

BS
ing

E

It is
model-
serves
tly in
pperly
y now
n.
Plan
gs in
extra
Install
equire
meets

e

RLI
INO

AMERICAN

TECHNOLOGY DEPT.

MAY, 1943

PRICE 35 CENTS

30 CENTS IN CANADA

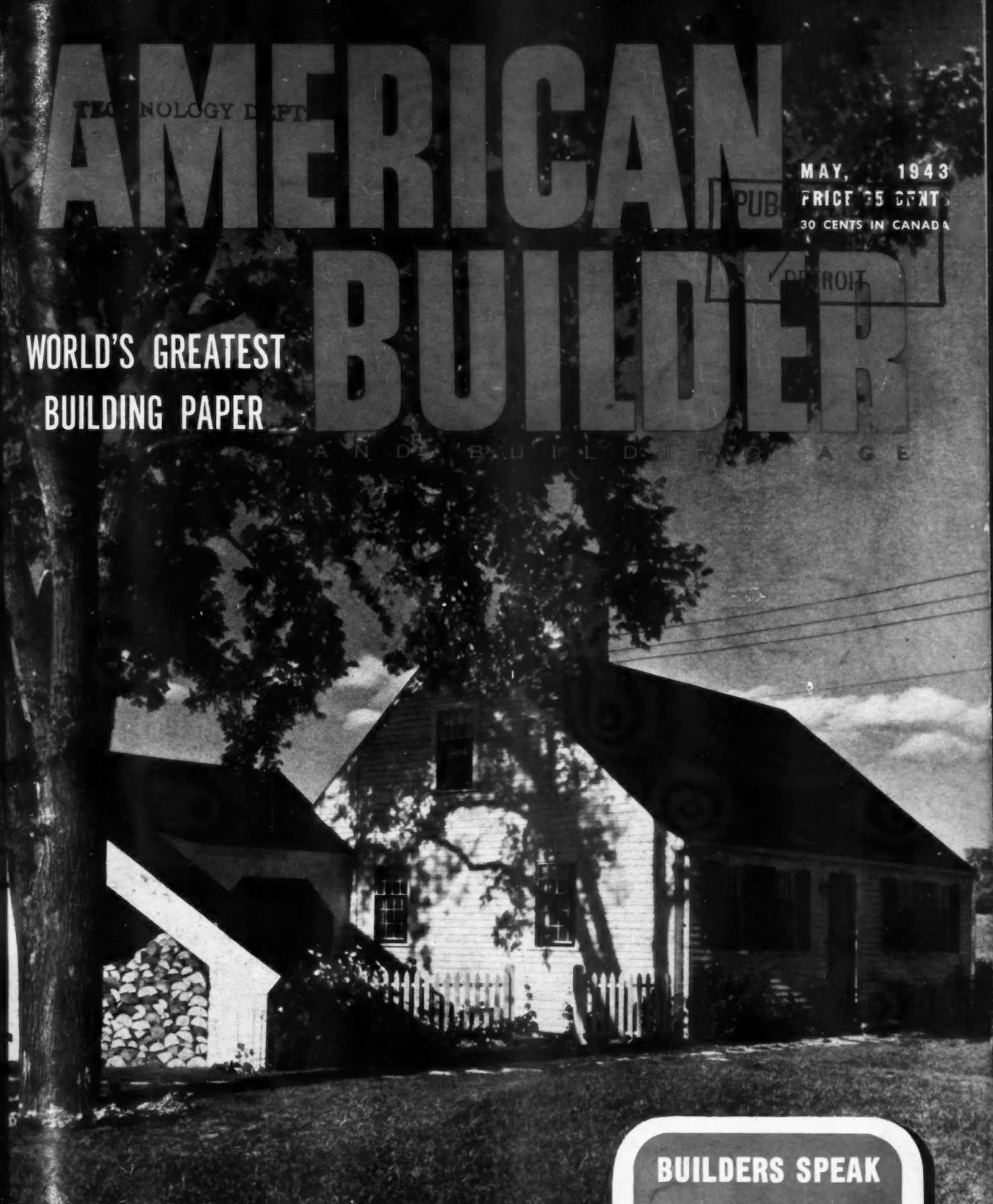
PUB.

DETROIT

WORLD'S GREATEST
BUILDING PAPER

BUILDER

AND BUILDING AGE



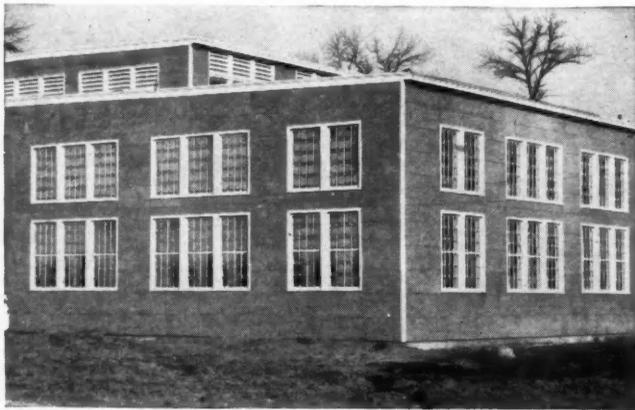
Designed by Royal Barry Wills; see floor plan in issue.

"WAR-TO-PEACE" PLAN

BUILDERS SPEAK
On **POST-WAR**
 ★ *Home* ★
Building

Builders look to Celotex

**FOR ALL THAT'S NEWEST
IN BUILDING MATERIALS!**



Multiple-Function Products Like

CELO-SIDING

TRADE MARK

Meet Today's Critical Material Situation!

