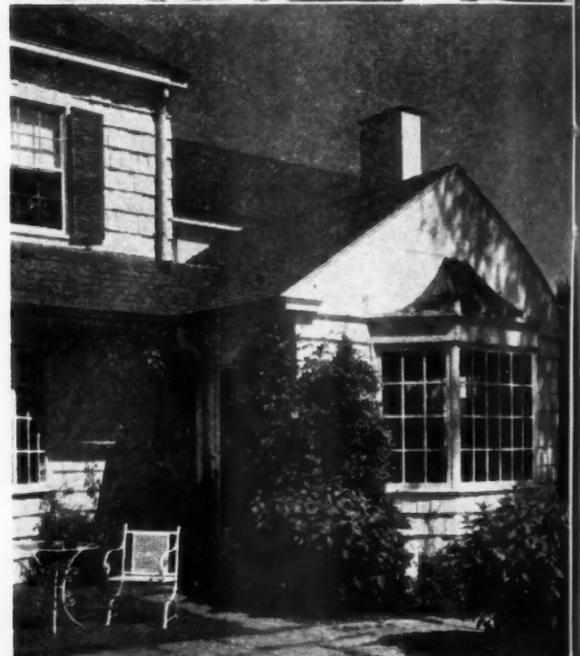
YOU CAN PUT THIS ISSUE TO WORK

This special War-To-Peace issue of *American Builder* climaxes a six-months' campaign to establish a private enterprise program for post-war home building. Copies are being sent to members of Congress, leading trade associations, government officials and business men as part of this magazine's contribution to a better post-war home building industry.

You can do your part by sending copies of editorials, articles and facts presented here to your local newspapers, congressmen and public officials. Permission is freely granted for such reprinting and distribution and for use of this information in local campaigns in behalf of private enterprise home building in your community—THE EDITORS.



Lift WPB Stop Orders



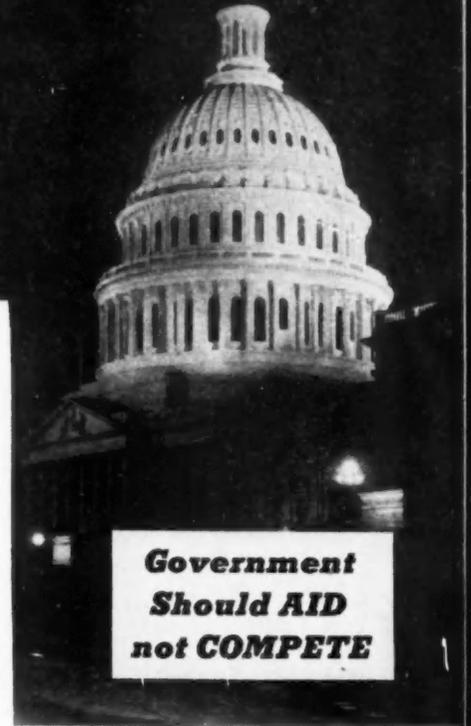
Promote Home Ownership



Liberalize Local Financing



Congress Must Act



**Government
Should AID
not COMPETE**

TEN POINT PROGRAM TO GIVE HOME BUILDING BACK TO PRIVATE ENTERPRISE AND ASSURE POST - WAR PROSPERITY

1. **Lift WPB stop orders at earliest possible moment so building can absorb unemployment. Non-critical materials should be removed from L-41 limitation at once. (See page 88.)**
2. **Get federal government out of direct construction and ownership of housing in competition with private enterprise. Any permanent Housing Agency after war to be charged with assisting private enterprise, not competing. Congress should state objectives, approve administrator. (See page 95.)**
3. **Reduce building costs by allowing full use of technical progress. Revise obsolete codes, enforce anti-trust and racketeering laws, rid industry of price fixing and all other restraints on building progress regardless of politics. (See page 96.)**
4. **Encourage liberal, long-term private home financing by banks, mortgage companies, loan associations. Broaden scope of Federal Home Loan Bank system; establish insurance if necessary to permit small town banks to make 90% loans.**
5. **Organize local better homes committees to lead campaign for home ownership and city rebuilding by private enterprise. Builders to prepare house plans and subdivision layouts now, process them as far as possible, erect experimental homes.**
6. **Set up city or county apprentice training courses for returning soldiers and ex-war workers who want construction jobs.**
7. **Revitalize FHA, build up quality of personnel, streamline services, encourage advance planning and processing of home projects. (See page 92.)**
8. **Make possible and encourage equity investments in low cost, garden type rental housing by private builders. Workable features of FHA Title VI should be included in finance plan to permit builders to sell houses on lease or contract basis, giving buyers 30 months to acquire down payment.**
9. **Pass federal and state urban redevelopment bills to enable private enterprise to rebuild cities. (See page 102.)**
10. **Reform local real estate tax systems by substituting "Occupancy Tax," and spreading cost of community operation to other tax sources than real estate. (See page 110.)**



**Remove Restraints
and Rackets**

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ncing

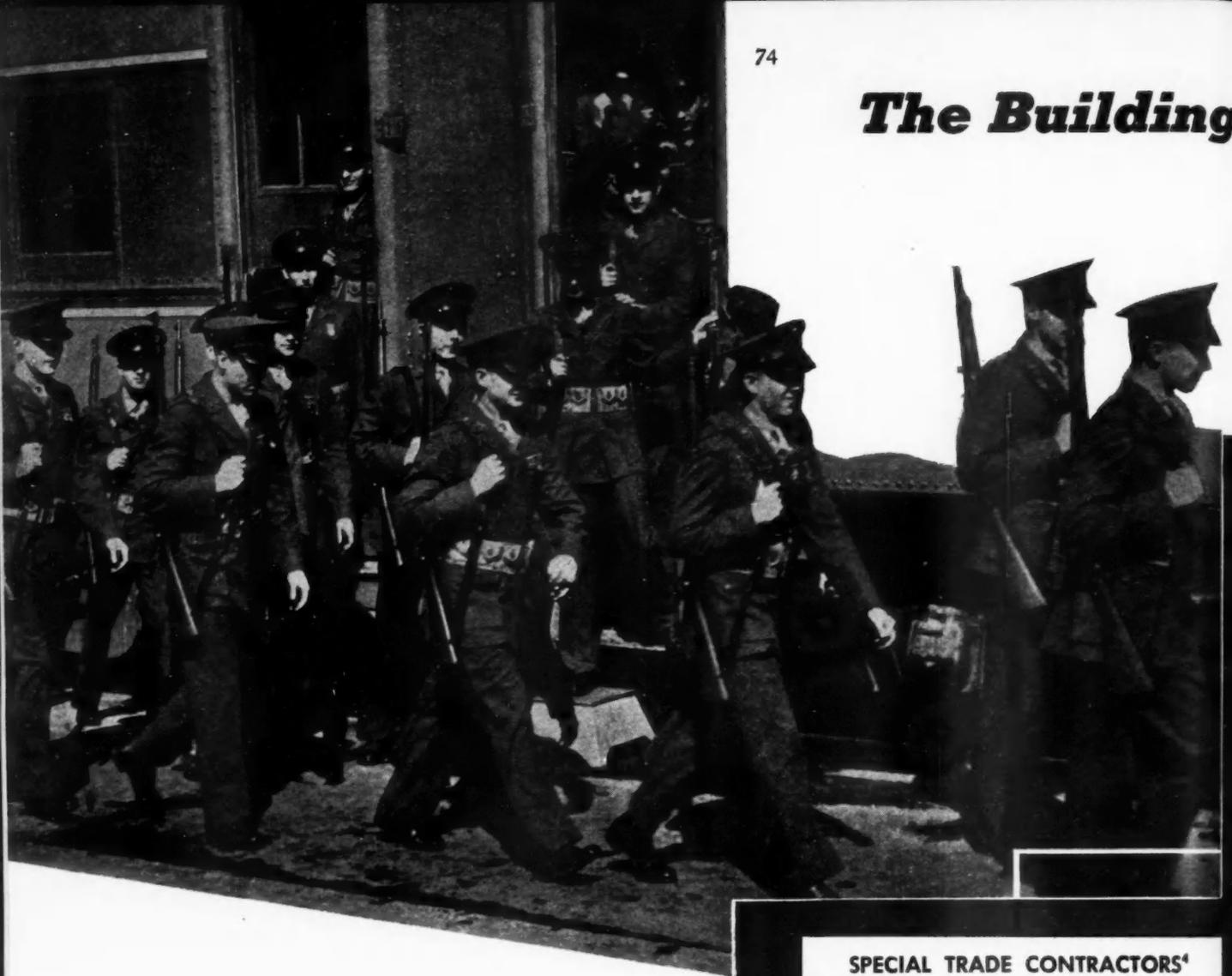


Organize Local Action



Draw Plans NOW

The Building In



THE keystone of all post-war planning is to provide jobs for returning soldiers and for former war workers. The gigantic private building industry is a major factor in our national economy in providing post-war jobs.

Private building is generally acknowledged to have revived our drooping national economy in the post-war depression of the early 20's, and to have put business back on its feet. When building prospers the nation prospers, for well over four million jobs are directly dependent on building in a normal, average year. Another million persons are partially dependent on construction activity for their livelihood. These jobs extend over many different industries and reach into every city, town and hamlet.

With post-war volume raised to a million homes a year, the private building industry readily can provide more than six million jobs, thereby becoming the major key to post-war employment by private enterprise. Private building can absorb thousands upon thousands of returning soldiers and former war workers, and thus can cushion the shock of readjustment to peacetime operation.

According to Herman B. Byer, Chief of the Division of Construction and Public Employment, U. S. Bureau of Labor Statistics, peak employment of construction workers in September 1941 (a year in which 715,000 new dwellings were erected) was estimated at 2,727,000.

¹Estimated. ²Population Census. ³Occupational Census. ⁴Census of Business. ⁵Census of Manufactures. All census figures issued by U. S. Department of Commerce.

SPECIAL TRADE CONTRACTORS⁴

No. Establishments		No. Employed
798	Air Conditioning	6,754
30,044	Carpentering	31,282
4,464	Concreting	18,106
15,915	Electrical	42,390
405	Excavating and Foundation	2,826
1,852	Excavating and Grading	7,943
2,178	Flooring	7,158
19,742	Heating, Piping and Plumbing	80,407
17,370	Plumbing	27,766
708	Insulation	6,970
522	Lathing	3,253
5,347	Plastering	17,413
720	Plastering and Lathing	7,754
622	Ornamental Iron	2,622
10,046	Painting	13,733
39,973	Painting, Paperhanging and Decorating	52,077
4,875	Roofing	18,951
3,046	Roofing and Sheet Metal	16,906
3,872	Sheet Metal	8,774
7,029	Masonry	30,273
2,149	Tile and Mantle	11,362
419	Weather Stripping	1,793
1,040	Glass and Glazing	3,142
176,187*		452,413*

*Minor and miscellaneous classifications included in this total not shown in table.

The materials and equipment put in place by these construction workers provided "behind the line" employment, in mines, factories, transportation and administration, of approximately 4,100,000.

Central figure in the complicated assembly of thousands of items that go into construction of a house is the contractor-builder. He makes the actual purchases of materials from many different sources and sees that they are assembled into a completed, livable unit. Estimates as to the total number of contractors and builders vary according to definition, and according to condi-

Industry—Key to Private Enterprise

Greatest Potential Producer of Post-War Employment: Private Building Can Provide from Four to Six Million Jobs. Its Far-Reaching Activity Extends to Many Industries and to the Grass Roots of Every City, Town and Hamlet

LAND

120,000, including Real Estate Brokers, Agents and Land Development Firms.
Owners of Land.

RESIDENTIAL BUILDERS AND GENERAL CONTRACTORS¹

100,000

FINANCIAL

No. Establishments ¹	No. Employed ¹
5,000	Active Savings and Loan Associations 17,500
1,500	Mortgage Bankers 7,500
400	Life Insurance Companies. 4,000
6,900	Individual Investors 19,000

UTILITIES

Water Companies
Gas Companies
Electric Companies
Telephone Companies
Surveyors
Street Builders
Transportation

ARCHITECTURAL²

19,899 Architects
100,925 Designers and Draftsmen
120,824

LEGAL

Title Examiners
Title Insurance
County Recorders

MISCELLANEOUS

Fire Insurance Agencies
Workers' Compensation
City Building Inspectors
Salesmen

BUILDING MEN³

Carpenters	556,918
Cabinet Makers & Pattern Makers	81,263
Construction Foremen	45,394
Masons, Tile Setters & Stone Cutters	102,089
Painters (Construction) Paperhangers & Glaziers	350,372
Plasterers & Cement Finishers	51,926
Plumbers, Gas & Steam Fitters	173,385
Roofers & Sheet Metal Workers	103,715
Structural & Ornamental Metal Workers	27,769
Laborers (Construction)	435,808
Electricians	197,080
Proprietors, Managers & Officials (Construction)	113,898
Civil Engineers & Surveyors	93,424
Electrical Engineers	53,103
Mechanical Engineers	82,255
Engineers, Cranemen & Hoistmen	60,886
	2,529,285

DISTRIBUTION⁴

No. Establishments	RETAIL	No. Employed
25,067	Lumber & Building Material Dealers	135,273
29,147	Hardware Stores	56,762
4,262	Heating—Plumbing Equipment Dealers	14,932
8,480	Paint, Glass, Wallpaper Stores	15,642
1,858	Electrical Supply Stores	3,952
19,902	Furniture	104,151
12,012	Other Home Furnishing Stores	35,192
20,915	Household Appliance—Radio Dealers	74,292
121,643		440,196

WHOLESALE

189	Builders' Supplies	4,061
1,236	Lumber & Millwork	10,770
154	Lumber & Millwork	2,384
280	Millwork	4,186
145	Brick, Tile & Terra Cotta	714
102	Cement, Lime & Plaster	900
282	Glass	3,451
675	Plumbing & Heating	10,243
368	Heating	2,648
927	Plumbing Fixtures, Equipment & Supplies	7,350
153	Construction Machinery	1,602
4,511		48,309

MANUFACTURERS⁵

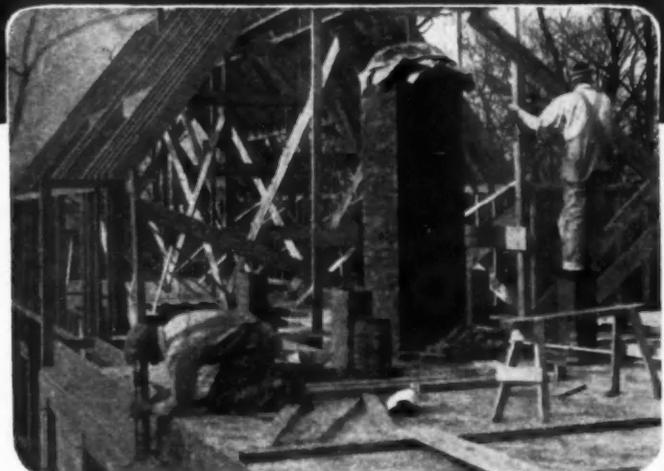
No. Establishments	No. Employed	
800	Brick & Tile 32,962	
2,200	Cement, Concrete Products. 50,656	
199	Construction Machinery 23,216	
205	Doors, Windows, Sash 10,428	
1,138	Fabricated Steel 44,800	
68	Gypsum Products 5,863	
434	Hardware 43,453	
138	Heating, Cooking Apparatus 3,927	
568	Lighting Fixtures 25,686	
269	Lime 10,917	
66	Linoleum, Floor, Wall Tile. 14,735	
58	Mineral Wool 2,297	
130	Oil Burners 2,723	
1,166	Paints, Varnishes, Lacquers 38,154	
716	Partitions, Shelving 17,841	
38	Plywood Mills 10,597	
129	Roofing, Asphalt 10,174	
8,358	Sawmills, Logging Camps. 311,736	
65	Sewer Pipe 7,051	
1,262	Sheet Metal Work 24,740	
68	Steam H. W. Htg. Apparatus 10,024	
510	Stoves, Furnaces, Stokers 55,911	
339	Vitreous Sanitary Products. 46,124	
124	Wallboard, Plaster 7,734	
46	Wallpaper 4,885	
162	Screens, Weatherstrip 3,616	
547	Shades, Venetian Blinds. 10,802	
146	Wiring Devices, Supplies 17,960	
218	Wood Preserving 12,623	
219	Woodworking Mch., Saws. 10,023	
20,325		866,731

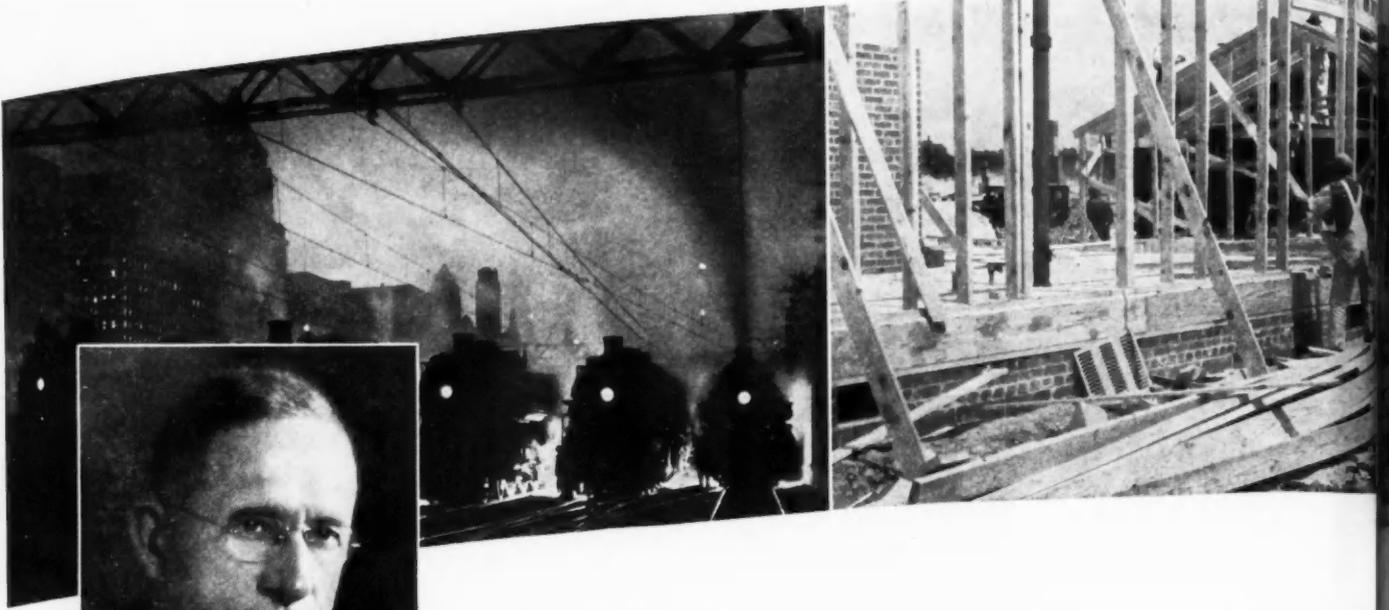
RAW MATERIALS MINES TRANSPORTATION POWER

tions. The number expands in prosperity and shrinks during a depression or war. The 100,000 figure used in the accompanying chart is a middle-of-the-road estimate as to the total number of contractors and builders.

Obviously no mere handful of men can "control" buying in the gigantic building industry, for there are in this country 16,553 communities, in which reside more than 50 per cent of our population; while 37,902,896 people reside in unincorporated communities. Each community is served by various interests which com-

(Continued to page 124)





SAMUEL O. DUNN

How to Create Jobs and

DURING the last war there was no comprehensive planning by business for the post-war period. There is such planning by business now under the leadership of national organizations, especially the Committee for Economic Development. There are two important reasons for the difference. First, there were no government policies or plans during the last war that threatened private enterprise. Now there are such policies and plans. Second, the domestic economy is being much more disorganized by this war, because expenditures, production and employment for war purposes, and the military forces being raised, are vastly larger. Therefore, in the absence of adequate preparation, the transition of business and employment to a peace basis might be more difficult and dangerous.

The policies of government will be of vital importance. They can undermine or destroy private enterprise. Or they can help enable private enterprise to cause much more construction, a far larger production and distribution of goods, and much more employment, than we have ever had in time of peace.

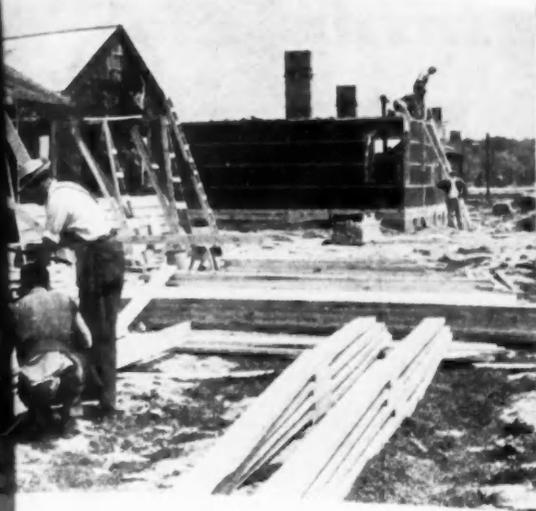
"Venture Capital" Important

Government plans and policies to compete with and restrict private enterprise should be exposed and resisted. But they should not be made by business an excuse for not adopting and trying boldly to carry out sound plans and policies of its own. If private enterprise is to succeed and prosper, it must, in seeking profits, take risks of losses. Private enterprise is based on "venture" capital. It is its very nature to take risks in seeking profits. Government should not increase the risks or limit the profits. But neither should government be asked or expected to aid any enterprise with subsidies or to protect any enterprise from losses due to mistakes in investment or poor management.

The threats to private enterprise from government

Profits are the source of investment that creates production and employment. Private enterprise must maintain a large volume at a fair profit. It must expose and resist labor or business monopolies as well as government policies that restrict or compete.

include, first, that of government "investment" in competition with it. The more government post-war spending there is, the more private industries government will compete with, the more severe its competition will be, and the less profitable private enterprise will be. Second, there is the threat of heavy and unfair taxation. Owing to the huge national debt, taxes will be heavy, anyway. The more government spending there is, the heavier taxes will be; and the heavier they are, the more unfair and detrimental they will be. For the way taxes are levied is determined by political pressure; and political pressure causes them to be made relatively the highest on real estate, on business and on large incomes derived from business. Prosperity and adequate employment require constant large investment of private capital. Private capital available for investment is derived principally from the profits of business and savings from large individual incomes. Therefore, the more of the profits of business, and the more of larger incomes, are taken by taxes, the less private capital there is available for the investment required for adequate production and employment. Third, there is the threat of government backing of labor union monopoly practices tending to cause labor costs, and, consequently, prices, to be excessive and inflexible in numerous industries. It is essential to maximum production and employment that each industry and its employees shall be able freely to exchange with other



Prosperity After the War

By Samuel O. Dunn

Publisher, American Builder

industries and their employees all the goods that they can and should produce. If, because of monopoly practices of either business or labor, wages and prices in some industries are made higher and more inflexible than in other industries, there cannot be free exchange of all the goods that can be produced; and no industry can give employment by producing goods that it cannot market.

Such government threats to private enterprise must be eliminated to make possible maximum production and employment. They can be eliminated by the federal, state and local governments (1) being confined in their spending to *real* public works that are needed and useful, and (2) removing during the transition from peace to war all government controls not necessary to prevent inflation during the transition, or to restore competition. And the restoration of competition will require control or suppression of monopoly practices of labor unions as well as of business. For the prices at which services or products can be sold at a profit depend principally on the labor costs incurred in providing them.

Probably it will require a great political struggle to save private enterprise from the attacks threatened by government. If so, every believer in private enterprise should engage energetically in the struggle. For when politics attacks business, politics becomes a vitally important part of the business of every person engaged in business or employed by it.

The people are accumulating huge savings in banks and government bonds. Probably immediately following the war there will be a grand rush to buy "consumption" goods and "consumers' durable goods." The latter, of course, include housing and the materials, equipment and furnishings for it. No doubt, while many plants are being converted from production for war, the demand for many kinds of consumers' durable goods—automobiles, for example—will exceed the supply. This was true immediately following the last war.

The result was inflationary advances in wages and prices, which were promptly followed in 1921 by a violent decline of prices and business.

Undoubtedly there will begin immediately after the war a large increase in home building. The home building industry apparently will have the first opportunity of any large industry to benefit by the huge savings the people are accumulating. The home building industry, nationally and locally, if it is wise, will try to take full advantage of this opportunity by avoiding any changes in prices not necessary to enable it to make reasonable profits. For large increases in its prices and profits would immediately cause demands for advances in wages that probably could not be resisted. Then the industry might find that the increases

(Continued to page 153)

AS publisher of American Builder and chairman of the Board of Simmons-Boardman Publishing Corp., publishers of Railway Age, Marine Engineering and other well known business publications, Samuel O. Dunn is well qualified to speak on the future of private enterprise. A lifelong student of economics, he is a forthright advocate of individual enterprise as a creator of jobs and wealth. "How to Preserve Private Enterprise," a 12-page booklet he has written, will be sent to readers of American Builder on request.





THEY want a home of their own.

THE United States already has the greatest housing shortage in history and with each passing month the deferred need becomes greater. Studies place the post-war housing need all the way from one million to two million units a year. One of the most authoritative, a new report by the 20th Century Fund to be released shortly, states that one million a year for a decade could be used.

This country has always, however, needed more houses than it could build and there is a great difference between a statistically impressive need and actual performance.

The really favorable factors that will turn the statistical shortage into a sustained market of a million homes a year, are the following:

1. Accumulated savings, plus greatly increased purchasing power will coincide with an acute shortage.
2. Post-war homes will be vastly more attractive, equipped with numerous eye-catching devices to attract buyers.
3. Because construction costs have not risen, while purchasing power of great masses of people has increased, the market for new homes will be greatly expanded.
4. Liberal long-term home financing and lower interest rates will bring the purchase of homes within the reach of millions not now served. This tendency was just beginning to "take hold" in 1941—the pre-war peak, when 715,000 dwellings were built.
5. Billions of dollars held by financial institutions will seek an outlet in private residential construction due to

Returning Heroes W

U. S. home building need greatest in history. Studies show million homes a year for 10-year period after war a definite possibility, but they must be of right kind and in the right places.



low interest rates prevailing elsewhere. It is generally conceded that interest rates will remain low because of the federal government's desire to keep interest on the huge government debt at a minimum.

6. Since real estate taxes and interest payments can be jointly deducted by home owners from their high income tax, there will be increased incentive for home purchase and ownership.

7. Although post-war changes are expected to be evolutionary rather than revolutionary, it is expected that technological progress, new products and equipment and keen competition among producers of building materials will enable the post-war builder to give the buyer more house for the money than he has ever had before.

8. Record-breaking numbers of people are now reaching the ages of 25 to 44; the marriage rate is up, and soldiers returning from the war will be demanding better housing—all important factors.

9. Population movement, the growth of new com-

No. of
Units

1000,000

900,000

800,000

700,000

600,000

500,000

400,000

300,000

200,000

100,000

191

America

HOMES

needs

Want HOMES Not "Mass Housing"

munities created by the war and the development of superhighways and air transportation will create new home building requirements.

All of the above factors will be at work in the post-war period, providing (a) private initiative and enterprise is not stifled by government controls or competition and (b) financing terms for private homes are set in liberal enough fashion, with low down payments and interest rates.

A vast housing need accumulated during the depression years which was just beginning to be translated into a vigorous building volume in 1941. In that year private enterprise builders erected and sold 619,260 units. Publicly financed units were 95,740, or a total of 715,000. More than 89% of the dwellings built were of one or two family type.

It is estimated by building experts that if the war had not intervened, more than a million homes would have been built in 1943. As it is, the present war housing program falls far below providing space for the normal increase in families in this country, not taking into account depreciation and obsolescence.

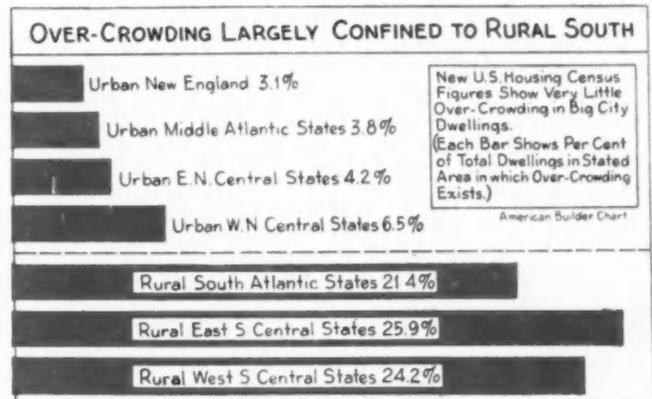
Recent census figures indicate that from 1930 to 1940 the number of non-farm families increased by approximately 4½ million. Yet the number of new non-farm dwellings constructed was only 2¾ million. We entered the war with a vast housing deficit which is now being aggravated by a sharply increased marriage rate. In 1942 the marriage rate was 13.4 per thousand compared with only 7.9 during the depression. Marriages, new families and new babies are a potent source of home demand.

While there is much talk of vast city housing projects in the post-war period, curiously enough the census figures show that the worst housing conditions and the worst over-crowding exists in rural areas. In a number

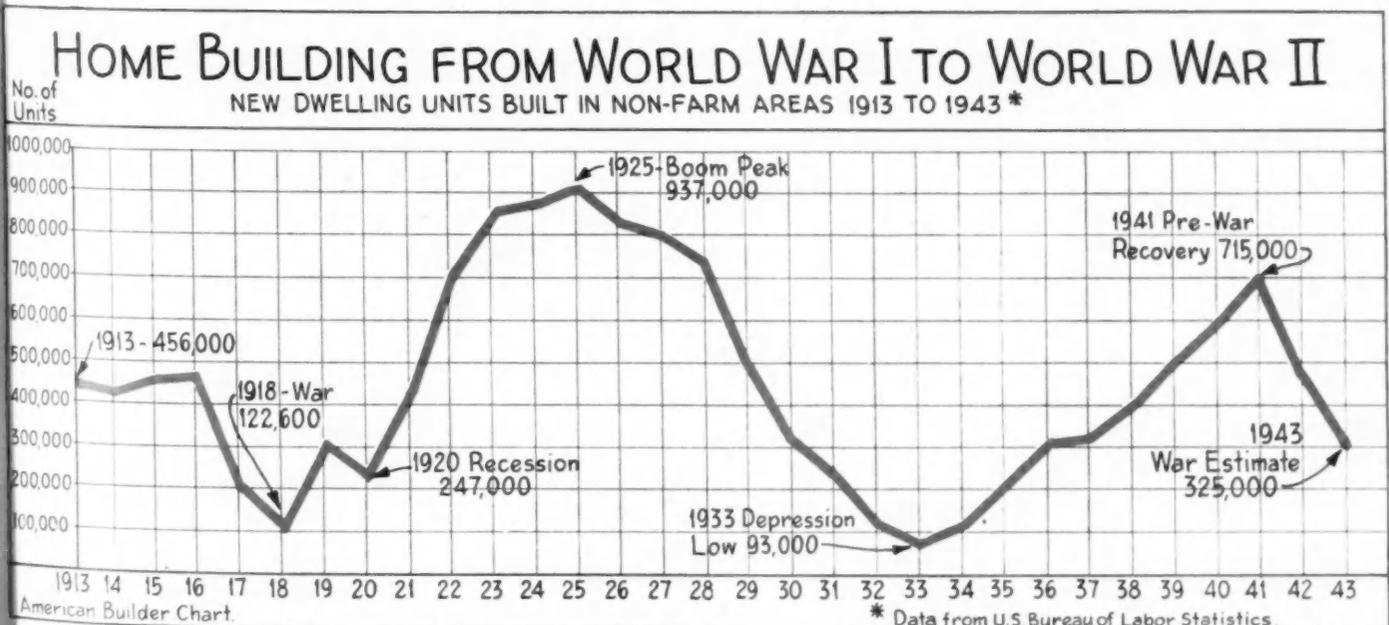
of the southern states the per cent of houses where serious over-crowding exists amounted to more than 25% of all dwellings. In the urban north, on the other hand, the number of houses in which over-crowding exists varied from 3.1 to 3.8 per cent.

There will be a notable tendency in the post-war period for still further decentralization of cities and a heightened movement of population to the suburbs and to the outlying rural areas. Thus the greatest new home building market will exist in the smaller communities surrounding the cities and in outlying rural areas reached by good highways, and later on by air travel. This movement had already reached large proportions prior to the war. The

(Continued to page 140)



1940 housing census revealed fact that overcrowding of homes is extremely great in the South, particularly in rural areas. Very little serious over-crowding was shown existing in the cities of the North.



HOME BUILDING more than doubled in the first year after World War I. Since 1929 volume has not kept pace with normal population needs although there was a steady rise to the 1941 pre-war peak of 715,000 units; 89% that year were 1- and 2-family homes.

What a Million Homes a Year Will Mean

1. **Every dollar spent on home building creates one hour of work.**
2. **52.9% of every dollar spent on home building goes for materials and equipment.**
3. **A million homes means a \$4 billion market.**
4. **Four billion man hours of work would be created, or full time jobs for 2 million men a year.**
5. **Expenditures for home building materials and equipment would amount to \$2,116,000,000.**

THE home building industry would take a place among the top job-creating, wealth-creating industries of the country if a million homes a year were built. The closest the country came to that record was in 1925, with 937,000 units. In 1941, 715,000 units were built.

Recent significant studies by the Construction Division of the U. S. Bureau of Labor Statistics throw new light on the labor and material requirements that go into home building. The results of the studies are summarized in the table below for 1,000 houses built under prices and conditions prevailing in 1941.

These bear out other studies to the effect that *every dollar spent for home building creates one hour of work.* (The exact B.L.S. figure is 57 minutes.)

On the basis of a \$4 billion home market, this would mean four billion man-hours of work annually. Figuring a full year's work of 40 hours a week, 50 weeks a year, (2,000 hours) this would indicate employment for two million men a year.

The average unit cost of the 715,000 dwellings built in 1941 was \$3,980. It is assumed that the post-war market will start at about the same average figure, so that a million homes would create a \$4 billion market.

The B.L.S. survey shows that 52.9 per cent of the construction cost of the average dwelling goes to material and equipment. Applying this to the \$4 billion post-war home market, we arrive at a total of \$2,116,000,000 for materials and equipment.

Another significant fact revealed by the B.L.S. survey is that for every hour of labor spent at the construction site, 1½ hours are required in mills, factories, mines and transportation to produce the products used.

The benefits of home construction spread far and wide through the very roots of American industry. Contrary to common opinion, home building achieves its greatest volume in small towns and rural areas. It is in these areas where the greatest post-war home market is expected to flourish. As the table, "Where America Lives," below shows, 17,751,900 people, or 13½ per cent of the total, live in rural areas not on farms nor in towns. Another 9,342,600, or 7.1 per cent, live in 13,288 places of less than 2,500 population. Home building is not only carried on through these many thousands of communities but is scattered over hundreds of thousands of sites in these communities. This is a paramount reason why "mass-production" has failed to apply to this industry.

LABOR AND MATERIAL REQUIRED FOR 1,000 HOMES

Total number of site man-hours.....	1,700,000	
Skilled occupations.....	935,000	55.0%
Semi-skilled occupations.....	238,000	14.0%
Unskilled occupations.....	527,000	31.0%
Labor expenditures.....	\$1,427,000	31.7%
Material orders.....	2,380,000	52.9%
Other expenses and profit.....	693,000	15.4%
Man-hours required in factories, mines, and for- ests, and in administration and transportation	2,550,000	

HOW HOME BUILDING DOLLAR IS SPENT

FOR EVERY HOUR of labor at the building site, 1½ hours are spent in factory, mines, and transportation.

FOR EACH dollar spent on home construction, 1 hour of labor is created as follows:

Labor at site (40%)..... 24 minutes

Labor off site (60%), 36 minutes

FIGURES based on a study by the construction division of the Bureau of Labor Statistics; dwelling units in the \$4500 range built under 1941 conditions.

in Jobs and Building Material Sales

A MILLION HOMES A YEAR IN TERMS OF MATERIALS AND EQUIPMENT

Steel & Wrought Iron.....	1,900,000,000 lbs.	Cast Iron Furnaces for Gravity System	213,000
Cast Iron	1,880,000,000 lbs.	Steel Furnaces for Forced Circulation	190,000
Copper	142,000,000 lbs.	Pipeless Furnaces.....	7,000
Zinc	77,000,000 lbs.	Floor Furnaces, gas-fired.....	432,000
Lead	86,000,000 lbs.	Space Heaters, gas-fired.....	196,000
Tin	1,700,000 lbs.	Space Heaters, oil-fired.....	4,000
Exterior Door Lock Sets.....	2,000,000	Coal or Wood Burning Stoves.....	22,000
Interior Door Lock or Latch Sets.....	10,984,000	Oil Burners (complete with control de-	
Exterior Door Butts.....	6,000,000	vices and storage tank).....	131,000
Interior Door Butts.....	21,968,000	Gas Burners (complete with controls)...	164,000
Door Stops.....	12,984,000	Dimension Lumber.....	billions of bd. ft.
Sash Fasteners (wood DH sash).....	14,640,000	Sheathing, Boards, Sub-flooring.....	billions of bd. ft.
Sash Lifts (wood DH sash).....	29,280,000	Roofing Materials	11,000,000 sqs.
Closet Clothes-hooks.....	18,000,000	Finish Flooring.....	120,000,000 bd. ft.
Wall Switches with Plates.....	12,000,000	Wallboard, Gypsum, Insulating Board ..	millions of sq. ft.
Convenience Receptacles with Plates..	14,000,000	Portland Cement.....	millions of bbls.
Service Inlets with Meter-board.....	1,000,000	Exterior Doors.....	2,000,000
Ceiling or Wall Fixtures.....	9,000,000	Interior Doors.....	11,000,000
Exterior Entrance Door Fixtures.....	2,000,000	Insulation	millions of sq. ft.
Box Cover with Bulb Sockets.....	3,000,000	Medicine Cabinets.....	1,000,000
Gas-fired, Side-arm Water Heaters.....	350,000	Kitchen Cabinets.....	1,000,000
Gas-fired, Burner under Tank.....	468,000	Paint & Varnish.....	millions of gals.
Oil-fired Water Heaters.....	6,000	Fireplace Mantels & Equipment.....	623,000
Coal-fired Water Heaters.....	54,000	Bathtubs	1,000,000
Electric Water Heaters.....	27,000	Closets	1,200,000
Furnace Coil Water Heaters.....	14,000	Lavatories	1,200,000
Water Heaters (instantaneous type)....	81,000	Garage Door Sets.....	800,000
Steel Boilers.....	98,000	Refrigerators	1,000,000
Cast Iron Boilers.....	111,000	Ventilating Fans.....	thousands
Circulation Pumps.....	48,000	Glass	millions of sq. ft.
Steel Furnaces for Gravity System.....	22,000	Electrical Equipment.....	millions of items

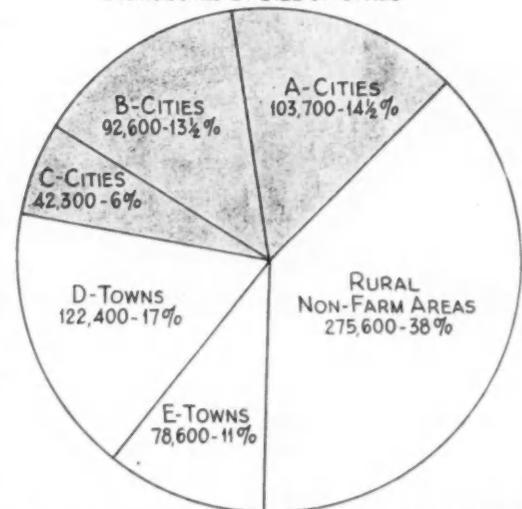
WHERE AMERICA LIVES

	No. of Places	Population	% of Total Population
Farm population.....		30,151,076	22.9
Rural population not on farms.....		17,751,820	13.5
Rural population in places of less than 2,500.....	13,288	9,342,677	7.1
Places of 2,500 to 10,000.....	2,387	11,707,805	8.9
Places of 10,000 to 50,000.....	878	17,383,991	13.2
Places of 50,000 to 100,000.....	107	7,343,917	5.6
Places of 100,000 to 500,000.....	78	15,620,164	11.9
Places of 500,000 and up.....	14	22,367,825	16.9
		131,669,275	

HOME construction is normally scattered across the width and breadth of the land in thousands of small towns and rural communities. Chart at right shows high percentage of homes built in 1941 were in rural areas and small towns. Table above, "Where America Lives" shows that 66% of the population live in small towns or rural area.

66% OF NEW U.S. HOMES WERE BUILT IN SMALL TOWNS AND RURAL AREAS IN 1941.

HOW 715,000 NEW DWELLINGS WERE DISTRIBUTED BY SIZE OF CITIES



A-Cities-500,000 and Over.
 B-Cities-100,000 to 500,000
 C-Cities-50,000 to 100,000
 D-Towns 10,000 to 50,000
 E-Towns 2,500 to 10,000
 Rural, Non-Farm Areas

Source :- Bureau of Labor Statistics

American Builder Chart



AHEAD: The World's Finest H

WILL the private building industry be able to survive the war and be in a position to deliver the homes so badly needed?

Will builders be able to pull through the current drought of building to carry on an immense post-war job?

Yes—war is just another pause on the way to a better housed America. These men say they are only awaiting the starting gun to build the best houses they have ever offered.

Plans that were consumer-proven just before war restrictions were clamped down have been brought up to date; sites are available in most communities, some already paid for by home owners; wartime experience in better methods for labor saving and cost cutting has been perfected for peacetime use; factory production and research promise a vast flow of new and improved products competing for markets.

The backlog of potential purchasers is meanwhile reaching an all-time high. Not that there has not been a demand in the past, but with peace there will be the need, the desire and **BILLIONS** of accumulated savings

to satisfy them. Homes by the hundreds of thousands, homes for all income levels, homes produced by private building—that's the promise of the years ahead. Industry and government must plan to assure the production of this most basic commodity; nothing must hold back the fulfillment of what we are fighting for—home and country.