CELO-SIDING is a new multiple-function product which combines siding, sheathing, and insulation. It is applied direct to studding, saving time, labor, and critical lumber, and is ideal for farm buildings, shops, warehouses, and small factories. Crushed mineral granules, pressed into the extra asphalt coating of the weather surface, provide a permanent exterior finish, in brown, buff, or green. Sizes: 7/8" thick and 2' x 8' (T&G on long edges) or 4' x 8', 9', or 10' (square edges only), for vertical or horizontal application.



CEMESTO Introduces
A Completely New Method
of Home Construction

Cemesto is another multiple-function Celotex Product, combining insulation, structural strength, exterior and interior finish. More than \$20,000,000 worth of Cemesto homes now shelter thousands of war workers.

CELOTEX ROCK WOOL

Saves Fuel,

Adds Year-'round Comfort

Celotex Rock Wool, in batts or loose form, provides insulation of proved efficiency at moderate cost. Available right now in any quantity, it enables you to offer home owners important fuel savings and year-'round comfort.



CELOTEX SHINGLES
Come In Many Styles,
Meet Many Needs

Celotex Triple-Sealed Shingles and Roll Roofing come in a complete range of styles, colors, and weights to meet every requirement. The famous triple-sealed manufacturing process insures extra wear without extra cost.

**WHITE ROCK GYPSUM
WALL BOARD** Finishes
Extra Rooms... Fast!

White Rock Gypsum Wall Board is an ideal material for making comfortable living quarters out of waste attic space. It handles easily, goes up fast, and can be papered or painted as soon as walls are completed.



These are only a
few of many Celotex Products
now available at
"BUILDING MATERIAL HEADQUARTERS"

CELOTEX

REG. U. S. PAT. OFF.

ROOFING • INSULATING BOARD
ROCK WOOL • GYPSUM WALL BOARD
LATH • PLASTER

THE CELOTEX CORPORATION • CHICAGO

Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago, 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, 1930, at the Post Office at Chicago, Illinois, under the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Ill. 1961. Address communications to 105 W. Adams St., Chicago, Ill.



Uni-point Cutting Guarantees Greater Production Per Man Hour!

Show this page to your superintendent and ask him True or False—?

Here's the answer! An answer also to the need for greater daily production!

FOUR engineers had chosen to design a machine with a stationary column in the back and a long swinging arm, our saw blade would necessarily cut into the material at a point in the guide fence wherever the CUTTING LINE OF ANGLE AND GUIDE FENCE INTERSECTS—A DIFFERENT POINT FOR EVERY ANGLE. Note diagram (A) and the five points representing any five different angle cuts.

Based on half a century of building wood-working machinery, our engineers instead designed a machine so that the saw blade would always enter the material at the SAME POINT IN THE TABLE regardless of cross cut angle, vertical, horizontal or compound miter. Note diagram (B) and the ONE-POINT CUTTING regardless of the angle of cut.

Woodworkers everywhere consider UNI-POINT a revolutionary advance in machine design. Why? Well, look at diagram (A) again! Suppose you were in production angle (5) and changed to angle (2). Note the distance between the two points at the guide fence. Because the second cut would be cutting across the table at some other point, it would be necessary to change the stops of gauges and reset the work accordingly.

Now look at diagram (B) and it will be observed that with ONE POINT CUTTING THE UNI-POINT WAY, such adjustments, changes and re-setting of work never become necessary.

This is only one example of the many multiple motions eliminated many times each day, every day, by Uni-Point simplicity.

Naturally, if an operator spends 20% or 30% of each hour making changes, machine adjustments, waiting for saw blade to stop, and re-setting work, he will do only 70% or 80% of the production, which is another way of saying his work requires 80 or 90 minute-hours to do 60-minute jobs.

Yes, Uni-Point guarantees greater production per man hour in more ways than one!

*Uni-Point Cutting means the saw blade always enters the material at the same point in the table, regardless of whether saw is set vertical, horizontal, or compound miter cross cut angle.

Write for Catalogue No. 60

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

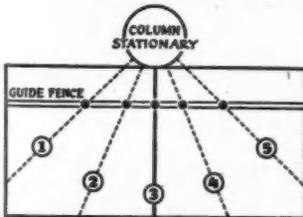


DIAGRAM A—The Old, Slow, Costly Way. Saw enters work at different point for every angle.

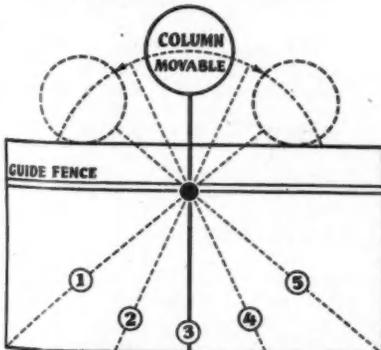


DIAGRAM B—The New, UNI-POINT, Efficient Way. Saw always enters work at same point regardless of angle. Saves 20% or more per man-hour.



AMERICAN SAW MILL MACHINERY CO.
HACKETTSTOWN, NEW JERSEY

**WILL POST-WAR
HOME BUILDING
BE PRE-FAB?**



better ask her!

She's the answer to what post-war homes will be, because she says what's what about more than 75 per cent of everything Mr. and Mrs. buy. And she's nearer 100 per cent of who's who in saying what kind of a home she and friend husband will build or buy . . . Do you think she'll want a home designed for pre-fab mass production? She didn't before, and war hasn't changed her. We think she'll want the plan which you and the architect work out with her and her husband, built with materials supplied by local lumber dealers . . . which means you'll be back at your regular trade of building individual homes when the Victory parades are over . . . Let us help you get ready for that brighter day . . . with construction details in your language, with stress tables for load calculations, with simplified specifications, with painting and finishing formulas and with 15 well planned small home designs by qualified architects. Also included are the how and why of soft-textured Arkansas Soft Pine framing lumber and Satin-like Interior Trim, which have served to build better homes for more than 40 years. Write for this useful information today, enclosing 10 cents to cover postage.

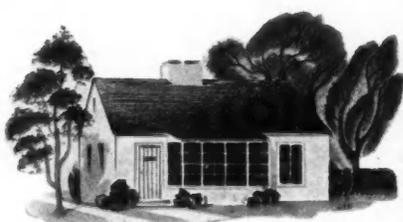
SEND TODAY
FOR THESE
USEFUL
BOOKS



ARKANSAS SOFT PINE BUREAU
586 BOYLE BUILDING ★ LITTLE ROCK, ARKANSAS



NEW TRENDS IN POSTWAR HOMES CALL FOR MORE SUN-FLOODED ROOMS



MAY'S POSTWAR IDEA FOR BUILDERS

Appropriately called "The Snuggery", this little four-room house does a big job of homemaking. More actual usefulness is tucked into its 846 square feet of floor space than will be found in most small houses. Even on dull days its large windows will work lighting wonders.



This bright and cheerful living room is an example of "what's coming". Light bursts in from three sides, and large Fenestra Package Windows admit floods of sunshine throughout this lovely little home. And besides, these better metal windows will provide easier opening, better ventilation, safer washing, better screens, low-cost storm sash, and afford better three-way savings, too . . . in first cost, installation cost and maintenance cost.

New window designs . . . to meet the postwar needs of all types of buildings . . . are now being developed by Fenestra's Research Engineers. Any window suggestions you may have will be gladly received.

DETROIT STEEL PRODUCTS COMPANY

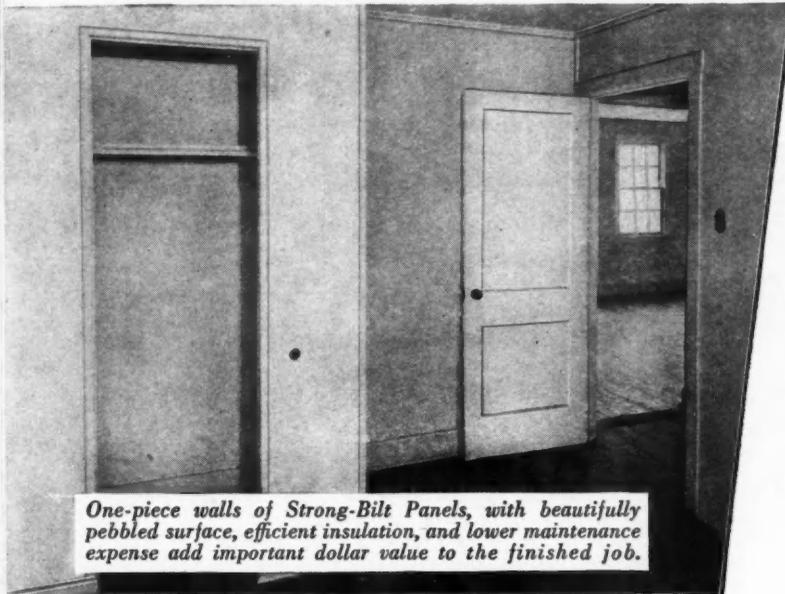
Now Exclusively Engaged in War Goods Manufacture

Dept. AB-5 • 2260 East Grand Blvd. • Detroit, Mich.

Pacific Coast Plant at Oakland, California



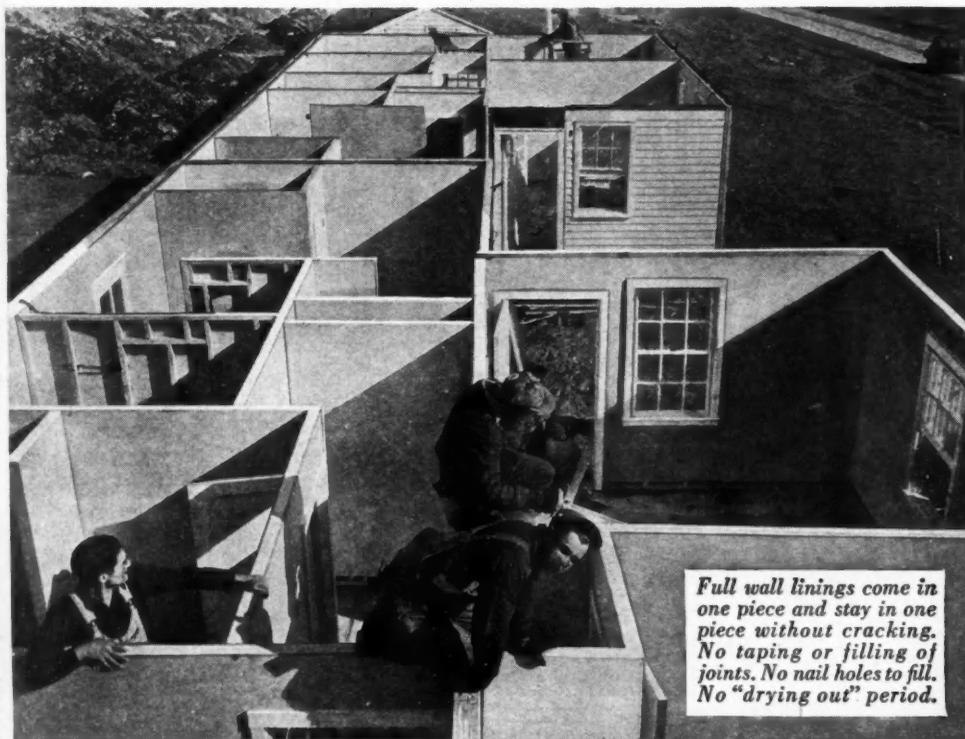
Proof from Leading Project Builders is pouring in!



One-piece walls of Strong-Bilt Panels, with beautifully pebbled surface, efficient insulation, and lower maintenance expense add important dollar value to the finished job.