Private Building Can Do It If Unhampered

But the question is being constantly raised, and now more frequently: *Can the building industry as now organized handle such a market?* Further, will it deliver the best houses possible or hold back advances? Let's look at the record and see if the promise of a revitalized industry will continue the very real progress of the past.

Opposite is shown a pictorial representation of the anticipated post-war private home requirements divided into three principal classifications. The first, single- and two-family homes, calls for an average of six hundred thousand units a year for ten years, quickly picking up

from nothing and approaching peak production at the end of the first year. In 1926 private builders produced 608,000 such units; in 1929, 367,000; in 1933, 81,000; in 1938, 330,000; in 1941, 570,000—a 12-year record in number and an all-time high in building the best small homes any country has ever had.

The astounding fact in this past performance not usually appreciated by the layman is the ability of home builders to adjust their operations very rapidly from a vanishing point to tremendous production, required in no other durable consumer goods. It is this expandable capacity that is overlooked by public housers trying to make a case for the necessity of government taking over anywhere from a small part to a major portion of the post-war home building job.

Multi-family units in the form of privately built row houses and garden court apartments offer quarters that represent a good compromise between single-family residences and the conventional type of apartment. Such units can be either rented or sold by private builders who have had broad experience with these ac-

A Continuous Record of Achievement and Progress

Private home builders can well be proud of their past performance. Any question about their capacity to meet the post-war demands can be answered with a positive YES, as this article points out.

Can Government do it better? A vigorous NO! (See stories on pages 95 and 99 for the sorry record of public housing.)

Private builders provided 619,000 dwelling units in the last pre-war year, 1941. These were the best any nation has ever seen, with more in the lower-cost bracket.

In spite of the worst obstacles under which any business was expected to operate, private building should account for 460,000 badly needed war housing units.

Best Homes!

commodations in the past few years. Added to the basic economies such as less land per unit, lower taxes and lower maintenance and operating costs are savings resulting from construction methods learned under war housing Title II and Title VI. The industry is now studying post-war possibilities of building larger projects of such units costing 15 percent to 20 percent less than comparable single units of same size and type of construction. This housing would be ideal for urban rehabilitation of close-in areas where design can conform to city plans which will insure a slow rate of obsolescence on high priced land. A volume up to 20 percent above the low cost field or about 150,000 living units a year of residential construction is anticipated in private multi-family structures.

A New Low-Cost Market

Mass housing in suburban and rural areas will continue to offer private building an opportunity to fill the demand for low-cost units. Here the public housers will be met on their own ground—providing for those



LOW-COST FIELD will attract builders and producers, large and small, using new production and other techniques to reach lower income field.

PLACE YOUR ORDER NOW!

FOR YOUR FUTURE HOME

ONLY \$150. STARTS YOU
Very Low Monthly Payments

Every American is entitled to own his own home. Gain the advantages in...

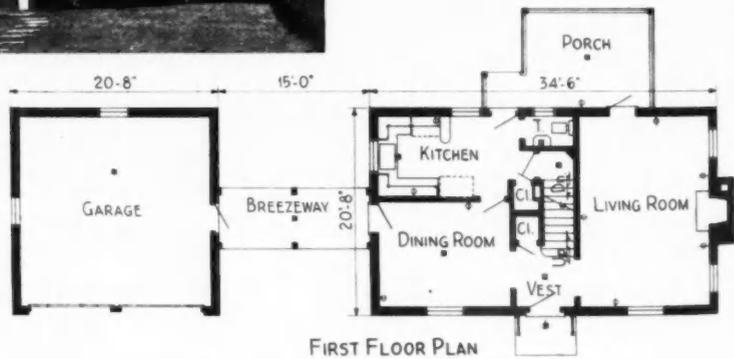
ADVERTISING campaigns are now creating post-war sales.

in the lower third of income level. The post-depression expansion of "security" homesteads beyond the urban limits has proven the ability of private builders to erect and sell good small homes on a sizable plot that can yield considerable food. Superhighways and better transportation will further add to the areas open to this class. Independence, health and contentment will be available to industrial and modest income white collar workers at a cost that will decrease as wartime production methods are applied. These include prefabrication in factory and on site, precutting, large tract development, low cost, standardized equipment, etc. A continuation of wartime lease-option and minimum down payment, low cost standardized equipment, etc. A continue everyone with an income; private industry should be able to reach at least down to the \$2,000 price with a soundly constructed dwelling, not of the type that creates rural slums or paternalistic squalor. This con-

BEST PRE-WAR HOUSES PLUS WARTIME DEVELOPMENTS IN NEW MATERIALS AND



LEFT: Attractive home built by J. C. Nichols in Prairie Village, Kansas City, has compact six-room arrangement with breezeway and two-car garage.



Four Good Pre-War Plans of Four to Six Room Homes

BELOW: Four-room forward-looking design of low cost house and built-in garage, Garden Oaks, Houston, has an economical 27 by 36-foot over-all plan.



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struction represents an additional market—so large that big industry is eyeing this plum. It may reach 250,000 units a year with a fair percentage of these prefabricated.

In approaching this post-war home market, builders must, as in the past, be the realists. Their job continues to be to meet the American demand for better homes at cheaper prices. Just as it's always necessary to have the star-gazers, so it is the builder's job first to analyze what dreams and miracles are made of and then add bit by bit to the best of the past.

Competition calls for everything that has been tested to the point where sales won't backfire—after all, the builder holds the bag. That's the pattern of home building progress: steady evolution to provide increasingly more convenient, comfortable living.

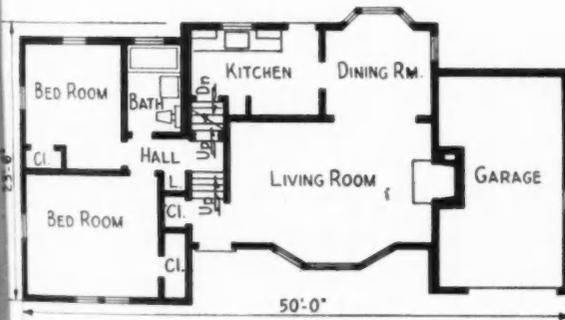
The promise of a tremendous post-war market does not mean that homes will not still have to be sold, and

that competition will not be keen, particularly after the first wave of buying subsidies and other consumer goods flood the market. Builders who are now making post-war sales plans and, in many cases, setting up a pre-delivery accumulation of down payments, or the purchase of a lot, will unquestionably have the distinct advantage of a quick start over those who wait until the war is over. Furthermore, such plans tie down the consumer dollars for the duration and help ease the pressure on the giant reservoir of spending power being built.

Using the best pre-war small home designs, each builder has the starting key to post-war building in his own community. Meanwhile, he is checking what he has found to have the greatest consumer acceptance against other good designs and currently announced developments which can be planned for inclusion when available. For example, four good small designs shown below might well be used as the basic post-war homes

IMPROVED TECHNIQUES WILL PRODUCE GREATER VALUES THAN EVER BEFORE

Charming, Well Planned Homes of Moderate Size and Price Will Lead in the Building Revival



USE OF three levels for homes on sloping sites should continue to be useful and can give advantages of privacy and convenience, as in the house at the right by Trowbridge & Davis, in a Long Island development.

GOOD CIRCULATION, plenty of closets and space on the second floor for additional rooms recommend the type of five-room home shown below and built by Mack Kanner & Sons, Merrick, L. I.

Post War Planning Will Start with Small Homes Like These



BUILDERS ARE READY, WILLING, ABLE TO USE WARTIME PROGRESS

Foresee Better Homes for All Due to Recent Advances

Chicago, Oct. 1.—When our heroes finally return from the far-flung battle fronts of the world, they will find private builders busy on the finest homes in history.

Wartime wonders of chemistry, research and electronics have captured the imagination of the nation; great strides toward better homes are among the things promised.

Meanwhile, builders are closely watching such developments and are following up all leads that might offer practical, salable features for their post-war homes.

Many builders are now planning their first models for erection as soon as restrictions are lifted. These will be their best pre-war designs with war-born improvements. They have gotten valuable new experience in methods and cost cutting out of the last two years and are waiting for the chance to use it on post-war home building.

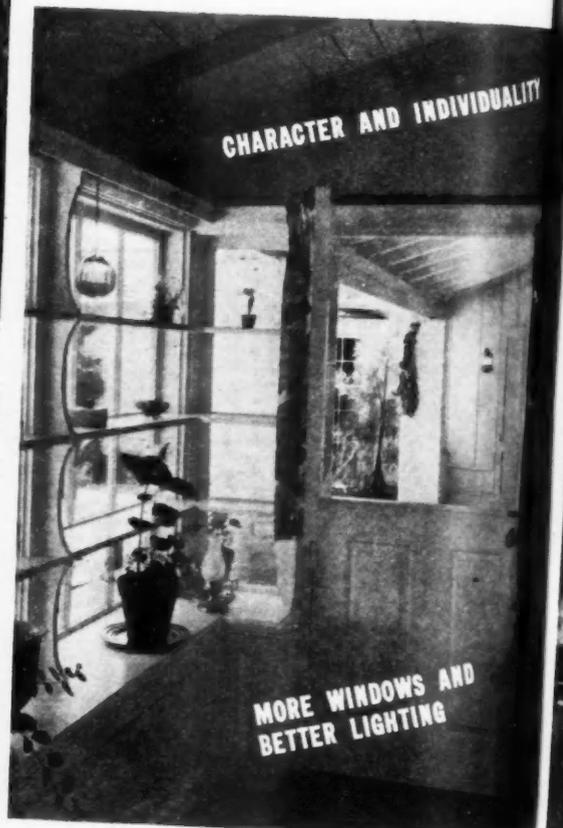
The natural initiative of builders when unfettered by present restrictions will assure a quick start on the gigantic volume of home building indicated by surveys. Plenty of accumulated funds in bonds and savings, along with a growing backlog of unfilled home buying desire, points to 10 million units in the first ten years of peace. Half a million war marriages a year are adding to past requirements.

These war brides dream of their first home and are joining others in acting now to assure getting one as soon as available. Legislation has been suggested to help returning heroes buy homes.

Sensing an anxious market, many builders are promoting sales at this time through purchase of lots, deposit agreements and down payment plans. Home plans being discussed with these buyers are based on the builders' best value designs of 1941; to these will be added the products of recent technological advances when proven and tested. They look forward to the gradual application of more and more equipment mass produced for lower costs, additional labor-saving devices, factory fabrication, new forms for old materials and newly developed synthetics, plastics, alloys—everything that promises better and cheaper jobs. (Publicity story on post-war homes suggested by American Builder.)

of the builders who produced them. The popular priced field unquestionably will extend down to a lower price at the bottom of this bracket to include homes ranging from \$3,000-\$3,500 to \$6,000-\$6,500. Except for unforeseen new added costs, such as pyramided taxes and a return to the standpat attitude on cost-cutting methods, the delivery of a top value small home within these brackets is easily possible.

Wartime techniques and advances made under "hurry-up" pressure have short-circuited many of the restrictive practices of the past. Factory fabrication of new sizes of building units, substitution of mate-



THE EVOLUTION TOWARD BETTER

PRE-WAR TRENDS INDICATED BY BUYER APPEAL:

- Compact plans: elimination of little used space.
- Largest demand for Colonial styling.
- More comfort equipment; more built-ins; better insulation.
- Bigger lots, less crowding.
- Automatic heating.
- Durable finishes; more color.
- Easily cleaned surfaces.
- Adequate wiring.
- Production kitchens.

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rials, labor specialization at site, and supervising methods tested on war housing to keep within the contract price in spite of unavoidable added costs—these and more have given builders a valuable production know-how. They have learned to get the job done, come grief or high water, without benefit of extras for each change. Post-war construction problems will be a cinch for these battle-scarred veterans.

Basically the job will remain what it was before the war. The steady progress made by builders particularly over the past thirty years will be accelerated to the extent that they can be supplied with improved prod-

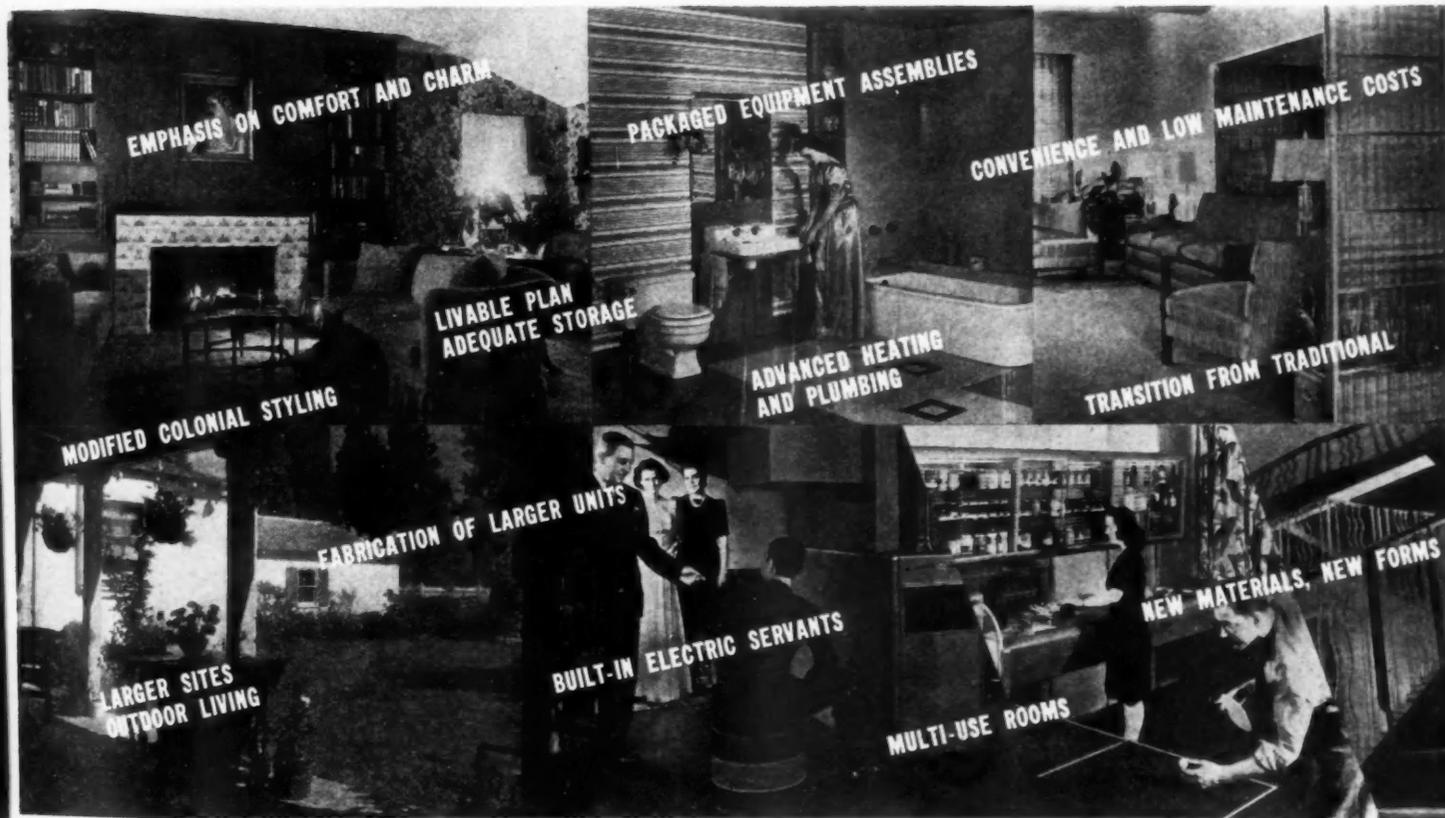
ucts now being ballyhooed. And don't let any of the detractors of home building get away with the silly statement that there has been no advancement in the field in 100 years—or 1,000 years—or 5,000 years—whatever suits their fancy.

Just ask an active building man on the job for two or three decades whether or not there has been any convenience and comfort added to his homes. Better heating, better arrangement and styling, improved lighting, insulation, plumbing, economies of operation through compactness and durability—just to mention a few of the modern advances.

These things didn't come overnight

and as one of the country's largest manufacturers recently pointed out "... we know that nobody can introduce new and revolutionary things without 'bugs' and 'bugs' mean delays in getting onto the market, service expense to dealers, disappointment to customers."

Continuing on post-war products, it is stated that builders are going to be told to wait for them, that everything sold in the past will be "obsoleted" by what's coming. That cannot be so. They may dream of collapsible, expandable, intangible houses of the future, but will actually start where they left off pre-war. And those were the world's finest homes.



BETTER POST-WAR HOMES; FUTURE OUTLOOK BASED ON BEST OF THE PAST

WARTIME PROGRESS AND EXPERIENCE HAVE ADDED:

- Mass production of new structural forms.
- Broader choice of substitute materials. Wider use of plastics.
- Cost reduction by more efficient methods on the job.
- Open mindedness on new techniques, revision of codes.

FUTURE HOMES SHOULD HAVE:

- Benefit of lower costs; more value.
- Emphasis on comfort and charm.

Modern Colonial design; greatest style changes on interior.

Most livable arrangements ever produced.

More efficient, helpful automatic heating and conditioning, possibly with complete air cleaning.

Compact, ready-to-install service units; someday include all mechanical functions (kitchens first).

Large panels of wall finish in both old and new materials.

Wider and better use of color.

Much of floor space planned for multi-use; movable partitions.

Factory-produced sub-assemblies; provision for replacement and change of parts.

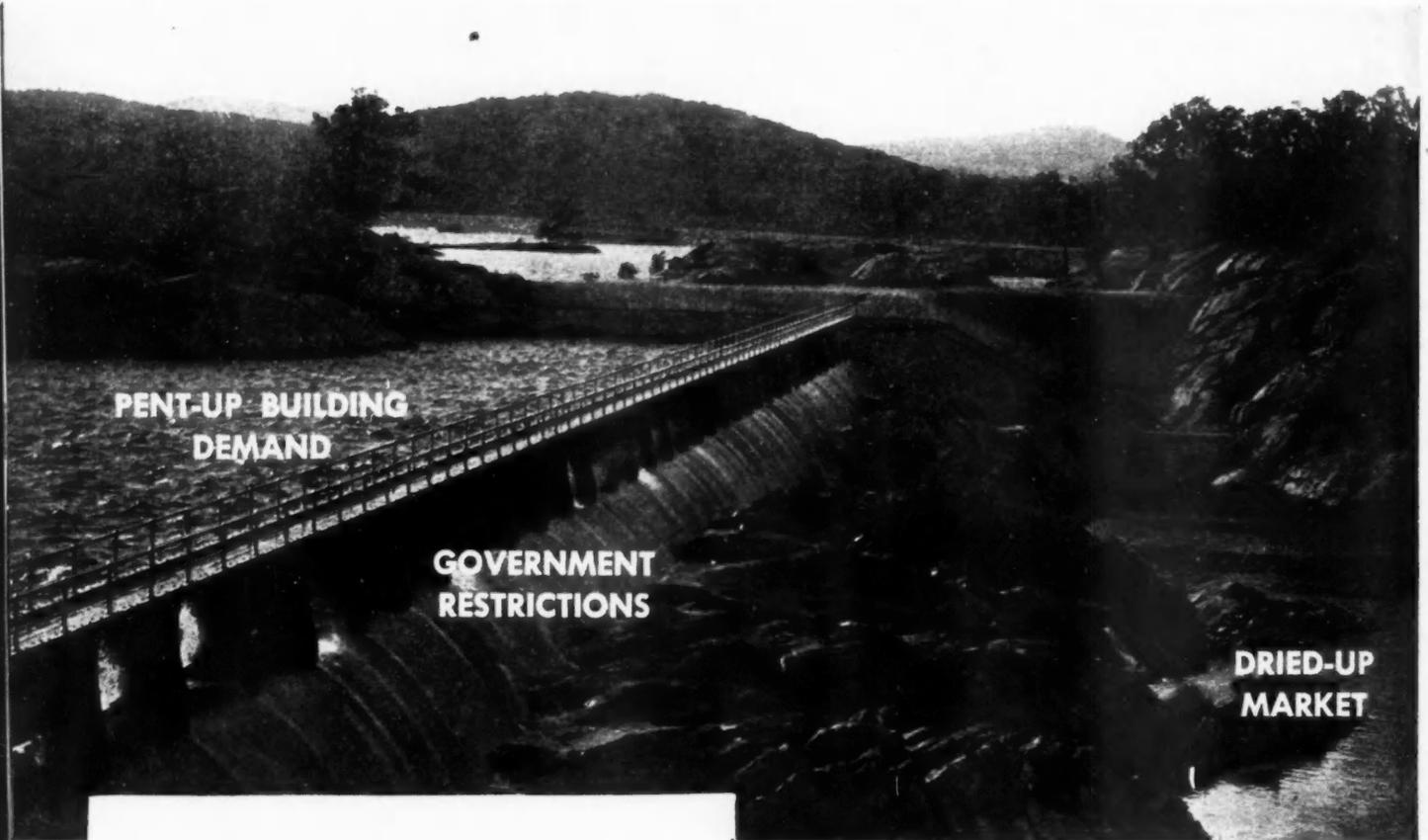
Best lighting equipment ever manufactured.

Numerous new electric servants and built-in conveniences.

Choice of wood, glass, gypsum, cement, fibre, steel, non-ferrous and light weight metals, plastics, ceramic and composition for many items in a house.

Lifetime wearing surfaces at such points as roof, walls, floors, and minimum maintenance materials for piping, screens, fixtures, etc.

Quick and Orderly Lifting of



Homes Are Important

The building industry spear-heads the attack on unemployment and inflation with a goal set at \$10,200,000,000 by the Department of Commerce for the first post-war year.

Residential construction alone must account for \$4 to \$5 billions of business.

If restrictions are lifted gradually before war's end, the building industry can remain strong enough to accomplish its task by doing the work thus made available.

6,378,000 housing units need repairing and remodeling, now.

\$10,000,000,000 worth of farm plant structures should be repaired, remodeled, or built, now.

After the war, 5,515,000 housing units will have to be replaced.

After the war, 1,000,000 families will try to build within the first six months.

IF restrictions upon building and industry are not lifted as rapidly as the conditions of war permit, this country may be headed for a period of submerged living that will dip lower than the depression of the 30's.

Like the waters behind a great reservoir, the pent-up demand for houses and goods of all kinds waits to enliven, or flood the country when restrictions are removed. The first great question is, will restrictions ever be removed? If so, when and how?

For if we wait until the end of the war the pressure of demand may be too great for the artificial walls to contain it. But if restrictions are *gradually* released, then business can revive and gear itself for post-war tasks. There is evidence that for the building industry, releasing of restrictions can and must begin soon. Here, perhaps, is a logical sequence for opening the spillways of the dam.

Considering remodeling, repair and maintenance as the first activity the building industry can resume, without hampering the war effort, 1940 census figures reveal an overwhelming demand.

Out of a total of 37,325,000 dwelling units in the United States, 6,378,000 need major repairs; 6,825,000 lack running water; 6,955,000 have neither electric or gas light; 19,802,000 have no central heating plant. It appears that there is an ample remodeling and repair field to occupy the building industry for some time.

Second, the farm market is estimated between \$10,000,000,000 and \$18,000,000,000. These figures include only the farm plant (not farm homes) that should be repaired, modernized, or built to bring the farms of the

Building Restrictions Demanded

To wait for war's end before relaxing restrictions on building may result in flooding a weakened industry with a demand that will overwhelm our national economy. Start action now!



nation up to the standard necessary to win the war and consolidate the peace. In addition to this huge market, many farms need a second home in which the farmer and his wife can retire while the son carries on.

And third, when it finally becomes possible to lift the lid off home building, a replacement market alone of 5,515,000 units awaits the industry, plus the estimated million homes that families plan to build during the first six months of peace.

With this tremendous market facing them, builders can view the future with assurance. That is, they can view the future with assurance if the pressure is taken off by the lifting of building restrictions quickly enough to keep the industry at an efficient level; to maintain the agricultural structures essential to our producing enough food to win the peace; and to enable us to maintain and repair the existing housing, while at the same time relieving the money pressure which is out of balance with consumer goods that can be purchased.

Importance of Action Before End of War

But if the building industry must wait until the war is over before rolling back the restrictions, then the building industry may find itself either closely controlled by the government, in an attempt to hold back the wild spiraling of prices; or may find itself with a tremendous money demand for homes that cannot at once be supplied: and with prices in a chaotic condition the government may then step in, claiming that private industry cannot do the job and that it will take over with public building. This, though adding to the confusion, will appear in the eyes of the people to be helping the building industry. They will not see that the industry was crippled by bonds, government itself placed upon it.

It is assumed, according to official sources, that private industry must produce 40% more goods and services after the war than it did in 1940, that it must employ at least 20% more workers than in that year.

The Department of Commerce has estimated that the dollar volume of post-war business, needed the first year in each major division of American business to maintain the national production level, is \$132,000,000,000. For construction, the goal was set to be \$10,200,000,000, and for residential construction alone, \$5,200,000,000.

If the building industry is to accomplish this task, and it can, and if it is to prevent the prognostication from coming true, that the post-war bread lines may run up to 15,000,000 men, then the building industry must be allowed to utilize its men and facilities in private construction as quickly as those men and facilities are no longer needed in the building of war materials, war housing and war plants.

The first reason for rolling back government restrictions as rapidly as possible is therefore one of preserving the construction industry at a high point of development, for use as an effective tool in the post-war period

What Government Should Do

1. Release non-critical materials from L-41 restrictions.
2. Separate "remodeling" from "new construction" in L-41, and clear it of restrictions where non-critical materials are used for remodeling.
3. Amend Regulation W to allow credit extension in relation to non-critical materials.
4. Reconsider M-208 to provide the bulging farm market with essential structures.
5. Revise price regulations applying to rent to correspond with commodity prices and wages; to encourage investment in private building field.
6. Rewrite Housing Standards to allow sound construction.

to prevent widespread unemployment, and inflation.

A second reason, however, exists and that is the fact that in the early stages of any planning, the direction it is to take can be molded. There is considerable evidence, that unless we in the building and construction industry take an active part in the planning, the final pattern that will be fitted to us will be one of bureaucracy's making.

In the recommendations of the 1943 National Resources Planning Board report there is some indication that perhaps too many restrictions of the war period will be held over into the peace era.

They forecast that commodity (consumer goods) rationing will probably continue. Rationing of durable consumer goods will continue even longer. Allocation of scarce raw materials should be retained. Control of distribution of industrial and construction equipment will be needed. Retention of price control should be expected. Vigorous enforcement of protective labor legislation will be necessary.

To prevent just the kind of runaway economy that the

(Continued to page 155)



Progressive

LENDING institutions whose men have first-hand knowledge of local needs and conditions, and who can make local decisions, are best qualified to advise and assist home owners in solving their mortgage financing problems.



HOW Local Financing

Can Be Liberalized

- 1 Establish insurance to protect loans during the first five to ten years of a long-term mortgage, or until the loan is reduced to 50 per cent of the appraised value.
- 2 Adopt the English 5-per-cent-down-payment system in which the builder leaves part of his profit in the job until principal has been materially reduced.
- 3 Provide farm-loan mortgage insurance (see farm-financing article elsewhere in this issue). Add provisions enabling borrowers and lenders to come through a period of low farm income without excessive foreclosures.
- 4 Make long-term amortized loans more depression-proof. Enable borrowers who temporarily cannot meet payments to make additional loans covering the payments, at an increase over the regular mortgage rate to prevent abuse.
- 5 Permit a mortgage borrower to prepay any amount, any time without penalty, then borrow his prepayments without further cost and without restrictions as to how the money is used.
- 6 Insure the *yield* on rental projects rather than the property itself, thereby enabling limited-dividend private corporations to build, own and operate rental housing and slum-clearance projects.

PRACTICALLY everyone connected with home building and home financing agrees that FHA mortgage insurance has been of tremendous value to the building industry, as an emergency measure in time of depression and as a means of establishing new standards in interest rates, mortgage risk rating, and construction practices. FHA insurance has become, in the minds of the general public and many building men as well, the generic term for all home financing. FHA mortgage insurance has been well publicized, yet the fact remains that about 80 per cent of the existing home mortgages in this country are uninsured loans made by savings and loan associations, mortgage bankers, insurance companies or individual private investors. Currently these institutions insure about 1/3 their loans with FHA.

Spokesmen for private loaning agencies are inclined to resent the intrusion of government and regulation into their businesses, much as builders resent the activities of public housing agencies. There are some builders who don't like government red tape that surrounds the processing of insured loans and prefer the quicker, more direct action of uninsured, privately made loans.

Many professional builders like FHA-insured loans because of what these loans have done for them in the past. They seem little concerned with the intrusion of government into the financing field, so long as low interest rates and long-term 70- to 90-per cent loans are available.

Severe critics of the so-called "private" financing institutions maintain that if FHA were eliminated entirely it might mean a return to former bad practices involving commissions, renewal fees, junior mortgages and other costly financing devices. They advocate retention of FHA as a "watchdog." The lending institutions state, however, that they have permanently adopted amortized loans and that competition of money seeking investment assures continued low interest rates.

As a matter of fact, the financing agencies themselves are not entirely sure just where they want government insurance, government assistance, and government restrictions to begin or leave off. They, like the builders, feel that adoption of a new and benevolent government agency in their field may be like undertaking the raising of a lion cub. What at first is a cute and playful kitten

Liberal Local Financing Needed

Billions Available by Local Financing Institutions. Private Enterprise Urged to Take Its Own Post-War Financing Risks.



may ultimately become an all-consuming man-eater.

The counter proposal to those who want private financing agencies untrammelled by government interference of any kind, is that they set up services that match FHA facilities. The private agencies, in some cases, can point out that they have made amortized loans for many years. They also believe that the FHA premium is too low to build up adequate reserves, and that it should be raised. They also maintain that some FHA costs are not shown on their books and have come out of public funds.

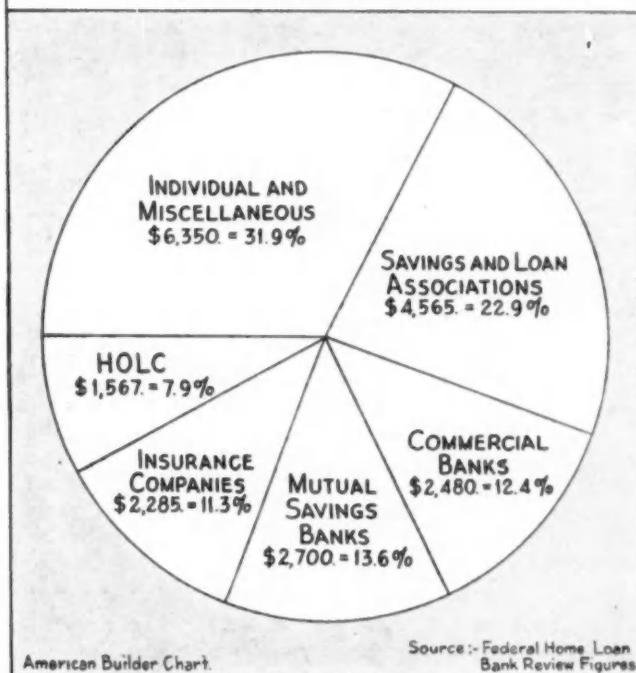
Private loaning agencies can and do give faster service on loan applications because they are administered by men who can make local decisions, who know local needs, and frequently know the individuals involved. They are not obliged to abide by government rules administered in nearby cities, or where all personal considerations must be left out.

Some of the private lending agencies feel that their facilities should be liberalized, changed, or extended better to meet post-war conditions. Some frankly want continuance of government assistance in new and constructive types of lending services.

For example, Claude B. Gandy, executive vice president, Richmond County Federal Savings and Loan Assn., Staten Island, N. Y., in a recent study of post-war building and financing proposed a new type of mutual insurance for mortgage loans. He suggested that some simplified form of government insurance be provided during the first 5 to 10 years of each home mortgage

(Continued to page 142)

HOW HOME MORTGAGE HOLDINGS WERE DISTRIBUTED AT THE END OF 1942 BY TYPES OF LENDERS. (IN MILLIONS OF DOLLARS)



"We are very much aware of the need for adopting in the savings and loan field streamlined methods of financing that will facilitate home construction, whether for ownership or rental, provided the methods can be adapted to our trusteeship as supervisors and custodians of invested savings."
—James Twohy, Governor, Federal Home Loan Bank System.

THE CHART above shows how \$19,917,000,000 worth of outstanding home mortgages were distributed among various types of lending institutions at the end of 1942, by total values and percentages (add 000,000 to each \$ figure). The value of outstanding loans protected by FHA insurance at the end of 1942 is estimated at \$4,100,000,000, or 20.6 per cent of the total loans. During 1942 the lending institutions shown in the chart financed \$3,944,000,000 worth of home mortgages, of which \$1,195,000,000, or 30.6 per cent were insured by FHA, while more than two-thirds were uninsured. A total of 493,000 new non-farm dwelling units were built in 1942, of which 159,760, or 32.4 per cent were started under FHA inspection. Just prior to war about 35 per cent of new homes were FHA insured.

Builders



THE VALUE OF A NATIONAL MUTUAL MORTGAGE INSURANCE SYSTEM HAS BEEN WELL DEMONSTRATED

RESULTS COUNT, BUILDERS SAY

FHA was established by act of Congress in June 1934. It has insured \$5,017,000,000 worth of mortgages on 1,127,000 small homes. Mortgage losses have been slight, and as of June 30 this year only 356 properties were being held following foreclosure.

FHA has firmly established the principle of a national mutual mortgage insurance system, has worked through private financial institutions to improve home financing methods. It has paid its way, has encouraged private enterprise construction, and has eliminated many obnoxious home finance evils, such as the second and third mortgage.

Like any large institution, government or private, it requires a system of checks and balances to keep it from becoming autocratic, arbitrary or inefficient.

"FOR all her faults we love her still" is perhaps the best summary of the feelings of a majority of builders about the Federal Housing Administration.

They want to see FHA continued as a vigorous and independent agency in the post-war period, and they resent what they consider its subordination and obfuscation since being placed under the National Housing Agency.

On the other hand there are many things about FHA which builders and others seriously criticize. Some of them may be inherent in any government agency. The



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Demand Vigorous, Independent FHA

Want post-war continuation of government agency that has done most to aid private home ownership, but find some improvement needed



quality of personnel has been low, politics has far too often crept into appointments and in many of its operations FHA has displayed far too much inefficiency, red tape and confusion.

The most serious and constantly recurring criticism of FHA is that it puts too much power in the hands of a few Washington appointed men. Frequently local offices have come under the sway of what the builders describe as "petty bureaucrats," or under the control of a lax, inefficient or politically minded administrator. The local builders in such a situation have no way of appealing from unfair decisions, and are, in fact, afraid to criticize for fear they will be "ridden" or unfairly discriminated against in future projects.

Yet, in spite of these criticisms and many others, builders want to see FHA continued. They fear public housing and public housers more than they do the minor manifestations of bureaucracy that appear in FHA.

Most of them hope, however, that other forms of financing, *not dependent upon FHA*, will be developed to keep it from being the sole arbiter of their fortunes. The ideal situation, from the builders' point of view, would be for enough competition to exist between the FHA insured financing and the uninsured savings and loan, or other types, to keep both in line.

Builders of the country, with excellent memories, recall that prior to 1934 when FHA was set up by act of Congress, it was practically impossible to get money on any sort of decent terms. They point out that FHA has been largely responsible for bringing down interest rates, for lengthening the term of the mortgage, and for lower-

PROPOSALS FOR POST-WAR FHA

1. Eliminate political appointments and hire a better quality of personnel. If necessary raise FHA fees in order to give higher pay to technical men.
2. Provide means for appeal by local builders from "petty autocrats" or inefficient local administrators. Streamline processing procedure.
3. Elevate construction standards in return for liberal financing terms. Give fair recognition to quality construction, and equipment in appraisals.
4. Insure loans on 5% down, 25-year basis for low cost houses; 10% down on houses up to \$8,000.
5. Develop modified post-war Title VI to permit builders to sell low cost houses on lease-option or contract basis, thus enabling them to spread down payment over 30 months' period.
6. Set up private finance plan to encourage equity investment in low cost rental housing of garden type.



PAYMENT—LONG TERM LOAN BACKED BY MUTUAL MORTGAGE INSURANCE.

ing the down payment required. They credit FHA with having eliminated many of the worst home finance evils, such as the second and third mortgages of the twenties. They believe that if FHA were liquidated, interest rates would rise and home financing terms would be made more difficult.

While builders are unanimously strong advocates of private enterprise, and are opposed to most forms of government, this is one case where they feel that competition is a good thing, that otherwise conservative finance would strangle private enterprise building.

In looking ahead to the post-war years, builders want a vigorous, independent FHA with as many modifications and improvements as they can get. Rather than experiment around with some other system, they prefer to con-

tinue with something that has been tested, and which was working quite well before the war started.

In its nine years of existence, FHA has insured mortgages on more than a million houses. It was paying its way and was a strong contributing factor to the prosperous home building volume that took place in 1941, when 619,000 units were constructed by all private operators. (225,000 were insured by FHA.)

The post-war period will find FHA a going concern with ample funds to operate and without need of immediate congressional action. Builders are determined that in any reorganization of the housing setup FHA shall not be submerged in some body dominated by public housing enthusiasts.

(Continued to page 147)

FHA's post-war plans ready—Ferguson

"Lending institutions willing and eager to advance funds to finance all the homes builders can produce"

By **ABNER H. FERGUSON**, Commissioner,
Federal Housing Administration

THE Federal Housing Administration's plans for the post-war period are already well formulated. No changes in the basic principles of the National Housing Act are needed. Our organization is ready with nine years experience in all the key market centers in the country. And we have lending institutions operating under the FHA program willing and eager to advance the funds to finance all the home construction activity builders can produce.

In preparing for post-war construction, FHA will examine proposed building sites and subdivision plans and give builders all possible aid short of actual processing of mortgage applications.

At my direction, all the field offices of the FHA are engaged in making a survey of all important housing markets to determine the ability of the construction industry to resume home-building operations promptly after the war.

This survey will establish first-hand information on the prospective demand for new privately financed housing in these markets after the war, the availability of suitable sites on both developed and undeveloped land, and the probable capacity of the building industry in each locality in the immediate post-war period.

The FHA is also consulting with the building materials industry on questions relating to the availability of adequate supplies of materials and equipment for housing construction when wartime restrictions are lifted.

While FHA operations under wartime conditions are concentrated primarily on assisting the construction of privately financed war housing, the importance of prompt resumption of large-scale building operations after the war points to the wisdom of making all possible advance preparations for the post-war markets.

FHA field offices are in close contact with private building operations in all sections of the country. The FHA processes priorities applications for all dwellings

built under National Housing Agency local quotas for privately financed war housing and insures mortgages financing upwards of 85 per cent of all private war housing. In the immediate pre-war period, about 35 per cent of all new private housing was financed with FHA-insured mortgages and built in accordance with FHA minimum standards.

In the current survey, FHA field officers will supply information on the following questions for each metropolitan area in the country:

Is there sufficient land suitable for residential development, and available to operative builders, to allow resumption of home building activity immediately after the war?

Will a substantial and continuing demand for residential construction develop?

If so, will there be a sufficient amount of suitable land to satisfy such a demand?

If this substantial demand develops, what proportion of the building sites, in your opinion, will need to be developed from acreage not now improved?

In addition, FHA field officers will gather information on the number of builders currently active under the war housing program and will estimate the number of builders operating in all areas who will be in a position to begin home construction immediately after wartime restrictions are lifted.

Prepared to Lead Revival

The FHA offices will also estimate the probable number of dwelling units which private builders in those areas can reasonably be expected to produce during the first year following the removal of wartime restrictions, assuming the availability of building materials and equipment, no major shortage of labor.

Private enterprise must be prepared to start residential construction operations on the largest scale justified the moment hostilities cease in order to provide employment for many of the men who will then be seeking work. Just as the FHA assisted the private building industry to rise from the depression in 1935, we will be prepared to lead the way for private builders to revive normal building activities immediately after the war housing restrictions are lifted.

Congress must set post-war housing policy

THE present National Housing Agency was established as a temporary war measure by executive act of the President in February, 1942, following recommendations for a consolidation of all housing agencies made by Judge Samuel Rosenman.

Although NHA is an emergency agency, the Federal Housing Administration and the Federal Home Loan Bank system are not. They were both established by acts of Congress.

When the war emergency has passed, it will be the duty of Congress to determine a national housing policy and a permanent national housing agency to put it into effect.

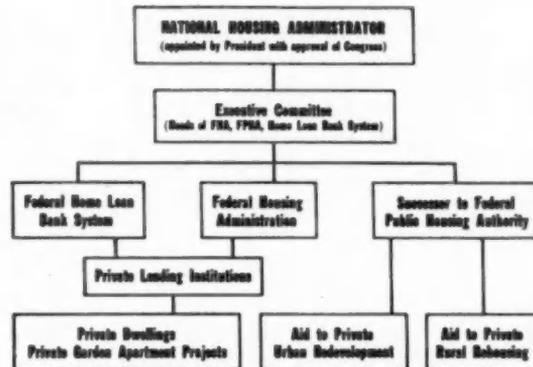
Private builders as a whole favor having FHA an independent agency, with no connection with public housers. They fear, and with some justification, that if FHA is part of an over-all agency, as at present, it will cease to function effectively as an aid to private home building enterprise, as it did so well before the war.

Depends on men and policies

There are sound arguments, however, for the establishment of a permanent national housing agency with policies clearly defined by Congress and top men approved by Congress—which will undoubtedly see that they are men committed to private enterprise and private home ownership.

In setting up such a housing agency, Congress could clearly state that its objectives should be to assist, develop and co-ordinate home building by private enterprise.

In the accompanying chart, a permanent post-war setup for housing is suggested, in greatly simplified form. The important points



PERMANENT post-war housing setup?

to be emphasized are:

1. Administrator to be a firm believer in individual enterprise and home ownership: approved by Congress.

2. An executive committee composed of the heads of the important divisions should determine policy, assuring a proper balancing of interests.