REPORTS of performance *on-the-job!* The experience of Bennett Lumber Corporation is typical of many. Sections for 250 war housing units built in the company's plant were shipped over 400 miles by rail and assembled at the site near a great war industry center.

Gaining wide popularity before the war, quickly adopted for extensive wartime use, Strong-Bilt Panels already are being figured into plans for eagerly-awaited post-war homes. For informative booklets covering use in both conventional and prefabricated construction, write The Upson Co., Lockport, N. Y.



Full wall linings come in one piece and stay in one piece without cracking. No taping or filling of joints. No nail holes to fill. No "drying out" period.

BENNETT LUMBER CORPORATION
MANUFACTURERS OF
Ready-Cut Homes and Garages
NORTH TONAWANDA, N. Y.
March 16, 1943

LUMBER

The Upson Company
Attention Mr. H. R. Shedd
Lockport, N.Y.

Gentlemen:

Inasmuch as we are now finishing up our Contract with the Federal Public Housing Authority for Prefabricated Houses on which we used UPSON STRONG-BILT PANELS for the inside lining, we feel it is only fair to you to let you know how very satisfactorily your product has worked out for us.

In the first place, our experience has proven that the application of Upson Panels for Prefabricated Houses is simple, economical and easy. We, of course, used your floating fasteners to eliminate face nailing. The full wall panels eliminated costly joints and panel strips.

Due to the fact that you furnished us with panels cut to exact size, our costs, both for the panels themselves and the application of them, were held to a minimum. We want to thank you for the wonderful service you have given us right from the beginning. Your help in figuring out the exact sizes of panels required, your cutting these panels to these exact sizes, and your promptness in making deliveries exactly as specified by us is very much appreciated, and undoubtedly saved us considerable grief as well as money.

The sections for our Prefabricated Houses on this Contract were shipped a considerable distance in box cars. We did not crate any of the panels, and think you will be interested in knowing that your STRONG-BILT BOARD proved its sturdiness and ability to take it, as very, very little damage occurred in shipping.

Our experience with UPSON STRONG-BILT PANELS has been so very satisfactory that, of course, we shall continue to use and recommend it for inside wall lining on all future jobs.

Cordially yours,
BENNETT LUMBER CORPORATION
President

FRA/RS

Upson Quality Products Are Easily Identified By the Famous Blue-Center



THE CRACKPROOF BEAUTY SURFACE FOR WALLS AND CEILINGS

**EASY
DOES
IT!**



GOLD BOND GYPSUM BOARDS SAVE LUMBER . . . SPEED CONSTRUCTION!

There's a bright side even to the lumber shortage! Gold Bond Gypsum Boards not only replace scarce lumber—they are actually easier to use! They handle like lumber—are sawed and nailed just as easily—and save hours of application time. (A 2' x 10' panel covers

20 sq. ft. at one lick). Nothing experimental about these heavy-duty boards as they have proved their durability and ability "to take it" on dozens of big government projects. They're immediately available—all you want—at your Gold Bond dealer's.

FOR ROOFS

GOLD BOND ROOF PLANK! Husky, fireproof, moisture-resistant panels nail directly to wood joists, and form a sturdy base for roofing material. No special attachments required for either flat or pitched roofs. Work goes faster and waste is eliminated because of uniform lengths. Sizes: 2' x 8', 9', 10' . . . 2", 1½", 1" thick. Long sides have shiplap edges for snug-fitting joints.

FOR OUTSIDE WALLS

GOLD BOND EXTERIOR BOARDS! Sheathing and siding—in one operation, that's the story about Gold Bond Exterior Boards. The center is fireproof gypsum rock for strength and rigidity. One style with durable overcoat of asphalt roofing. Another comes with tough, weather-sealed green facing and with special water-shed edges. Sizes: 2' x 8', 9', 10' . . . ½" and 1" thick.

FOR INTERIOR WALLS

GOLD BOND SOLID PARTITION PANELS! For permanent or demountable partitions in plants, offices, dormitories or low-cost homes. Panels are fireproof with rock-like rigidity, built to withstand hard usage. Panels may be left in natural cream color, but may be papered or painted if desired. Easily installed. Can be completely salvaged when temporary partitions are removed. Sizes: 4' x 6', 7', 8', 9', 10' . . . 1" thick. (Also ¾", 1½", 1½" thick.)

See Your Gold Bond Dealer



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

Publisher's Page

Making Private Enterprise Work

THE purpose for which every private enterprise industry exists is to make profits. But each industry's long-range profits will depend more than ever in future upon how much it promotes the public welfare. For to be able to convince that it can, does and will promote the public welfare better than government enterprise will be necessary to enable private enterprise to prevail in any industry.

The private enterprise home-building industry can best promote the public welfare after the war, and make adequate profits for itself, by providing a million better homes each year at the lowest practicable annual total cost of home-ownership.

Providing better homes each year will require keen competition in improving architecture, and in developing, selling and utilizing improved and new materials for building and equipping homes. It will require effective efforts for changes in labor-union rules and municipal codes tending to prevent progress.