3. The Federal Housing Administration and the Home Loan Bank System, which are concerned with financing private home building, would continue and their functions broadened. By aggressively seeking to liberalize private home financing, including rental housing, they could greatly reduce the need for public housing.

4. The present Federal Public Housing Authority would be replaced by an agency charged with assisting and co-ordinating private enterprise action to clear slums, rebuild cities and provide greatly needed rural housing of required type.

Congressman Wilson flays NHA record

By EARL WILSON, Indiana.

Member Committee on Public Buildings and Grounds

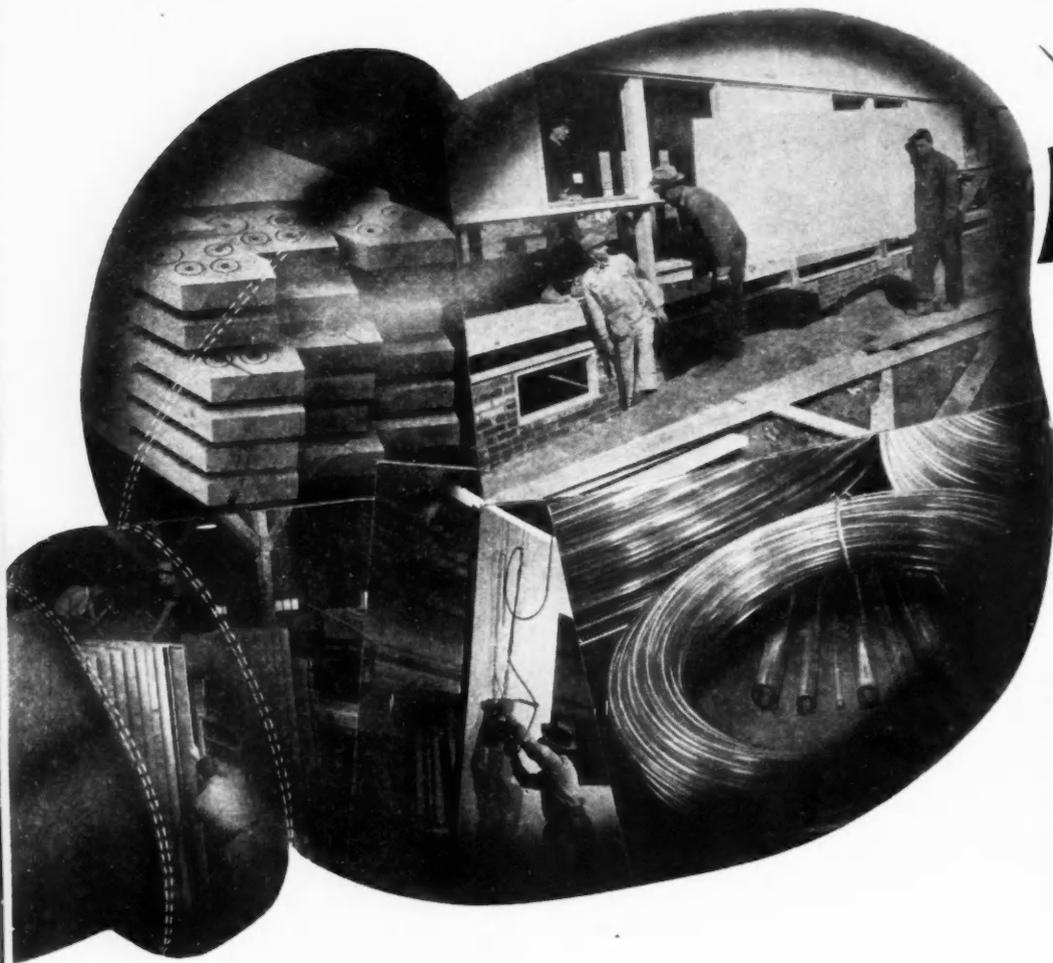
OF ALL the smelly messes in Washington, number one on the list is the housing situation as carried out by the National Housing Agency, under the leadership of John Blandford, Administrator. The waste of men, man-hours, material and precious time in building houses that have never been occupied and will never be occupied is colossal.

The work such construction would have provided for contractors after the war, and the use of that same material to build real homes for the improvement of our living standard, and the time used on such useless work which could have been directed into more pro-

ductive channels is astounding and has undoubtedly prolonged the war.

Houses have been built where we couldn't use them. Houses have been built for fantastic prices compared to their value when completed. Work has been done in many localities which, through managerial neglect or stupidity has had to be ripped out, torn down or done away with only to be done again, all at outrageous cost to the taxpayers. Private industry could have been allowed the materials and without a single government boss on the grounds could have built three times as many houses, twice as fast and at two-thirds the cost. A case in point is that when the Army, Navy or Maritime Commission were allowed to control the construction of housing units as needed by their workers,

(Continued to page 158)



KNOCK OUT

**Give New Materials
and Improved Meth-
ods a Chance to Help
Deliver Better Post-
War Homes for Less**

A GOOD building code is safe, fair, practical, economical, flexible, and recently revised. If the one governing the communities in which you operate is all that, you're fortunate, although you can still do something to help keep it that way. Many codes were once good, when first adopted. If your code is not all these things, this article will tell you what to do about it now.

Here is a modernization job that can and should be done at this time, and requires no critical materials, only realism and an honest determination to improve these local building regulations by bringing them up to date.

A building code that functions properly is described as a living instrument of widespread use; the respect demanded by it depends upon its being composed of a reasonable set of requirements continually revised to meet the current methods and needs. Unfortunately too many codes are dead with an aura of political stench continually rising from the corpse.

The reason for the current drive to eliminate such bad codes is that they can have a very adverse effect on the amount and type of private building expected in the tremendous post-war market. This interest is much broader than builders and the building industry; it can affect the prosperity and living conditions of millions in towns and cities scattered throughout the country. Codes are governed by custom and precedent far more than by actual engineering requirements, in the opinion of Robert L. Davidson, Pierce Foundation research director. He believes that in some respects their standards are wastefully high, and in others not high enough to encourage the most efficient types of construction. Codes have not kept pace with laboratory and engineering developments.

This is a crucial time in the adopting of modern build-

ing codes. Many communities, particularly in and near defense centers, are operating under a set of regulations in which many allowances and substitutions of an emergency nature had to be made if war housing was to go ahead. Some of these wartime changes have proven adequately safe and greatly reduce construction costs. Others were no more than stop-gaps, decidedly sub-standard. In this nation-wide experimentation, some of these changes have been in effect long enough to prove their permanent merit. They should be made a part of a revised code. The failures should be discarded and, where possible, every job corrected to make it safe.

Start Already Made in Some Cities

Some far-sighted cities have already done this work. To keep abreast of simplifications enforced as war measures and to conserve critical materials and labor, realism could not be reconciled to horse and buggy building codes. Instead of eliminating obscure and conflicting provisions from these old codes, it was found better to junk the antiques and do a rewriting job based on laboratory tests recently made on the changes. Detroit did this with their plumbing code, which became effective in April of this year.

However, there are many communities not touched by wartime pressure to change. Some materials that have been used for years in a majority of towns and cities all over the country are still forbidden where archaic codes are in force. The building wave of the future will again reach many of these spots, and like those urban centers where codes are dictated under political pressure, rather than fair and practical considerations, building and the people generally will be the losers.

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"HORSE and BUGGY" Building Codes

Local Groups Should Start Action Now

Communities under the handicap of excessive building costs due to obsolete and unfair codes will not contribute the full share of national re-employment and post-war prosperity that can be created by the private building of their towns and cities. Furthermore, stagnant areas will be an invitation to government housing which has in the past operated in defiance of unreasonable local code requirements where forced to do so.

Ultimate Answer—National Building Code

Since codes are supposed to be based on facts arrived at through laboratory tests, there is no sound reason why there should not be a National Building Code. This would be uniform throughout the country with exceptions or alternates to cover differences in geographical requirements.

Properly organized and determined local action to get the best code available will rid the country of remaining sore spots having backward codes. The uniform building code adopted by the Pacific Coast Building Officials' Conference is now being used in 330 cities located in more than half the states. The 1943 edition of this code is completely up to date and represents work of the past three years to include new provisions for this period. Now the code committee is studying anticipated developments of the next three years in preparation for the 1946 edition of the code.

Another well known code which is serving as a model for building regulations in many cities throughout the country is the Recommended Building Code of the National Board of Fire Underwriters. This one is also continually revised to keep it modern. Canada has its new National Building Code recently completed and ready



HOW to get your local building code changed

1. Check local code against recognized national building code. See box below for source.
2. If found obsolete, form a local code revision committee to spearhead a campaign; interest local civic groups in revision, pointing out community benefits in action.
3. Appoint non-partisan technical code committee including representatives of professional architectural and engineering societies. Enlist local newspapers in publicity.
4. Join a national building group interested in promoting adoption of modern codes; if a member of such a group, urge and support such action.
5. Meet with your local, state and national political representatives, make sure they appreciate great aid of good codes to post-war re-employment and prosperity.

for adoption by cities throughout the Dominion. It is considered a model code in the English-speaking countries of the world.

Other organizations, some listed below, are doing important work on building codes which will help those communities desiring revision. Now is the time to join the parade to knock out horse and buggy building codes.

WHERE to get information on up-to-date codes

NATIONAL BOARD OF FIRE UNDERWRITERS, 85 John St., New York. "Recommended Building Code." 1943 edition brings this model code up to date with Appendix on new fire ratings.

PACIFIC COAST BUILDING OFFICIALS CONFERENCE, 124 W. Fourth St., Los Angeles. "Uniform Building Code," 1943 Ed. This model code in effect in 330 cities in 30 states, Hawaii and Canada, \$2.00. Also sponsor "Modern Building Inspection," a 404-page handbook of useful information, \$5.00.

AMERICAN STANDARDS ASSN., 29 W. 39th St., New York. "Industrial Standardization," house organ of this group which promotes standardization of many types, including building codes.

NATIONAL BUREAU OF STANDARDS. "Building Materials and Structures Reports," publications on test results. Superintendent of Documents, Government Printing Office, Washington, D. C.

CANADIAN: "National Building Code," a recent model code. Department of Finance, Housing Administration, Ottawa, Ont. \$1.00.



THESE books are models with detailed information on codes and inspection.

Home Ownership—

Public Housing Threatens Promise of More and Better Private Homes

PRIVATE HOMES:

Contribute to local taxes. Build self-reliant citizenship.

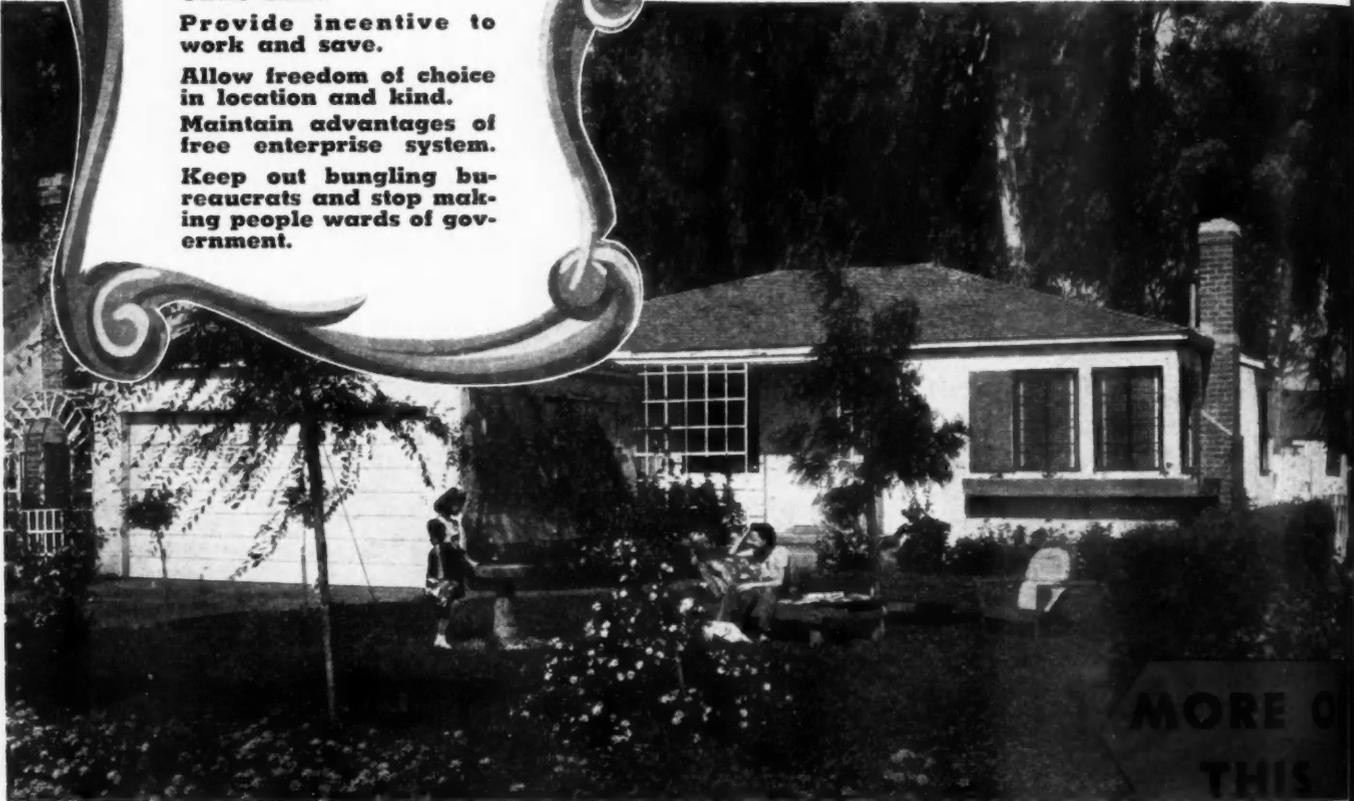
Assure huge post-war re-employment at no cost to Uncle Sam.

Provide incentive to work and save.

Allow freedom of choice in location and kind.

Maintain advantages of free enterprise system.

Keep out bungling bureaucrats and stop making people wards of government.



A HOME of one's own is at the top of the list in the American Way of Life—that for which the blood of the younger generation is being shed; that to which they feel they have a right to return. The right of home ownership is demanded by these boys and the opportunity hoped for by all families which are now dissatisfied tenants.

Any bureaucratic or economic threat that might restrict this right or make the opportunity less liable of fulfillment must be challenged and defeated now. Public housing is such a threat. The chart opposite shows the increase in government financed housing, particularly in the last five years, to a point where this year it will top private building.

Partly war housing to be sure. But will the public housers, once having tasted the delights of increased spending, be content to retire? Or will they want to project their operations into vast so-called slum clearance projects? Nation-wide plans being made by them now and programmed for post-war construction give the answer. It will be government versus private building—public housing against private homes—unless the present alarming trend is reversed.

Right now there is a smaller percentage of American homes owned than at any time in the last fifty years. Here are the figures as reported by the Bureau of Com-

merce, showing the number of renters and owners in dwelling units of the U.S.:

Census Year	Dwelling Units Owner-Occupied		Units Rented
	Number	Per Cent	
1940	15,195,763	43.6	19,658,769
1930	14,002,074	47.8	15,319,817
1920	10,866,960	45.6	12,943,598
1910	9,083,711	45.9	10,697,895
1900	7,205,212	46.7	8,223,775
1890	6,066,417	47.8	6,623,735

Expansion of government-owned rental housing can depress desirable home ownership even further. As well as throwing such units onto the market against new privately built single homes which must compete without subsidy, the threat of public housing coming into a community is sufficient to discourage private enterprise from starting building.

All families are not in a position to own homes, but these can be housed by private building until they can buy—even those in the low-income bracket. Private urban redevelopment and multi-family rental units, as described elsewhere in this issue, will do the job after

Number of Un...

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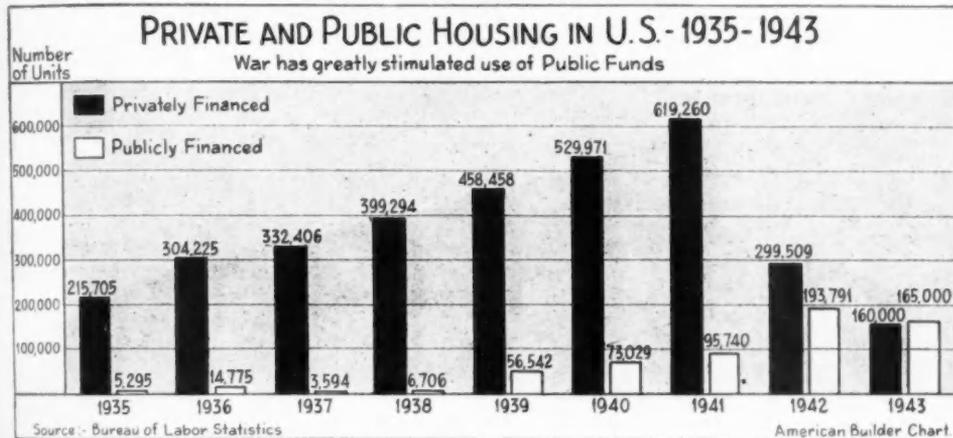
the Backbone of DEMOCRACY

the war if given the necessary legislative enabling assistance now.

Other than the many fundamental reasons for home ownership as a national objective, there is the important consideration of private building as the earliest and best post-war re-employment assurance to take up the slack of change-over. The latest U.S. Chamber of Commerce survey on expected post-war purchases by consumers covering the period up to Sept. 1 shows that 1,540,000 families intend to build or buy a new home within six months after the war is over. This means a pri-

vate building market of at least \$7,184,800,000. Let's make sure these needs and desires will be filled by tax-paying private enterprise.

Praiseworthy as the idea of social housing may have been when it was first applied a decade ago to certain sections of the Southeast, its growth since threatens the American way of self-assurance; it breeds complete dependence on government and all the attendant evils. A better way to rehousing in both the blighted rural areas and the city slums is the job of private builders, encouraged and aided by government when necessary.



PUBLIC HOUSING:
Pays less than its share of tax costs.

Limits choice in living conditions.

Removes drive to acquire independence.

Creates growing, self-perpetuating housing bureaucracy, reckless of public funds.

Destroys private enterprise.

Offers a less desirable background in which to raise children.

ESS OF THIS



International Photo

PRIVATE BUILDING

Can Do the Job Best —



© Washington Press

Says Frank W. Boykin, Alabama Congressman, Member Public Buildings and Grounds Committee.

er of morale, and certainly post-war housing of a permanent nature, both for home owners and renters will be a challenge to the entire building industry and one it can and will be able to effectively meet if allowed to do so without let or hindrance from or domination by the Government or any of its bureaucratic agencies.

Proper housing is the most vital need of the American family and post-war housing offers tremendous opportunities to the building industry and its related enterprises to benefit our entire citizenship.

A comprehensive program for this industry after the war requires a con-

siderable study of all phases of the various problems which the end of the war will bring. It is not a job exclusively for any single person or for any national office.

A prospective homeowner must be free to build whatever type of home he wants and in whatever locality he may so desire without unnecessary interference from anybody.

Recently a bill was introduced in the Senate to allocate "not to exceed \$1,000,000,000 for the fiscal year ending June 30, 1944" for the post-war period of housing, but this entire fund to be administered by the National Housing Agency and its Administrator.

(Continued to page 150)

HOME ownership is one of the greatest assets a nation can possess. It makes for contentment and is a build-

New Techniques to Bring Lower Costs

Power Equipment, Precutting and New Construction Methods Promise Better Houses for Less After War

FOR private enterprise to make good on delivery of the large volume of home building forecast, it will be necessary to turn out better homes at less cost than ever before. Skeptics don't believe it can be done; building-wide use of production methods, many the result of war emergency, will assure it.

A decade ago depression stagnation started builders on an intensive search for cost-reducing methods through labor-saving. During the past ten years increasing use of power tools on home building projects has been the trend. War housing stimulated this use still further when time-saving mass production became necessary.

Four principal means through which construction savings are promised are (1) availability of larger units or pre-assembled parts by the material supplier, (2) production of building items engineered by the manufacturer to require less labor on the site, (3) development of new and improved power tools by makers, (4) more efficient use of such tools by builders.

The prediction along this line is that we will see such things as less promiscuous use of the hammer and saw on the job; gradually use of fewer nails and more glue; more labor transferred from site to shop or factory.

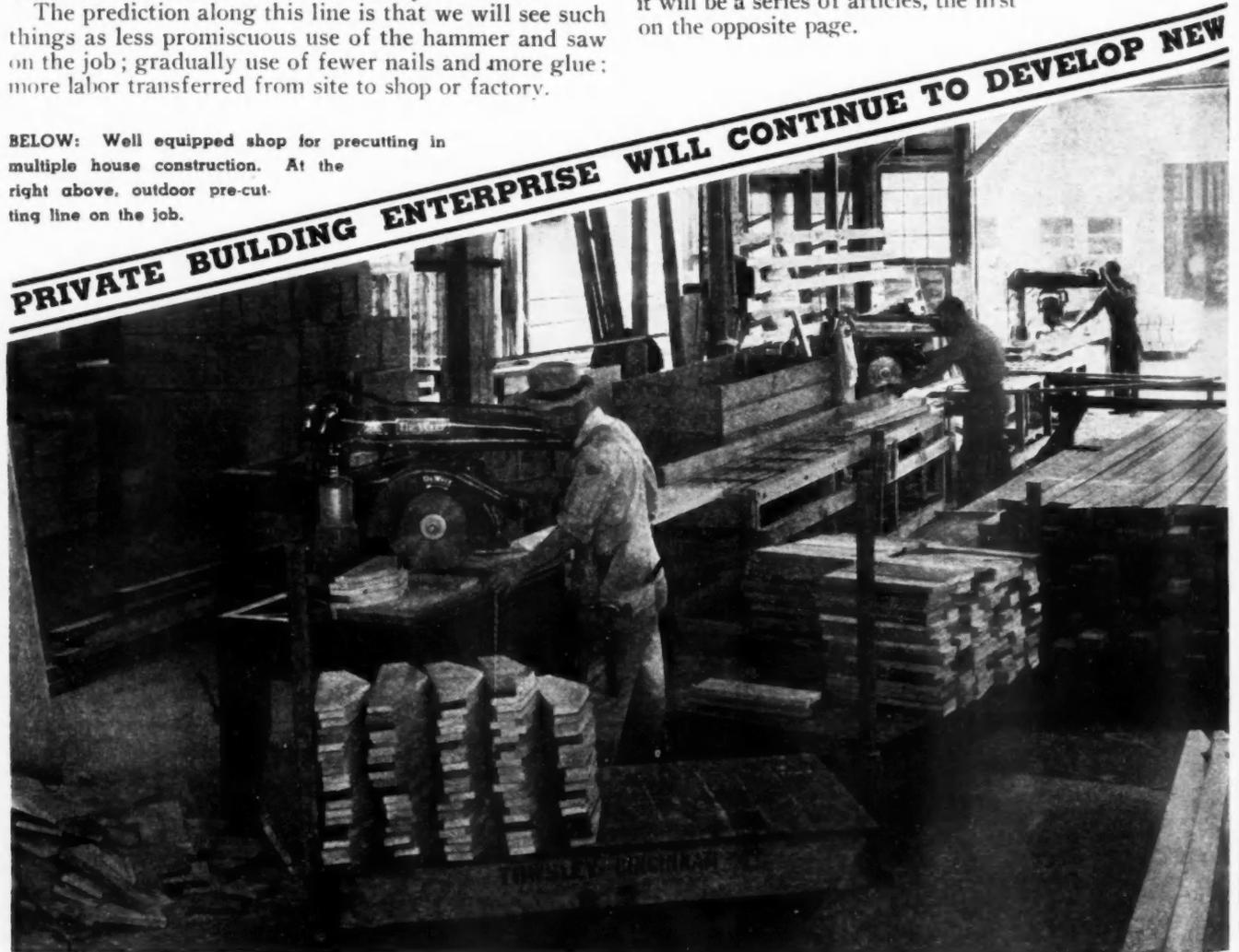
Precutting of materials will become standard practice. It has proven a valuable saver of time and materials on jobs of all sizes. One of the most outstanding examples is Builder David D. Bohannon's 700-home project at Richmond, Calif., for war workers in the nearby Kaiser ship yards. These were three-bedroom houses of attractive appearance which, while conserving vital materials and labor, were very livable within 34 by 34-foot over-all dimensions. When the job was completed a short time ago, it was found that the 700 units were erected in 700 hours—a phenomenal record rate of a house an hour!

There were many short-cuts through clever use of various special devices and equipment on this job, such as simplified operations for non-skilled labor, re-use of forms and handling of supplies.

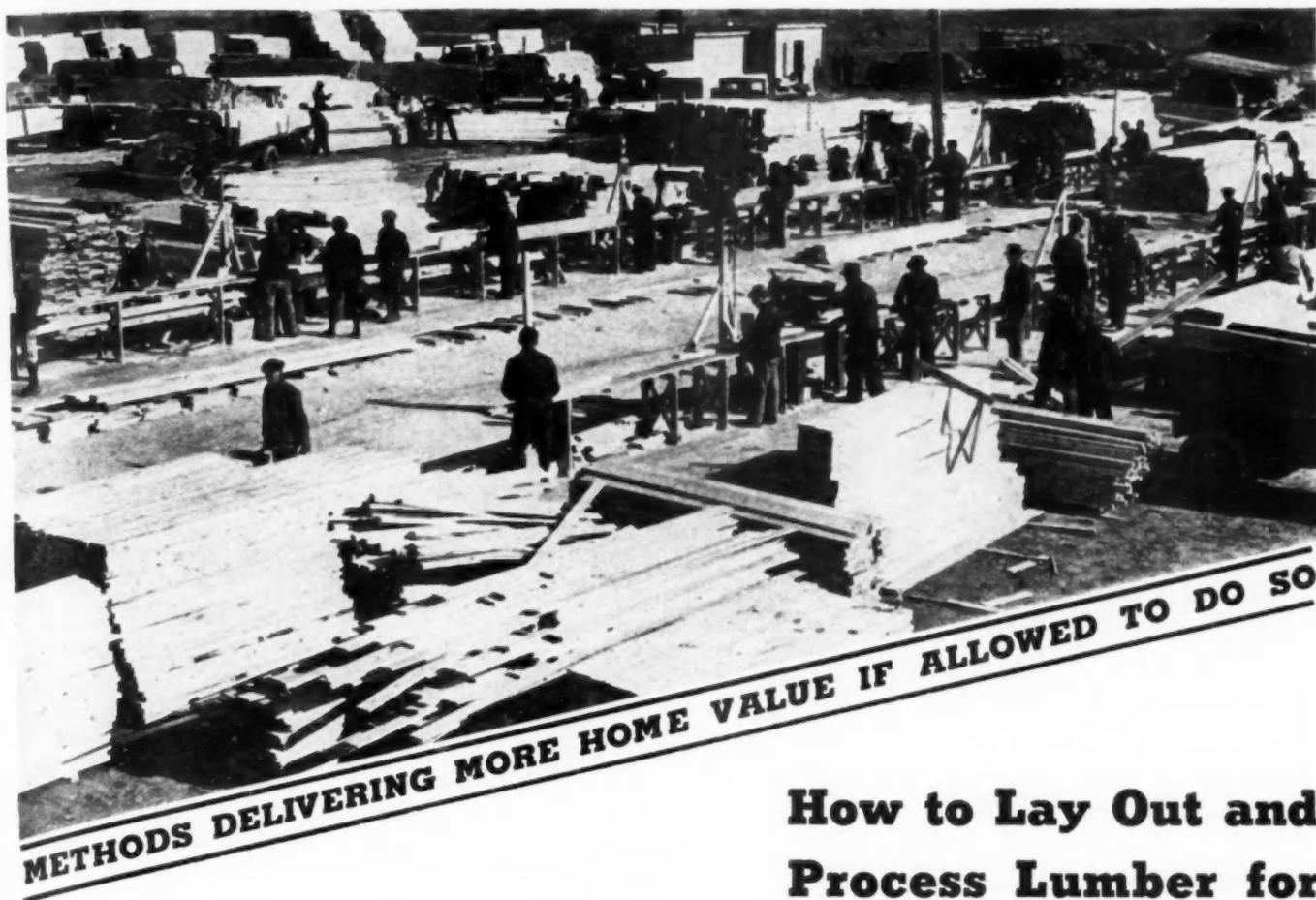
The real factor in turning out these houses speedily was precutting of materials in a carefully scheduled operation. Lumber reached the site from the cutting yard in specially designed trailer truck units where handling was on a line production basis, traveling on rollers. All the way through there was as little time used as top efficiency required.

Operations of this kind are felt to be so important in meeting the coming peacetime needs for low-cost homes by private building that American Builder is presenting a detailed description of precutting methods: it will be a series of articles, the first on the opposite page.

BELOW: Well equipped shop for precutting in multiple house construction. At the right above, outdoor pre-cutting line on the job.



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METHODS DELIVERING MORE HOME VALUE IF ALLOWED TO DO SO

Cost-Cutting Methods by Precutting Framing Described by T. C. COMBS

Recent member technical staff West Coast Lumbermen's Assn.; now in service.

THE WALLS of a typical small house contain over 2,000 pieces of lumber, each trimmed on both ends; of these over half are less than 7 feet long; they comprise over three-fourths of all the pieces in the construction of a house but tally only about a third of the board footage. Precut framing for homes and other light frame walls, first introduced in 1940 by the West Coast Lumbermen's Assn. in its "Precut Framing Manual," is a practical plan for the efficient utilization of short lengths. It has been gaining many converts during the past three years of wartime building.

FIRST IN A NEW SERIES
of articles describing how
to set up a system of pre-
cutting framing members.
An important subject for
post-war home builders.

By "precut framing" is meant all construction lumber which has been cut to scheduled length and fabricated to detailed dimensions, ready for assembly into the structure. It includes studding trimmed and square-butt ready for nailing, rafters beveled and notched, or any of the many other parts as they appear in the completed framework. It permits complete fabrication in advance of use. The entire house frame and much of the finish can be precut. Even subflooring and diagonal sheathing can be mitered 45 degrees on one or both ends with great success; half a dozen boards can be cut at a time. Where the cost of measuring, computing or shop detailing of a small number of unusual pieces, as in the complicated roof framing of a single house, is found to eat up the savings of shop cutting, these pieces should be turned out alongside the framing job.

Bundled precut framing is advantageous. By bundling short lengths into knock-down window and door assemblies, runs of bracing, and convenient parcels of fire blocking, many separate

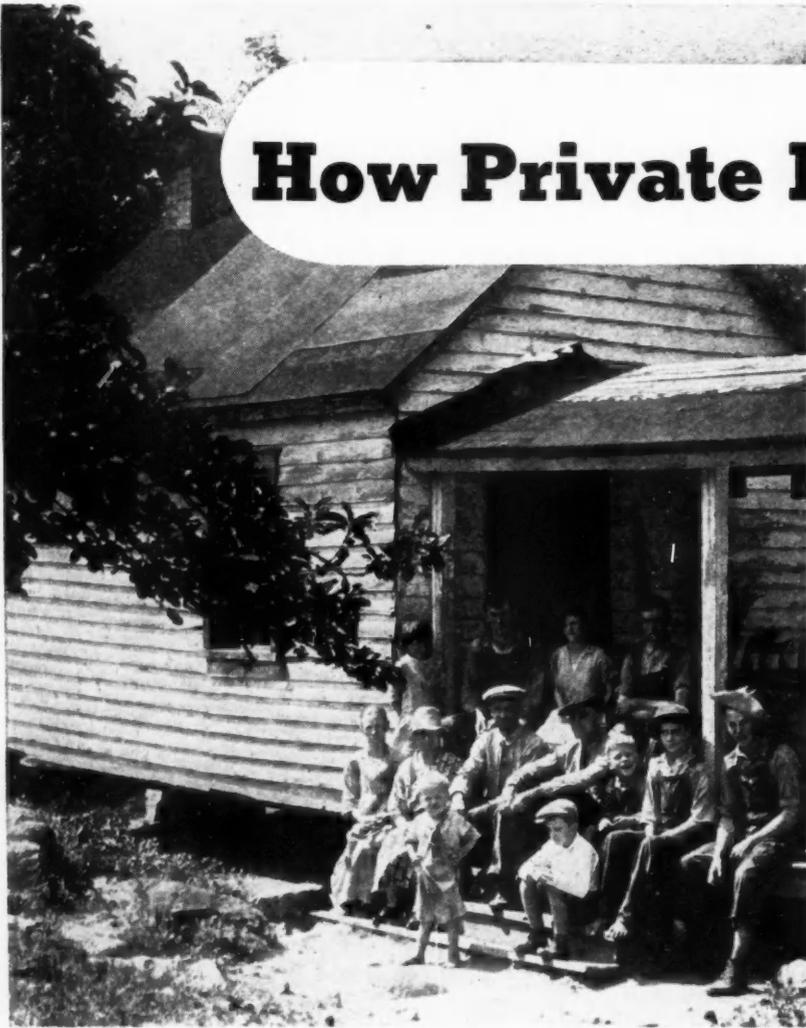
pieces are reduced to a few parcels. Five elements make a wall frame: windows, doors, blocking, bracing, and studding. These permit simplified estimating, with 100 per cent accuracy. Bundles are laid down at exactly the places where they are to be used, thus saving costly confusion, trips to the material pile, job-measuring and intermittent job-cutting.

The true cost of lumber in a job is its cost in place. In the past, the cost of *using* lumber has been greater than the cost of the lumber itself. Experience with precut framing shows that the cost of using lumber, hence the cost in place, is reduced to a minimum.

Not only can lumber of *specified* grade be precut to advantage, but pieces can be cut from lumber of *lower* grade, often with great saving in cost. This is done simply by cutting the required pieces from between defects. The pieces so produced will average fully 90 per cent of the total piece. In this way lumber is raised in grade in the process of precutting
(Continued to page 159)

How to Lay Out and Process Lumber for Quick, Accurate and Wasteless Building

How Private Enterprise Can R



Ewing Galloway Photo

THE spirit that created America was zeal for the conquest of environment. This battle is never permanently won.

Who, then, has the temerity to say that private enterprise, which so far has led the way, cannot attain victory in this newest battle against environment; the redevelopment of blighted urban and rural areas? Or can it be assumed that the spirit of individual initiative in America has deteriorated to a spirit of subservience to some hypothetical, all knowing, all powerful monopolistic national government agency.

There is no such thing as government action without there being action on the part of individuals. It is not a question of a vague, imaginary government body acting, but a question of the citizens of that government expressing their will. We are the government. In spite of the necessary and unnecessary rigging of political machinery, the people of this country are still the force behind the government and the government must express, not the thought, but the actions of those people.

Who Knows the Formula?

Unless the proposed Metropolitan Life Insurance Company project in New York proves itself successful over the long pull, slum clearance or the redevelopment of blighted areas has not been accomplished on a sound economic basis in this country, except in isolated cases such as the Arthur L. Binns project in Philadelphia, Pa. There a number of row houses were purchased

IF local codes and building codes are revised; if municipalities are equipped with the powers of eminent domain and use it; if slum properties are devaluated realistically; if long-term loans necessary for the acquisition of large areas of land can be obtained; if private builders are allowed to qualify as redevelopment corporations—then private building can really do the job best.

on tax sale at extremely low prices and rehabilitated at an equally low cost.

The chief reason why private industry and the building industry must interest itself in slum clearance is because private industry is going to pay the bill anyway.

\$7,000,000,000 Asked For

When the Southeast Regional Planning Commission, representing Florida, Georgia, Alabama, North and South Carolina, Mississippi and Tennessee, recommends to the National Resources Planning Commission a program calling for \$7,000,000,000 for post-war housing and rehabilitation, to be financed wholly or in part from federal funds, it is apparent that private industry is going to pay some taxes.

Blighted rural and urban areas are going to be rebuilt whether private enterprise takes a part or not, and this rebuilding is going to take place for perfectly sound economic reasons.

Here, for example, are some of the bills private citizens and industry are paying today that can be reduced, to some extent most certainly, by providing adequate housing and facilities for the ill-housed one-third of our nation. In 1942 the forty-eight states spent, to prevent ill health, or the spread of disease, over \$58,000,000; on hospitals and institutions the states spent \$263,665,000; on public welfare, \$908,431,000; on penal institutions and correction, over \$80,000,000. To-

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Rebuild Blighted Areas



Kaufmann & Fabry Photo

tal expenditures on these matters of health and public welfare were \$1,263,044,000 in the 48 states.

That adequate housing facilities will have some effect upon the expenditures just tabulated is indicated by the following facts discovered regarding the slum areas in Chicago. In these Chicago slum areas incidence of reportable diseases is 50% greater than the average for the rest of the city. Infant deaths are over 50% greater. There are five times as many fire calls, and these areas require four times as many police.

To illustrate the expense of fire calls it can be stated that in one slum area the fire department in 1938 expended \$22,646, as against an average of \$871 for all sections of similar size. Clearance and redevelopment of this one neighborhood would save the city and its taxpayers over \$20,000 in fire cost alone.

It may be sheer coincidence, but in relating slum clearance to the cost of penal institutions, it is interesting to note that in slum clearance areas in Chicago thirty-two of every hundred children in the area were delinquent from 1927 to 1933, whereas only four of every hundred were delinquent in the city as a whole.

Private Industry to Pay

Private industry and taxpayers are paying those bills now. The public houser draws a line and says, "Up to this point public housing will take over and beyond that, private building will build." But no bureaucrat has ever been known who did not seek to perpetuate

Opportunities in Small Towns

WHEREVER FOUND, blight is a problem of tearing down and rebuilding—and the opportunity for the private builder is greater in rural areas and smaller communities, because the amount of capital needed to handle the redevelopment is smaller.

WHILE MOST people think of cities like Chicago and New York when slums are talked about, actually there is a higher percentage of blight in the rural South than in any other locality. But the problems of big cities are far different from those of smaller communities.

IN ONE SMALL town there was a square block occupied by a tumble-down factory and shanties. This site, within two blocks of main street, has already been acquired by a local builder to be used as a home building development in the post-war period.

THOUSANDS of similar sites can be acquired for little money in rural areas and small towns. This is the new frontier of opportunity for private builders when the war ends.

his job and the easiest way to do that is to take over more and more territory and increase the size of the bureau. As far as private industry is concerned it is not a question of where the line is drawn but a question of how far private industry can push the line back into the slum areas.

The building industry can do the job of redeveloping blighted urban and rural areas on a sound economical basis, but it cannot do the job alone on an economic basis because the large profits to be derived from the redevelopment of blighted areas do not accrue to the agency doing the work, but are spread to a vast number of taxpayers. It is for this reason that the redevelopment of blighted areas must be co-operatively carried out between government agencies having the power to condemn and the money to acquire the property, and private industry and builders equipped with the means and knowledge to rebuild and manage those properties.

Redevelopment Legislation

To effectively activate this partnership and to make it possible for private enterprise to enter the field with some hope of safeguarding the people's money, some legislation with this end in view can be pointed out: notably the Neighborhood Development Act, Senate 1163, introduced by Senator Wagner of New York upon the request of the Urban Land Institute; the Federal Urban Redevelopment Act of 1943, Senate 953, introduced by Senator Thomas of Utah; Minnesota Governor Harold E. Stassen's housing bills for the State of Minnesota, and state legislation in Maryland, Wisconsin, Kansas, Missouri, New York, Illinois, Michigan and Kentucky.

The Wagner Bill, while applicable only to deteriorated urban areas, provides for the National Housing Agency, named as administrator of the program, to make loans to cities or instrumentalities of cities, for acquisition of property and for preparation of the sites for rebuilding. A lien upon the property is acquired as security for the loan. Loans are repayable in 99 years at interest rates prescribed by NHA. Assembled lands may be leased or sold, but any parcels sold to an individual company or corporation would be freed from the federal lien. To prevent land speculation, lessors and purchasers must contract to commence construc-

tion of their improvements within a reasonable time after acquiring land from the city. As a prerequisite to the loan, a development plan including detailed plans for specific areas to be developed, and a plan for the temporary relocation of persons displaced by the redevelopment, must be approved by the National Housing Agency. The bill authorizes an appropriation not to exceed \$1,000,000,000 for year ending June 30, 1944.

It has been estimated that this program should draw about \$5 of private money and credit into the rebuilding of blighted areas for every dollar of federal credit extended. On the basis of a 10-year program this bill would allow construction totaling \$50,000,000,000 in private funds for the \$10,000,000,000 of federal credit.

Hugh Potter of Houston, Texas, president of the Urban Land Institute, has explained, "Private enterprise and private funds can rebuild these worn out areas but they cannot, unassisted, finance the acquisition of land for that purpose. Whatever financing is devised to assemble this blighted land in areas sufficiently large to permit the creation of a new environment must of necessity include a process of devaluation. The terms and interest rates of private credit cannot be expected to undertake that kind of financing. Most of us, I am sure, would prefer to see some form of municipal or state credit used for this purpose, but unfortunately that is simply not within the realm of possibility. We must realize that out of every \$1 of taxes we pay, 75 cents of it goes to the federal government."

Proposal to Use NHA

While the Wagner Bill proposes to use the National Housing Administration, utilizing NHA's experience by extending its life term into the post-war period, the Thomas Bill calls for the formation of a new federal organization, the Urban Redevelopment Agency as the supervisory body. This agency is authorized to loan \$150,000,000, of which not more than \$50,000,000 can be contracted for before July 1, 1944, and July, 1945, respectively.

Repayments on advances go into a revolving fund subject to regulations prescribed by the Secretary of the Treasury. An advance to a municipality for the

(Continued to page 124)

These Steps Must Be Taken in Your Town to Enable Private Building to Operate in Blighted Areas

- 1 Organize and take an active part in a local Housing Authority under State laws.**
- 2 See that your Authority or Municipal area has the right of eminent domain.**
- 3 See that local codes allow interesting variations in neighborhood patterns.**
- 4 Revise building codes to allow use of new materials, and methods.**
- 5 See to it that your city has a planning agency.**
- 6 See that your city has a master plan, a land use plan, and plans describing a proposed project area, and proposed development.**
- 7 See that plans are prepared to protect the economic value and social benefits of the project area.**
- 8 See that liens on tax delinquent lands are foreclosed at the end of five years' delinquency.**
- 9 See that health, fire and building laws are rigorously enforced, or the buildings remodeled or boarded up.**
- 10 Support proposed national legislation designed to provide private builders or municipalities with loan funds for slum clearance.**

American Builder, April 1939

AMERICAN BUILDER AND BUILDING AGE

59

Public Subsidies and Private Housing

THE philosophy underlying the present trend toward subsidized public housing appears to be that every man, no matter what his economic status, is entitled to a decent, healthy place to live—just as it has become an accepted part of American thought that every child is entitled to a free education, no matter what his parent's income.

Proponents of subsidized housing say that, like free education, the civic values of decent housing in place of crime-breeding slums are such that all citizens benefit and should therefore join in paying the costs.

Whether members of the building industry share this view or not, it must be admitted that it has apparently gained considerable public acceptance. Under the U.S. Housing Authority program \$800,000,000 has already been appropriated for large scale public housing, and more is being urged on Congress.

Without commenting on the right or wrong of this policy, but accepting it as something which is occurring whether we like it or not, *American Builder* has the following to suggest:

If subsidies must be granted to housing, better results will be obtained by paying such subsidies to the "ill housed one-third" in such a way as to encourage them to buy small, individual homes through the regular channels of private building and finance. In other words, make the subsidies help private building and encourage private home ownership, rather than hurt private building and discourage home ownership in favor of renting.

Is such a thing possible? Let us see. Under the U.S. Housing Authority program the following help is extended. 1. A 90% loan running for 60 years is granted by the Federal government. 2. A 10% loan is advanced by the local housing authority. 3. An annual subsidy of 3 3/4% of the total cost is paid by the Federal government each year for 60 years. 4. Exemption from local real estate taxes is granted.

That is SUBSIDY in a big way! *American Builder* is prepared to demonstrate that private builders with far less help, could provide much better houses at much less cost, both to the occupants and to the tax-payers.

Let us illustrate with a \$4,000 house (and lot). At this price or less a good house can be built and sold anywhere in the country close to cheap transportation. Under the FHA plan the monthly interest and amortization payment on a 25 year loan of this amount is approximately \$24—too much for the "ill housed one-third." But if the

low-income home buyer were helped with the same 3 3/4% annual subsidy granted by the USHA, his monthly cost would be reduced \$12.50. So his good little \$4,000 house would cost him only \$11.50 a month! At that price he could afford to pay at least a part of local real estate taxes. With taxes, heat, upkeep and other necessary expenses included, the monthly cost to the subsidized owner would still be far less than he would have to pay in a large scale public housing project. Furthermore, the subsidy would run for only 25 years, the length of the loan. The entire operation would be handled by the usual private channels of building and finance. The subsidy would be paid directly to the loaning institution and would in effect amount to guaranteed interest on the loan.

If a 3 3/4% subsidy does not bring the cost down low enough, it could be increased to 4% or 5% or even 6% and still cost less (since it runs for only 25 years), than the 60 year USHA subsidy. A 6% subsidy would practically cover the entire monthly FHA interest and amortization payments, leaving the underprivileged occupant to pay only the local taxes and upkeep! Bear in mind, that since the financing is done by private loan agencies, with or without FHA insurance, the Federal Government would be spared the necessity of raising the huge sums now required to advance the 90% loans of USHA.

Planned "Garden Communities"

Who would be entitled to such a subsidy? The answer is: the same people who are to enjoy the housing which they rent. Private builders would be entitled to build "garden communities" or buy a house of course, to provide the "ill housed" man of reasonably good earnings with a home of his own.

Private builders would be required to provide a 10% down payment would provide a 10% USHA plan. But suppose the luckless man lost his job, or decided of his own accord to move merely wished to move, snapped up by others anxious

For the Ill-Housed One-Third

The private enterprise plan reproduced above, and first published in April, 1939, offers a concrete suggestion which with proper development might fit post-war conditions. It would provide a subsidy to enable the underprivileged to own homes built by private builders. It applies to rural and suburban areas.



THE 3 R's—remodeling, repairs, rehabilitation—set for an early start

Nine Billion Dollar Market Shown by U. S. Housing Census

OLD MAN DEPRECIATION keeps rolling right along in spite of the war. In fact, because of extra war traffic and use, all buildings, including homes and apartments, business buildings and farm buildings, have been subjected during the past two years to extra wear and tear; and, while maintenance and repairs have been exempted from the restrictions of the War Production Board's Limitation Order L-41, the actual fact has been that much needed upkeep work on buildings has been put off or slighted throughout this war period because of the shortage of skilled, experienced men and the difficulty of obtaining the proper materials with which to make these needed repairs. Patriotic motives have also entered to prevent and postpone upkeep operations that normally would have been ordered.

Thus, maintenance has been neglected and the restyling, remodeling and enlarging of homes have been almost entirely laid aside for the duration.

Any work involving a "change of design" and costing more than \$200 has been prohibited under the amended Order L-41; and this has stopped the customary modernizing operations that are so important in the sale of the larger old homes to adapt them to the requirements of new owners.

From all of these causes a tremendous backlog of unfilled modernization, improvement, upkeep and repair wants has been accumulated. This is estimated to represent a market potential of at least \$9 billion; and it is distributed over every section of the United States.

Little Jobs, All Over, Add to Big Total

This is *big business*; but fortunately it is divided into so many small pieces, is so widely distributed, and is so natural and spontaneous in its conduct that no big new organization has to be set up to handle it. Once the official restraints are removed, this big business of fixing up homes will again surge ahead. It will start instantly. No need here for retooling or reconversions; no delay for new models; no waiting for tests, demonstrations or promotion campaigns. An immediate start to fill a recognized nation-wide need for home repairs and improvements awaits only the official word as to when such work would be permitted, patriotic and in the public interest. The men and materials for this work on the home front can be promptly assigned and utilized the moment they are released from their war front duties.

The 1940 U. S. Census has revealed the size, age and many of the details of the nation's present establishment for homes and shelter. Reports were made by the Census enumerators on every home and family shelter unit. Size, value, age, material of construction, state of repair, plumbing, heating, lighting, occupancy, mortgage status, and other important facts were recorded,

and have been analyzed by the Bureau of the Census.*

A total of over 37 million dwelling units were found and they have an estimated value of \$94 billion. This is by far the greatest body of money investment of the American public. Under the sane principle of "protect what we have" such an investment obviously deserves adequate care, maintenance and repair. Yet, according to the Census reports, 18.3 percent of all dwelling units in 1940 were found to be in need of *major repairs*. This percentage means that the huge total of 6,413,727 houses and other family shelter units urgently need the services of local building mechanics to put them into safe and healthful condition.

The age of each residential structure in the United States was determined; and in the Census report they are listed by age groups running back 80 years. Of the "old timers," houses built prior to 1920, over 22 million were still standing in 1940. This group was 59.4 percent of the total. Four and a half million homes were



*Footnote—"Housing, Vol. II, General Characteristics" 16th Census of the U. S.: Supt. of Documents, Washington, D. C., 40 cents.

found to be fifty years or more old; and the group of thirty to fifty year old houses numbered 9,680,404.

While this is eloquent testimony to the staying powers of our typical home construction, it certainly does indicate a crying need and opportunity for modernization and rehabilitation. The owners of these old houses want them fixed up. They are dissatisfied with out-moded styles, dilapidation and lack of modern conveniences. Every community has its share of these "old timers." They cry out to local building industry men for service. Here is probably the nation's biggest backlog of business for the post-war and war-interim periods.

It was further found by the Census investigators that 39.1 percent of the dwelling units in the United States lacked a bathroom with tub or shower, 58 percent were without a central heating plant and 19.7 percent still depend on kerosene oil lamps for home lighting. More than half, 55.7 percent, were of the small popular size of four, five and six rooms. The average value of all owner-occupied homes was found to be \$3,073 and the average rental of all tenant-occupied units \$21.17 per month.

Urban rents in the North averaged \$34.73 a month however, compared with \$6.12 for rural farm homes in the South.

So completely is the American housing scene dominated by the small, modest home that out of the total of 15,195,763 owner-occupied units the census takers found only 3.3 percent (512,329 homes) to have a value of \$10,000 or more.

Reports on the materials of construction used in these existing residential structures gave the exterior walls as: wood 81.9 percent, brick 11.3 percent, and cement

QUICK FACTS ON EXISTING HOMES

(from 1940 U. S. Census)

- 37,325,470 dwelling units in U. S.**
- 29,313,708 residential structures**
- \$94 billion, their estimated value**
- 30,030,095 (80.5%) in 1- and 2-family houses**
- 24,908,955 1-family houses**
- 6,413,727 (18.3%) units need major repairs**
- 22,171,329 (59.4%) are 20 years or more old**
- 14,320,519 (39.1%) lack bathtub or shower**
- 19,802,230 (58%) are without central heating**
- 4-, 5- and 6-rooms most frequent size (55.7%)**
- Exterior material: Wood 81.9%, brick 11.3%, cement and other 6.8%**

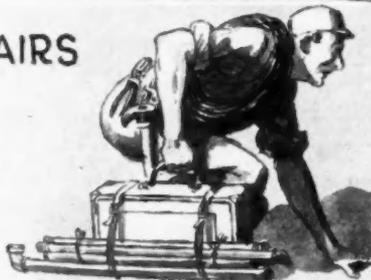
stone and "other" 6.8 percent. All told, 69.9 percent had running water in the dwelling unit; 64.7 percent had a flush toilet inside the structure; and 78.7 percent were found to have electric service for lighting and other purposes. The value of refrigeration in the home is well recognized, since 44.1 percent of the family units had mechanical refrigerators plus 27.1 percent ice refrigerators.

The heating figures are revealing: 21.8 percent of all occupied units (for the entire United States, North, South and West) were heated with steam or hot water
(Continued to page 154)

REMODELING



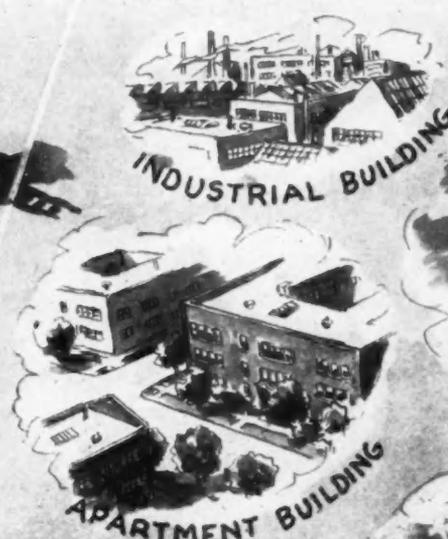
REPAIRS



REHABILITATION



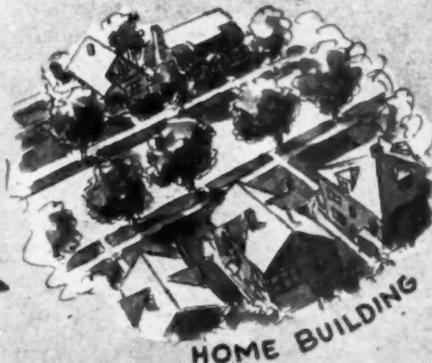
INDUSTRIAL BUILDING



FARM BUILDING



APARTMENT BUILDING



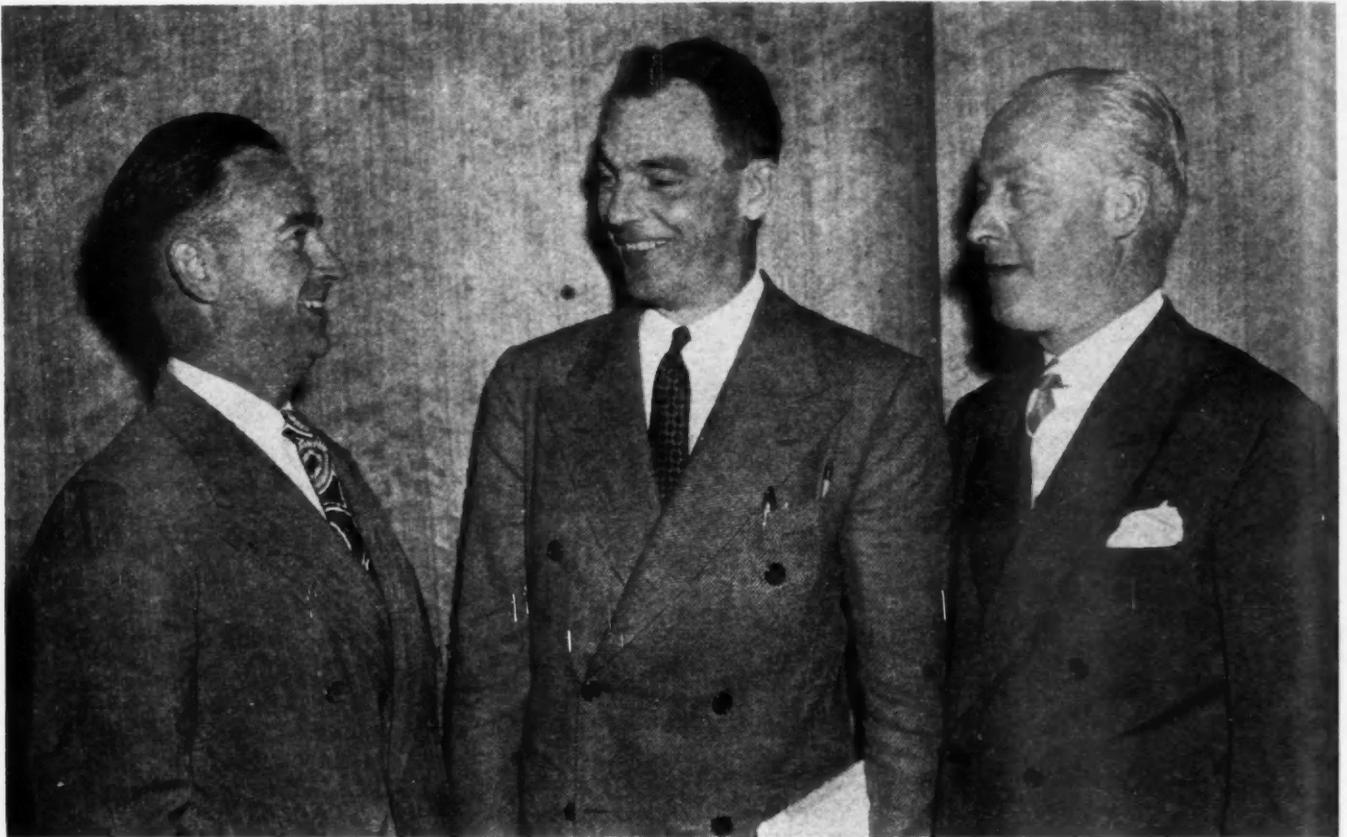
HOME BUILDING

BUSINESS BUILDING



QUE.

MILLIONS OF HOMES, FARM BUILDINGS, BUSINESS BUILDINGS IN CRYING NEED OF ATTENTION



IN UNITY STRENGTH. President Burns (center) welcomes new NAHB Secretary Schulenburg (left) and Vice-President Merrion (right).



W. J. GUINAN, executive secretary, Detroit association, and Frank W. Cortright, NAHB executive vice-president.

Home Builders Association Plans Vigorous Expansion

Merger details completed at Washington meeting and plans laid for strong national group to represent industry now and in post-war. Now has 1200 members.

FOR THE first time in the history of the residential building industry, there now exists a strong, well financed national association capable of representing the builders of the country in national affairs.

The final ceremonies cementing the merger of the two national associations took place at the Statler Hotel in Washington at a two-day conference last month. Forty-seven directors representing various city and regional builders' associations were on hand to complete the merger details and to meet with government officials to discuss war and post-war housing prospects for the private builder.

Fritz Burns, president of the National Association of Home Builders, declared: "in the future our progress will be multiplied by combined action. This alliance makes us completely representative of the home building industry

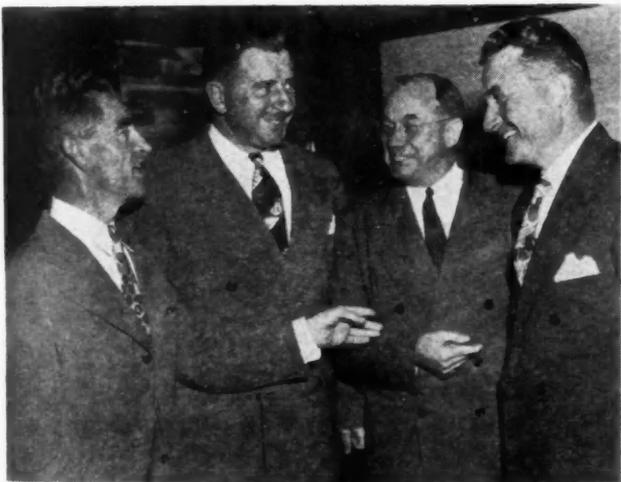
We will not only meet opposition but overcome it."

Harold Schulenburg of Kirkwood, Mo., former president of the National Home Builders Association, and newly elected secretary of NAHB, said the merger "would place home builders in a position to defend themselves from the hampering regulations of brass hats." Joseph E. Merrion, president of the Metropolitan Chicago Home Builders Association, became vice-president of NAHB.

The new association is starting out with ample financial backing, an aggressive executive vice-president, Frank W. Cortright, whose Washington headquarters are at 1737 K St., N.W., and a membership of some 1200 builders. One of the important decisions of the meeting was to reduce the annual dues from \$25 to \$10 to bring in a larger membership among the rank and file of un-



TOP U. S. housing officials attend NAHB luncheon at Statler Hotel, at meeting in which war and post-war problems were discussed. Officials at head table include John B. Blandford, NHA administrator, Abner Ferguson, FHA commissioner, Earl Draper, deputy FHA commissioner, Col. F. J. C. Dresser of WPB, Malcolm McDonald, OPA lumber distribution, Curt Mack, FHA chief underwriter, and others.



OLD FRIENDS and new friends met as hatchets were buried at merger meeting. Builders shown (left to right): Ralph S. Duke, University City, Mo.; David D. Bohannon, San Francisco; Harry J. Durbin, Detroit; Robert Gerholz, Flint, Mich.; Joseph Meyerhoff, Baltimore; Lex Marsh, Charlotte, N. C.; Franklin Burns, Denver; Russell Muth, Philadelphia; J. B. Haverstick, Dayton; W. L. Crawford, Baton Rouge.

organized builders of the country. The \$10 dues entitle each member to receive the Association's weekly Washington News Letter, a valuable service describing the changing developments at the capital.

To assure the Association a strong financial backing, numerous individual builders have made large contributions. A dozen of these were for \$500 or more, while one builder contributed \$2500. Numerous contributions of \$100 to \$250 were announced.

The new association is exclusively a residential builder organization, and its announced purpose is to represent the home builders of the country at Washington and else-

(Continued to page 154)

(See "War Housing Items" by Frank Cortright, p. 122, for further information on NAHB activities.)

A Big \$10 Worth

TO encourage increased membership throughout the country, directors of the National Association of Home Builders have reduced dues to \$10 a year. In addition to giving every builder strong representation in Washington, this entitles him to receive the Association's weekly Washington News Letter. NAHB headquarters are at 1737 K St., N.W., Washington, D. C.



How to do something in your town about post-war building

Six practical suggestions for local
action and local campaigns.

Build experimental model homes

AS SOON as war conditions permit or WPB says materials can be spared, local builders should start erecting experimental model homes, putting into effect the latest ideas that make for better houses at lower cost.

The local builder's association, or a group of local building interests, might get together to sponsor such a model home. A number of such houses erected before the war ends would serve as proving grounds for the industry and would eliminate a period of trial and error or uncertainty after the war.

It is entirely possible that in the near future WPB might make available enough material for a few such experimental model homes.

A staunch advocate of this idea is Fritz B. Burns, president of the National Association of Home Builders and a prominent Los Angeles residential builder.

Burns' organization has recently installed a research division under the direction of Joseph H. Schulte for the purpose of gathering and developing new ideas and innovations in materials and appliances for the post-war house. He is working toward the idea of building an experimental modern home as soon as possible, and has gotten in touch with numerous manufacturers of materials and equipment regarding their latest products.

This is certainly a practical, tangible way to bring post-war planning down to earth, and get things started early.

Set up apprentice training courses

MILLIONS of young men "hardened by war" will be returning to their home towns and villages all over the United States ready and anxious to go to work in the building industry. They will be badly needed, for never in the history of this country has the supply of skilled building workers been so low.

Obviously something must be done to train these men for the operations required in construction. It is not a bit too early to start doing something in your town, county and state to set up apprentice training courses.

It has been suggested that Uncle Sam should put service men through a period of training for whatever jobs they select before discharging them from the army. That idea may have some merit, but it seems probable that the boys will be anxious to get back to their home towns as soon as possible, and this would be just one more case where the Federal government undertakes an operation that should be done by the local community.

Home construction is a local industry and customs, methods and procedures vary widely, not only due to local habits, but due to local conditions—climate, plans, and available materials.

It may be that a federal subsidy will be required to enable local communities or perhaps states to set up apprentice training courses. These should be available not only to service men but to ex-war workers.

It is probable that the State Board of Education should organize and co-ordinate the program.

Work for revised tax system

HIGH real estate taxes which load an unjust and unfair amount of the cost of local government on home ownership, are the greatest obstacle to private home building.

This system can be changed, and it calls for aggressive local groups of property owners and building industry men to do it. It can't be done from Washington; it has to be started in your own home town.

An "occupancy tax" is recommended as a new source of local revenue. A recent study by the Committee on Inter-governmental Fiscal Relations, headed by Dr. Harold M. Groves, proposes the following:

(1) Gradually adopt an occupancy tax either as a supplement to or replacement for the property tax. This would be collected from the occupant of a property whether tenant or owner. The amount of the tax would be based upon the rent, to cover services to the individual including education and police protection. Such services account for approximately 2/3 of local governmental costs.

(2) Side by side with the "occupancy tax," a comparatively small service fee, laid on the property itself to cover such matters as municipal facilities, fire protection, and the like.

(3) Unused property would be exempt from the tax on rentals. The tax on home rentals might be adjusted upon size of the family. A business rental tax would be levied at a flat rate.

Work with CED for post-war plan

THE Committee for Economic Development is an independent, private, non-profit organization doing a notable job to encourage and stimulate private business to plan now for post-war employment.

Headed by Paul G. Hoffman, president of the Studebaker Corporation, the Committee is particularly anxious to help small business men to provide jobs quickly once the war is over. CED committees are being set up in towns and villages all over the country, the idea being to set up a post-war program to maintain employment in each community.

An important book has just been published showing how to proceed, titled "Plan post-war jobs now." Builders interested in the program or in obtaining a copy of this booklet should write John F. Fennelly, executive director, Suite 3311, Department of Commerce Building, Washington, D. C.

Demand standardization of parts

LOWER costs, greater speed and greater efficiency would result in home building if increased standardization of building products were possible.

Every builder, material dealer and sub-contractor should be interested in and support the new proposed American Standard Basis for the co-ordination of dimensions of building materials and equipment.

The American Standards Association, in co-operation with the American Institute of Architects and the Producers' Council, proposes a standard 4" module as the basis of all construction plans, and as the basis for co-ordinating and simplifying the dimensions of all building products.

The new basic standards (A. S. A. project A62) would be a monumental step forward if adopted by the building industry, as it will reduce the vast and confusing number of sizes of building products and simplify their installation.

Organize local better post-war homes campaign

American Builder is placing at the disposal of thousands of communities the information contained in this issue for use in local better post-war homes campaigns.

Building men are not going to wait for Washington to save their business. Every town must organize its own private enterprise campaign for better homes and a better post-war community.

American Builder's 10-point private enterprise program can be put to work locally. Use the material and articles in this issue as the basis for local speeches, newspaper publicity, letters, displays, posters and promotion.

Organize a "Post-war Plan for Our Town" committee and enlist the Chamber of Commerce, clubs, civic organizations, all building interests.

Right now such a program is being organized by the City of Lexington, Kentucky. A local architect, Hugh Meriwether, is director. A detailed plan of Lexington's future is being prepared, studying its traffic problems, buildings, tax values, parks, schools, homes.

Every organization in town is to be enlisted in a vigorous post-war program to make Lexington the most beautiful home city in the country. Some of the unique ideas contained in the plan are as follows:

Some of the unique ideas contained in the plan are as follows:

1. Rearrangement of local tax structure so that taxable value will be determined by a formula in which rental value, age of structure and fire hazard as measured by insurance rates will be factors. This formula is already developed but will require additional study and state legislation.
2. Purchase by the city of obsolete buildings in the center of the business district. These buildings after purchase will be removed and their sites converted into open park areas, thus increasing the rental value and so the tax value of the surrounding properties.
3. Creation of park strips in the centers of the main business streets, thus beautifying these areas, dividing traffic and aiding pedestrian use.
4. Correction of overhead wire evil.
5. Expanding present zoning control into control of appearance as well as structural and fire hazard factors.
6. Continuing program of private improvement with contests and public award with broad publicity given to

(Continued to page 112)

THOUSANDS OF NEWSPAPERS HAVE CARRIED AMERICAN BUILDER'S ARTICLES ON POST-WAR BUILDING BY PRIVATE ENTERPRISE—A TOPIC OF KEEN INTEREST TO THE AMERICAN PUBLIC.



HOW TO DO IT • HOW TO DO IT

(Continued from page 111)

that firm or individual making the greatest improvement in privately owned buildings for each period.

It is certainly not too early for building men to organize a post-war better homes or rebuilding program for their own town.

With such a basis of local action by communities themselves, it is suggested that some type of a *national* program to stimulate interest in home ownership be developed. An advocate of a program of this type is Clifford W. Stuart of the General Electric Company who believes that the building material manufacturers of the country should co-operate to rekindle interest in home ownership throughout the land. He has expressed his ideas in a series of ideas on housing and home ownership, as follows:

(1) Adequate housing is a physical and a social necessity in a high-standard-of-living democracy. The U.S.A. needs millions of new houses.

(2) The greater the number of home owners in this nation, the greater the number of stable and interested citizens. The U.S.A. needs millions more of these, too.

(3) About 60% of our families are renters, 40% owners. Yet facts now available indicate 3/5 of the renters would prefer to own. How will this latent desire be activated?

(4) Household operating and upkeep expenses come

out of the same pocketbook as mortgage amortization payments. Usually high-quality products reduce the former more than they increase the latter—not "in the long run" but each month. If the public realized this, what effect would it have on the market for *quality* homes, materials and equipment?

(5) The modern single long-term mortgage brings home ownership within the realms of monthly payments about the size of rent, and probably it's cheaper to own than to rent. In these days of high income taxes, for instance, a house buyer can deduct mortgage interest and real estate taxes, which a renter cannot, although he pays them indirectly. How will the public learn?

The need for millions of houses after the war can easily be demonstrated. But unless a *market* for houses is created, they will not be built—at least not by *private enterprise*. A number of government agencies are now active and organized in the housing field—some aid, some supplant, private operations.

(8) Better-organized, competing industries are poised for a campaign such as we've never witnessed before to regain markets—in other words, to entice consumers away from home buying.

(9) Other industries have *national* advertising (i.e. education) of their end-products—automobiles, not just bodies and engines; refrigerators, not just boxes and motors. Where is the counterpart in building?

What leaders say about post-war building

MILES L. COLEAN—"When the war is over the need for housing in this country will challenge our industrial, financial, and political ingenuity. The country could absorb from 900,000 to 1,200,000 new dwellings a year for the decade after the war."

HENRY KAISER—"The best way to combat the fanciful theories of a paternalistic state is for private enterprise to mobilize its tremendous capacity."

STUART M. CROCKER—"Government should facilitate and motivate private construction enterprise where needed, but in no case enter into competition with it."

PAUL G. HOFFMAN—"When it comes to providing post-war jobs we just can't chance bringing too little too late. It isn't plotters on the left who constitute the real hazard to our free society but pressures from unwanted idleness."

JOHN B. BLANDFORD—"We are determined to do our part to assure the realization of the hopes of a lot of younger persons who aren't going to be content with the way things were done before."

ABNER FERGUSON—"FHA is ready at a moment's notice—needs no new legislation—has half a billion dollars of unused insurance authorization still outstanding, sufficient for 100,000 houses."

JOHN H. SCOTT—"Insurance of mortgages is primarily a function of private enterprise. Businessmen engaged in the mortgage business ought to organize a private company for insurance of mortgages."

WILSON COMPTON—"Lumber for post-war homes will be more largely refined, fabricated, treated and assembled. It will provide more labor in the factories, will require less labor on the jobs."

ROGER W. BABSON—"Everyone from the president down to the humblest workman should join in a plan to glorify the progressive builder and businessman. He alone can put people to work and reduce public debt."

RAY HUBBS—"Each returning war veteran should receive a model home set in the middle of some good old American soil."

HARVEY FIRESTONE—"Only by intelligent and effective post-war planning can we prevent a crime wave of major proportions."

CHARLES A. MULLENIX—"There is nothing this country could do for our returning veterans which would so quickly adjust them to civilian life as to expedite their purchases of farms and homes."

HERBERT U. NELSON—"Homes for Veterans' could well be the theme song for a major post-war program."

CYRUS CRANE WILLMORE—"Give a man a piece of ground and he has a stake in the community. He is a more valuable citizen."

GEORGE J. HAAS—"The nation will emerge from the war with capacities for making plastics, synthetic fibers, nitrates, hydro-carbons and scores of chemicals on a scale that would have been regarded as fantastic before the war."

W. C. BELL—"Private enterprise in building is made up of small independent units—builders—savings and loan banks—retail lumber dealers. Such concerns form a vital part of the two and one-half million small business establishments which constitute the heart and soul of the main body of the American system of production and distribution."

JANET MORROW—"British housewives think that American homes are the finest in the world, with the best kitchens, bathrooms, and labor saving devices. They want just such houses after the war."

H. R. NORTHUP—"We must have a vigorous, well thought-out program to lead the building industry in the after-war period."

PRIME FACTORS IN POST-WAR BUILDING

CONTRACTOR BUILDERS

3 to 10 Houses on Contract or for Sale, Light Load Industrial, Commercial, Remodeling.

MERCHANT BUILDERS

10 Houses or More in Groups, Urban and Suburban. For Sale or for Rent.

CARPENTER BUILDERS

Maintenance, Repairs, New Farm Buildings, Rural Buildings, Small Homes.

LUMBER AND BUILDING MATERIAL DEALERS

Farm & Rural Buildings, Houses, Remodeling, Yard Prefabrication.

PREFABRICATORS

Low Cost Houses, Sheds, Wayside Stands, Tourist Cottages, Small Commercial.

**"Back the Attack
-BUY
WAR BONDS"**

DOUBLY PROTECTED

Against Rust and Corrosion

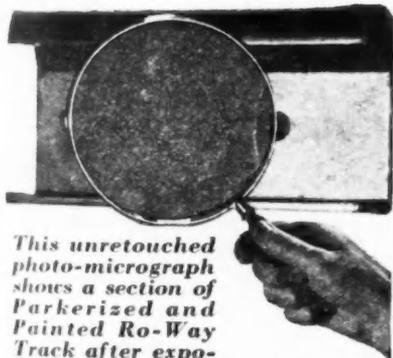


*Parkerized
AFTER
FABRICATING*

*Painted
AFTER
PARKERIZING*

That's the Kind of Hardware Used on All **Ro-Way**

OVERHEAD TYPE DOORS



This unretouched photo-micrograph shows a section of Parkerized and Painted Ro-Way Track after exposure to the salt spray test for 251 hours. At 492 hours, there was evident only a red rust spot about the size of a pin head.

Other Exclusive Features of Ro-Way Doors include:

- "Crow's Foot" Outer Bearing Support.
- "Zip-Lock" Twin Torsion Spring Adjustment.
- "Tailor Made" Springs—power-metered after door is weighed.
- New Friction-Reducing Track.
- Improved Track Rollers with "double-thick" wearing tread.

The Ro-Way "one-two" process of treating all Hardware parts puts an end to "creeping rust" and insures both longer service and better appearance from these improved Doors of the Overhead Type. Perhaps you have noticed the absence of rust streaks on the painted steel parts and tracks of Ro-Way Doors. That clean, fresh look they retain through long service is due in part to the way Ro-Way protects the hardware against rust and corrosion.

Note this important fact, too. The metal parts of Ro-Way Doors are Parkerized *after* fabricating. That means the inside surfaces of bolt holes and the ends of sheared parts have been treated just as carefully as the exposed surfaces.

Parkerizing is the rust-protecting process so widely used by makers of fine motor cars, refrigerators, etc. We believe that purchasers of Overhead Type Doors are entitled to the same engineering care and protection.

So remember when Ro-Way Doors go on the job, there goes with them this double protection of all hardware parts. That's just another extra value which Ro-Way gives, without extra cost.

Write for special folder on Laboratory Tests showing how well Ro-Way hardware parts withstood exposure to salt spray for nearly 500 consecutive hours.

ROWE MANUFACTURING CO.

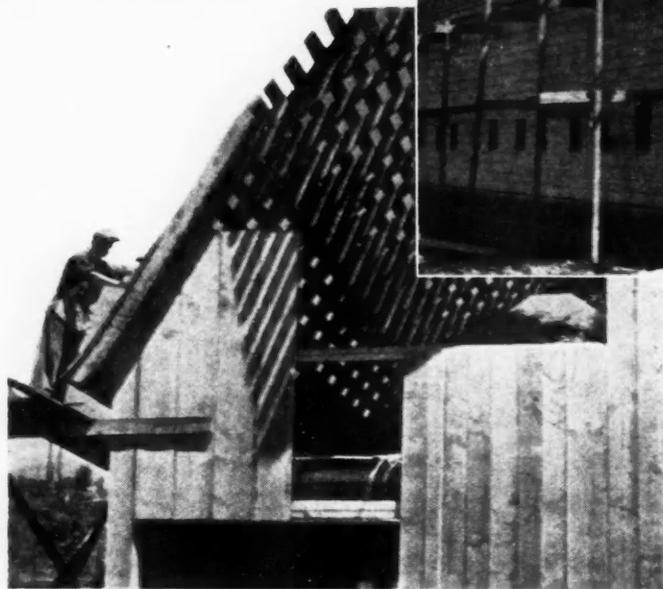
769 Holton Street

Galesburg, Ill., U. S. A.

There's a Ro-Way for every Door way!

NOT POST-WAR, BUT RIGHT NOW More Adequate Farm Structures Must Be Permitted

**Vital to Food Production
Relieves Labor Shortage**



CLEAR the path now for needed repairs and enlargements to our food and crop-production farm buildings. It's a \$10 billion job.

A SURVEY of retail lumber dealer stocks shows a critical shortage—and in many yards a total absence—of the types of lumber generally used by farmers for the construction, repair and maintenance of their barns, stables and storage buildings.

Furthermore, dealers report that they can not now obtain such lumber from the mills, that their orders for common boards, shiplap and drop siding as customarily used for farm building jobs are being refused even when supported by the proper AA-2 agricultural use rating.

The mills, in turn, report that the War Production Board has not released for them any stock that can be shipped on AA-2 agricultural-use orders and that, under present conditions at the mills, they are unable to accept and fill these orders from dealers for farm building type lumber.

This obstacle to urgently needed farm building projects comes on top of the restrictions and requirements of the WPB Limitations Order L-41 which had already pinched down and cut off a greater part of the country's normal program of farm building maintenance and expansion. It is a serious blow to the farm front in its effort to respond to the world-call for greatly increased food production.

It should be removed along with the other obstacles and discouragements to all-out agricultural production which have confused and hampered the farmers.

No part of our war effort is more important than the production of food; it is vital to success on the fighting fronts, on the home front and, in ever increasing quan-

ties, for the rescue and succor of the liberated peoples, as our victorious armed forces advance. Building improvements on the farm save labor, conserve feed, prevent spoilage and increase the health, comfort and productivity of dairy and beef cattle, hogs, sheep and poultry.

NOW is the time—and not later on—that farmer-type lumber should be directed back into the retail yards where it can quickly be put to work on farm building repairs and farm plant expansion to help increase food production and relieve the farm labor shortage. Good buildings, sanitary stables and feeding floors, silos, corn cribs, granaries, root and fruit storehouses, poultry houses, stock shelters, self feeders—these all constitute the farmers' factory; and, as in any other business, if the production is going to be substantially increased the factory plant has to be increased, or made more efficient, or both.

The U. S. Census for 1940 reported the total value of buildings on the nation's 6,096,799 farms as \$10,400,000,000. This was almost half as much (46.8 per cent) as the value of the farm land—\$22,200,000,000. Farm implements were reported as having a value of \$3,000,000,000.

Farm employment for 1941 stood at 10,267,000, counting both family members and hired workers, according to the U.S. Department of Agriculture; which also states that the cash farm income for 1941, from crops and livestock, amounted to \$11,185,430,000.

It has been estimated by many building industry authorities that the present need for repairs and remodeling on existing farm structures and for clearly indicated new construction totals the staggering sum of \$10,000,000,000. This is probably not an exaggeration, because for twenty years prior to the present era the nation's farm plant was very much neglected, due to depressed farm market conditions.

From 1920 to 1940 there was a shrinkage in value of farm lands and buildings of almost 50 percent—from over \$66 billion in 1920 to \$48 billion in 1930 to
(Continued to page 141)

The NEW Barrett Spear-lock shingles

Speedy Solution for War-time Roofing Problems

• Yes, speedy, because this new Barrett shingle is quick-laying. The locking device is fast-engaging, easy—not tricky—to apply. This means time-saving and labor-saving—important considerations in these days of labor shortages.

Time-proved in principle, the Barrett Spear-lock device is simplicity itself, yet it is a positive system of locking which compels shingles to lie flat, stay put and fit the roof like a glove. Moreover, Spear-lock shingles are pleasing in design—give the roof

trim, handsome appearance.

Self-aligning notches—an important feature of Barrett Spear-locks that automatically lines up the shingles on the roof—obviate chalk marking.

This timely, low-cost, long-lasting roofing development is typical of Barrett, dependable source of quality roofing materials for 89 years. Let us give you full details on all the selling points that make the new Barrett Spear-lock shingles one of the most profitable opportunities on the market today.

THE BARRETT DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK



BARRETT BUILT-UP ROOFS . . SHINGLES AND SIDINGS . . ROLL ROOFINGS
. . ROCK WOOL INSULATION . . ROOF COATINGS AND PROTECTIVE PRODUCTS

New Rural Credit System Needed

Mortgage bankers advocate farm mortgage insurance plan to stimulate private lending; will better serve borrowing needs of farmers and relieve drain on Treasury

HERE are 6,096,799 farms in the United States, with an estimated total value of \$33,642,000,000. Of this total, an estimated 2,670,397 (43.8 per cent) are mortgaged for about \$6,350,000,000. More than half of the farm mortgages are held by individual private investors, the balance by insurance companies, banks and other institutions. Most of the individual investors are retired farmers, or country-town people who are directly or indirectly interested in farm lands.

The farm-loan experience of both institutional and individual investors has been turbulent and rather unhappy during the past 25 years. The institutional investors had no provision in their mortgage contracts, other than foreclosure, for periods of deficient farm income. As a result, during the 1930's they had to take over large numbers of farms during an era of depressed land prices. The expense was enormous and they still are trying to get out from under the huge burden of acquired properties.

Individual investors had a little more flexibility in provisions of their loans, because their relationships with borrowers are more personal and direct, but the result was little, if any, better than the experience of institutional investors. The disaster that occurred to farm loans during the 30's made them unpopular with disillusioned individual investors who previously had regarded them as the safest of all loans.

Government Unsuccessful in Farm Loan Field

Government agencies such as Federal Loan Banks and Federal Farm Mortgage Corporation were established about 25 years ago to make direct loans in areas not adequately served by private lenders. They were not originally intended as emergency measures, but during the depression years they were called upon to serve much as the Home Owners Loan Corporation served in the residential field. These government farm loan agencies took over distressed properties and thereby relieved much of the strain on severely taxed facilities of institutional lenders. Individual lenders, however, frequently took their losses and suffered in silence.

The Federal Loan Banks and Federal Farm Mortgage Corporation are not financial successes, partly because of ways in which they are set up, and partly because they undertook an impossible task. In 1942 President Roosevelt signed a bill extending the 3½-per cent interest rate on Federal Loan Bank and Loan Bank Commissioner loans for another two years. At the time, he estimated that the subsidies paid out during this two-year extension period to those whose interest rates are lower than their contract rates will cost the Federal Treasury \$67,000,000. So large a loss, even in these days of fantastic financing, is disturbing. It indicates size and scope of the farm financing problem.

Summarizing the current situation we see individual investors scared of the farm field, institutional investors still working off the acquisitions of depression years, and government agencies paying out huge subsidies each year. There can be little question but what some new form of rural credit system is needed.

Several years ago the Mortgage Bankers Association of America appointed a Farm Mortgage Committee to study the situation. It proposed mutual mortgage insurance of privately made farm loans, patterned after FHA insurance in the urban loan field. Mutual mortgage insurance for farm loans, provided by the Federal government and administered by a government agency would, in the opinion of the committee, enable private capital to re-acquire and retain a large part of the farm mortgage indebtedness for which more than adequate investment funds now are available. It is believed

that such a program would work to mutual advantage of borrower and lender, and would relieve the Federal Treasury of much of its present subsidy burden.

Mutual mortgage insurance as proposed for the farm field, should include provisions for an independent, standard appraisal, to reduce cost of acquisition, thereby eliminating some wasteful features of present competition. It should extend benefits of its insurance plan to individual investors, who at present frequently are unable to compete with the more favorable rates and terms offered by institutional lenders. The plan should strive, so far as possible, to provide uniform costs of mortgage funds to farmers in all territories. Insurance facilities should be available for short-term loans, and the program should include provisions for meeting emergency periods of low farm income without taking over the properties under the least favorable conditions.