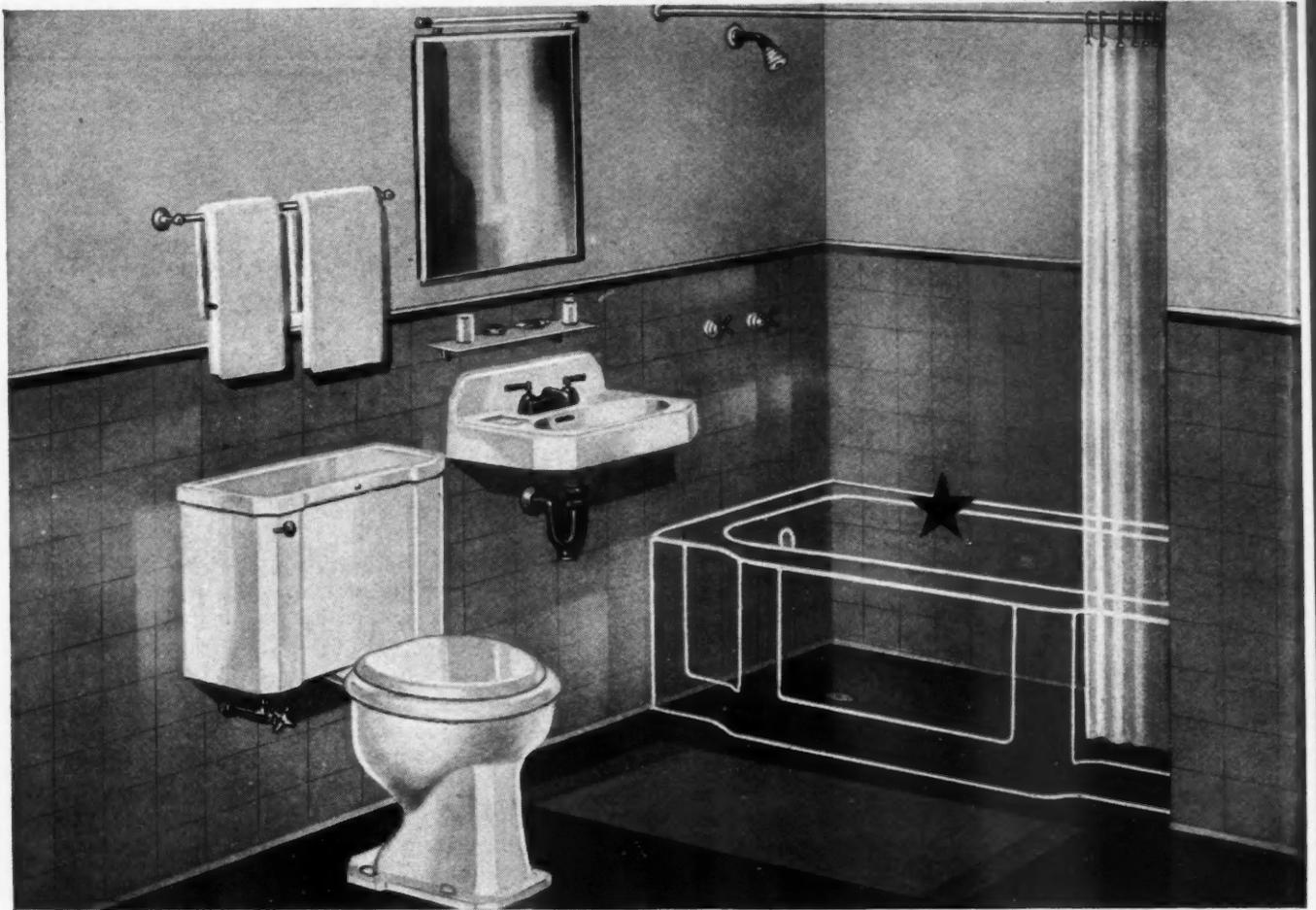
Costs include those of sites, financing, materials and equipment, and labor. Financing has been made less difficult and expensive for the home-owner by methods reducing interest and enabling him to pay indebtedness in installments over periods of years, such as that provided by the National Housing Act. Whatever government co-operation in financing is afforded should always amply safeguard the taxpaying public from loss. Monopoly practices tending to make prices of materials and equipment higher than they would be made by competition should be eliminated. And this includes monopoly practices of labor unions for maintaining excessive and inflexible hourly wages, for unduly restricting working hours, for restricting the amount of work done for the wages paid, and for otherwise inflating building costs. The policy prevailing in almost every community of imposing a disproportionate burden of taxes on real estate, and thereby burdening home-ownership, should be exposed, attacked and overthrown.

The foregoing is a large program. Being a business man, as well as a student of economics and politics, the writer is aware that it is much easier to write it than to get it carried out. Business men, large and small, are under constant temptation to join in economically unsound practices to increase immediate profits. They have arrayed against them labor-union leaders who, backed by politicians, perseveringly use political and monopoly methods to get more pay for less work—ostensibly for the benefit of wage-earners; actually to their detriment.

But—the issue presented to the building and every other industry is, free private enterprise, versus a government-planned, dominated, recklessly taxing, spending and subsidizing economy *in competition with private enterprise*. To destroy that menace, private enterprise must be made to function in the public interest as efficiently as possible. To function as efficiently as possible, it must itself conform with the economic laws of free enterprise; and also present the strongest *organized* resistance it can, *nationally and locally*, to every government or labor-union policy tending to prevent efficiency.

It will be a hard struggle. But private enterprise can win it. There is the most public sentiment against "government planning" that there has been in a decade. But to win, private enterprise will have to deserve to—and really fight.

Samuel O. Drumm,



The Case of the Missing Bathtub★

Essential materials that might have gone into the production of Kohler bathtubs are going to battle instead.

Much of today's war housing is destined for permanent occupancy. There will be a substantial market for you in the post-war period if space is provided in wartime homes for future installation of bathtubs.

Americans insist upon bathtubs. Women particularly have favored tub-bathing facilities for

their own use and for their children. Homes in which provision has been made for the tub will have a greater interest to prospective tenants and owners.

Why not design bathrooms so that an easy and inexpensive installation of a bathtub can be made by the owner later? You can build goodwill and post-war business for yourself. Kohler Co. Established in 1873. Kohler, Wisconsin.

★ BUY UNITED STATES WAR BONDS ★

KOHLER OF KOHLER

PLUMBING FIXTURES AND FITTINGS • HEATING EQUIPMENT • ELECTRIC PLANTS



FLOORS OF THE FUTURE

What Will They Be?