Private lenders in the past have not fully covered the field. They made loans only where they best knew conditions, or where they felt it was safest. They were thinking of investment opportunities rather than the nation-wide borrowing needs of farmers. It is confidently expected that farm mortgage insurance would encourage private investors to make available sufficient farm mortgage money to meet the borrowing needs of farmers in all places and at all times without recourse to direct government loans.

More than half the farm mortgage borrowing, according to the committee, involves short-term loans that are preferred by borrowers, even though they cost more than long-term fully amortized loans. Only the latter type are available through the Federal Land Banks and Farm Loan Commissioner. It is believed that mortgage insurance could and should cover short-term loans, thereby better meeting the mortgage needs of farmers.

Inclusion of provisions for extending time of both principal and interest payments in times of depression would enable all loaning agencies to avoid repetition of some of their troubles of the 1930's.

The committee points out that Federal Land Banks and Federal Farm Mortgage Corporation have made loans in line with the long-range policy of the Department of Agriculture regarding unwise expansion of agricultural production. Private capital has not always been so considerate of over-all national needs and at times has loaned money in territories where it was not permanently needed. If mutual

(Continued to page 140)

How Length of Amortization, Interest Rates and Taxes Affect Home Buying

In the sale of a \$4,600 house with a \$4,250 mortgage amortized over 25 years, at 4½% interest, the following is a breakdown of monthly cost to the home buyer:

AMORTIZATION SCHEDULE		Total
	Monthly Payment	paid in over 25 years
FHA Premium	\$ 1.71	\$ 303.00
Hazard Insurance ..	1.04	312.00
Monthly Tax	12.65	3795.00
Interest	15.94	2390.00
Principal	7.69	4250.00
TOTALS	\$39.03	\$11,050.00
Annual income needed to purchase on above basis ..		\$1873.00
Annual income needed to purchase same house, same interest and period, if tax is eliminated		1266.00
Annual income needed to purchase same house, 35-yr. period, 3% interest		1478.00
Annual income needed to purchase \$3600 house, 35-yr. period, 3% interest		1153.00
Annual income needed to purchase \$3600 house, same terms, if tax is eliminated		679.00

Prefabrication's PROFIT PACKAGE

Mr. Lumber Dealer

- How many \$2500 homes did you sell in 1941?
- For how many did you make plans and estimates?
- For how many did you negotiate loans?
- For how many did you finance the carpenter-contractor?
- On how many did you foot the bill for the contractor's bad managing?
- On how many did you have arguments with purchasers?
- How many were completed and paid for within 90 days?
- How many were *profitable* to you?

And—

For how many \$2500 homes did you make plans and estimates and *not* sell? Considering these, was your \$2500 home business profitable after overhead?

Our *postwar packaged* homes will be pre-planned and pre-estimated. Your salesman will spend his time selling rather than figuring. Your customer can *see* in advance what he is buying. Values will be pre-established with financing institutions to facilitate financing. Your *costs* are known because your risk inherent in field construction is out. You can complete a deal in 30 days and have your money Your *profit* is in the materials you sell—a much greater proportion of the total costs will be for materials. Your *profit* is in the volume you handle—with the same capital investment, the same overhead and the same effort, you can handle a much greater volume Plan now to be our dealer in your community. Only established dealers of high standing need bother to write us. Nothing until our war orders are completed, of course.

**Buy a Home in the Peace to Follow
With the Bonds You Buy Today.**

HOUSTON *Ready-Cut* HOUSE CO.

Prefabricators Since 1917

POLK AVENUE

HOUSTON, TEXAS

Bibliography of Post-War Planning Information

Chamber of Commerce of the United States of America, Washington, D.C. A series of Bulletins on Post-War Readjustments, all written by Emerson P. Schmidt, Economist. Six have so far been issued: (1) "Why Plan for the Post-War Period?"; (2) "Is Post-War Collapse Inevitable? The Short-Run Favorable Factors"; (3) "Some Unfavorable Factors"; (4) "Maladjustments in the Post-War"; (5) "Absorbing the Total Labor Supply"; and (6) "The Problem of Business Incentives."

"Plan Now for Future Public Works," another Chamber of Commerce publication, suggests a "workpile of private and public construction projects in the blueprint and specification stage" so that advantage may be taken of construction opportunities immediately after the war. 20 pp. "Your Stake in Capitalism" by Eric A. Johnston, President of the C. of C. Analyzes the essential steps to be taken to make capitalism function effectively in the interests of all groups. 1943.

"The Role of Public Works" by Col. Willard Chevalier. Evaluation of conditions under which public works should and should not be employed in the post-war economy. 1943.

Dayton Chamber of Commerce, Dayton, Ohio. "Manual of Post-War Planning." A guide to companies needing help in planning for the post-war, prepared for the use of business executives. 14 pp.

Chamber of Commerce, Baltimore, Md. "The Baltimore Plan." A guide for citizens to restore business, preserve private enterprise, promote useful public works and increased employment. 23 pp. 1943.

Western Homes Foundation, 364 Stuart Bldg., Seattle 1, Wash. "The Homecoming Home" by W. C. Bell, Foundation chairman. Written to inspire organized planning for the homecoming of service men. 16 pp. 1943.

The Producers' Council, Inc., 815 15th St., N.W., Washington, D.C. "Post-War Planning for the Construction Industry," a statement of needs, objectives and procedures of a program to prepare construction industry to do its part in maintaining full employment. 28 pp. 1942.

F. W. Dodge Corp., 119 W. 40th St., New York City. "Building Ahead." a booklet containing historical records of peacetime construction, activity data on this year's war construction, and indications as to what lies ahead in the near future and in the post-war period. 30 pp. 1943.

Twentieth Century Fund, 330 W. 42nd St., New York. "Post-War Planning in the United States," by George B. Galloway. Summarizes the findings of the National Resources Planning Board in 1942 and rounds up in general the entire post-war picture. Revised Jan. 1943. 60c. A new housing study will be ready next month.

American Institute of Architects, 1741 New York Ave., Washington, D.C. From "The Octagon," publication of the A.I.A., have been reprinted two articles comprising a Statement on Post-War Reconstruction Problems. 20 pp. 1943.

National Lumber Manufacturers Assn., 1319 18th St., N.W., Washington, D.C. "Home Building and Home Ownership After the War," reprint of an address delivered by Dr. Wilson Compton of the Association, and issued in pamphlet form. 8 pp. 1943.

National Association of Manufacturers, 14 W. 49th St., New York 20, N.Y. A series of publications on various phases of the subject of post-war planning: "Bench Marks for Tomorrow's Progress," a panel discussion at the 1941 Congress of American Industry.

"Discussions on the Post-War Outlook," including two addresses and a symposium from the War Congress of American Industry. 1942.

"Free Competitive Enterprise and the Common Man," an address by Frederick C. Crawford, president of N.A.M.

"Jobs, Freedom and Opportunity," preliminary views of the Post-War Problems Committee of N.A.M. 47 pp. 1943.

"Management's Responsibility in the Post-War World," an address by Henry J. Kaiser at the War Congress of Industry. 1942.

"Peacetime Plans of Industrial Companies," a cross-sectional report, prepared by the N.A.M. Corporation Peacetime Planning Committee.

"Preparing Now for Post-War Problems," from a report of the N.A.M. Committee on Post-War Problems. 1942.

"The Post-War Prospect," a series of articles by Wilfred Sykes, chairman of N.A.M. Post-War Committee.

"Testimony to the Future," a cross-sectional report of Post-War Industrial Research. 20 pp. 1943.

Brookings Institution, 722 Jackson Place, Washington, D.C. "Collapse or Boom at the End of the War?" by Harold G. Moulton and Karl T. Schlotterbeck. Business trends following wars, likely conditions at end of this war and economic outlook during first few years after war. 40 pp. 1942. 25c.

A. F. of L. Weekly News Service, Washington, D.C. "The AFL Plan to Banish Fear of Want." A series of proposals, which began with the June 8, 1943 issue of the Service.

United Automobile, Aircraft and Agricultural Implement Workers of America, (CIO) Detroit, Mich. "Post War Program," an extensive program for health, education, security, to be supported by taxes based on ability to pay, increased inheritance taxes, and ceilings on profits and incomes. 5 pp. 1943

American Academy of Political and Social Science, 3457 Walnut St., Philadelphia. "Re-employment and Post-War Planning" by Col. John N. Andrews. An analysis of problem of finding employment for discharged members of the armed forces. "The Annals," pp. 186-192, March, 1942. \$2.00.

Public Affairs Committee, Inc., 30 Rockefeller Plaza, New York, N.Y. "The Airplane and Tomorrow's World," by Waldemar Kaempffert. Public Affairs Pamphlet No. 78. 1943. 10c. "War, Babies, and the Future," by William Fielding Ogburn. Public Affairs Pamphlet No. 83. 1943. 10c.

Simmons-Boardman Publishing Corp., 105 W. Adams St., Chicago. "How to Preserve Private Enterprise," by Samuel O. Dunn. Undesirability of permanent government planned and dominated economy after the war, and what should be done to re-establish and maintain free private enterprise in the United States. 12 pp. 1943.

American Management Assn., 330 W. 42nd St., New York, N.Y. "Population Shifts and Income Changes," by Philip M. Hauser. 1943.

National Planning Assn., 800 21st St., N.W., Washington, D.C. "Urban Redevelopment and Housing." Planning Pamphlet No. 10 containing findings of the Division of Research and Statistics, Board of Governors of the Federal Reserve System. 24 pp. 1942.

"Better Homes—Better Farming," Planning Pamphlet No. 11. Post-war problems of care of the land, use of forests, better farming, better rural homes and community living are discussed. 9 pp. 1942. 25c.

American Society of Planning Officials, 1313 E. 60th St., Chicago. "Blighted Urban Areas and Their Rehabilitation: A Selected List of References." 13 pp. 1940.

American Planning and Civic Assn., 901 Union Trust Bldg., Washington, D.C. "Housing and Blighted Areas—A Report to the NAREB," by Arthur Binns. 3 pp. 1941. "Urban Redevelopment Corp.—A Legislative Victory in New York," by A. C. Holden. 16 pp. 1941.

The Urban Land Institute, 1737 K St., N.W., Washington, D.C. A Proposal for Rebuilding Blighted City Areas. 8 pp. 1942.

"The Present and Ultimate Effects of Decentralization upon American Cities," by Harland Bartholomew. 12 pp. 1940.

Citizens' Housing Council of New York. 470 4th Ave., New York, N.Y. "Economic Study of Thirteen Depressed Districts in Manhattan." 44 pp. 1941.

Surface Combustion, Toledo, Ohio. "Digest of Marketing," a pocket-size publication of which the July-August issue was Vol. I, No. 1. It offers a digest of information helpful in post-war planning by condensing and presenting articles from leading publications, speeches, charts and diagrams, and is a service of the Janitrol Sales Clinic.

Two additional Surface Combustion publications are "The New Peacetime Market" and "Blueprint for Post-War," both reprints in 32-page pamphlet form of speeches made by two company executives. 1943.

National Housing Agency, 1600 Eye St., Washington, D.C. "A Handbook on Urban Redevelopment for Cities in the United States." 1941.

"Bibliography on Post-War Housing and Urban Redevelopment." A mimeographed bibliography which includes most of the significant American and British publications having to do with post-war urban development and relationship of housing programs to post-war rebuilding.

Senate Document No. 65. "Draft in Reverse After the War," by Carl A. Gray. Plan for utilization of Selective Service and its co-operating agencies to aid returning servicemen to find suitable peacetime jobs. 23 pp. 1943. U.S. Government Printing Office, Washington, D.C. Free.

Committee for Economic Development, Dept. of Commerce Bldg., Washington 25, D.C. "Plan Post-War Jobs—Now," a description of national post-war goals and approaches to be used by individual industrial companies in planning to reach such goals. Contains a plan for estimating post-war factory employment in a community. 35 pp. 1943.

"Preparing for High Levels of Employment and Productivity" is another C.E.D. publication.

Department of Commerce, Washington, D.C. "Markets After the War. An Approach to Their Analysis" by S. Morris Livingston. Designed to provide some of the background and perspective so essential to an appraisal of potential domestic markets after the war. 52 pp. 25c.

"Community Action for Jobs and Profits" is a guide for the use of local leaders in working out post-war plans, aggressively putting them into effect. The book includes Guide Sheets to simplify surveys.

National Resources Planning Board. "The Role of the Housebuilding Industry by Miles L. Colean," a pamphlet outlining the opportunities for private enterprise on the supply of housing, some of the obstacles to be overcome and some of the governmental aids which may be needed. 30 pp. 1942. Superintendent of Documents, Washington, D.C., 10c.

Other post-war planning pamphlets issued by the Board before its dissolution are, "After Defense—What?"; "After the War—Full Employment"; "Better Cities"; and "Post-War Planning." Superintendent of Documents. 10c each.

HERE are valuable sources of reference material to help you in your post-war planning. Prices are given where known, but much of the material is free. If you are interested, write the organization named.



**WALLS OF
MONOWALL
MAKE RUSH
JOBS EASY**

DON'T PASS UP bids on essential new construction or remodeling jobs because labor is scarce—or time too short. Armstrong's Monowall helps you solve both problems because it provides a practical, decorative finish for walls and ceilings in one simple—fast—operation.

Monowall saves time and labor because no special preparation of wall or ceiling surfaces is required. Its large boards (up to 4' x 12') are quickly erected with Armstrong's CM-50 Cement to old or new plaster, gypsum lath, wood, or other dry and firm bases. No unusual skill or special tools are needed. Monowall cuts and trims like wood, and is easily fitted into

joint-concealing channels and moldings furnished by Armstrong. Any competent workman can do the job quickly and well, working alone.

There's no finishing to do—and that saves a lot more time. Armstrong applies Monowall's gleaming, durable finish at the factory.

Monowall is designed for modern interiors—both commercial and residential. Its plain colors and scored tile-designs are adaptable to any decorative scheme.

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ARMSTRONG'S MONOWALL

MADE BY THE MAKERS OF TEMLOK INSULATION—SHEATHING, LATH, DE LUXE INTERIOR FINISH

HANDY NOTEBOOK DATA SHEETS

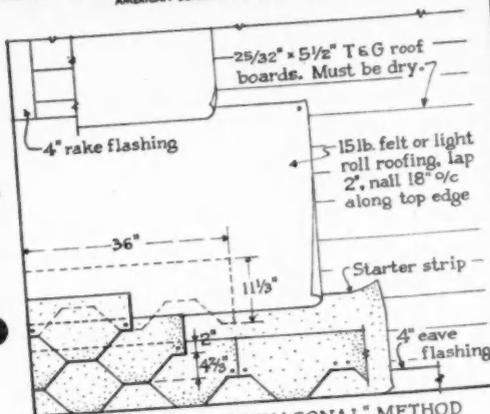
American Builder JOB HELPS

Prepared by
Don Graf

Builders' short cuts, time savers and how-to-do-it ideas shown in convenient 3x5 notebook size for use in office or on the job. A continuing editorial feature appearing monthly. Sheets or notebooks are not for sale or available from any other source than the editorial pages of American Builder.

HOW TO LAY HEX ASPHALT SHINGLES

AMERICAN BUILDER FOR OCTOBER 1943



PLAN SHOWING "HEXAGONAL" METHOD

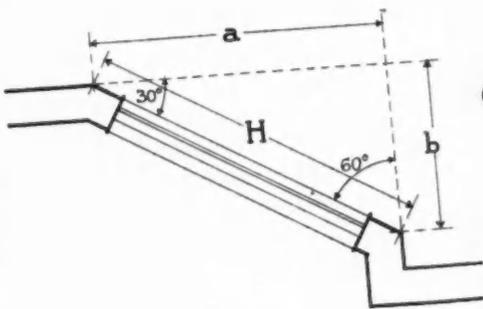
Size of strip	11 1/8" x 36"
Grade of shingles	Standard
Headlap	2"
Exposure	4 1/2"
Weight in lbs. per square applied	167
Number of strips required per square of roof	86
Total area of roofing per square of laid roof	193
Number of nails required per square of roof	344
Average cost per square applied NE States	\$9.75
Average cost per square applied SE States	\$6.35

Hexagonal pattern strip shingles are more vulnerable to driving rains than square tab shingles. They should always be laid with an underlay material and should never be applied to roofs of slight pitch. The best practice is to consider 6" rise per foot of run as a minimum slope. The flashing at the eaves should project 1/8" to 1/2" beyond the edge of the roof boards to form a drip.

BUREAU OF STANDARDS REPORT BMS73

HOW TO FIND SIDES OF 30-60° BAYS

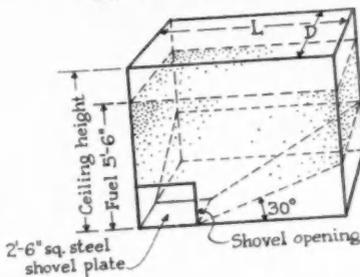
AMERICAN BUILDER FOR OCTOBER 1943



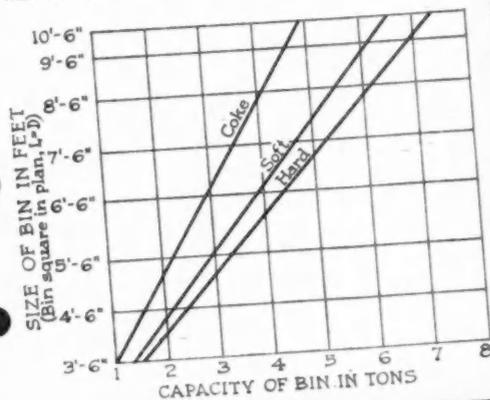
b	a	H	b	a	H
1'-6"	2'-7 3/16"	3'-0"	2'-10"	4'-10 7/8"	5'-8"
1'-7"	2'-8 15/16"	3'-2"	2'-11"	5'-0 9/8"	5'-10"
1'-8"	2'-10 5/8"	3'-4"	3'-0"	5'-2 3/8"	6'-0"
1'-9"	3'-0 3/8"	3'-6"	3'-1"	5'-4 1/8"	6'-2"
1'-10"	3'-2 1/8"	3'-8"	3'-2"	5'-5 13/16"	6'-4"
1'-11"	3'-3 13/16"	3'-10"	3'-3"	5'-7 9/16"	6'-6"
2'-0"	3'-5 9/16"	4'-0"	3'-4"	5'-9 15/16"	6'-8"
2'-1"	3'-7 5/16"	4'-2"	3'-5"	5'-11"	6'-10"
2'-2"	3'-9 1/16"	4'-4"	3'-6"	6'-0 3/4"	7'-0"
2'-3"	3'-10 3/4"	4'-6"	3'-7"	6'-2 1/2"	7'-2"
2'-4"	4'-0 1/2"	4'-8"	3'-8"	6'-4 3/16"	7'-4"
2'-5"	4'-2 1/4"	4'-10"	3'-9"	6'-5 5/16"	7'-6"
2'-6"	4'-3 15/16"	5'-0"	3'-10"	6'-7 11/16"	7'-8"
2'-7"	4'-5 11/16"	5'-2"	3'-11"	6'-9 7/16"	7'-10"
2'-8"	4'-7 7/16"	5'-4"	4'-0"	6'-11 1/8"	8'-0"
2'-9"	4'-9 3/16"	5'-6"	4'-1"	7'-0 13/16"	8'-2"

HOW TO PLAN A FUEL BIN

AMERICAN BUILDER FOR OCTOBER 1943



The bin with a corner opening provides somewhat less capacity than the center opening bin for the same floor area. Starting with a 2'-6" square shovel plate and extending the size in both length and width by 1 foot at a time we get the capacities shown in the chart. EXAMPLE: A bin 6'-6" square trimmed to 5'-6" will hold 2.9 tons of coke, 3.9 tons of soft coal, or 4.4 tons of hard coal.





"You can take it from me, baby, because I've seen a lot of roofs in my travels. You're landing in a snug berth . . . your home's got a new Certain-teed roof!"

Doctor Stork's right! For a bright, new Certain-teed roof is a sure sign of a well-protected home . . . weathertight, shipshape, and snug! And Certain-teed Shingles are mighty pretty, too . . . come in good-looking colors and blends. And wear? They're "Millerized"—super-saturated with moisture-proof asphalt—then heavily coated with mineral granules.

But most important, they're fire-

resistant—carry the Fire Underwriters' Approval Label. That means greater safety!

HOW ABOUT YOUR ROOF? Need a new one? Act now! Winter's on the way! Our Government urges everybody to keep homes in good repair. And there's plenty of Certain-teed Shingles available.

FREE Booklet! New Roofs for Old!
The wartime way to give your home a new lease on life—economically with Certain-teed Asphalt Shingles. Write to Dept. B-5, Certain-teed Products Corp., 120 S. LaSalle St., Chicago, Ill.

DON'T FORGET, we've only BEGUN to fight!
★ See the thing through! Buy War Bonds! ★



CERTAIN-TEED

BUILDING PRODUCTS

There's No Priority on Making Friends!

Call it "goodwill advertising" or "V-Day insurance"—the Building Industry has a job to do *now* . . . making friends (and customers) for *Tomorrow!*

That's why Certain-teed advertising keeps at it this Fall in American Home, Better Homes & Gardens, Country Gentleman, Successful Farmer . . . selling Certain-teed for you to millions in an unforgettable way!

**CERTAIN-TEED
PRODUCTS CORPORATION**

120 South La Salle Street
Chicago 3, Ill.



War Housing Items from the CAPITAL

By Frank W. Cortright

Executive Vice-President, National Association
of Home Builders of the United States



ADVISORY GROUP FORMED:

For the first time in the history of this, the second largest industry in the country, a committee completely representative of all phases of the industry has been formed. It is composed of twenty-two presidents of professional, contracting, subcontracting, home building, manufacturing, distributing, financing and real estate associations. At the suggestion of certain officials of the War Production Board, the United States Chamber of Commerce assembled this group, and Mr. E. P. Palmer, Chairman of the Construction and Civic Development Department Committee of the United States Chamber of Commerce serves as its chairman.

MEETS WITH WPB: On Wednesday, September 15, this committee and a number of prominent labor officials met with Arthur Whiteside, Vice Chairman of Civilian Requirements, and Mr. Joseph Keenan, Vice President of Labor Production of the War Production Board.

LABOR PRESENTS CASE: The presidents of a number of labor unions representing the various trades of the construction industry spoke for an early relaxation of existing restrictive orders and better use of available manpower. It is estimated that nearly 600,000 men will be released from construction activities during the next six months. In that many of these are totally unsuited for war plant work, it was urged by Labor that they be employed either in maintenance and repair work in the plants, or in non-war construction.

L-41 STANDS: As Vice President in Charge of the Facilities Branch of WPB, Mr. Johnson dispelled whatever optimism may have previously existed as to an early modification of L-41. In a clear-cut statement this official made it very plain that until our production of ships, planes, guns and tanks was equal to the needs of the armed services, his division would not approve of any major relaxations. On the other hand, he agreed that maintenance and repair must be kept at a full level to preserve the civilian economy, particularly insofar as public health and safety are concerned. There has been much loose talk according to Mr. Johnson, regarding

the easing up of critical materials and manpower in some areas. Unfortunately, most of this is inaccurate, he believes, and recent optimistic statements as to civilian construction being permitted are as yet unwarranted.

L-41 BEING REWRITTEN: It is a matter of public knowledge that this primary restrictive order is now being rewritten, but we are informed that the major objective is merely that of clarification. Hardship cases—construction permitted to take

FLASH!—As we go to press, word is received that the House has just passed the FHA bill (H.R. 3291). We are informed that it was approved in the following form:

(A) **TITLE VI** increased by \$400,000,000 and extended to July 1, 1945.

(B) **TITLE I** extended to July 1, 1947 and amended so that FHA has the authority to increase the insurance premium from the present charge of three-fourths of one per cent to a full one per cent if deemed advisable.

(C) **TITLE II** was extended to July 1, 1946.

care of such things as replenishing fire losses, or in instances where a particular hardship is imposed, will be taken care of. Procedures may be liberalized in the case of war housing projects under \$10,000, or where the amount of metal applied for does not exceed 2,000 pounds of steel and 100 pounds of copper. Finally, it is hoped that the various amendments to L-41 will be codified and spelled out so that somebody else besides a Philadelphia lawyer can understand it.

\$400,000,000 FOR TITLE VI: Breaking all records for fast action, Congressman Steagall's Banking and Currency Committee, in a two hour hearing, unanimously agreed to report this important measure to the floor with the recommendation for immediate passage.

NHA JUSTIFIES REQUEST: In addressing the Steagall Committee, Administrator Blandford presented his case in his usual thorough and masterful fashion. Supplementing his testimony, a complete summary of the present status of the war housing program was given to each committee member. The total war housing program for the year July 1943 to July 1944 calls for 925,295 accommodations, of which 560,000 must be found in existing private structures, the remainder to be provided by construction or conversion. Of the family units to be built, it is contemplated that 176,295 will be erected by private enterprise and 164,095 temporary units will be built with public funds.

CONSTRUCTION, 1944 PROGRAM:

Of the 181,202 units estimated to be built by private enterprise in the fiscal 1944 war housing program, 81,702 have already been assigned to specific localities and 99,500 will be assigned before the close of the fiscal year. With this proposed program added to the war housing already underway, it will mean that private enterprise will have constructed, either by conversion or new building, approximately 1,060,000 family units. The total program of publicly financed construction is approximated at 660,000 family units, mostly TDU's, dormitories and trailers.

PRIVATE CONSTRUCTION:

In explanation of the request for \$400,000,000, the basic premise is that FHA will continue to insure in the future, as it has in recent months, 85% of all privately financed construction. The average insured value per unit is expected to be \$4,100.00. This average compares with a figure of \$3,468.00 for Title VI insurance already written, and \$3,929.00 under outstanding commitments. There is clear evidence in recent applications that costs are rising as shown by average application figures in July of \$4,354.00. By allowing an appropriate reduction of 6% from applications to value of insurance written, FHA arrives at the estimated average cost of \$4,100.00.

LOSSES UNDER TITLE VI: The National Housing Agency is closely watching development of the Title VI insurance fund. It will not, of course, meet any real test until the post-war period. However, it is possible to calculate now that accumulated reserves (after deducting all past and anticipated future administrative expenses) added to the \$10,000,000 originally placed in the fund, will pay all losses involved in foreclosures up to 11 3/10 per cent of cases insured. This would permit the foreclosure of about 33,000 of the 300,000 cases insured before the government would be asked to contribute any further money.



The home of the future will use a lot of aluminum in its construction. That's an "educated" prediction. As a result of war work more designers and manufacturers than ever before are now accustomed to working with aluminum. They are anxious to utilize its many advantages.

Look at the rapid progress aluminum windows were making before the war took them off the market. Their easy operation, weathertightness and fine appearance sold them then, and they continue to keep home owners happy. Many a family buying war bonds to apply on a postwar home has mentally specified "Aluminum Windows".

Thresholds and doors, made of aluminum, can successfully combat the conditions that make the going so tough for materials now used. Colored aluminum offers exciting possibilities for trim and other decorative uses in the home of the future. It doesn't take much imagination to visualize many places in which strong, durable, attractive aluminum can be used to advantage.

Remember, in considering aluminum, you can think in terms of lower costs than ever before. On ingots, aluminum is 25 per cent lower than in 1939. New manufacturing techniques and large quantity production have already lowered prices for all fabricated aluminum products. ALUMINUM COMPANY OF AMERICA, 1940 Gulf Bldg., Pittsburgh, Penna.



ALCOA ALUMINUM



Reg. U. S. Pat. Off.

The Building Industry— Key to Private Enterprise

(Continued from page 75)

prise the local building industry for that community. We should keep in mind that building is national in scope but local in application.

There are representatives of the realty group to provide land, brokerage and management services. They are from the ranks of 120,000 real estate brokers, agents and land-development firms, not including an uncounted army of individual land owners.

Financing needs of the industry are provided by approximately 7,000

savings and loan associations, mortgage bankers and life insurance companies that employ approximately 20,000 persons, not including another uncounted small army of individual investors.

An architectural group, consisting of architects, designers and draftsmen, numbers 120,824.

We might next briefly consider some uncounted miscellaneous groups whose members are only partially dependent upon construction. They include various utility services involving the providing of water, gas, electricity and telephones, the surveying of land, building of streets, and transportation. Legal services are provided by title

examiners, those who issue title insurance, and by county recorders. Miscellaneous and protective services include the issuing of fire insurance policies, workmens' compensation, building inspection, and selling.

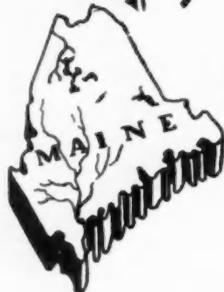
Production, distribution and consumption of building materials and equipment require huge manpower. The accompanying partial list of manufacturers who produce for the building industry shows 20,325 establishments that employ 866,731 persons. Distribution facilities are provided by 126,154 retail and wholesale establishments that employ 488,505 persons. The products made and distributed by these two groups are consumed by an army of more than a quarter million building men.

Add them all together and we find that private building can provide from four to six million post-war jobs. Next to agriculture it is the greatest and most diversified employer of manpower in the nation. A busy private building industry means that the sound of the hammer and saw is heard throughout the land. It means the building of new homes, the creation of new, taxable wealth. It means smoke in factory chimneys, loaded freight cars on the rails, loaded trucks on the highways, loaded ships at sea. It means payrolls in plants and offices. It means crowded shopping centers and ringing cash registers in retail and service stores. In short, it assures that economic enigma known as post-war prosperity.

Have You Heard?



THE FAMOUS "SCRATCH-TEST" CHANGED THE FLOOR BUYING HABITS OF MILLIONS BY PROVING THE DURABILITY OF "BRUCE-WAY" FINISH AS COMPARED WITH ORDINARY FINISH!



THE BRUCE STREAMLINE FLOORING LAID IN THE PAST 3 YEARS WOULD BE ENOUGH TO FLOOR EVERY HOME IN THE STATE OF MAINE!

UNIT-WOOD BLOCK FLOORING AND STREAMLINE FLOORING ARE THE TWO MAJOR IMPROVEMENTS OF THE PAST 25 YEARS IN THE HARDWOOD FLOORING INDUSTRY. BOTH ARE BRUCE PRODUCTS.



Private Enterprise Can Rebuild Blighted Areas

(Continued from page 104)

purpose of acquiring real property for development, redevelopment, or for reconditioning of an area, or for reservation for future planning and redevelopment of municipalities or metropolitan areas is conditioned upon the existence of a planning agency, a master plan, a land use plan, plans describing the project area and proposed development, and restrictions on the use of surrounding property to protect the economic value and social benefits of the project area.

After provision for public uses, such as schools and recreational spaces, a municipality under this proposed legislation must lease the remainder of the project area in its entirety to a qualified corporation, or to a public housing authority, for a period of not more than 30 years. Thereafter leases are renewable after reappraisal and adjustment of rentals. These advances evidenced by income debentures and bearing 2% interest, would be secured solely by rentals from the leased property. Payment on the loan would be made semi-annually and applied first to the interest. No time limit is established for repayment of advances.

Governor Stassen in his housing
(Continued to page 126)

AND AFTER THE WAR... Bruce Streamline Flooring will be back, for you to lay in thousands of new and remodeled homes! Bruce wood technologists and chemists are working *now* on better hardwood flooring for the future. You may be assured that the outstanding floors of tomorrow — as those of today — will be products of E. L. Bruce Co.!



BRUCE

Factory-Finished
STREAMLINE HARDWOOD
FLOORING

A PRODUCT OF E. L. BRUCE CO., MEMPHIS, TENN.

**J-M Dealers and Contractors
are supported by a National
Radio Program that has the
LARGEST AUDIENCE OF
ANY NEWS PROGRAM
ON THE AIR!**

Since December 29, 1941, we have reached millions of people every evening, Monday through Friday on a coast-to-coast C.B.S. Network, and at the best listening time of the entire 24 hours... 8:55 P.M. Eastern War Time. No other news spot has as large an audience.

This powerful national advertising program is constantly winning new friends for Johns-Manville and J-M Dealers. It brings to your prospects and customers five minutes of the latest news, followed by news of Johns-Manville... interesting facts about our company and our products. And most important of all, it reminds them that the J-M dealer is headquarters for building materials and building service in their community.

Week after week, this popular J-M news program goes on reaching farmers and city people, business men and housewives... from Maine to California. It has this one major objective: to build greater and greater values in the Johns-Manville name as a merchandising and consumer selling asset for you, both now and in the post-war period.

**Johns-Manville
BUILDING MATERIALS**



**TUNE IN: 5 minutes of
news brought to you by
Johns-Manville, Bill
Henry reporting. C.B.S.
- 8:55 P.M. E.W.T.,
Monday through Friday.**

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proposals, states, "The first concern of government in the post-war world should be to create a favorable environment in which free enterprise by its inventiveness, its management, its mass production and its distribution can make the greatest possible contribution to the standard of living of the people.

"This would mean first that government should use its powers of condemnation to acquire suitable areas of property for housing developments and then sell these areas at modest cost to private enterprise for redevelopment of low cost housing. Government would thereby, in the initial stage, furnish a subsidy roughly comparable to land grants to railroads when they needed help in developing the vital

transportation systems of this country.

"In co-ordination with these grants of real estate, government should condemn areas of slums, clean out the buildings entirely and make parks and wide arteries for travel.

"Government should guarantee occupancy of approved projects of low cost housing units and at the same time permit their direct rental and direct sale. To the extent that government must make good on its occupancy, pensioners, those receiving old-age assistance and those receiving welfare allowances, would be placed in living quarters much better than those they now occupy. Government is now paying that rental bill in any event. Government could also assist similar programs in area development, in the na-

ture of modernizing and improving some existing structures."

The legislation passed by Maryland, Wisconsin, Kansas, Missouri, New York, Illinois, Michigan and Kentucky give cities the authority to make it possible to assemble land in deteriorated areas, even by condemnation if necessary, for private rebuilding. While many of the present state laws farm out to private redevelopment companies the authority to condemn land for rebuilding and rely upon private credit to finance the land assembly, the Maryland and Wisconsin Acts provide this be done by the city for reconveyance to private builders. All states except Maryland require the setting up of a specially constituted redevelopment corporation to carry on the rebuilding. Maryland would permit private builders as such to qualify.

While various government proposals and state acts point the way to clearing land in blighted rural and urban areas for private redevelopment, one of the main obstacles in the way is the method whereby properties in slum areas can be appraised.

Absorbing Devaluation

Appraisal of slum properties will be the subject of a special article in a subsequent issue, but here is one method of saving that should be noted.

Much of the difference between the cost of acquiring blighted area sites and the value of redevelopment projects could be absorbed by the difference between the interest rates on federal government obligations and the interest paid by private land development corporations. The federal government lends a municipal corporation \$1,000,000 to buy a blighted area which has an economic resale or leasehold value of only \$500,000 to a private redevelopment corporation. The municipal corporation, however, might have to pay only 2% interest on the \$1,000,000 loan from the federal government, or \$20,000 a year, while it might lease the land to the private redevelopment company for 6% on a \$500,000 valuation, or \$30,000 a year, which would be sufficient to pay the interest and amortize the principal of the government obligation on a long term basis.

It has been estimated that there may be as many as seven or eight million residential quarters in blighted areas today. The cost of rebuilding the slums in American cities is in the neighborhood of \$50,000,000,000 or more. The very magnitude of the problem, instead of causing despair, should give rise to hope. Employment opportunities large enough to sustain prosperity are anticipated. Some economists have indicated that this would require a national income as high as \$140,000,000,000.

Well aware of its responsibilities, various segments of the private building industry have advanced proposals designed to aid private development or redevelopment of blighted areas.

Mortgage bankers, life insurance of-

(Continued to page 128)



"Giving it the GLUE GUN"

HERE'S the operation that's saving critical nails, speeding construction and developing new structural strength in hundreds of different wartime building jobs today . . . laying down a ribbon of Laucks Construction Glue with a Laucks Glue Gun.

This operator is making a floor assembly for army overseas housing units. The plywood floor will be affixed on top of this insulated frame section in another moment . . . making a rigid, stressed cover assembly that can "take it" in transportation and in service.

It's just another example of applying more than 20 years of gluing

knowledge to a specific construction problem . . . the kind of practical "know how" that's made I. F. Laucks, Inc., the world's largest manufacturers of water-resistant and waterproof glues.

Investigate what Laucks Glue and Laucks counsel can do for you . . .

I. F. LAUCKS, Inc. Lauxite Resins — Lauxein Glues

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• Don't forget, LAUX REZ, the pioneer resin sealer and primer, protects wood as rust-proofing protects metal.



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Consult LAUCKS—America's Glue Headquarters

magic...? or logic?



Pressure of 1700 tons changes the basic materials of natural wood — cellulose and lignin — into perhaps one of the most versatile materials serving America's war industries today. This unique material is Masonite Presdwood.**

NO MAGIC. But much logic! Simply, it is this: Wood's strength comes from its lignin-locked cellulose fiber. But in the tree the fiber lies in parallel layers, making for uneven strength. *Interlace* the fiber, lock it together with pressure in its own cement-like lignin, and the product will be strong in every direction!

The Masonite process starts by exploding hardwoods and softwoods, leaving the cellulose undamaged and the lignin intact. The resultant fibrous mixtures, of varying degrees of plasticity, are then reassembled . . . far stronger than wood . . . subjected to different heats and tremendous pressures . . . thus producing Masonite Presdwoods.

These hardboards are easily worked. They can be bent, and machined with

accuracy on wood-working tools to almost any shape or contour. Their glass-like smooth surfaces provide for perfect painting with regular paints, baked-enamel finishes or lacquers.

Masonite ligno-cellulose hardboards now serve in more than 500 different war uses, releasing quantities of rubber, steel, aluminum and other strategic materials for other vital purposes. There's

little left for civilian purposes today. But these versatile hardboards will be plentiful in peacetime for your buildings . . . for sturdy exteriors, walls and ceilings, furniture, cabinets, counters and hundreds of other jobs. Masonite Corporation, 111 W. Washington Street, Chicago 2, Ill.

*Trade-mark Reg. U. S. Pat. Off. "Masonite" identifies all products marketed by the Masonite Corp.
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MASONITE PRESDWOODS



THE LIGNO-CELLULOSE HARDBOARDS

(Continued from page 120)
 ficials, commercial and savings bankers dislike public housing in any form. Some are interested in developing formulas for the direct ownership of rental housing projects, but are against making heavy public expenditures for such purposes.

Savings and loan associations propose a plan whereby associations may pool their funds and invest them directly in rental housing projects, and redevelopment corporations, owned outright.

Realtors, architects, city planners and certain financial interests, having the support of municipal officials, propose the granting of federal loans to urban communities to be used to ac-

quire property in slum and blighted areas, for resale or leasing on a reduced basis to private redevelopment corporations, or public housing authorities for the reconstruction of the areas in accordance with master city plans. These operations are to be aided by mortgage financing, equity investments, yield insurance, and housing subsidies.

The Committee on Post-War Reconstruction of the American Institute of Architects proposes that architects and others should study problems relating to city planning, such as problems in finance, taxation and assessment methods, zoning and land use legislation, building code revisions, construction costs and how they can be cut.



**THE
THICKER
...THE
BETTER**

INSULATION TESTS conducted at the University of Minnesota, and reported at the semi-annual meeting of the ASH&VE, June 8th, 1943, proved that, within reasonable limits, the thicker the insulation, the better. Of course 3 $\frac{5}{8}$ " is the practical thickness for walls; and 4" is normally recommended for ceilings.

Another point developed was that there is no difference in the insulating value per inch of thickness of Mineral Wool, whether installed in ceilings or walls.

Furthermore, the cost per inch of Mineral Wool decreases with the thickness . . . demonstrating, once again, that the thicker, the better.

A copy of the report mentioned above may be obtained by enclosing 6 cents in stamps to cover postage and mailing with a request, to the address given below.

**NATIONAL
MINERAL WOOL
ASSOCIATION**

1270 Sixth Avenue

New York, N. Y.

Builders in general want a continuation on a liberal basis of the elements that comprise the program of the FHA, including some war housing features. They want generous appraisals, no down payment requirements, lease option arrangements, 25-year loans. Some builders want to continue the plan under which builders will promote and own garden projects containing rental units.

Thoughtful consideration should be given the private industry plan produced by Frederick M. Babcock, M. A. I. In presenting his Yield Insurance Plan, which was published in full in the October, 1942, issue of the Appraisal Journal, he outlined a plan "B," designed to provide low rental housing in blighted areas of cities where the costs of land acquisition, rebuilding, and rentals available, were disproportionate.

Under this plan, local corporations were to be created to acquire sites in blighted areas, wreck the existing structures, plan rental housing projects, erect new structures, rehabilitate old structures, and own and manage the properties thereafter. Such corporations would have the power of condemnation.

Capital from Sale of Stock

Capital could be secured by the sale of common stock shares only, to the public and to trustee investors. Corporations would not be permitted to mortgage properties, nor to create any form of funded indebtedness.

Total cost incurred, up to the completion of the project, would be ascertained, and if approved would become the "established assessment." Allowable costs would embrace all actual outlays including actual interest paid during construction, provided such interest was at a rate not in excess of 3 $\frac{1}{2}$ % per year.

The FHA (after amendment of the National Housing Act) would accept such projects any time prior to commencing construction or rehabilitation for yield insurance, provided minimum standards were complied with.

Yield insurance for this purpose would consist of a guarantee of a yield of 3 $\frac{1}{2}$ % per annum on the amount of the "established investment" which remains invested in any year. If a project in any year were to earn less than 3 $\frac{1}{2}$ %, the FHA would pay in cash immediately, upon verification of the claim, the difference between 3 $\frac{1}{2}$ % and the amount actually earned.

Accounting for this purpose would reduce the original "established investment" on a straight line basis at the rate of 2% per year of the depreciable portion of the original investment—the total investment exclusive of land.

Earnings in excess of 4 $\frac{1}{2}$ % would be devoted in the order named to (1) expenditures for needed or desirable improvements, repairs, maintenance and alterations; (2) accumulations in a reserve for the foregoing purposes.

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ON YOUR "M Day"...

Welcome home
COMPANY "A"

There is coming a day of unparalleled opportunity when men and women, having fought and worked for a way of living, set out freshly to enjoy it. Their

needs, and your plans to meet these needs, will shape a new America. You will be ready.

Simplifying your task and enlarging as never before your ability to provide comfortable, healthy and attractive homes, Case designers and engineers will be ready with many developments—among them Case Lifetime plumbing and heating equipment.

It is yet too early—much still must be done to win the war—for us to discuss in detail all that we hope to have ready on your "M day." But when that day comes you can be sure that the quality associated with Case products for over 90 years will be on people's minds. And you will surely be able to supply it.

W. A. Case & Son Mfg. Co., Buffalo.



90 YEARS
1853
CASE
1943
OF SERVICE

CASE LIFETIME BATHROOMS HOT WATER SYSTEMS

Don't Relax—Back the Attacks!

(Continued from page 128)

the total of such reserve not to be allowed to accumulate to more than 7½% of the original established investment, and (3) payments to the FHA as additional premiums (really a penalty for failure to reduce rents).

There would be no direct regulation of rents by FHA but management supervision might be provided for.

The total benefits collectible under the plan would be limited to 14% of the original established investment. That is, when the aggregate amount of paid claims equals 14% of the original established investment, additional claims could not be collected from the FHA, and the insurance would cease. No claims would be collectible after

20 years from original date of insurance.

The FHA would collect an annual premium amounting to ¼ of 1% of the portion of the established investment remaining unrecaptured in each year: that is, the premium amounts to 7.1% of the coverage (¼ of 1% divided by 3½%).

Although, as this review indicates, government and industry have already interested themselves to a large extent in the problems of redeveloping blighted rural and urban areas, there is still much work to be done.

For example: codes regulating the subdivision of land should be made liberal enough to allow the planning of interesting variations in neighbor-

hood patterns. The standard rectilinear plan increases the cost of constructing streets and the cost of installing utilities, as well as increasing the cost of maintenance.

Old fashioned detailed building codes preventing the use of new materials, appliances and apparatus, should give way to a newer type of flexible regulation which would apply to all cities, towns and villages in the state.

Both federal and state government taxing policies are exerting an adverse effect upon real estate, particularly with reference to large scale redevelopment of blighted areas. Corporate and individual owners of real estate are taxed on the basis of earnings in addition to the taxes levied on real property. This earning tax exerts an adverse influence on economies that would be possible through large scale operation. As a result, holdings are kept split up and equities are kept small because interest on indebtedness is a legitimate deduction from income, whereas amortization is an out of pocket disbursement on which an income or a franchise tax must be paid.

Ignoring the problems that prevent private enterprise from successfully tackling the rebuilding of blighted areas on an economic basis, public housers simply accept these problems as being inherent in the profit system, and instead of bucking the line, attempt to go around the ends, with special privileges and subsidies blocking the way. The fact that they have been thrown for an economic loss on every play is submerged in a jumble of language carrying the familiar ring of the backfield man's complaint that "the line didn't hold," the line in this case being "private enterprise."

Housers Depend on Business

For public housers are dependent upon private enterprise and expect to show a saving in the following ways:

(1) They expect "tremendous sums of private capital to be attracted to the task" of slum clearance; (2) they expect to obtain "lower utility rates" for their projects; (3) private contractors submitting the lowest bids are expected to keep costs down and do the best work; (4) lower prices are expected from the manufacturing industry on large quantities of materials; (5) financing costs are expected to be lower when borrowing from local private interests; (6) furthermore they expect private interests to pay the taxes that pay for the projects, and (7) at the same time not try to drive too hard a bargain when land owned by private interests is being devalued.

Now that is the "seven-man private enterprise line" that public housers need for their "gains," but they want a great many more "blockers" in the backfield (in the way of privileges and subsidies) than private enterprise ever has. They have had:

Free garbage and trash removal; street improvements, water and sewer main installations furnished by the city; fire, police and health protection;

(Continued to page 132)



SPACE-SAVING: Both machines on one steel stand, compact. Has big capacity.

MONEY-SAVING: Cost of additional motor saved, running cost is generally lower.

PORTABLE: Used anywhere in the shop — moved easily to suit your convenience.

DELTA Saw-Jointer Combination

speeds up production

...saves space, time, money

This rugged, big-capacity production unit may be used by one man or two — no interference between the saw and jointer machines. Eliminates waiting — saves time—cuts costs. Delta's Combination Unit provides both machines in minimum space—gets the work out faster, pays for itself in a short time and shows big profits thereafter —reflects credit on your choice. Precision-built, safe, satisfactory. See this machine at your Delta distributor's—inquire about priorities and deliveries. Mail the coupon for new Delta catalog.



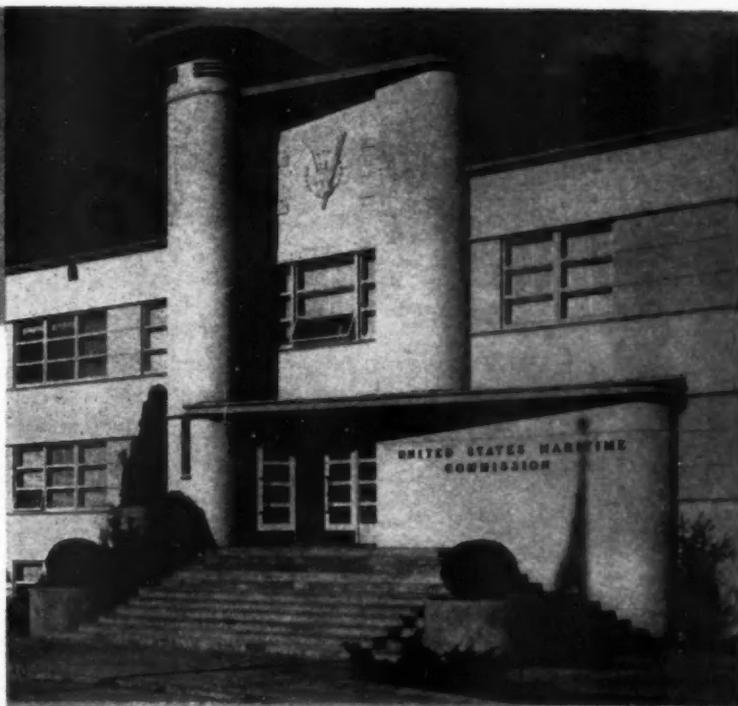
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714 E. Vienna Ave., Milwaukee 1, Wis.
Please send information on Delta's Saw-Jointer Combination and other low-cost Delta Woodworking Machines.

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Company.....
Address.....
City.....(.....) State.....

BUFFCO

PLYWOOD - DOORS

War industry factories, barracks and hutments, airplane engine crates, forms for concrete structures, assault boats and pontoon bridges . . . these are but a few of the many war demands for BUFFCO products . . . and these are the reasons why BUFFCO plywood and doors have been unavailable to the normal channels of civilian trade. We know that you wouldn't have it otherwise until victory is won. When that time comes BUFFCO products, backed by over 30 years of manufacturing experience and tested by severe uses in the war, again will be ready to serve your every building and construction need.



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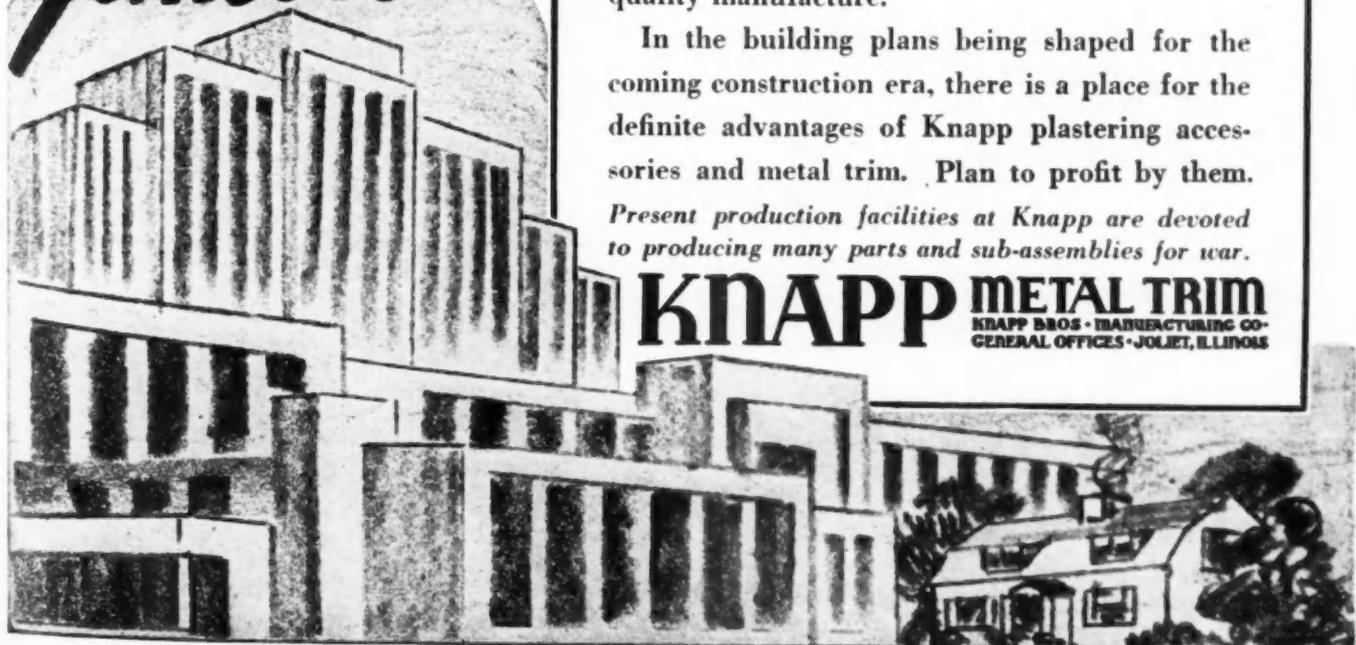
New York
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FOR THE BETTER BUILDING OF

Tomorrow



THE better structures of tomorrow will include products of proved quality and design. You will find Knapp Products among them, for they have become the standard of comparison through years of constantly sound design and quality manufacture.

In the building plans being shaped for the coming construction era, there is a place for the definite advantages of Knapp plastering accessories and metal trim. Plan to profit by them.

Present production facilities at Knapp are devoted to producing many parts and sub-assemblies for war.

KNAPP METAL TRIM
KNAPP BROS. MANUFACTURING CO.
GENERAL OFFICES - JOLIET, ILLINOIS

★
They thank their
LUCKY
STAR



★ Last winter, during the fuel shortage, many home owners thanked their lucky star that had led them to install Donley Heat-Saver Fireplaces. These Heat-Savers met the fuel crisis by supplying the radiated heat of a conventional fireplace plus a large volume of circulated heat from the warm air chamber around and above the firebox.

Contractors who install Donley Heat-Saver Fireplaces are not only guarding against fuel emergencies but are also providing plentiful heat for cool days in spring and fall.

**Comfort and Convenience
for Postwar Homes**

No matter how small the postwar home, it should be provided with the comfort and convenience obtainable through Donley Devices such as coal chutes, package receivers, mail receivers, fireplace equipment, etc. Write today for a copy of the latest Donley catalog featuring Donley Heat-Saver Fireplaces and other Donley Devices.

THE DONLEY
BROTHERS COMPANY
 13910 Miles Ave. • Cleveland 5, Ohio

(Continued from page 130)

snow removal services; tax exempt property; and in at least one case reported the city auditor collected the rents, city water-works workmen made minor repairs at the project, and the city's wholesale powers were extended to the local authority.

Look at Federal Subsidy

But if private building is to really look at the blighted area problem with an eye to improving on public housing, then private building should look at the Federal subsidy granted Housing Authorities. Here is the way that works:

The Authority can make a contract with FPHA for 90% of the amount of capital needed for the project. It must pay interest to the government of $\frac{1}{2}\%$ more than the Federal going-rate-of-interest (for instance 2% plus $\frac{1}{2}\%$, which would total $2\frac{1}{2}\%$).

The Authority can start construction on the FPHA contract which is a government guarantee to pay.

It can borrow money on short term notes at $\frac{1}{2}$ of 1% (making a post-dated note with the Federal Government to take up the loan), but instead it can, through advertisement, arrange another short-term note and pay off the original note, continuing the loans.

Also it can sell long term 15-year or similar bonds with rate of interest at about 1.9%. When this is done, it must set up a special fund—Debt Service Fund—to repay bonds coming due and interest.

If rent, minus operating expenses, does not equal the payments for the year needed to pay interest and amortize the debt (repayment of bonds and interest) the government will grant a subsidy up to an amount equal to the going rate of interest (2% in this case) plus 1%, or 3% total.

By law, the project must pay off the capital investment in 58 years, but some are paying off in 45 and 43 years.

If the authority were paying $2\frac{1}{2}\%$ on a government loan as used in this example, there would be an annual charge of $3\frac{1}{4}\%$ ($\frac{3}{4}$ of 1% plus $2\frac{1}{2}\%$) on the original capital loan in order to pay off the loan in 58 years.

The point is that a housing Authority cannot afford to remain financed on short-term notes of approximately $\frac{1}{2}$ of 1% interest for two reasons. One, interest rates may go up; and, two, there can be no set program for paying off the original capital investment, for not enough money is taken in rent to pay off in 58 years.

The authority should, therefore, finance by selling long-term bonds as soon as possible. But to do this the Authority must use the annual federal subsidy of (in the example used here) 2% plus 1%, or 3% of the original capital cost, or at least that part of the subsidy needed to amortize the debt.

Actually, then, if the government advances the full subsidy shown in the example at 3% for 58 years, the effect is, that the government has advanced to the project on each one million dol-

lars of original capital a sum of \$1,740,000. The original capitalization, however, is considered paid in full, and no further subsidy is given, but of course no refund or interest is attached to the subsidy of \$1,740,000 for each \$1,000,000 which has been loaned originally.

If the capital for the project can be obtained from sale of bonds to private industry and individuals at the low rate of 1.9% (instead of from the government at a higher rate of interest) then several years can be cut off the amortization period of the original loan and likewise off of the period of subsidy. If for example 13 years could be cut off, then if the Authority used the entire subsidy of 3% (in our example) for 45 years, the amount of the subsidy for each million of capitalization would be \$1,350,000 which would represent a saving of \$390,000 on each million of original capital loaned, but which would still leave the taxpayer out about \$1,350,000 per million of capitalization.

One of the reasons these housing bonds can be sold at a low rate of interest (1.7% up to 2%) is because the investors rely upon the security of the Federal Government's promise of a subsidy. But the Federal Government by law cannot grant the subsidy unless the local government (state) contributes an amount equal to at least 20% of the subsidy.

Why Tax Exemption Is Used

Tax exemption of the property upon which these projects are built has been relied upon year after year, because when a State legislates that a certain classification of property is tax exempt, it cannot change its decision to affect projects, retroactively, without some bond holder questioning the constitutionality of the new ruling in court. Therefore, tax exemption has been considered proper evidence that local government will contribute its 20%, thereby obligating the national government to contribute its subsidy, which in turn secures the bond investor's money.

It is obvious that the Wagner Bill, Governor Stassen's plan, and Babcock's Yield Insurance Plan, are aimed to enable private builders to rebuild rural and urban blighted areas at a great deal less than the present government methods of operation. If under the Wagner Bill, cities assembling slum properties, and counties in rural areas assembling slum properties, really devalue the land sufficiently to allow private builders to build units that can be rented at \$12 to \$15 a month, then the plan will work.

It is believed, however, that in the case of actual slum clearance where the building industry is supposed to build low cost housing, some form of subsidy will be needed. Perhaps tax exemption of the low cost project will be sufficient. Perhaps it will be necessary to subsidize the tenant, as was indicated in the *American Builder*

(Concluded on page 134)

A little Carrara Glass

MAKES A BIG DIFFERENCE IN A BATHROOM



To give a bathroom the smartness and personality which appeal so strongly to home-buyers and home-owners, you don't have to use a lot of Carrara Glass. It's not always necessary to wall a bathroom with Carrara from floor to ceiling. No need to wait till building restrictions are lifted before you modernize bathrooms with Carrara.

No . . . you can give bathrooms a tremendous amount of added appeal . . . now . . . with just a little Carrara. A 16-inch base around the room

. . . walls for the tub recess . . . a splash-panel behind the washstand . . . these are sure-fire beautifiers. And all three together, in an average size room, can be done for less than the present modernization limit permits!

Carrara won't check or craze. It won't absorb odors. It won't stain or fade. It stays good-looking permanently. It's easy to clean. And easy to install. Nine attractive colors to choose from. These practical considerations recommend Carrara as much as its beauty.

Remember, in any type of home, even a little Carrara in the bathroom goes a long way to give it eye-appeal, whether you're doing modernization jobs now or planning new construction later.

Send the coupon now for complete information about Carrara and the many ways it can be used effectively and inexpensively.

"PITTSBURGH"

stands for Quality Glass and Paint

CARRARA

The modern Structural Glass

PITTSBURGH PLATE GLASS COMPANY

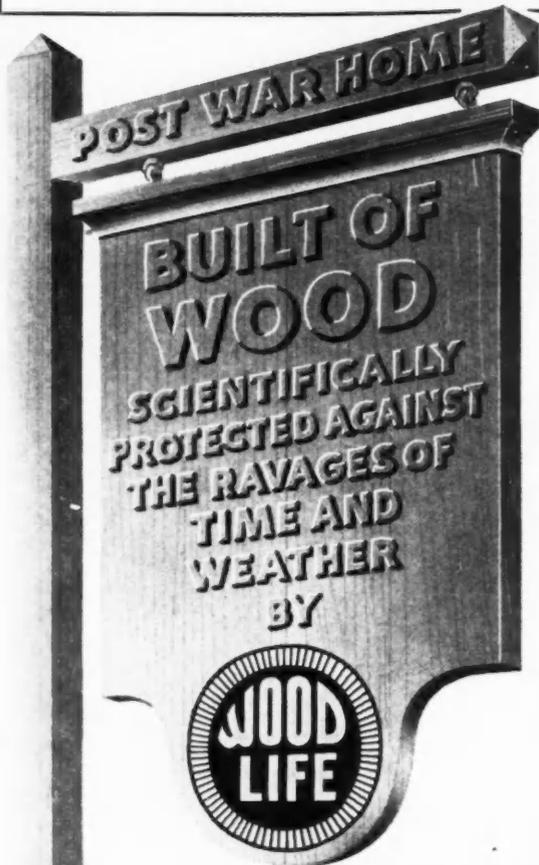
Pittsburgh Plate Glass Company
2094-3 Grant Building, Pittsburgh, Pa.

Please send me, without obligation, free literature on Carrara as follows: (Please check)

..... Full-color booklet "How to make Bathrooms and Kitchens Better Looking."
..... Complete facts about Ready-Built Carrara Glass Panels.

Name.....
Address.....
City..... State.....

RIGHT AROUND THE CORNER



WOOD

windows and doors that do not swell and stick or shrink and rattle

WOOD

panelling and mouldings that do not develop open joints and cracks

WOOD

cabinets in which doors and drawers will always operate easily

WOOD

flooring of lifetime beauty that does not buckle in summer and show cracks in the heating season

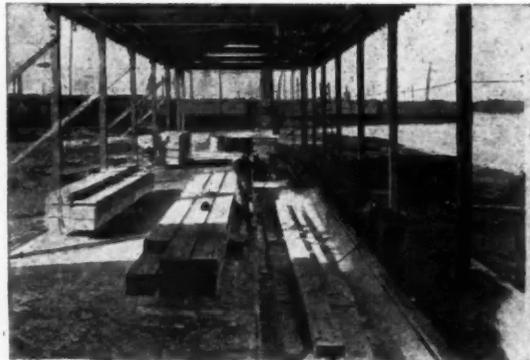
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framing lumber that termites and decay will not bother

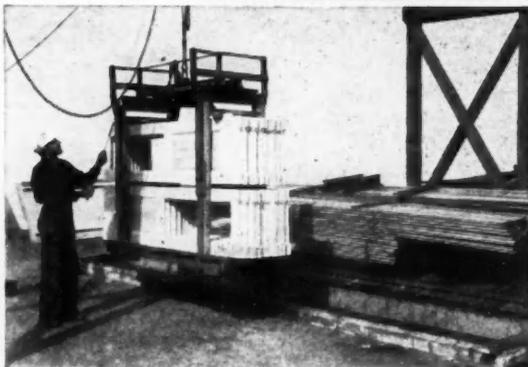
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shingles that will not curl and crack

American mills, with equipment like this, are ready everywhere to treat lumber and wood products for Post War homes—as they now treat for war uses with



**WOODLIFE
TOXIC WATER
REPELLENT**



- ★
- ★
- ★
- ★

Protection Products Mfg. Co.

Mfrs. of PRESERVATIVE SOLUTIONS for **21** Years
Research Laboratory and Plant KALAMAZOO, MICH.

(Continued from page 132)

plan first published in April 1939 and reprinted in this issue on page 105. Certainly for rural rehabilitation of blighted areas, the plan of enabling the tenant to own his own home rather than to rent his home, is the least expensive in the long run and carries with it the greatest development of character stability.

The problem of urban slums is somewhat different. It is probable that the land cannot be devalued to a point where many individual homes could be built on that property. It is more probable that apartments or row houses of some kind must be rebuilt upon slum property. In this case rental property is perhaps the only answer.

It is, however, up to the private building industry to do something about housing the sub-marginal population. Industry is going to pay for the housing anyway, and if it allows the government to go too far in paying for this housing, through taxation, private industry may find itself with a new type of monopoly on its hands: The monopoly of the consumer. It may find itself with only one customer, the government.

* * *

LETTERS—

(Continued from page 7)

in the FHA discussion of Messrs. Upson and Hardinge in the August issue.

When I see FHA insuring in 1943 the full 1942 selling price of certain houses in this vicinity (and the 1942 loans were on the basis of the entire actual cost of the property, and doubtless included a profit to the builder in many instances), one with my training can hardly be blamed for thinking how surely a private insurance company would become insolvent when the real estate cycle turns downward as it has done with such regularity in the past.

In the Savings and Loan business it takes the savings of several savers to equal the amount of the average home loan. For every borrower who has been saved a little interest by the FHA, four or five savers have been penalized. Yet our government is supposed to be based on the greatest good for the greatest number.—F. R. PEAKE, President, Community Federal Savings and Loan Association.

A timely need

Littlestown, Pa.

To the Editor:

Could you give us any information on what has been done or what is being planned in regard to building units outside towns and cities for factory workers where each family has a plot of ground to raise food, etc., for their own use?

We are interested in the type and make-up of the units, and what results have been obtained from actual experiments.—NEVAEH A. CROUSE, I. H. Crouse & Sons.



P A R S O N S

Pureaire

K I T C H E N S

More Comfort per Dollar...

IN POST-WAR HOMES

When Johnny comes marching home he'll marry Mary and they'll start house-hunting. The home they'll be able to afford will be very little but very well built, compact and convenient. Not a middle-sized house squeezed together. More like a modern apartment expanded.

No space wasted on a separate kitchen! Instead, a beautiful complete, all-steel Pureaire set into the big living room wall. Ready to cook the finest meal you ever ate. And whisking every whiff of cooking odor, heat and vapor away into the outer air.

Thousands of housewives already O.K. Pureaire. Investigate! But remember—none for sale till Victory.

TRAVERSE BAY MFG. CO.

(Affiliated with The Parsons Co.)

15000 Oakland

Detroit, Mich.

VENTO

This symbol of the finest in Steel Basement Windows and pleasant, profitable dealer relationship, will take on even greater significance when post-war plans, now being consummated, are put into effect.

**BUY
WAR
BONDS**

Already operations have been moved to a more central location to provide better, faster shipping and much larger production facilities. Product improvements now on the boards will again pace the industry and the complete line will contain the finest steel sash for every conceivable purpose. You can count on VENTO, just as soon as war restrictions are lifted, to give you the type of products and service that spells maximum profits in any man's language.

VENTO STEEL PRODUCTS CO.
600 WEST 41ST STREET, CHICAGO, ILL.



Here are the
NEWEST MEMBERS
 OF THE
PERMA-GLOSS FAMILY

32" x 18"
 Two Compartment
 Flat Rim Sink
GENERAL CERAMICS CO.

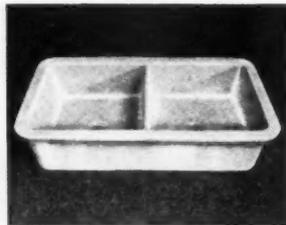
30" x 18"
 Flat Rim Sink
GENERAL CERAMICS CO.

These latest additions to the Perma-Gloss line of Kitchen Sinks and Trays fill a long-felt need. Born in war time, they are not "War-babies" in the usual sense of the term, as they are designed for permanent homes. Mounted in kitchen cabinets, they will grace the most streamlined post-war kitchen.

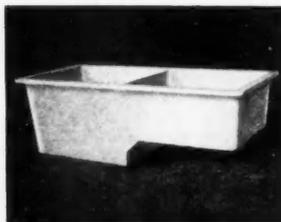
FOUR TYPES OF PERMA-GLOSS KITCHEN SINKS



B-551—"Perma-Gloss"
 Flat Rim Sinks — 3 sizes
 20"x18", 24"x18", 30"x18"



B-534—"Perma-Gloss"
 Two Compartment Flat Rim Sink
 Size 32"x18"



B-571—"Perma-Gloss"
 Flat Rim Sink & Tray Combination
 Size 42"x20"



B-520—"Perma-Gloss"
 High Back Sink
 Size 24"x20"

Perma-Gloss Sanitary Ware, is made from carefully selected clays ... fired at a high temperature with a layer of vitreous china glaze. It is an homogeneous, durable body of uniform strength covered with a brilliant, lustrous surface that is acid and stain *proof* — not merely acid resistant. There's no paint or glaze to peel off — no iron to rust. Uniform wall thickness throughout assures a craze and dunt proof product with a body that will withstand thermal shocks.

Write now for full details.

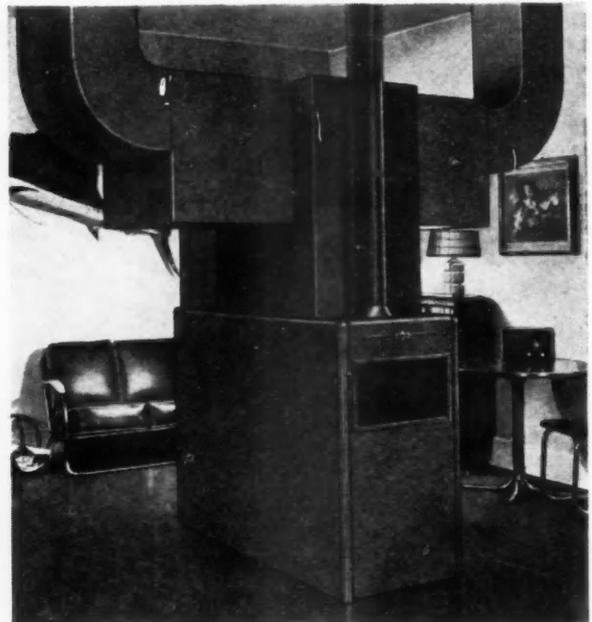
General Ceramics Co.
SANITARY WARE DIVISION
METUCHEN, NEW JERSEY

1947

Action Started on

ANTICIPATING a tremendous post-war expansion of the market for air conditioning, Servel, Inc., has developed a new gas-operated unit combining all the functions of complete air conditioning, including winter heating and summer cooling, in one simple unit. It was previewed at the Waldorf-Astoria, in New York City on Aug. 25.

Although public introduction of the new air conditioning unit cannot be made until after the war, as the company is now entirely converted to war production, Servel officials stated that distribution, advertising and sales promotion plans are now being discussed with utility outlets so that adequate personnel can be trained to sell, install and promote the product.



COMPLETE air conditioning in one simple unit, developed by Servel.

George S. Jones, Jr., vice president in charge of sales for the company, is also in charge of Servel's post-war program to enlist the co-operation of gas companies in formulating marketing plans for the distribution of gas air conditioning and other gas appliances soon after peace comes.

Ottinger Announces Big Post-War Expansion for U. S. Plywood

PLANS to expand the production and distribution facilities of United States Plywood Corp. on a nation-wide scale after the war's end have been announced by Lawrence Ottinger, president.

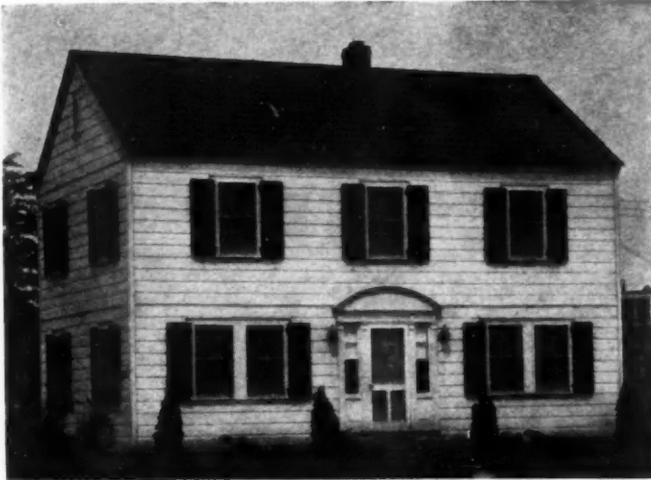
During a visit to the Corporation's Chicago office, Ottinger told *American Builder* that new uses for plywood have created a demand which will enable the company to rehire 500 employees now in the armed services, retain those in plants now devoted exclusively to war work, and hire a great many more. They plan to double the present number of distribution units, which is 15, and open two or three new plants in addition to the eight they have now.

It was also announced that Clay Brown, formerly of Smith Wood Products, Inc., Portland, would take an active part in the company's expansion plans as assistant to the president of the Corporation.

Mengel Plans for Peacetime Building

THE Mengel Co., Louisville, Ky., is striving, through its Post-War Planning Committee, to look ahead to V-Day. Although practically on a full wartime basis, Mengel executives are attempting to make the conversion back to peacetime products as

Post-War Products



EXPERIMENTAL prefabricated house using dry-wall construction.

simple as possible, so that jobs will be ready for men now in uniform and employment will continue at a high level.

In order to explore new uses for its plywood, doors and kitchen cabinets, Mengel built the above prefabricated house, all the wood parts of which were manufactured in its own plants. The house was built under the PHC system, with a dry-wall construction throughout, using Southern Hardwood Mengelbord panels in various designs.

Apartment Heating Competition Announced

THE Minneapolis-Honeywell Regulator Co., Minneapolis, has announced a \$10,000 competition for the best apartment heating designs submitted by contestants. Looking to future markets, a test survey of approximately 1,000 apartment dwellers in New York City, Chicago, Brookline, Mass., and St. Louis, Mo., disclosed that 84 per cent of the people living in apartments believe that it is either necessary or desirable to have their own control over the amount of heat being supplied to their personal living space.

Using a hypothetical six-story apartment building, prizes will be awarded for designs of a system of steam heating and its control, and a system of hot water heating and its control. John E. Haines, manager of space heating controls division, said, "Personalized apartment heating represents the latest advance in apartment design, and after the war will be as common as the electric refrigerator."

Detailed instructions with complete architectural layouts will be provided each contest entrant. Any person, except company
(Continued to page 138)

* * *



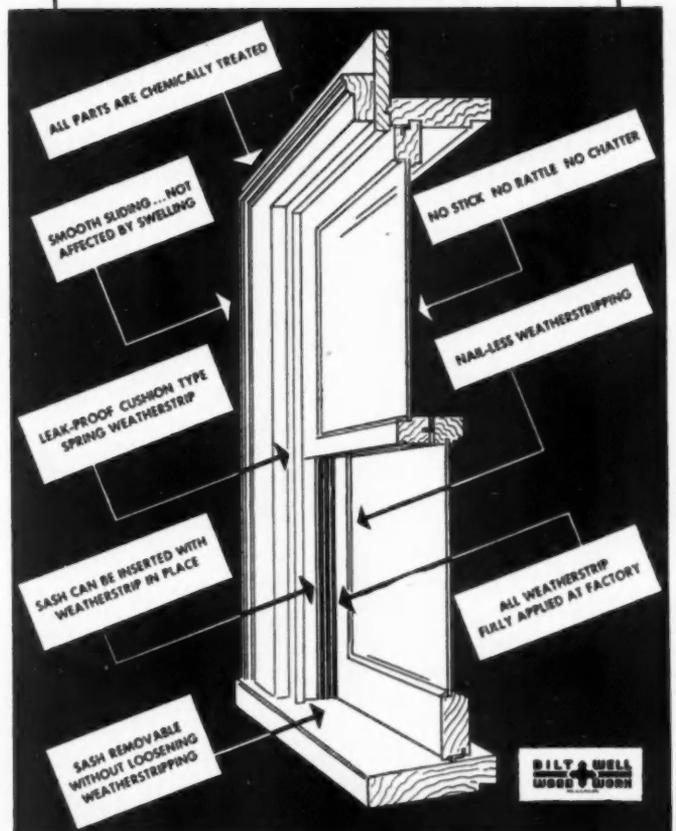
HERE in this country to explore methods of rehabilitation for post-war China. Dr. Yu Lin Hsi, member of the People's Political Council of Chungking, China, and an envoy of Generalissimo Chiang Kai-shek, visited National Gypsum Company's Administrative Offices and gypsum board plant while a recent guest of the city of Buffalo. He is shown here (left to right) with Melvin H. Baker, president of the company, and Yao Tung, mechanical engineer of Chungking

Your

POST-WAR JOB BEGINS TODAY!

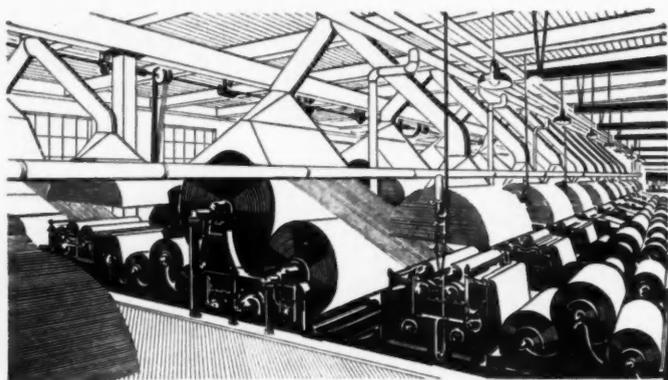
The plans you lay now will be here to stay in the not-too-distant future. You will want to prepare *now* for building *then*. Plan your post-war houses with an eye to the Bilt-Well Superior Window whose sash can be installed or removed without loosening or removing any of the weatherstripping. Bilt-Well exclusively designed weatherstripping—nail-less and applied at the factory—automatically compensates for swelling or shrinking of the window sash. Write now for complete details about the

BILT-WELL SUPERIOR UNIT WOOD WINDOW



CARR, ADAMS & COLLIER CO.

Dubuque, Iowa



Maintenance Men Like This Long-Lived Wolmanized Lumber

FIND A MATERIAL that your maintenance men recommend, and you can be sure that it won't cost you very much for upkeep. Wolmanized Lumber* is that kind of material. It doesn't need much attention, even on the toughest jobs, because it is able to resist decay and termite attack.

TEXTILE MILLS use a lot of Wolmanized Lumber. It is easy to erect in the first place—goes up fast, just like any other wood construction. It provides the resilience so necessary in mill buildings. And it stays up, even though exposed to high humidities and temperatures, conditions that foster decay.

WOLMANIZED LUMBER is ordinary wood made resistant to decay and termite attack by vacuum-pressure impregnation with Wolman Salts* preservative. "Fibre fixation" prevents leaching-out of the preservative. This lumber offers all of the usual advantages of wood—high insulating value, light weight, low cost. It is clean, odorless, and it can be painted.

WAR CONSTRUCTION is taking most of the Wolmanized Lumber produced. Whether for housing personnel or equipment, or for manufacturing plants, wood is speeding completion of these buildings. Wolmanized Lumber assures them of long life. It will do the same for your peacetime construction. American Lumber & Treating Company, 1645 McCormick Building, Chicago, Illinois.

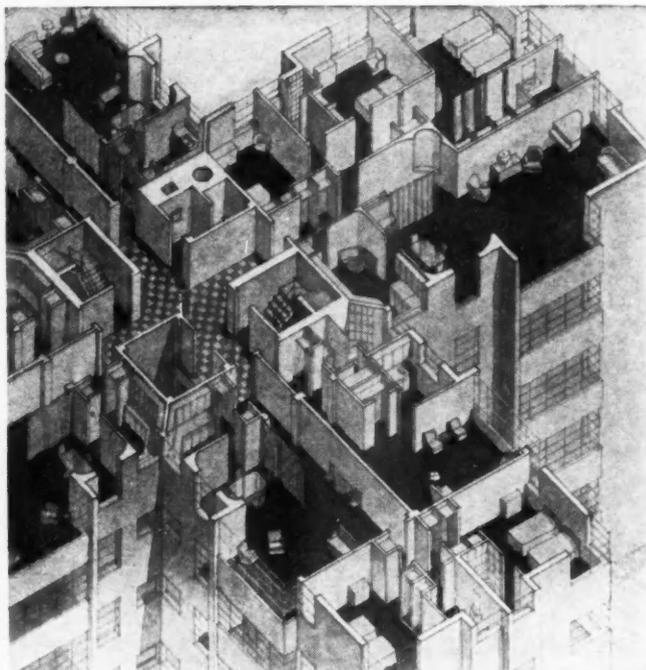
*Registered Trade Marks

"Alloyed" FOR ENDURANCE
WOLMANIZED LUMBER



(Continued from page 137)

employees, may enter the contest simply by writing to the main office in Minneapolis. Separate prizes will be awarded for the best solution based upon a system of forced hot water heating and a system of steam heating. First prize in each group will be \$2,000, second prize in each group will be \$1,000, and third prize will be \$500. In addition, there will be 20 honorable mention prizes of \$150. The jury will consist of a nationally recognized consulting engineer, a nationally recognized architect and a representative of Minneapolis-Honeywell. The contest will be closed Nov. 15, 1943.



ISOMETRIC drawing is basis of M-H apartment heating contest.

Producers' Council Adds Post-War Leaders

TWENTY well known industrial leaders were recently appointed to the Advisory Board of The Producers' Council, the national organization of manufacturers of building materials and equipment, and will play a prominent part in planning for post-war construction to which that organization and other factors in the construction industry are devoting attention.

Westinghouse Activities Look to Post-War

A NEWLY created "Better Homes Department" which will expand the housing activities of the Westinghouse Electric and Manufacturing Co. is headed by Irving W. Clark, associated since 1934 with the kitchen and housing activities at the Westinghouse Electric Appliance Division in Mansfield, Ohio. His headquarters are in Pittsburgh. The immediate function of the new department will be to coordinate the Company's activities in helping to house war workers, though its ultimate objective is to develop post-war housing markets for the contributions which electricity is making toward better living.

In line with these functions, the Better Homes Department will provide a centralized advisory and consultation service for architects, engineers, builders, prefabricators, home owners, and others interested



IRVING W. CLARK

Real Estate Survey Reports Critical National House Shortage

Rush for Post-War Houses Seen

THE war has left the United States short of housing by nearly one million units. Making this national problem even more severe, the demand for living accommodations is expected to increase seriously in 52 per cent of our cities in the next six months.

These are among the outstanding facts shown in reports from 287 cities made to the National Association of Real Estate Boards in its 41st semi-annual survey of the real estate market. Conducted as an objective measurement of where the nation stands on its supply of housing accommodations in the midst of war, first results of the survey announced Sept. 18 by the Association show that there is under-supply of single-family dwellings in 88 per cent of our cities and in 94 per cent of war industry areas. There is apartment shortage in 75 per cent of all cities and in 85 per cent of war industry areas. The under-supply is the most severe known to the nation since World War I.

Real estate boards of the 287 cities and members of the National Institute of Real Estate Brokers and other Institutes of the Association reporting in the survey estimate their local shortage of single-family houses quantitatively as about one for every 132 persons, and the apartment shortage as one for every 171 persons. Projection of these figures indicates that under present conditions of maximum employment we have a national under-supply of 522,385 houses and 403,241 apartments, a total of 925,626 dwelling units. The backlog of demand augurs well for post-war building.

War Housing Somewhat Better; Post-War Needs Grow

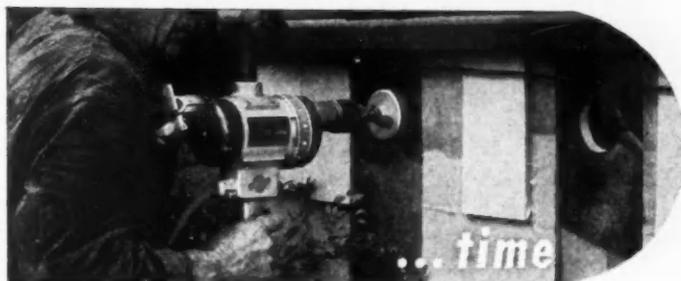
A critically severe shortage must be dealt with in a limited number of war production centers, the survey indicates. "Every house occupied." "No apartments, except where someone leaves the city or enters the armed services," some report, with industries still expanding. But some of the cities that were most crowded in the earlier war period begin to feel that their peak demand has been reached. They say that their supply, while not comfortable, is now adequate or will be when current construction is completed. It is significant that only 37 per cent of the war areas expect the housing squeeze to tighten in the coming six months. Thus we appear to be over the biggest hump in finding shelter for wartime in-migrants, except where change in military requirements causes expansion of industry in new localities. For ordinary civilian housing needs, however, no relief is in sight during the war period.

Real estate boards, preparing for new building when the bans are lifted, are nevertheless watching the situation carefully, lest shortage now become over-supply after the war. The larger the reporting city the more likely it is to report housing shortage. Of cities in the over 500,000 population bracket 95 per cent are under-housed. Regionally the Southwest coast states show most general housing need; 100 per cent of them have a shortage. Next come New England and the Northwest states, where 93 per cent of reporting cities have a housing pinch.