You read much about the "house of tomorrow"—predictions that new forms of glass, metal, plastic, and plywood will be found in every room . . . that kitchens will be mechanical wonders . . . that bathrooms will be like those in the movies . . . that windows will wind up and down like those in an automobile . . . that roofs will slide back and forth at the owner's command.

What about the floors? What kind of flooring will be used in the "house of tomorrow"? Of one thing you can be certain . . . that it will be made of hardwood. No satisfactory substitute has been found for hardwood floors. No other material has its warmth, beauty, economy,

durability, and other desirable qualities.

You can also be certain that the new postwar flooring will be a product of E. L. Bruce Co., world's largest makers of hardwood flooring. The two major flooring improvements of the past 25 years have been developed in our plants—first, unit-wood block flooring for use over concrete; later, prefinished strip flooring known as "Streamline."

Our wood experts, engineers, and chemists are continually conducting research work to produce a better hardwood flooring to match the improvements in other building materials. We can't tell you now what the new postwar flooring will be. But you may rest assured it will be a Bruce product.



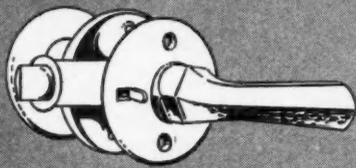
E. L. BRUCE CO.

Memphis, Tennessee

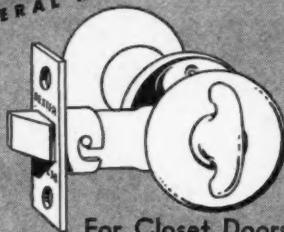
Homes
the tub
ve ten-
★
sy and
can be
I good-
Kohler
consin.

★
R
ANTS

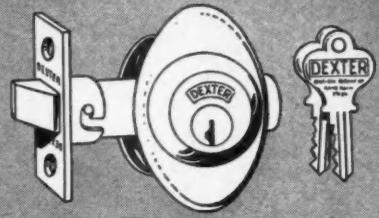
DEXTER-TUBULAR FOR WAR HOUSING
 CONFORMS WITH APPLICABLE FEDERAL REGULATIONS



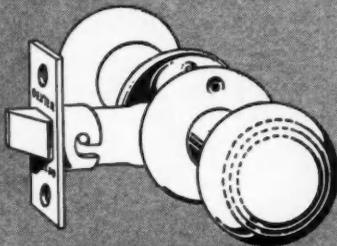
Screen Door Latch



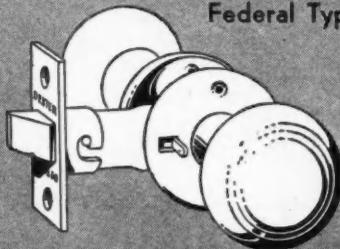
For Closet Doors
 Federal Type 150A



Entrance Set
 Federal Type 150-154

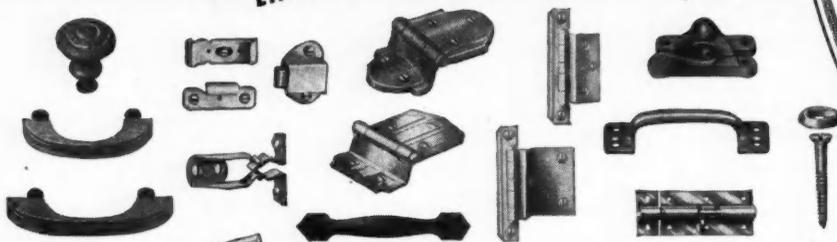


For Passage Doors
 Federal Type 150



For Bedroom and Bathroom
 Doors Federal Type 151

DEXTER-TUBULAR SATISFIES
 LIFE-TIME WARRANTY BACKED BY REPUTABLE NAME RATED AAI



DEXTER-TUBULAR SAVES
 IMPORTANT MAN HOURS IN WAR ECONOMY



... New Catalog
 shows permitted items — the Dexter-Tubular Commander Line and Cabinet Hardware that conform with Federal specifications on War Housing. Write today for your copy — sent at once without obligation.

Builders—particularly in War Housing areas—find many advantages today from the NATIONAL BRASS line. The time savings of Dexter-Tubular Drill Hole installation are especially significant today. The Lifetime Warranty is a factor for permanence and satisfaction. And you will find many uses for the supporting line of Cabinet Hardware, Shelf and Screen Door Hardware — conforming to applicable Federal Regulations.

WHAT IS AVAILABLE WITHOUT PRIORITY — Many items of Cabinet Hardware and DEXTER-TUBULARS illustrated in the regular catalog are still available. Lines are broken — you may not find the finish or design desired — but we will advise you of the closest alternates in stock. Available without priority while existing stocks last. Don't hesitate to write or wire us — as always, we want to serve builders to the best of our ability.

National Brass Company, Mfrs.
 GRAND RAPIDS, MICHIGAN
Certified Builders Hardware
 Cabinet Hardware
 Screen Door Hardware

Washington News Summary

WPB Releases Several Items For Builders' Use

L-41 Restrictions on Hotel Construction Modified by WPB

Clarification of WPB restrictions on construction, alterations, maintenance and repair work on hotels has opened a field of endeavor for those interested.

The terms of paragraph (b)-(1) of L-41, which prohibits unauthorized construction, do not apply to hotels provided the estimated cost of the construction over any continuous twelve month period does not exceed \$1,000. The revised order, however, further provides that within the prescribed limit of expenditure not only materials obtained without priorities assistance may be used, but also materials obtained with priorities assistance for some other purpose before construction was begun. This is, of course, subject to restrictions of other orders applicable to such materials and to the other usual limitations of L-41.

Under a new definition, maintenance and repair means the work that is necessary to keep a structure in sound condition, but does not include any building operation involving a structural alteration or change in design.

Minimum construction necessary to make safe and to protect any structure or project, or the contents thereof, damaged by fire or other specified casualty, may be undertaken without application, provided it can be completed without priority assistance for the materials involved. In this case too, materials obtained with priority assistance for some other purpose, before construction was begun, may be used.