Private enterprise can supply 100 per cent of presently needed war housing if given right conditions, say 69 per cent of the surveyed cities. While new war housing is sometimes excepted, residential rents are insufficient to justify investment in rental housing at present construction costs in 75 per cent of reporting communities, the survey finds.

Wartime difficulty in keeping property in repair is causing depreciation at a seriously rapid rate in 35 per cent of reporting cities. The depreciation has begun to affect structural soundness in 49 per cent of the cities, has much affected it in 5 per cent of the cities. Building equipment has been somewhat affected in 72 per cent of the cities, much affected in 14 per cent of them.

3 TOOLS that save



STANLEY ELECTRIC DRILLS

No. 121 - These compact, sturdy and versatile drills supply the "know-how" quickly in these days when skilled labor is scarce. They speed drilling operations up to 1/2" diam. on wood or metal and are handy for hole-saw work.



STANLEY SAFETY SAWS

No. W8 - Time means money in hurrying up a contract job - and here's a real money-maker. A heavy duty Safety Saw with plenty of power for fast cutting, tilting base for bevel work, duplex handle for easy working in any position.

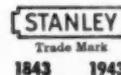


STANLEY ELECTRIC HAMMERS

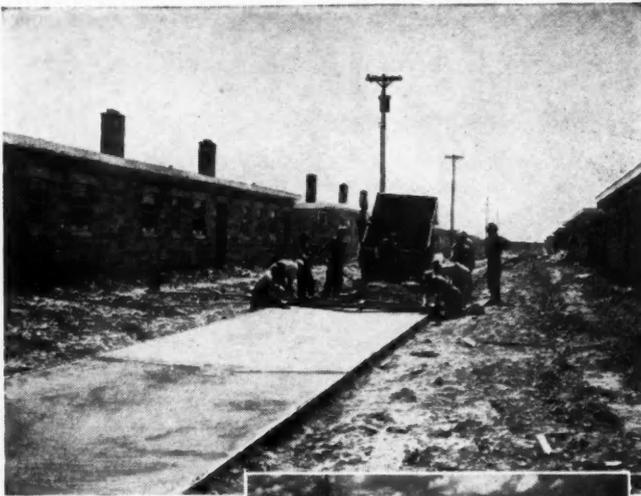
No. 310A - Supply the "extra-man-power" on such normally slow jobs as drilling, chipping and channeling concrete, stone, brick - chiseling wood, tamping concrete - almost any "hammer-action" job. "Free thrown" plunger eliminates hammer-shock.



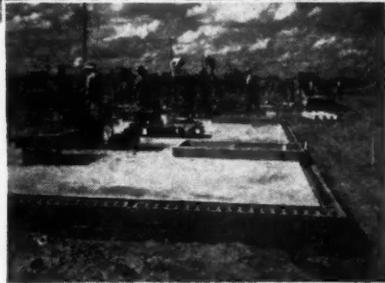
Send for Literature. Stanley Electric Tool Division, The Stanley Works, New Britain, Conn.



STANLEY ELECTRIC TOOLS



Building concrete lane at housing project for Naval Ordnance Depot workers in Nebraska.



Footings and floors in place for concrete masonry homes near Ordnance Depot.

War Construction Still Needs Concrete Men

Expediting the war effort is still the first duty of concrete contractors and concrete products manufacturers.

Needs for war housing, war industry and military camp improvements are not yet satisfied. Facilities for preserving and storing foods for soldiers and civilians are as urgently needed as ever. Farmers still need concrete improvements such as feeding floors, paved barn yards, and sanitary milk houses, which save labor and increase farm production.

- Concrete construction for any of these vital purposes requires minimum use of scarce materials. Transportation is saved because the bulk of concrete materials is usually available within short hauling distance of any project.

Information sheets and "How to do it" booklets have been prepared to help contractors expedite concrete construction for war industrial plants, military posts and farms. These are available on request.

PORTLAND CEMENT ASSOCIATION
Dept. A 10-3, 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

BUY MORE WAR BONDS

New Rural Credit System Needed

(Continued from page 116)

mortgage insurance is provided, private funds should be loaned with consideration for long-range plans for a permanent and sound system of farming and marketing of farm products. This proposal brings up the \$64 question of government control.

The committee advocates a system of private farm lending that is free from political dominance and free from pressure that leads towards socialization or regimentation. It believes that such a combination is possible. Whether such dominance can be avoided depends entirely upon the amount of initiative that is shown by private enterprise. The farm financing need is so widespread and so urgent, the committee believes that a nation-wide system of farm mortgage insurance will have to be established either by extension of present government agencies making direct loans, or through establishment of a government agency providing mutual insurance of privately made loans. The latter course of action quite naturally is preferred.

* * *

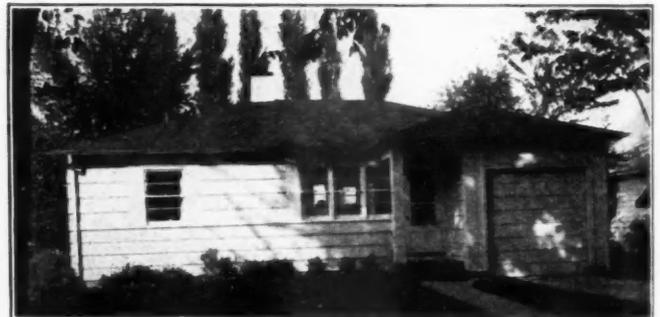
Returning Heroes Want Homes

(Continued from page 79)

tendency is to create a deterioration of the heart of the larger cities which can only be corrected by redevelopment on the basis of fewer people.

Since the bulk of new building in the post-war will be in outlying areas it is apparent that there has been far too much emphasis placed on mass housing. The average American and the returning soldiers and sailors will be more interested in an individual home on a plot of ground in rural surroundings than in mass housing.

The combination of lower home costs, plus larger purchasing power in the hands of buyers will be a potent cause of new home construction. It is estimated that the bulk of post-war houses will be priced at between \$3,000 and \$6,000.



DOOR EQUIPMENT

for the **HOMES of TOMORROW**

"When the lights go on again" there'll be tens of thousands of homes going up all over the world. Help these prospective builders of tomorrow... plan their dream houses to have ALL the most modern conveniences... include over-head garage doors. Whether standard doors be used, or architecturally designed ones made, Frantz "Over-the-Top" Door Equipment can be applied in a few hours, for a few extra dollars, to provide the ultimate in modern garage door operation. Write for information on this and other Frantz Guaranteed Buildware items.

FRANTZ
Guaranteed BUILDWARE

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

Not Post-war, But Right Now

(Continued from page 114)

\$33.6 billion in 1940. With such a depreciation in capital valuation, it is little wonder that these farm owners managed to get along with very little spending for building repairs and production plant enlargements. They spent a minimum all through these two decades and were just getting back into the building market in a substantial way when the present war restrictions and discouragements began to be laid on in the fall of 1941.

The result was that agricultural America was poorly equipped to handle the big war job assigned to it of greatly increasing food production, and of doing it in spite of fewer farm workers and increased costs. We are already paying dearly in rationing, pricing troubles and food shortages for this lack of preparedness on the farm front and for the mistakes in policy that have aggravated the farmer's problems by denying him the building repairs, improvements and enlargements which he needs to do his war job effectively.

Regardless of any other war demands for farm building-type lumber, this food and crop production use must be provided for. The retail yards serving farm trade must be supplied and the farmers given clear cut permission to go ahead. This is an urgent war job for today.

For the post-war period and for that halfway war-interim period when the European phase of the fighting is done and a partial return to civilian service can be made, then this ten billion dollar farm building market looms as probably the greatest single job of the nation under private enterprise to employ returning man power, utilize construction materials and furnish productive investment for the people's funds.

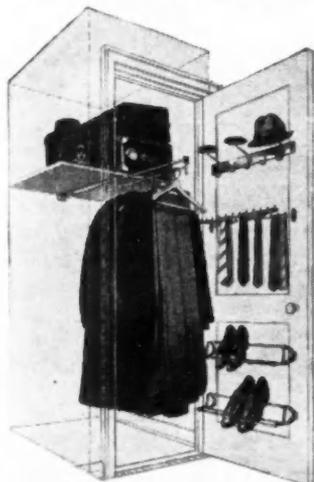
Broad gage policies of regulation, financing and taxation affecting the ownership and improvement of farms should be stressed, both in Washington and throughout the States, and by both government and business leaders. The results will be far-reaching.

Space-saving

K-VENIENCE

Clothes Closet Fixtures

... will be absolutely a "must" in post-war housing, the obvious solution to neglected clothes closets, the demand for more closet space and truly useful, modern fixtures.



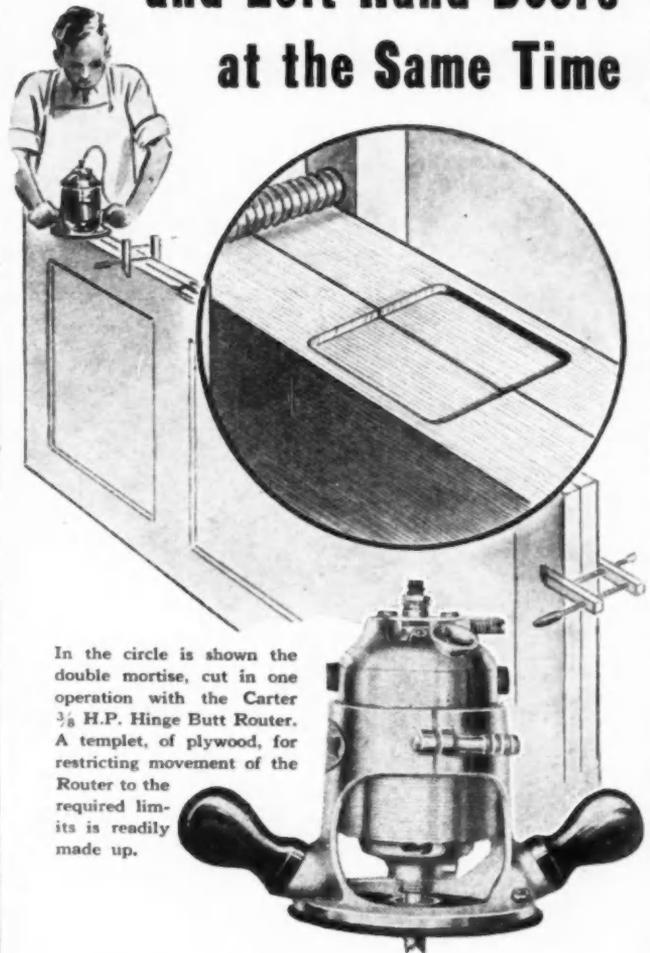
★ They keep all apparel in handy reach, closets neat and orderly. Fixtures for shoes, hats, ties, trousers, skirts, towels, suits, belts, gowns, coats. Tracks, slides and rollers for doors, drawers and shelves.

KNAPE & VOGT MFG. CO.

Dept. M-10
Grand Rapids, Mich.

Photograph Courtesy Architectural Forum

Cuts Butt Mortises on Right and Left Hand Doors at the Same Time



In the circle is shown the double mortise, cut in one operation with the Carter 3/8 H.P. Hinge Butt Router. A templet, of plywood, for restricting movement of the Router to the required limits is readily made up.

A saving in time and money can be made by routing butt mortises in right and left hand doors at one time with a Carter Hinge Butt Router and Templet as illustrated. One left and one right hand door are clamped together. A templet is made slightly wider than the combined thickness of the doors, and the same length as the doors, with two or three openings located in correct position for the butts. These openings permit entry and movement of the Router to remove the wood to the required dimensions of the hinges.

Because of its high speed (18,000 r.p.m.) and easily varied depth adjustment, the Carter Router quickly cuts perfect mortises, smooth and uniformly accurate in length, width and depth. Write today for complete information on money-making Carter Equipment.

R. L. CARTER DIVISION



The Stanley Works
133 Elm Street
New Britain, Conn.

CARTER TIME-SAVING TOOLS

The
Winner
QUALITYBILT
CORNER CHINA CASE



DESIGN FL2429

QUICK SALES—LOW COST

Ideal for today's low cost homes or remodeling. Quality-bilt in every detail. Quickly installed. Requires no recess. Size 2'-8 1/2" x 6'-8" overall. 1'-3 3/4" deep. Prompt shipment from stock. See your lumber dealer or write us. Dept. AB-1043.

Qualitybilt
WOODWORK
REGISTERED



1875 Sixty-eight years of service 1943.
Our modern plant over 21 acres of floor space.

FARLEY & LOETSCHER MFG. CO.
Sash—Doors—Frames—Cabinet Work—Etc.
DUBUQUE, IOWA

Progressive, Liberal Local Financing Needed

(Continued from page 91)

loan or until such time as the loan is 50 per cent repaid. Another constructive suggestion of a slightly different type has been offered by Ben H. Hazen, president, Benjamin Franklin Federal Savings and Loan Assn., Portland, Ore. He points out that FHA Title II insurance has no provision for averting foreclosure of delinquent mortgages. He proposed a simple auxiliary device that would operate much like premium payment loans in the life insurance field. His suggestion is that FHA advance monthly payments upon the borrower's application, charging a rate higher than the mortgage rate to avoid abuse of the privilege. He points out that many foreclosures in time of unemployment could be averted by this method, and lenders would continue to have a safeguarded reducing mortgage. He also advocates a plan whereby a borrower may pay extra amounts at any time, then borrow back his prepayments without new cost for any purpose, whether it be to paint his house or buy a car.

The following article presents some of the problems of post-war financing and expresses the views of spokesmen for various agencies and institutions that make both insured and uninsured loans:

U. S. Savings and Loan League Claims Better Service, Less Red Tape

THE increasing flow of funds into savings and loan associations and cooperative banks which institutions channel practically all of their funds to home lending in peacetime, is building up a backlog of available monthly installment credit at the lowest cost in history, according to the Home Building and Home Owning Committee of the United States Savings and Loan League. The committee estimates that the very first year the war is over these institutions will have available for home loaning, if the demand materializes, at least \$3 billion. This is enough to

LONG LIFE—LOW COST

CHENEY CORRUGATED ROOFING is an important improvement that is fast becoming the No. 1 Roofing material for industrial and farm use.

Thoroughly tested against weather, moisture, heat, cold, smoke fumes, salt air and fire. It weathers to a pleasing gray color and because no coal tars are used, bleeding is eliminated and it can be painted any color desired.

★Meets government specifications and while army and navy are taking most of our production, we still have material for civilian uses.

ALL STANDARD SIZES AND GAUGES

WRITE FOR DESCRIPTIVE FOLDER
CHENEY METAL PRODUCTS CO., Trenton 5, New Jersey
DESIRABLE TERRITORY OPEN TO QUALIFIED DISTRIBUTORS

finance three quarters of a million homes.

A great era of home building and home owning can be realized after the war without assistance, direct or indirect, from the Federal taxpayers, who will be busy paying for a \$250-billion war, believes Ralph H. Cake, Portland, Oregon, president of the League. He urges that the building industry and loaning institutions figure out their part in the great era of post-war ownership "in terms of doing it with our own ingenuity, taking our own risks . . . The post-war world will be a great day for private enterprise because it will require for its rebuilding the things at which private enterprise has always been best."

The United States Savings and Loan League probably is the nation's most active advocate of private enterprise in home financing, although many of its members insure their loans with FHA. Some of its members suggest or advocate other forms of government insurance participation in mortgage lending, but basically the individual members object to FHA activities on the same grounds that builders object to activities of the Federal Public Housing Administration when it comes into a city and erects a housing project.

Builders say that public housers interfere with private enterprise. Savings and loan men maintain that FHA is a tremendous, expensive, and unnecessary government bureau of a type that must be eliminated if we are to restore private enterprise and liquidate non-essential government interference with business. Builders say that public housing projects are built and financed through "hidden costs" that do not show on their books, but which have come out of public funds. Savings and loan men likewise report that FHA has deficits and expenses that do not show on its books, and that \$95,000,000 of public funds have been required and consumed to date. They point out that no private builder or loaning institution could sustain losses such as these government agencies have suffered and continue in business.

Advocates of private financing maintain that the savings and loan associations have provided amortized loans for the past 100 years; that their operations have been tested by

(Continued to page 144)



Almost our entire output is now going directly to the fighting forces.

The things we make have nothing at all to do with bathroom cabinets or with other Lawson peacetime products. We are not sitting up nights over blueprints of postwar products. (Our pre-war products keep us busy enough as it is.)

We very much regret our inability to produce merchandise for you. We need hardly add that we will be back in the business of manufacturing a complete line of bathroom cabinets at the earliest possible date.

But, till the war is over, our job is to contribute what we can toward winning it. That is what we are now doing.

And, unfortunately, we can only do one thing at a time.



The F. H. Lawson Company

CINCINNATI, OHIO

127 YEARS OF LAWSON QUALITY

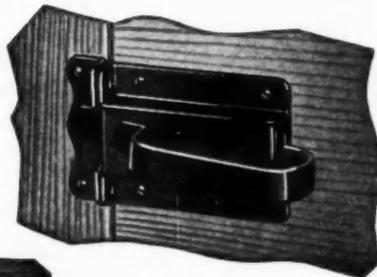
WAGNER

LATCHES THAT CAN BE LOCKED!

DANDY REVERSIBLE No. 847! FOR SWINGING DOORS—POPULAR PRICED.

Center screw covered by latch bar at all times.

Convenient padlock eye for security.



Furnished with back latch to protect door from damage, from wind, etc.

Here is a quickly installed, economical and efficient latch for swinging doors. Fits right or left hand doors without changing spring. Long latch bar permits space up to 5/8" between door and jamb.

WAGNER MANUFACTURING COMPANY

Dept. AB-1043

Cedar Falls, Iowa



Bathe-Rite
SHOWER CABINETS

... using STEEL ... where
STEEL is best ... means greater
**RIGIDITY in BATHE-RITE
SHOWER CABINETS**

THAT'S why there can be no successful "skipping" of STEEL — where Steel is necessary — a fact that the War Production Board recognizes in allowing the 24 pounds used in BATHE-RITE Cabinets.

Project Contractors have reason to know the extra value of Bathe-Rite's Steel Frame construction. For they have found that, while saving time, labor and money in Bathe-Rite's "quick-assembly" features are important, the final measure of value is the strength, sturdiness and rigidity of the finished assembly. . . . Long-life service and complete satisfaction in use.

Today, Bathe-Rite Shower Cabinets are proving their EXTRA VALUE — from every standpoint of easy installation, appearance, convenience, sturdiness, rigidity, long life — in new, remodeled, renovated homes, and in factories, institutions, hospitals, schools. After the war this reputation for quality will be more important than ever — remember Bathe-Rite.

Bathe-Rite "Steel-Framed" Shower Cabinets

Made in two standard sizes to fit all needs. Comply with W.P.B. regulations.

WRITE OR WIRE FOR DETAILS. Give name of project and quantity required, if possible. Delivery assured on any quantity.



Bathe-Rite Division
MILWAUKEE STAMPING COMPANY
827-5 South 72nd Street
Milwaukee 14, Wisconsin

Bathe-Rite "STEEL FRAMED" SHOWER CABINETS

(Continued from page 143)

past 100 years; that their operations have been tested by depressions and that they know what reserves are needed to absorb losses that are inevitable from the risks taken in mortgage lending. They believe that the present FHA reserve is too small in comparison with its insured liability, and that more time is needed to build up a five or ten per cent reserve in order to withstand a depression should it occur. They point out that FHA has operated only on a rising market and has never been tested by a depression. Should a depression occur when reserves are too low, the experience of HOLC in the depression years would seem like a pink tea in comparison with the debacle FHA would be called upon to withstand.

They believe that the question of whether government should engage in the mortgage loan business, or any other business, once an emergency has passed, depends on whether the government agency is a sound business proposition that pays its way, or whether it requires a drain of treasury funds in order to continue its operations. If, for example, FHA operating costs are excessive, its premium should be raised, and then if builders do not care to meet the increase, they should take their own risks and do without FHA.

The savings and loan men give full credit to the management of FHA, which they believe to have been as efficient and effective as can be expected from a government bureau. They believe further that it has helped standardize interest rates, improve appraisal practices and in many instances has raised construction standards. Perhaps the greatest service of all has been that it taught many lending institutions the stability and desirability of amortized loans. In view of their very satisfactory experience with fully amortized loans it is believed that private lenders will continue to make them regardless of whether FHA stays in the field.

Furthermore, there is so much money available and seeking investment that competition alone is expected to be sufficient to keep interest rates at their present low levels for some time. On the other hand, it is pointed out that should mortgage money become scarce and interest rates increase,

PLANNING FOR PEACE
While Producing for War

**PACIFIC
NATIONAL**

FIR



The Pacific National Lumber Company is producing for war,—big timbers for ships, ways and docks, lumber for defense housing and war industries.

When peace comes we are planning to again supply you with high quality lumber for your post-war construction needs.

Our modern mills and huge timber stands assure you of an ample supply.

**DOUGLAS FIR
WEST COAST
HEMLOCK**
★★★★★★★★

**Pacific National
LUMBER COMPANY**
TACOMA, WASHINGTON

private investors would abandon FHA insurance in an instant.

The final measure of any post-war financing service, according to savings and loan men should be its value to builders and borrowers. They point out that where a lending institution is forced to follow government rules and regulations and have its loan serviced in a nearby FHA office, loan applications, inspections and payments to builders necessarily are slowed down. There are plenty of builders who like to talk about the stability of government-insured loans, and plenty of others who object to the red tape and delays that are entailed in servicing insured loans. The advocates of private financing point out that local mortgage institutions whose members are thoroughly familiar with local needs and conditions, and who frequently personally know the financial responsibility and business integrity of all parties involved in a building project can handle loans more quickly and satisfactorily.

Post-war building, according to advocates of private enterprise in the financing field, will need to get things accomplished quickly and efficiently. It will need men of ideas willing to risk their time, talents and money. They point out that savings and loan associations will have \$3 billion and the talent ready to serve post-war borrowing needs of private building.

**What It Is—How It Operates—
What It Will Accomplish**

Yield insurance, like other constructive suggestions for new and improved types of post-war financing, proposes use of government administered insurance protection. Unlike most other mortgage insurance proposals, however, it calls for insurance of a return on the established investment, rather than on the property itself. Still another difference is that it calls for direct ownership and operation of large rental housing projects by private investment groups rather than ownership of mortgages on the projects. It is the housing field equivalent of a large life insurance company owning and operating a railroad instead of owning railroad bonds.

(Continued to page 146)

EXTRA LIVING

Space

AVAILABLE NOW!



Space in Post War homes will be an important item. Waste attic space must be utilized.

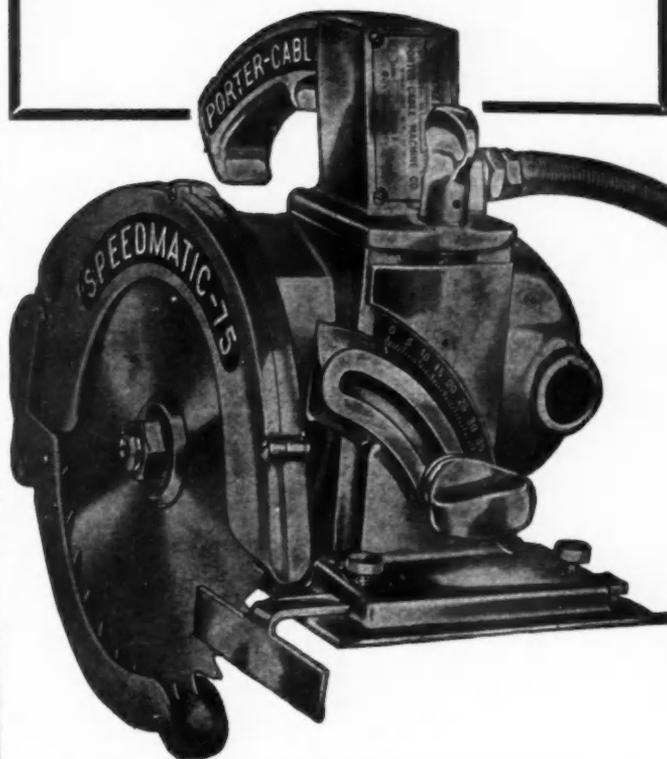
MARSCHKE FOLDING STAIRWAY makes attic space useable. No rafter clearance needed—no obstruction to attic floor—no cables or pulleys—self balancing construction makes **MARSCHKE FOLDING STAIRWAYS** raise or lower so easily that a child can operate them. Easy to install in new or old houses and will increase their value \$500.

Build in attic rooms today for war workers. Plan Post War homes with this convenient—attractive—space saving feature.

Write us for free literature.

THE MARSCHKE CO.
551 University Ave. St. Paul, Minn.

Wartime Rush Work
Shows Why...



Speedmatic

ELECTRIC HANDSAWS

do the hard jobs easier

The strain of long hours on top-speed jobs has cleared the air of a good many points about portable saws. As anyone who has put SPEEDMATIC to the test can tell you—

SPEEDMATIC IS EASY TO USE. The extra wide shoe insures true cuts and effortless guiding. It's the only truly one-hand saw.

SPEEDMATIC IS EASY ON THE USER. Its scientific design makes for perfect balance. The natural position of the handle avoids arm tension and wrist cramping.

SPEEDMATIC IS EFFICIENT. The helical gear drive delivers 11% more of the motor's power to the cutting edge. The blade enters the cut at 7,000 revolutions per minute—so fast it practically feeds itself. No overloading—no stalling.

SPEEDMATIC IS DEPENDABLE. The oversize motor has power to spare. Its strong, protected housing withstands the stress of day-in-and-day-out use on rough-tough jobs.

Write for descriptive folder, or see your dealer or Porter-Cable representative. His name is in the phone book.

PORTER-CABLE MACHINE CO.

1721-10 N. Salina St.

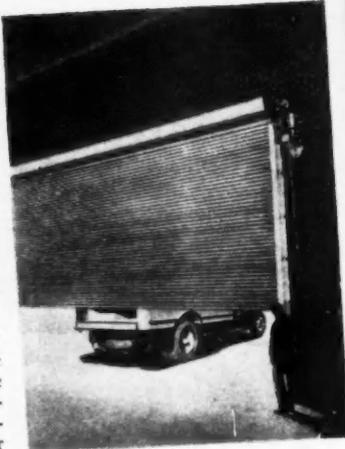
Syracuse, N. Y.

Postwar Planning will still rely on PROVED PERFORMANCE

POSTWAR PLANNING DATA

KINNEAR ROLLING DOORS

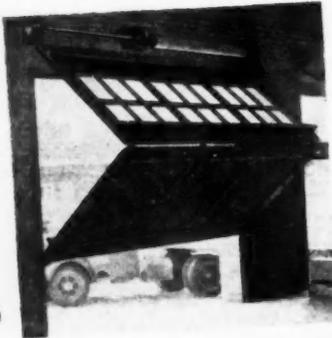
operate with maximum efficiency in minimum space — opening easily and smoothly upward, and coiling compactly above the opening. They provide durable protection against weather, intrusion and damage. They save operating time and effort; reduce installation, operation and maintenance costs. Kinnear Rolling Doors are made of wood or steel, to fit any opening. Equipped for motor or manual operation.



POSTWAR PLANNING DATA

KINNEAR BIFOLD DOORS

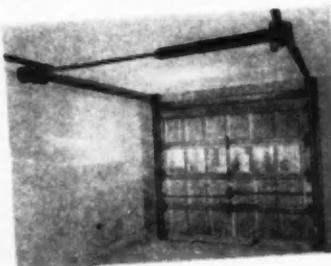
A rugged, quick-acting door of two horizontally hinged sections, with provision for any number of glass panels. Torsion-spring counterbalance assures easy operation. Any size. (Heavier-duty "telescoping" Bifold Doors are also available.)



POSTWAR PLANNING DATA

KINNEAR RoL-TOP DOORS

An all-purpose door; ideal for residence garages. Sections fitted with ball bearing rollers operating in rugged steel tracks. Spring counterbalanced. Has rugged cylinder lock and special "key-stone" sealing device. Any number of light sections. Motor control available.



Write For
Catalog

THE KINNEAR MANUFACTURING CO.
1560-80 Fields Ave. Columbus 16, Ohio

SAVING WAYS
IN DOORWAYS

KINNEAR

ROLLING DOORS

(Continued from page 145)

Under the present system of high-percentages mortgages, money is invested at rates that seek to compensate for rather high speculative risks. The yield-insurance plan advocates reduction of both the risk and the return.

Only qualified, responsible investors such as savings banks, trust estates and life insurance companies would be eligible to own and operate yield-insurance projects, as limited-dividend corporations. Such an investment group would be qualified to build, own and operate medium-priced rental housing projects in cities or suburbs, or to undertake slum-clearance projects, as described elsewhere in this issue. Owners of the project would not be permitted to mortgage the properties or create any form of funded indebtedness. A suitable government housing agency would accept the project for yield insurance, which might consist of a guaranteed minimum return of 2½ per cent a year on an approved total cost.

If in any year during the first twenty years of operation, the project fails to earn 2½ per cent, or whatever rate of return is decided upon, the difference between income and guaranteed return would be paid by the insurance agency. A limit would be placed on the aggregate amount of claims, say 10 per cent of the original cost, to be paid out to the investor. The insuring agents would collect a small annual premium each year to cover administrative costs and to build up a reserve for claims.

The yield-insurance plan, as described, has a number of advantages. It involves government participation in a way that for the first time would make it possible for private enterprise profitably to erect and operate large scale rental housing projects. It would make further public housing projects unnecessary. It would encourage construction of houses and slum clearance projects where they are needed, would provide an attractive and safe investment outlet, and would give the present mortgage lender real control of his investments.

Because of the limited-dividend feature there would be no necessity for rent control or limitations, particularly since



Peace and Plans

for a HOME and comfort are what our boys are giving the best years of their life fighting for. If we wait until they come home before we start tooling up and getting organized to produce a better home, we will be letting them down. It is our duty to stop talking and do something about it.

THE FORD Factory-Built System

of prefabrication now offers you all the benefits of eight years of practical experience in prefabricating Fine Homes, Cottages, Poultry Houses, Etc. FHA-approved designs, technically and time tested. We will furnish complete plans and details and assist in shop layout, enabling you to start right away on essential war work and at the same time prepare your organization to swing into post-war housing without delay using a system that you will be proud to be associated with.

IVON R. FORD LUMBER CO.

McDONOUGH

NATIONAL DISTRIBUTORS

NEW YORK

Adirondack Co., 142 E. 45th St., New York City

income over and above the established maximum is used to reduce the capital investment. It is believed that yield insurance would make new construction activity attractive in time of depression when few other sound investments would be available, and unattractive in boom times when money could earn more in other types of investment.

* * *

Builders Demand Independent FHA

(Continued from page 94)

Assuming that FHA will be carried on in the post-war period, there are several important aspects of its operations in the home building field that should be studied:

1. RENTAL HOUSING. While the American public is overwhelmingly in favor of home ownership, the fact remains that a considerable part are unable, through the nature of their work, or location, to buy a home. Private building industry cannot let rental housing become the sole prerogative of the public housers.

In order to provide well planned, low cost rental housing, FHA should set up a post-war finance plan to encourage entrance of equity investment in this field. A considerable volume of rental housing has been built during the war period under Title VI, some of which may prove to be unsound. Title VI should be restudied to see whether a workable system may not be carried out in the post-war era.

Certain it is, that there are vast sums of money in the hands of insurance companies, estates, individuals, and institutions that will be seeking investment in housing. Through mortgage insurance or yield insurance, some method should be found to bring money into this field. Rental housing, such as is now being built under Section 608 of Title VI, may be made satisfactory as a post-war operation by inducing management firms with sufficient capital to come into this type of project.

(Continued to page 148)

LEADERSHIP reflected in QUALITY



METAL TRIMS trademarked
CHROME DGE

Trademark Reg. U.S. Pat. Off.

The wide preference for B & T Metal Trims trademarked Chromedge is due to *Quality!* Quality in the materials from which they are fabricated—*quality of design*, from the standpoint of both beauty and utility—*plus quality of service* to those who specify, install and use B & T trims. These advantages will hold sway again, when Victory permits B & T to turn from war work to the production of metal trims trademarked Chromedge.

Available

Several shapes and sizes still available from pre-war stocks. Write for details.

The B & T METALS COMPANY
Columbus 16, Ohio

ZIP!

ZIP!

ZIP!

GRAND RAPIDS
Invisible
SASH BALANCE

Time, ever an important factor in the consideration of profits, is now twice valuable in a world where even minutes saved is a pattern of patriotism.

The simplicity, rapidity and ease of the installation of the Grand Rapids Invisible Sash Balance is but one of its more highly commendable features. Its smooth, dependable performance can be emphasized. The ease of tension adjustment, absence of tapes or cables, and the actual invisibility of the entire working mechanism are of primary importance to the contractor engaged in priority installations—and will continue to be in eventual post-war construction programs.

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

Deliveries of Grand Rapids Invisible Balances are governed by government priorities. Send for catalog for full information as well as delivery details.

GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS • MICHIGAN



LOOK HOW EASY to INSTALL ZONOLITE INSULATION

Easy to Sell, too! Remember, Uncle Sam's Helping You

By radio, magazines, newspapers and public speeches, high government officials have lately been urging the insulation of all homes and other heated buildings as a fuel saving measure. This is bound to create millions of dollars worth of insulation business for contractors who are equipped to handle it.

When you use Zonolite insulation, equipment is no problem. No costly, cumbersome blowers are needed to install Zonolite. You simply pour from the lightweight bags. Zonolite is safe and clean to handle. Will not irritate the skin in any way. Once installed it will do its job efficiently—and forever.

Great Rural Market

Because it is so easily installed, Zonolite is particularly suitable for the great rural market where insulation is just beginning to come into its own. Why not look into the great 3-WAY opportunity afforded by ZONOLITE 3-WAY INSULATION? Mail the coupon.

SEE YOUR LOCAL LUMBER AND BUILDING MATERIAL DEALER



3 KINDS OF ZONOLITE JOBS TO SELL



1 GRANULAR FILL INSULATION

Pours as easily as popcorn; complete fill without blowing or tamping; rotproof, vermin-proof, fireproof, virtually non-settling.

2 INSULATING PLASTER

Zonolite Aggregate used in place of sand produces a plaster of less than half the weight of ordinary plaster and with 4 times the insulating value.



3 INSULATING CONCRETE

Zonolite Aggregate used in place of sand and gravel makes warm, dry floors, walls and roofs for farm and industrial buildings.



UNIVERSAL ZONOLITE INSULATION CO.

Dept. AB10, 135 S. La Salle St. Chicago 3, Ill.

Mail Coupon for Complete Details **FREE**

UNIVERSAL ZONOLITE INSULATION CO. Dept. AB10, 135 S. LaSalle St., Chicago 3, Ill.

Gentlemen: Please mail details on items checked. Home Insulation Insulating Plaster Insulating Concrete

Name.....

Address.....

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

(Continued from page 147)
2. FLEXIBLE DOWN PAYMENTS. One of the greatest obstacles to home purchase is the down payment. In England, home volume soared when down payments were brought to 5%. Under the English system, however, the builder leaves part of his profit in the job until a larger equity has been built up by the purchaser.

In the financing of war housing, under Title VI, builders have been permitted to sell a house on a lease-option, or contract basis. Under the flexible provisions of this plan they can collect as much or little down payment as they choose, depending on the character of the buyer. Usually they would collect from \$50 to \$100 as a guarantee of a 30 months' lease. During the 30 months the buyer would contribute a small amount each month to building up his down payment.

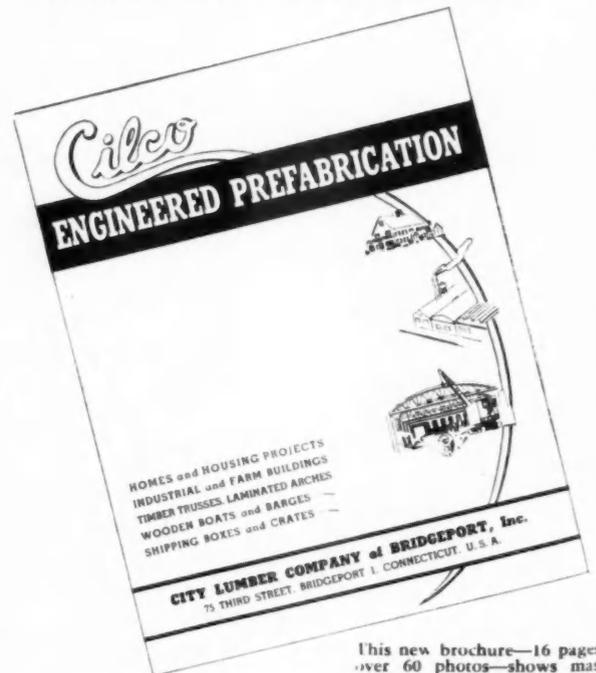
A modified Title VI arrangement to permit builders to sell houses on such a contract or lease option basis, with a flexible down payment plan, has much to recommend it.

Builders have frequently pointed out that there are many prospective buyers who have stable, steady jobs, who never quite get around to saving up a down payment. They list, policeman, fireman, and other civil servants in this class. They say that it has proved perfectly safe to turn a new house over to men of this type with little or no down payment under the system outlined.

Liberal Financing Favored by Builders

3. FINANCING TERMS. Among post-war FHA proposals, the most frequent are those for more liberal financing terms. Since FHA merely insures loans made by private institutions it does not have a free hand in this respect. However, since it appears that there will be an ample amount of funds available in the post-war period, consideration may be given to attempting to drive financing costs down further. Since everytime this is done the monthly cost of ownership of a house is reduced.

Just off the Press!



HOMES and HOUSING PROJECTS
 INDUSTRIAL and FARM BUILDINGS
 TIMBER TRUSSES LAMINATED ARCHES
 WOODEN BOATS and BARGES
 SHIPPING BOXES and CRATES

CITY LUMBER COMPANY of BRIDGEPORT, Inc.
 75 THIRD STREET, BRIDGEPORT 1, CONNECTICUT, U.S.A.

This new brochure—16 pages, over 60 photos—shows mass production facilities for wide range of prefabricated structures.

It's Free—Send for Your Copy Today

THE CITY LUMBER COMPANY
 of Bridgeport, Inc.

75 Third Street,

Bridgeport, Conn.

bringing additional thousands into the market for home ownership. It is favored by builders. In order to encourage low cost home construction the proposal has been advanced that houses under \$4,000 be financed on a basis of a 5% down payment, a 25-year mortgage and a 4½% interest rate. Such terms would go farther toward opening a vast post-war building program.

Another frequent proposal is that houses up to \$8,000 or \$10,000 be financed on a 10% down payment basis instead of the 20% as formerly.

4. QUALITY CONSTRUCTION. FHA has had a sound influence on land planning and better construction. This should be encouraged and increased. A frequent complaint of builders is, however, that the valuation set on houses does not give proper weight to the cost of quality construction nor take into account the extra cost of better land planning. They feel that recognition of such costs should be made, and also that the FHA appraisals should more quickly and accurately reflect changes in costs.

The cost of quality, built-in equipment, such as electric stoves, dish washers, hot water heaters, etc., should be included under the mortgage.

Another criticism of FHA, made by lending institutions, is that when a home buyer gets into distress it becomes necessary for the lender to foreclose or seize the property within 60 days in order to get the protection provided by the FHA insurance. This provision may prove serious in case of a depression when many people could not keep up with payments. It is suggested that a more flexible arrangement be set up so that the owner could have a breathing spell.

Whatever the future development of FHA may be, it is clear that the basic idea behind it—namely a sound national mutual mortgage insurance system, has been proven and will continue. With aggressive and intelligent leadership, FHA could make itself a dominant factor in the post-war task of creating millions of homes and jobs.



with A Mallsaw



MODEL 85
Capacity 2½"

Faster, easier, accurate cuts with an Electric MALLSAW take the arm and back-aches out of fitting storm sash and doors, and assure quicker, better fitting and a warmer building.

- MALLSAWS also Save Time and Effort:**
- ★ Squaring form boards to size above and below grade.
 - ★ Making multiple cuts of like framing members.
 - ★ Fitting interior trim.
 - ★ Cutting openings for windows, doors, registers and ventilators.

4 powerful Models with 8", 8½", 9", 12" blades and cutting capacities of 2½", 2¾", 3" and 4¾" are available on suitable priority.

Literature and prices upon request.

MALL TOOL COMPANY

7737 South Chicago Ave., Chicago 19, Illinois



WHAT
will fireplace units
be like after the war?

What advances will be made in their design and construction?

How will they add further to home comforts?

How will they increase efficiency in home construction?

What new methods will cut their costs of production?

Bennett Engineers have already planned marked improvements... not only in the units themselves, but also in their *services* and *values*. After the war, Bennett Units will be worth more than ever to the builder who wants to *sell* and the customer who wants to *buy*.

BENNETT FIREPLACE CO.
NORWICH, N. Y.



BENNETT
Guaranteed

FIREPLACE UNITS
FLEXSCREENS
CONSTRUCTION SUPPLIES



Here's a truly beautiful door (HM-836) of authentic colonial pattern, made of soft textured, kiln dried, Ponderosa Pine with perfectly proportioned raised panels. A door that can be used anywhere because it harmonizes with all types of architecture.

The stiles and top rail are 4 3/4"; lock rail 8"; mullions 4 5/8"; bottom rail 9 3/4"; height of top panel 9 3/4"; height to top of lock rail 35 3/8". Furnished 1 3/8" with 7/16" thick raised panels or 1 3/4" thick with 9/16" thick raised panels. Usually supplied with Cove and Bead or Ovolo sticking. Doors are smooth machine sanded ready for paint or enamel finish.

Many other patterns of Interior and Exterior Panel and Sash Doors are also available as Huttig of Muscatine has been Door Headquarters for more than 77 years. These include Pine doors with raised panels or laminated flat Pine, Fir, Birch, or Gum panels, as well as veneered doors of Unselected Birch, Plain Red Oak, and Unselected Gum. Ask your Jobber for them or write us when in need of doors.

HUTTIG MFG. COMPANY
Muscatine, Iowa

You can't Buy Better Doors Than Those Bearing the Brand of—Huttig of Muscatine—
"Woodwork of Merit"



Private Building Can Do the Job Best—Boykin

(Continued from page 99)

I view any such Governmental control with serious apprehension.

I find it impossible to get up any enthusiasm for Government in business. I don't know of any conspicuous successes that Government has made in business. I believe in the effectiveness of free enterprise and in its incentives, and I cannot see where State Socialism or State Ownership will look for the incentives to work which free enterprise has furnished in the past and will furnish in the future, I believe, if left free—and that, too, without exploiting any class.

In connection with housing, the Committee on Public Buildings and Grounds has recently completed hearings in which it was evident that private funds had to stand idly by and watch Government agencies build housing facilities when private capital could absorb most of the needs. It is not a good thing. It is not a healthy thing.

The present mood of Congress, and one that in my opinion will increase in the future rather than decrease, is that private capital should be employed in all branches of the Government whenever available. The demand of Congress that a minimum of Government funds and a maximum of private funds be used is a real demand, and one that is here to stay.

The Government can and should assist the building industry, especially in the handling of slum-clearance projects and rehabilitation of blighted areas in our cities and in such other conditions where the entire financial burden cannot be provided by private funds.

The National Housing Agency and its component organizations, during the past 15 months, have made a conspicuous failure in their efforts to keep pace with the war workers' demands for housing. This should be immedi-

MAJESTIC HEATING FIREPLACE
A LIFE-SAVER To Fuel Rationed Users

Although drastically limited for the duration, Majestic Circulator Fireplaces are today demonstrating their true worth as a home heating unit . . . particularly for users in fuel rationed areas. So after VICTORY more and more homes will be demanding the extra heating efficiency and fuel economy of this type of fireplace . . . a fireplace that works like a furnace. And a Majestic will afford you the best buy. It makes fireplace building a cinch! Any style mantel can be built around it, and many exclusive design features and correct proportions insure a perfect operating finished fireplace. Economical, too! In your post-war planning write now for details.



THE MAJESTIC COMPANY

899 Erie Street,
Huntington,
Indiana



BUILDING NECESSITIES

ately corrected and if it is not corrected it could easily become of national concern and inquiry.

This appalling condition is due to a flagrant misuse of power by subordinates and the failure of those in authority to form a proper policy or to have it effectively administered.

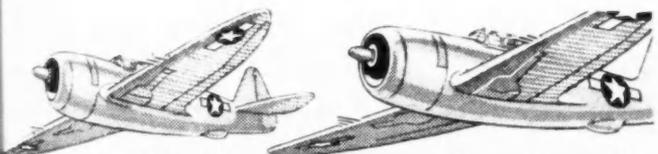
It is almost ludicrous the way National Housing Agency continually reaches out in its quest for power and more power despite its lamentable failure to adequately cope with its present problems. The political maneuvering of those now in control is evidently designed for the sole objective to perpetuate themselves and to continue their activities in the post-war period.

Present NHA Set-up a Mistake

Some of the agencies that now comprise the National Housing Agency never should have been made a component part of that agency and should at once be restored to their former position and allowed to continue their normal function. A striking example is that of the Federal Housing Administration.

The general public, the home owners, and the home builders have had and still have confidence in this agency, whose exclusive function is to insure loans. It has been of inestimable benefit and has been the primary means of providing more than a million homes for our citizens. It is now and always has been headed by competent men of integrity and ably staffed. It was established as an independent agency and placing it under the direction of the National Housing Agency was a vital mistake and should be immediately corrected. It should be restored at once to its former independent status, not hampered by any such direction and not subjected to the inefficiencies and internal jealousies that prevail throughout some of the other housing agencies and which have been singu-

(Continued to page 152)



where "Thunderbolts" come home...

Allith HEAVY DOOR HARDWARE



Returning from their far flung missions, the new long range, high altitude P-47 fighters roll into well-equipped base hangars. Of that efficient equipment, numerous important items are produced directly by Allith. Yes, we're geared up to 100% war production. And we'll be ready to take on your backed up orders — after Victory.

ALLITH-PROUTY, Inc.

DANVILLE, ILLINOIS

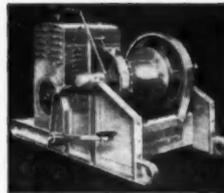
Saves Time, Material, Labor
JAEGER HOISTER and SELF-RAISING TOWER



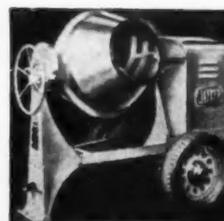
Jaeger Self-Raising Tower, quickly assembled on ground and raised by its 17 H.P. "Hoister," can be moved around job on its own skids — elevates loads up to 2000 lbs. Cage, with Automatic Safety Lock, handles largest concrete cart or 2 barrows. Standard height is 37 ft.—10 ft. sections up to 67 ft. can be added. Saves time, material, labor, pays for itself in no time.

Labor scarce? This outfit can do work of 10 to 12 hoppers with only 2 wheelers and a hoist operator. Speeds placement, too.

Hoists, 6 to 100 H.P.
Gas, Electric—1, 2 or 3 Drums



Jaeger Mixers
Concrete, Plaster, Mortar — are Recognized World Leader



THE JAEGER MACHINE CO. 521 DUBLIN AVENUE
COLUMBUS, OHIO

(Continued from page 151)

SUPERIOR FIREPLACES
 —with their 22 years of proven efficiency will again be manufactured after the war.
PREPARE NOW—to tie-in with our continued National Advertising by including them in your POSTWAR inventory and plans.
 Write for full information
SUPERIOR FIREPLACE CO.
 1046 S. Olive St., Los Angeles (15) Calif.

larly absent from this well managed organization. Federal Housing Administration is one of the few governmental agencies conducted without any cost to the taxpayers. Its methods of appraisal of properties on which it insures mortgages is unique, sound and proven, and has been fully approved by practically all financial institutions. Moreover, its reserve funds have continuously increased from year to year, and in larger amounts each succeeding year, until it now amounts to more than \$60,000,000.

No Governmental Agency or Bureau having to do with present or post-war building should be in the hands of any except those whose experience has proven them capable of performing their duties in an efficient manner. We have not yet reverted to the "public be damned" days and those in high positions whose disregard for the welfare of the taxpayers is notoriously apparent will surely have to change their policies or be removed from their positions of authority. Above all looms the public interest and the public good.

Building Industry Has Big Job Ahead

The building industry itself is not above criticism; in fact, it was rather loosely organized and conducted prior to this war. It well deserves great praise for its handling of wartime construction, but it, too, needs much overhauling and housecleaning. Now is the time to begin this important work.

I firmly believe that the building industry will be able to properly handle all construction work offered during the post-war period and that it will offer one of the best means of quick employment for many thousands of our returning armed forces.

When our boys come home from "over there" let us provide them with proper employment and proper homes and let private industry take the lead without interference from any and all bureaucrats.



PACIFIC MUTUAL DOOR CO.

National Distributors

Since 1921

DOUGLAS FIR PLYWOOD

Home Office: Tacoma, Washington

Six branch offices and warehouses at

Los Angeles, Calif.
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Chicago, Ill.
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St. Paul, Minn.
 Kansas City, Kan.



How to Create Jobs and Prosperity After the War

(Continued from page 77)

in its prices had reduced the demand for building, and left it with advanced wages which government and labor unions would not let it reduce without a struggle.

Plan for Stable Prosperity

The building industry—and every other industry—should make and carry out plans, not for a “boom,” but for a long period of stable prosperity. After the last war the period of prosperity lasted less than a decade; and more than all the profits made in the decade ending with 1930, when residential and farm construction averaged over \$4 billion annually, were lost in the decade ending with 1940, when such construction averaged only \$1 billion \$500 million annually. “Booms” seem fine while they last; but they are inevitably followed by depressions. And another depression probably would cause irresistible demands for more government interference with private enterprise, and more government “investment” in competition with private enterprise to relieve unemployment.

Private enterprise, especially in the home building industry, will have perhaps the greatest opportunity in its history after the war. But it can take full advantage of this opportunity only if it avoids mistakes of the past. It should not try to get large profits on a small volume of business. It should strive to get the much larger profits that can be derived from maintaining a large volume of business and employment over a long period of years. An unprecedented volume of total peacetime construction, production and distribution will be necessary to provide adequate employment. And if private enterprise fails to provide adequate employment it will probably find itself in more serious trouble than it has experienced or feared.

make the most of Available manpower



ONE operator with this machine turns out more work than several without it—and with much greater accuracy. It cross-cuts, rips, dados, shapes, routs and tenons—on wood, plastics, metals, ceramics and other materials. The Walker-Turner Radial Saw's patented geared, shock-proof motor permits deep cuts with smaller blades; its sliding ram design eliminates overhanging arm, affords clear view of work. Many other features and ample safeguards. Prompt delivery for war work. Get literature. WALKER-TURNER CO., Inc. 10103 Berckman St., Plainfield, N.J.

walker-turner COMPANY, INC. PLAINFIELD, N. J. U.S.A.

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DRILL PRESSES—HAND AND POWER FEED • RADIAL DRILLS
METAL-CUTTING BAND SAWS • POLISHING LATHES • FLEXIBLE SHAFT MACHINES
RADIAL CUT-OFF MACHINES FOR METAL • MOTORS • BELT & DISC SURFACERS

ACID TEST FOR WESTERN PINES

The continual study of the chemical properties of Idaho White Pine, Ponderosa Pine and Sugar Pine in our Research Laboratory divulges many of nature's secrets. It results in discoveries that make for increased usefulness and even better performance of these fine woods.



In these wartime days, as in the days of peace, the Western Pine Association Research Laboratory is constantly experimenting to determine new values, new uses, and to improve manufacturing procedures for the Western Pines.



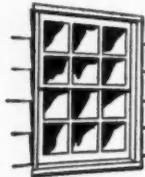
WESTERN PINE ASSOCIATION

Yeon Building, Portland (4) Oregon

*Idaho White Pine *Ponderosa Pine *Sugar Pine

THESE ARE THE WESTERN PINES

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to give greater utility
to **WOOD**
windows

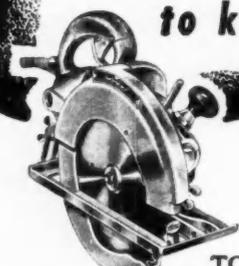
— to enhance and improve the lasting qualities of the wood of which they are made, research scientists have developed minimum standards of *toxic preservation*—a treatment to increase resistance against deterioration under severe service conditions imposed by modern construction.

NATIONAL DOOR MANUFACTURERS' ASSOCIATION
McCORMICK BUILDING - CHICAGO, ILLINOIS

Seal of Approval—The Identification of a Product Meeting N. D. M. A. Preservative Minimum Standards



SERVICE . . .
to keep it cutting



Use Wappat Maintenance
for { Extra Saw Life
Top Performance

TODAY, with tools not readily available to all, our maintenance facilities have added importance for you. Our Service Department will help you keep your Fred W. Wappat Saws and Alta Tools working better . . . longer.

Simple parts replacements that maintain efficiency will also prevent undue wear and serious trouble later on. Reconditioning can fit for hard work early models worn by years of use.

Scores of owners are using our service to take fullest advantage of the quality built into every Fred W. Wappat Portable Electric Hand Saw and Alta Tool. Write for particulars.

- When they are available without priority, Fred W. Wappat Portable Electric Hand Saws will again be delivered for free trial.

Fred W. Wappat PORTABLE ELECTRIC TOOLS
MAYVILLE, N. Y.

**Home Builders Association
Plans Vigorous Expansion**

(Continued from page 109)

where. The membership includes a number of the largest home building firms in the country, many of which are now engaged in war housing. It is felt that with the end of war, the home builders of the country will more than ever need representation in post-war legislation that will affect home building.

Following conclusion of the merger details, the builders plunged into consideration of war and post-war problems. These included proposed revision of war housing standards, revision of OPA MPR-251, allocating priorities, amendments to Title VI, lumber supply and costs, metal for bathtubs, faster processing under Section 608, recognition of costs by FHA, legislation necessary for post-war. The following government officials were present at the meeting:

National Housing Agency: John B. Blandford, Jr., administrator; Leon Keyserling, general counsel; Richard Voell, technical division; Coleman Woodbury, assistant administrator.

Federal Housing Administration: Abner Ferguson, commissioner; Earl Draper, deputy commissioner; Curt Mack, chief underwriter; Howard Vermilya, Technical Division; William Wittausch, Statistical Division; Herbert Colton.

War Production Board: Col. F. J. C. Dresser, chief, Project Division; Arthur Woods, chief, War Housing Service Branch; William Macdonald, chief, Plumbing & Heating Branch; Don Campbell, Lumber Division.

Office of Price Administration: Malcolm McDonald, Lumber Distribution Branch; Neal Stabler; Harry Madway.

In concluding his report to the NAHB directors, Frank W. Cortright said: "It is apparent that there is a big job to be done. It can only be done with money, a full staff, and a large volume of membership.

"The war housing job is well along, but the post-war job of 10,000,000 homes is ahead. Only through planning and adequate legislation will this immense construction task be satisfactorily accomplished. For the first time in history builders of this country are joined together; for the first time their representatives are recognized by Government and Industry. We are finally taking our proper place in the councils which will formulate the plans and carry them through.

"Intelligent and powerful leadership is required. It is undoubtedly our opportunity and responsibility to assume this responsibility. In the past the home builder, upon whom all allied industries and professions have been dependent, has been the victim and not the leader. The time has come for us to assume our rightful place. It is indeed fortunate that the successful merger of our two associations now makes this possible."

. . . .

The 3 R's—Set for an Early Start

(Continued from page 107)

systems, 16.8 percent with piped warm air systems, 3.5 percent with pipeless warm air furnaces, and 46.6 percent with stoves. A residue of 11.3 percent depended on fire places or "other" heat sources. As to fuel, 77 percent used coal or coke, 11.9 percent fuel oil, 7.8 percent gas and 2.6 percent wood.

Some idea of the size and character of the typical home repair and maintenance job is gained from a study of FHA Title I operations. For the year 1942 a total of 343,153 loans for single-family home repairs were insured by FHA. These averaged \$328 each for a total of \$112,709,233, or 79.4 percent of all of the property improvement loans insured under Title I. Other classifications were: multi-family dwellings 10.2 percent, farm homes and buildings 3.8 percent, and commercial and industrial buildings 2.2 percent.

The total of Title I loans reported by FHA for 1942 amounted to \$155,534,216 based on 432,181 repair and improvement projects. This was a decline of 37.1 percent

in number and 45 percent in money from the figures of 1941, this decline presumably due to the difficulty of getting men and material and to the patriotic holdback sentiment previously referred to.

The highpoint of FHA Title I loans for repairs, etc., was in 1941 when sums aggregating \$282,716,233 were borrowed and insured for such purposes by this government agency. Of course only a small part of the nation's regular program of building repair, maintenance, and improvement ever came into these insured financing circles, since the average small job needs no financing and most sales of building materials to farmers are carried by retailers on open account. However, from the record of FHA Title I loans we get a useful line on the size and character of the current repair and maintenance jobs that are paid for by insured monthly payments.

Exterior painting was most frequently ordered; represented 19.6 percent of all Title I loans. The average amount was \$416 each, for a total in 1942 of \$35,191,706. Interior finish added 8.4 percent, each job averaging \$335, for a total of \$12,115,692.

Roofing was a major repair and maintenance item, according to the FHA report for 1942. Each job averaged \$217, for a total of \$17,100,311; 18.3 percent of Title I loans were for reroofing.

Heating plant repairs and renewals constituted 17.1 percent of the total, with each job averaging \$305, for a total of \$22,586,914. Plumbing was 6.2 percent in numbers, average expense was \$326 and total was \$8,703,242.

"Alterations and additions" showed the largest average cost, \$487, total \$22,358,893 for the 45,874 such projects recorded for FHA financing.

These 1942 FHA Title I figures, interesting as they are and rather informative as to details, nevertheless serve to reveal principally the tremendous shrinkage during these war years from the normal volume of repairs, maintenance and alterations on the nation's homes, business buildings and farm structures. For 1941, the last of the prewar years, these expenditures were estimated by the U. S. Bureau of Labor Statistics at \$3 billion.

Delayed attention to the upkeep of buildings, amounting easily to more than two billion dollars annually for these war years, will prove very costly to the nation's major investment if permitted to run along much longer. Here is urgent work for the Home Front—most important to the soundness of our national economy. The three R's—remodeling, repairs and rehabilitation—are set for a prompt start in every community just as soon as the war restraints can be lifted.

* * *

Quick and Orderly Lifting of Restrictions

(Continued from page 89)

National Resources Planning Board fears, is the primary reason why restrictions on building should be lifted as soon as possible. If full building maintenance, repair, and remodeling can be resumed prior to the end of the war, the building industry will be able to maintain itself at a high level of efficiency and at the same time absorb some of the billions of excess purchasing power which appears to be worrying government economists.

There are materials, today, which are not critical, which should be released from the \$200 new construction restriction paragraph of L-41. There is labor available for the application of these materials.

Remodeling, which is often difficult to differentiate from maintenance and repair, should be given a separate paragraph and cleared of all restrictions under L-41 as long as non-critical materials are used. Remodeling should not be included with new construction.

Regulation W, credit restriction of the Federal Reserve Bank Board, should be rescinded in relation to non-critical materials, just as it was opened up to make way for the fuel saving campaign with reference to insulation and the application of storm windows.

Certainly the regulations of M-208 should be reconsidered

(Continued to page 156)

**WANTED NEW PRODUCTS
For Post-War Expansion Program**

A nationally known manufacturing company planning on expanding the scope of its operations in the post-war period wishes to acquire new products.

The company would like to acquire the patents and rights to manufacture products for which it appears there should be a ready demand in the post-war period and/or it would like to purchase one or more small to medium-sized manufacturing enterprises in their entirety.

All purchases will be made for cash.

This company's present business is allied with the building field but its interest is not necessarily confined to products which would complement its present lines, if the potential market for such product or products is large enough to warrant an independent operation.

Since the company's expansion program is aimed at the post-war market and in any event the war economy makes any immediate expansion difficult, inability to manufacture and sell any product during the war would not bar its purchase. Post-war prospects of any product or company will be the determining factor in its attractiveness. Should you wish, your initial communication can be made through your attorney or banker without disclosing the name of your company. You will be afforded ample means of assuring yourself as to the company's financial responsibility before you will be asked to disclose any confidential information.

It will expedite matters if your initial communication contains sufficient information to make a superficial appraisal of the merits of the products involved and their potential markets.

Address—American Builder
Box 1043, 105 W. Adams St., Chicago, 3, Ill.

Eye Appeal . . .

and Plenty of it

MIAMI

"Streamlined"

Wood Bathroom Cabinets



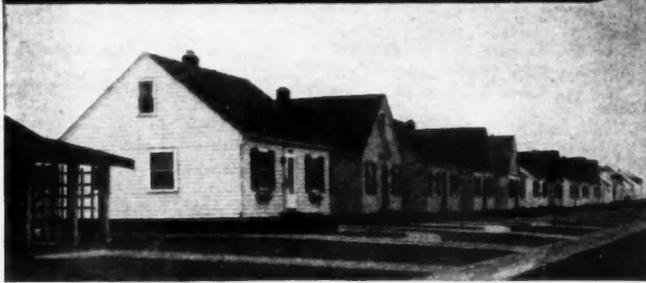
Miami Wood Bathroom Cabinets are smartly modern in every detail—trim, beautiful and with mirrors framed in steel (by permission of WPB). Completely equipped, including famous Miami convenience features.

These attractive Wood Cabinets, now available in quantity, are doing a real wartime job . . . "filling the gap" left by discontinued production of Miami Metal Cabinets for the duration.

Miami Wood Cabinets are now widely used for essential replacements. For details, write Dept. AB.

MIAMI CABINET DIVISION—The Philip Corey Mfg. Co.
MIDDLETOWN, OHIO

33,000 KITCHENS MUST BE RIGHT!



★ As its contribution to war and defense housing, Kitchen Maid has already sold more than 33,000 kitchens for projects of all types! Such a record is further evidence that this famous factory-built cabinetry of composite construction is right for practically every application—proof that it meets the most rigid present-day requirements for adaptability, ease of installation, price, and delivery. But more than that! Kitchen Maid's wide experience in this advanced cabinetry design can be of great value to you on any war housing job. Write for facts now.

Kitchen Maid Corp., 530 Snowden St., Andrews, Ind.

AMERICA'S LEADING BUILDER OF WAR-TIME CABINETS

KITCHEN MAID
CABINETS OF COMPOSITE CONSTRUCTION

Where **POWER, SPEED** and **ACCURACY** are required

MASTER

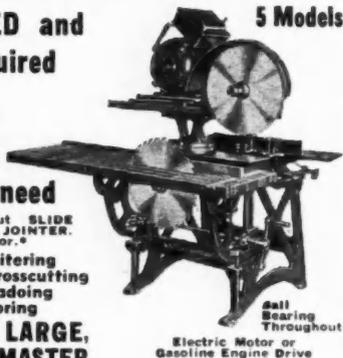
is the machine you need

Equipped with **OVERHEAD** crosscut **SLIDE** saw — **UNDERSLUNG** rip saw and **JOINTER**.
*Operated with only **ONE** motor.*

12 Machines in 1
Jointing Tenoning Mitering
Ripping Rabbling Crosscutting
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No job too **SMALL**, too **LARGE**, or too **Difficult** for the **MASTER**

The **MASTER WOODWORKER MFG. CO., Inc.**
Brush and Fort Sts. Since 1917 Detroit 26, Mich.



5 Models

Ball Bearing Throughout
Electric Motor or Gasoline Engine Drive

(Continued from page 155)

with reference to the bulging farm market, upon whose produce the prosecution of the war and the consolidation of the peace depends.

Price regulation, as it applies to rents, should be gradually revised upward in accordance with the rise of commodity prices and wages—otherwise the incentive for private capital to enter the building field for income will lie dormant.

In a short time it should be possible, also, to revise the Housing Standards to the point where they can be logically termed "standards" and not act merely to curtail materials and cheapen the final product.

Those are the things that can be worked upon today. Relaxation should be expected in all of them as the war progresses. It will be too late if roll-backs of government control do not take place until the day of victory.

The moment the need for a government restriction is no longer apparent, it should be attacked and the roll-back commenced. In dealing with government, or bureaucracy of any kind, it is well to remember that it is only the voice that is loudest or the one that is multiplied by the greatest numbers that can be heard. That is the way of democratic government. It can be complained against, but it must be reckoned with.

Reasons why it can be logically hoped that the time is soon coming when some of the restrictions upon building can be lifted are three fold:

(1) Our lack of preparedness for total war forced us to gear our plants to equip more military forces in two years than our enemies did in seven to ten years. The first phase of our war production cycle was the creation of the necessary industrial capacity: factories, warehouses, military camps, utilities. This phase is nearly completed. When completed, the material and labor going into vast channels can be diverted elsewhere.

(2) The second phase was that of equipping our military forces starting from nearly zero and producing enough to equip all our forces in about two years of accelerated production. This required a leveled out capacity to produce much more than 50% of our maximum need in the last year of this period. These war supplies are expendable and require constant replacement.

(3) The simple replacement period is the third phase. Since we cannot stay long in the war if we consume more than 50% of our material each year, the replacement phase will use much less war goods than our final capacity could make each year, and we shall have an excess capacity which can be released for civilian production. The fact is we and our allies have been equipping new armies and fighting and using up our war goods while we were making them, and this has caused us to undertake all three of these phases at one time, which would indicate that when phases one and two are finished, a considerable capacity of our nation can be turned over to civilian production.

The war will not stop in one day, it will gradually decrease as we defeat first one enemy and then another. There is accumulating evidence of the approach of a dual economy:

PROMPT DELIVERY ON UNIVERSAL LEVEL TRANSIT



Patent Ball Bearing Center

Ideal for Defense Plant and Large Construction Jobs
PROMPT DELIVERY WITH Preference Rating

Powerful 12" Telescope—Price complete with Tripod, Carrying Case, Sunshade, and Dust Cap \$115.00, plus \$4.00 Excise Tax. Can be furnished with a compass at \$12.50 Extra.

Write for free booklet—**HOW TO LAY OUT BUILDING LOTS**

Expert Repairing of all makes of instruments

DAVID WHITE CO. 311 W. Court St., Milwaukee, Wis.

WHEN YOU NEED **CONSTRUCTION EQUIPMENT**

CONSTRUCTION MACHINERY CO.

Think First of

WATERLOO IOWA



MIXERS • PUMPS • HOISTS BATCHING & PLACING EQUIP. SAWS • CARTS • BARROWS

that we shall be finishing the war on one side, while gearing portions of our productive equipment for the task of winning the peace on the other.

That is the great hope—that this productive capacity will be released to tool up for the job of winning the peace. But in Washington Bureaus there are those who would turn the screws tighter, keep the clamps on, retain the wartime restrictions. . . .

Because of them, it can well be asked—Will the miserable history of another nation repeat itself here? Is this the way visiting Europeans will describe our country in the post-war era?—

"Money is scarce. Capital has fled to Holland, England and Switzerland in fear of further devaluation. No banker will make a 20-year loan on a house or even a 10-year loan because he is afraid of further inflation which would mean he would not get his money back. Interest rates are exorbitantly high, financing terms difficult. The national budget continues to be unbalanced and the political situation is such that there is little hope that it will be balanced in the near future. Radical labor and social reforms have been put into effect so rapidly that they have seriously upset business. Labor has a strong political position and has secured a universal 40-hour work week law which has been a great shock to business and industry. Building costs and building wage rates have sharply increased while, at the same time, rents have been fixed by law, which has, of course, effectively killed private construction for profit. Confidence is lacking both in government policies and future labor activities. In a city of 4,000,000 population, building permits were taken out this year for only 35 single-family dwellings—permits for all kinds of dwellings, including apartments, totaled only 154, covering less than 2,000 family units."

It Can Happen Here

That description is no figment of a morbid imagination. That was the description of Paris and France as actually published in the *American Builder*. September, 1938, upon the return of Joseph B. Mason, now Editor, from England and France. After the first world war France never succeeded in balancing its national budget; it was unable to take government out of business and instead engaged in radical reforms so quickly that industry could not absorb them. It forgot to rescind wartime restrictions on building and rental property, with the result that costs continued to rise, consumption fell off, unemployment increased, and lacking the incentive to build, the unemployment problem was greatly accentuated.

It is well to remind our government, now, of this recent horrible example of a country that fell apart the moment outside pressure was exerted against it.

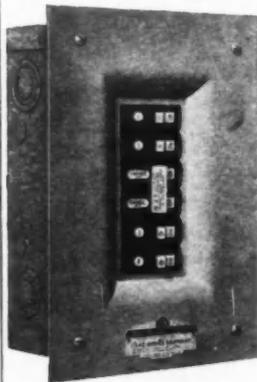
It is well to consider that business men must assume a large degree of responsibility for the action of government and of peoples within this country. For in this country the government is responsible to each of us, and we are responsible for the government.

H. . . . HOUSES will be built to live in

after the war. Churches will be erected in which to worship—stores in which to sell—factories in which to manufacture varied products. They will be constructed to appeal to the tastes and needs of their future occupants—by builders who understand those tastes and needs. . . . In all of these, the electrical distribution systems—whether simple or complex—will be important.

FA LOAD CENTERS SERVICE EQUIPMENT and PANELBOARDS

Pleasingly designed and finished, this FA Service Equipment combines FA Type AC Thermag D. P. 35 Amp. Circuit Breaker for range circuit, and 4 S. P. Type AC Thermag Circuit Breakers for light and appliance branch circuits. (Cat. No. SE41-3L7F—list price \$11.00.)



will be installed in many of these buildings. They will be selected, by men who know, for protection, efficiency, convenience, attractive appearance and honest construction—because they more than meet the standards of the Underwriters' Laboratories, Inc.

Write for Bulletins 63 and 67

which describe these products in detail—with wiring diagrams, suggested specifications, etc. Then, for complete satisfaction, specify them for the buildings you will erect. . . . Frank Adam Electric Co., Box 357, St. Louis, Mo.



Looking Forward with



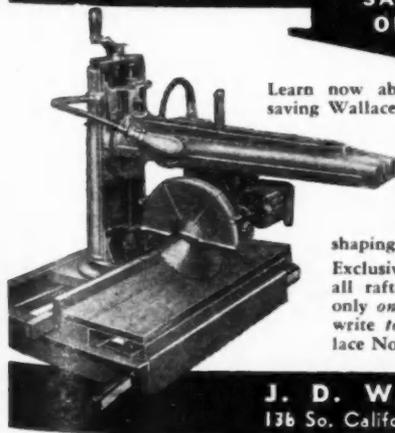
Our chemists and designers are now planning for that day when Wright Rubber Tile flooring will again be available. And supporting these new developments will be all the experience gained in over 20 years of specialization in the manufacture of rubber tile flooring.

Flooring Contractors: Now is the time to get lined up on our "2-Way Profit" proposition. After "Victory Day" it will be first come, first served. Write for details.

WRIGHT RUBBER PRODUCTS DIVISION
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WRIGHT RUBBER TILE
Flooring of Distinction

SAVES MONEY ON SAWING!



Learn now about the money-saving, time-saving Wallace No. 1 Radial Saw!

Here's the portable machine for building work, large or small. Does cross-cutting, mitering, jack-rafter cuts, ripping, dadoing, grooving, notching, bevelling, routing, shaping, etc.

Exclusive *angulator* aids in sawing all rafter cuts without marking and only one handling. For extra profits, write today for leaflets on the Wallace No. 1 Radial Saw.

J. D. WALLACE & CO.
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NON-TILTING PLASTER-MORTAR KWIK-MIX 6-P

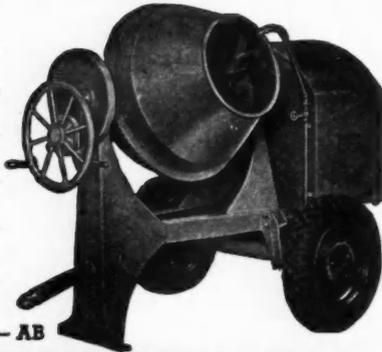


Fast discharge — 7 seconds — no tilting necessary — weighs only 850 pounds — air-cooled engine — V-belt and worm drive.

WRITE FOR BULLETIN NP — AB

3½-S TILTING KWIK-MIX

Side discharge — anti-friction bearings — welded construction — discharge either side — spring mounting.

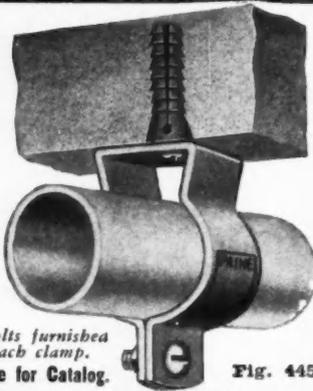


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KWIK-MIX CONCRETE MIXER CO.
PORT WASHINGTON . . . WISCONSIN

PAINÉ CONDUIT CLAMP

All clamps are rust-proofed and are designed to hold porcelain bushings, thin wall or rigid conduit, also armored cable. Illustration shows clamp anchored with PAINÉ Woodscrew Lead Anchor, Fig. 950, in concrete.



Correct size Stove Bolts furnished FREE with each clamp.

Ask Your Hardware Dealer and Write for Catalog.

Fig. 445

THE PAINÉ CO., CHICAGO 12, ILL.

SAVE TIME

in making layouts and in giving lines and grades

SAVE MONEY

by reducing labor costs by using a

WARREN-KNIGHT TRANSIT-LEVEL

This instrument gives you what you have always wanted in a low priced instrument—high power telescope—close focus—vertical arc with clamp and tangent—sensitive level—compass—plate level—protected circle—vernier reading to one minute—extra large shift—sturdy construction—low maintenance costs.

For complete details write for new Catalogue F-810

Liberal allowance for your old instrument.

Prompt delivery on priority orders

WARREN-KNIGHT CO. 136 N. 12th St. PHILADELPHIA 7, PA.



Patented

Transit-Level No. 38-b

\$160.00

Made also without compass and arc at lower prices.

Congressman Wilson Plays NHA Record—

(Continued from page 95)

they did the job with negligible waste, no unnecessary delays, built sufficient accommodations and had little if any over-programming or overbuilding.

The record of the official government building agency, however, is not such a clean one. They have fallen down pitifully on proper programming. They have in every case, over-programmed, overstaffed the administrative side of the project and through sheer neglect or stupidity they have caused government construction expenses to climb beyond the bounds of reason. In some cases the final cost of a project has been as high as 155% more than it should have been.

But, when private concerns or construction houses have approached the National Housing Agency for permission to build so much as a hen coop they have had to all but black the boots of the powerful agency men. At the same time, the Agency was requesting a 400 million dollar appropriation from Congress, much of which to waste in the construction of more of their "jerry built" shacks, and they would have gotten it but for the fight that several of us put up against further funds being granted to an organization which had only a record of wanton waste to recommend it.

At last reckoning, there were 45 thousand federally built housing units standing idle. And thousands more under construction which I can only presume are probably less than filled at this date. A fine thing, I believe you will agree when we tie up hundreds of thousands of man-hours, thousands of tons of critical materials, thousands of men and millions of dollars in buildings we do not need, will not use and had no need for in the first place.

FHA Is Bright Spot in Housing

The one part of the National Housing set-up which tried and continues to struggle to do a good and honest job, is the Federal Housing Administration.

But the stipulations of Executive Order 9070 give the allocation of all project assignments to the head agency NHA, and since the FHA loans its funds to private builders and since the FPHA (real child of the NHA) is a public building organization, the poor FHA has gotten a step-child's share from the very beginning.

If, after protest, the NHA is forced to give the FHA an assignment, another stipulation of Executive Order 9070 strangles its birth cries in the control of the head agency (NHA). And just in case something slips by the boys who are determined to run the show without restriction, a third stipulation of Executive Order 9070 settles that possibility by stating that "All programming must be done exclusively by the NHA." And we are right back where we started, with government control of all avenues of supply and the government in the building business as private industry's only competitor.

Many of us in Congress and in the building business have come to suspect that more is stirring beneath the smooth manners of the National Housing Agency authorities than has so far met the American eye. A snuffing out process is threatening the American institution of home ownership.

I would like to promise that your Congress is going to handle this situation with an iron hand and I can be encouraging, since I am very hopeful of action, as indicated by the defeat of the 400 million dollar request referred to above. At least I can vouch for my continued efforts and devotion to a program of sound assistance for the private builder and the private home owner. As a member of the Committee on Public Buildings and Grounds, my vote will always be to encourage the old-fashioned institution of the individually owned home, where a man reigns secure, happy and proud of "his own little home."

Precutting Methods (Continued from page 101)

scheduled short lengths. This permits economical buying. Precutting can utilize random-length lumber. Example is cited of a builder who had a huge national defense project with a short time schedule. He saved a full week's time by ordering a supply of random-length 2x4's in advance of making a quantity takeoff or locating the sources of his ultimate requirements. He started at once on precutting. Scrap was no more than it would have been with specified lengths. Incidentally, the random-lengths cost less. Later, as convenient, he made purchases of his final requirements. He found that short lengths can be cut as advantageously from random-length as from specified-length lumber.

Lumber fabrication requires relatively simple equipment compared with that for other materials; hence precutting can be done effectively at any point, from the sawmill to the job site. Since each item of work in the construction industry involves closely controlled costs and carefully scheduled planning, there are several factors which determine the place to do the precutting and who should do it.

THE BUILDER has the responsibilities of meeting specified standards and co-ordinating the efforts of the various trades and crafts. His profits and reputation are based on finishing jobs with dispatch and with excellent workmanship, both of which pre-cut framing permits. Builders undertake all manner of jobs—the single unit, the custom-built house, the group development, and the huge project; hence precutting, when done by the builder, may be on the building site, at a central location on the project site, or at a separate site from which ready-to-nail lumber is hauled to the job.

THE RETAIL LUMBER DEALER has the raw materials at hand and normally has power saws, if not a complete woodworking plant. He maintains a close liaison with the builder. He is skilled in shop schedules and lumber grading and is in an excellent position "to make little ones out of big ones." He can deliver pre-cut framing as well as commercial lengths, and is located close enough to the job to handle non-standard or special cutting. He is also in a position to maintain a stock pile of odd or random lengths which can be worked up into specified shorts, so that his scrap is negligible. He can utilize off-peak time on standard items.

The retail lumber dealer can also save money for the builder by assembling items into knock-down bundles. A bundle of the cripples, headers, and trimmers comprising the rough frame of a window is a boon to the builder as compared with the same items supplied loosely. On some jobs as much as half a carpenter's time is lost in measuring and cutting or hunting for the right piece. Bundles save lost motion. They also permit estimating with 100 per cent accuracy.

THE LUMBER MANUFACTURER is of course in the fulltime business of converting logs into parts for buildings and structures. Several West Coast manufacturers can supply pre-cut framing, through normal channels, as a product more highly refined than yard stock. Not only does this include the pre-cut framing for light frame buildings, but also towers, highway bridges, roof trusses, and a myriad of important structures are now pre-cut in part or entirely and when desired, are given pressure preservative or fireproofing treatment prior to fabrication. (Continued next month).



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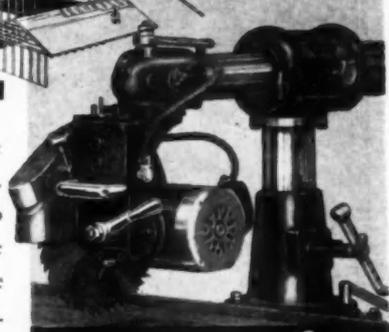
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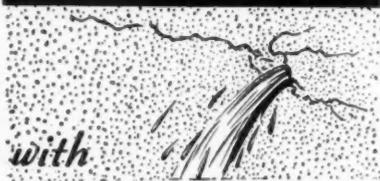
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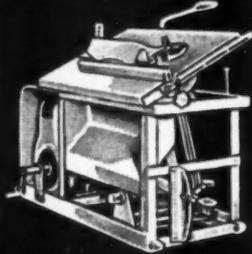
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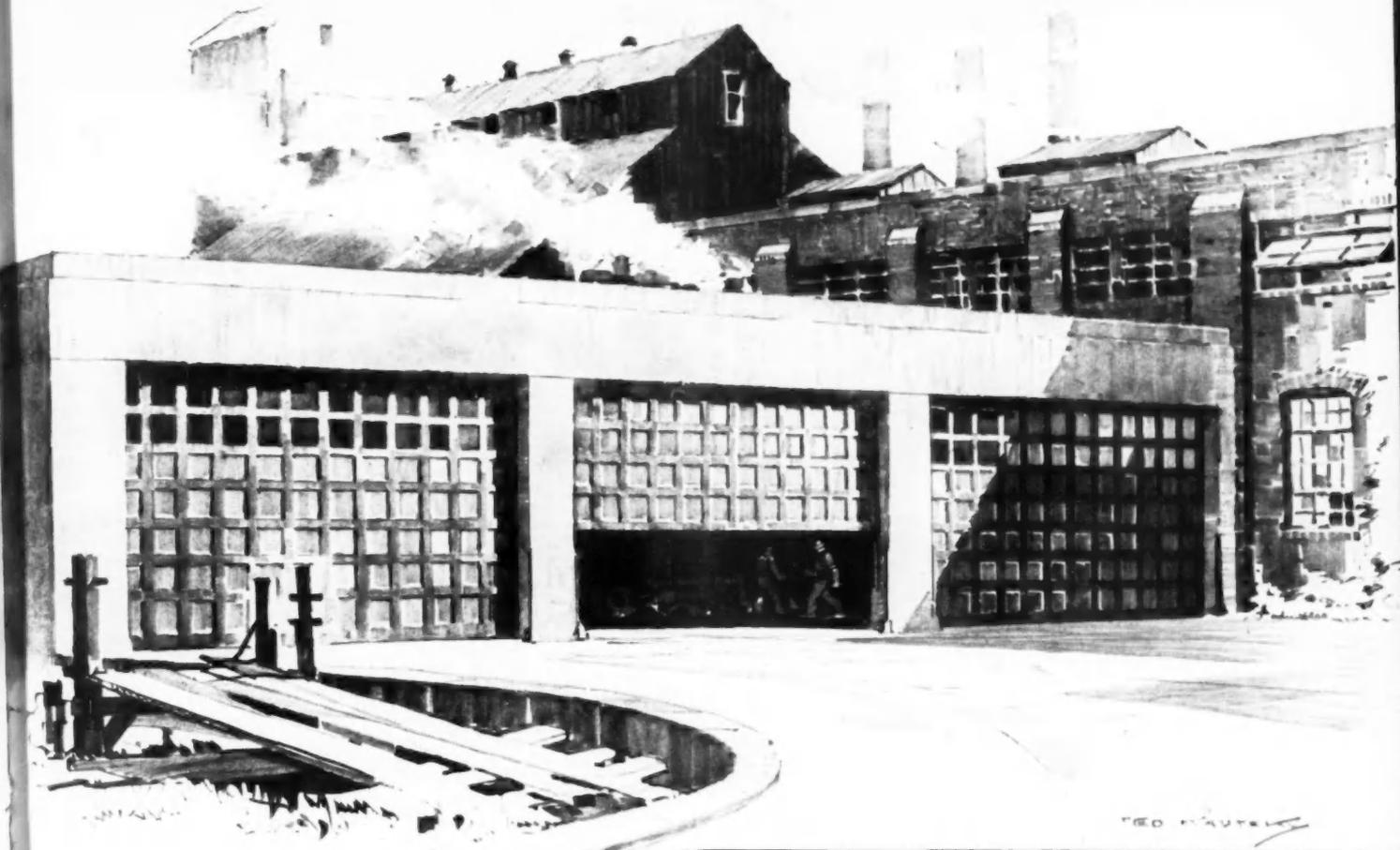
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