Likewise, construction to rebuild or restore multi-residential construction, hotels for example, damaged by fire or other specified casualty, may be undertaken, or new multi-residential construction built in its place, provided that the estimated cost of reconstruction shall be less than \$5,000, and that within two weeks of such damage or destruction form PD-200 is filed with WPB.

To protect civilian economy and to allow the distribution of essential goods and equipment, arrangements for the production of specific quotas for civilian use have been made.

For the three months beginning in April, production up to 210,000 non-mechanical ice boxes is permitted. Use of metal in these ice boxes is limited to a few pounds each. Altogether more than 400,000 mechanical and non-mechanical refrigerators have been released for spring sale. 148,847 electric and gas operated units have been released from stocks frozen in the hands of dealers and distributors.

In an announcement on March 10, WPB gave advance approval to small electric, gas or water connections for construction or remodeling projects permitted by limitation order L-41. Prior to this, individual application had to be made to WPB.

Domestic sizes of certain air boosters and under-fire coal burning fans have been released for general distribution by amendments of WPB's L-280. These items originally were frozen for use in war housing projects. They were released because they are too small to be installed in the heating units in the housing units now planned.

While the manufacture of metal plastering bases for civilian use is

(Continued to page 84)

Title I and Title VI Financing Assured by Amendment

Insured financing under Title I and Title VI have been assured by Congress and approved by the President.

Title VI makes available the insured financing of approximately 90,000 additional dwelling units to be built for war workers by private builders.

Because of wartime hazards and uncertainties most private lending institutions are reluctant to finance war housing projects on an uninsured basis, with the result that approximately 85 per cent of all private war housing being built is covered by Title VI insurance.

Title I will continue to be available for war housing conversions and essential repairs.

Title I loans for the purpose of converting existing structures to provide additional living quarters for essential war workers may be insured for amounts up to \$5,000 to be repaid in equal monthly installments over periods of as long as seven years.

Privately financed conversions represent an important part of the National Housing Agency's Homes Use program.

Qualified projects are eligible for AA-3 preference ratings under NHA's local quotas for critical war housing areas.

For financing essential repairs and

(Continued to page 84)

Most Building Freed From Price Control

Most of the construction industry not already exempt from price control, will soon be removed from regulations, according to Price Administrator Prentice M. Brown. Repair and maintenance services, however, which are a factor in civilian rents, will remain under control.

General contracting activities and many types of sub-contracting on new dwellings and factories will be formally excluded from price regulations. The necessity for specific regulation over the entire construction field has been eliminated almost completely by wartime limitations on civilian construction, and the drastic decline of contracting activities. Furthermore most of the industry is now active in military construction

and other government building activities which previously have been exempted from regulations.

Examples of construction work which will remain under control are as follows: Repair services, including plumbing and the repair and maintenance of heating plants. Sheet metal work; the sale of goods, such as roofing, flooring and siding on an installed basis, when such materials are necessary for the maintenance of existing structures. The sale of building materials on an installed basis where the items are sold on a unit basis, including materials such as pipe and fencing and mechanical equipment, such as water heaters and furnaces, when sold on an installed unit basis, will remain under control.

R P M

REPAIR PROTECT MAINTAIN

News DIGEST



SECOND HOME FRONT OPENED!

NELSON OKAYS CAMPAIGN

Says Conservation Important for Victory

The new Barrett Second Selling Front of Repair, Protection and Maintenance is off to a flying start with the full support of Donald Nelson, Chairman of the WPB.

Apprised of Barrett's interest in promoting the conservation of vital materials through the use of paints, wood preservatives and other Barrett products, Mr. Nelson in a letter to Barrett says:

"Since the conservation of every vital material during the war is of utmost importance, I am confident that this campaign will be of especial interest to building owners."

The full support of the Government of this RPM selling front is of particular importance to roofing dealers, contractors and builders. Backed by the WPB, Barrett and the building industry, this new selling front promises to be a real major offensive.



"Corny" Cobb SAYS . . .

"Well, by golly war's sure changin' things 'round here lately. This here RPM front is sure worth a pipeful a' thinkin'!

"These here restrictions we're yellin' about don't come near to touchin' th' biggest market we got. This here is the Repair and Maintenance market . . . the dad blamed biggest of 'em all!"

Reg. U. S. Pat. Off.



Worn metal flashing is repaired with application of Barrett Plastic Elastigum* and asphalt-saturated felt.

Clip shortage problem is solved by Dallas Milliken of Topeka. His mechanic uses S.I.S.* Cement.

Barrett Pitch-saturated Waterproofing Fabric and P.B. Cement provide damp-proof barrier in masonry.

YANKEE INGENUITY SOLVES PRODUCTION SHORTAGE

The use of practical substitutes to overcome the shortage in restricted materials has presented an ingenious solution to the troubled building industry.

A typical example is that of Dallas Milliken of Topeka, Kansas. Unable to obtain lap clips, he fastens shingles on roofs with Barrett S.I.S. Cement. This product, well-known to roofers everywhere, is a unique ready to apply, self sealing waterproofing adhesive. Milliken's men use a hand pressure gun to apply the cement.

Many Barrett products are saving precious steel and

copper for war uses today. Where brick arches are used instead of steel lintels over doors and windows, and where masonry substitutes for steel, Hydronon provides the necessary damp proofing. Wood trusses and timbers are treated with Barrett Carbosota*, the recognized high-quality creosote oil. Greater use is being found for Barrett Plastic Elastigum for flashings on roofs and parapets. Every day American ingenuity finds new ways of substituting for critical materials, and Barrett Protective Products play a great part in this increasing trend.

GOVERNMENT CITES BARRETT FOR WAR BOND AD



A recent Barrett advertisement which appeared in the Saturday Evening Post has been cited by the Government "For distinguished services rendered in behalf of the National War Savings Program."

This forceful Barrett advertisement was inspired by the thrilling adventure of three Navy men adrift for 34 days on a rubber raft.

This advertisement is a digest of the eight page Barrett RPM News. It is full of news and ideas to help you sell. Mail the coupon for your FREE copy.

BARRETT OFFERS HEAVY AMMUNITION FOR NEW SELLING FRONTS

With 30 percent of American homes obsolete and some 12 million houses over 25 years old, leading roofing dealers, contractors and builders are joining forces with Barrett in the opening of a new second home front—Repair, Protection and Maintenance.

Long troubled by material shortages, the men in the building industry see in this new selling front the solution of many of their wartime problems. The market is tremendous, and will widen even more as the pressure of priorities on building materials and construction makes itself felt more strongly.

Today Barrett is helping roofers, contractors and builders to fight on this RPM front by offering ammunition which includes not only a complete line of Protective Products for repairing, protecting and maintaining homes and farms, but also complete and comprehensive promotion material. Dealers and distributors are using Barrett direct mail campaigns, window displays, selling manuals, etc., to widen the RPM front now. Every month from now until the end of the war will see a greater need for repair, protection and maintenance.

The Barrett Division AB-5-43
Allied Chemical & Dye Corporation
40 Rector Street, New York City

Please send me my FREE subscription to the RPM News, to help me with new selling ideas.

Name

Address

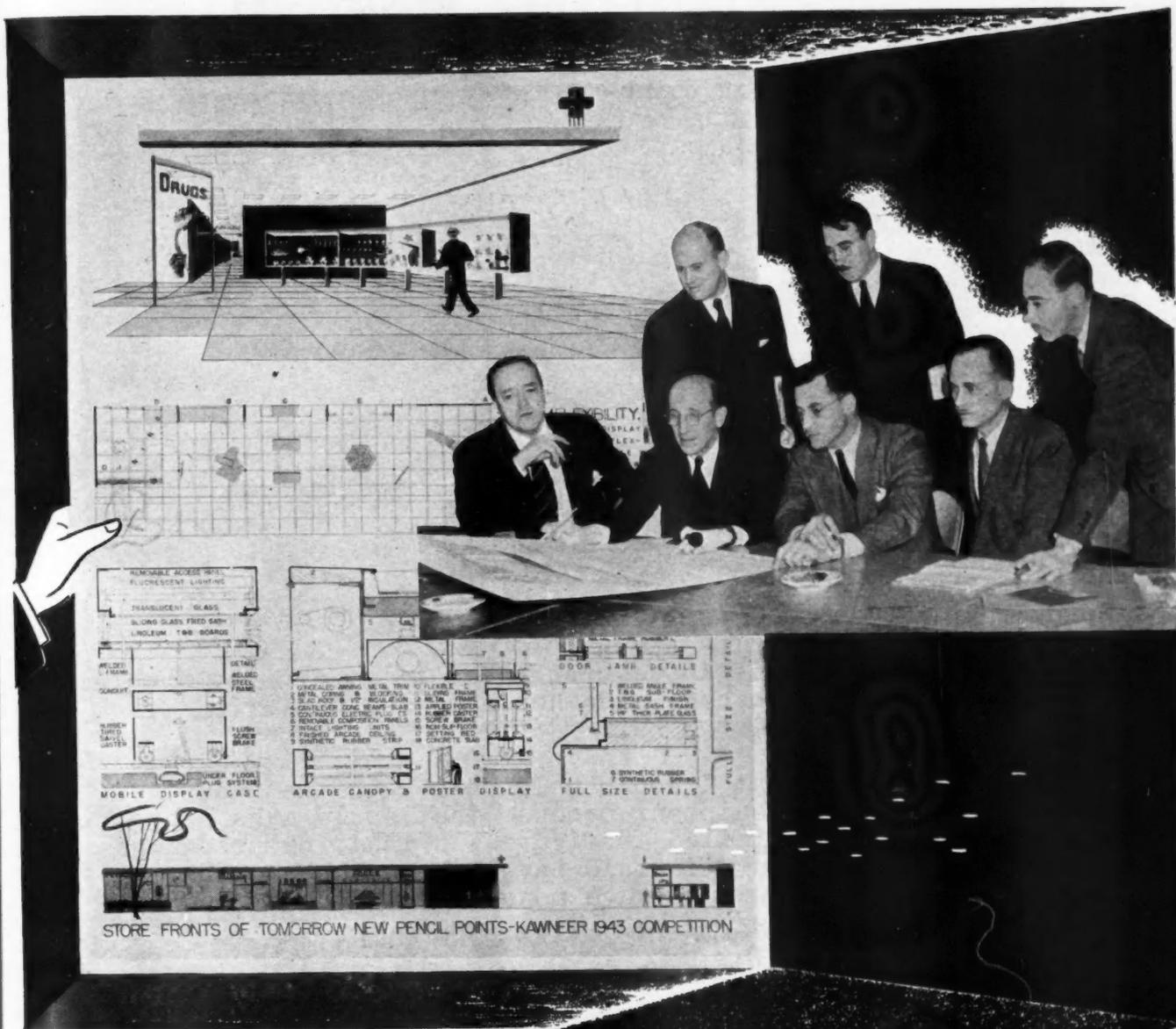
City

State

LOOKING AHEAD -

THE STORE FRONT OF THE FUTURE is very much the business of The Kawneer Company. Having originated the store front idea back in 1905, and having pioneered many important store front developments, Kawneer is now working on the better Kawneer Store Fronts of tomorrow.

The recent Kawneer-New Pencil Points Architectural Competition revealed interesting new trends; other research is pointing the way to improvements of great importance. Kawneer production facilities, now devoted 100% to the war effort, will again be directed to the manufacture of superior store front construction.



Kawneer

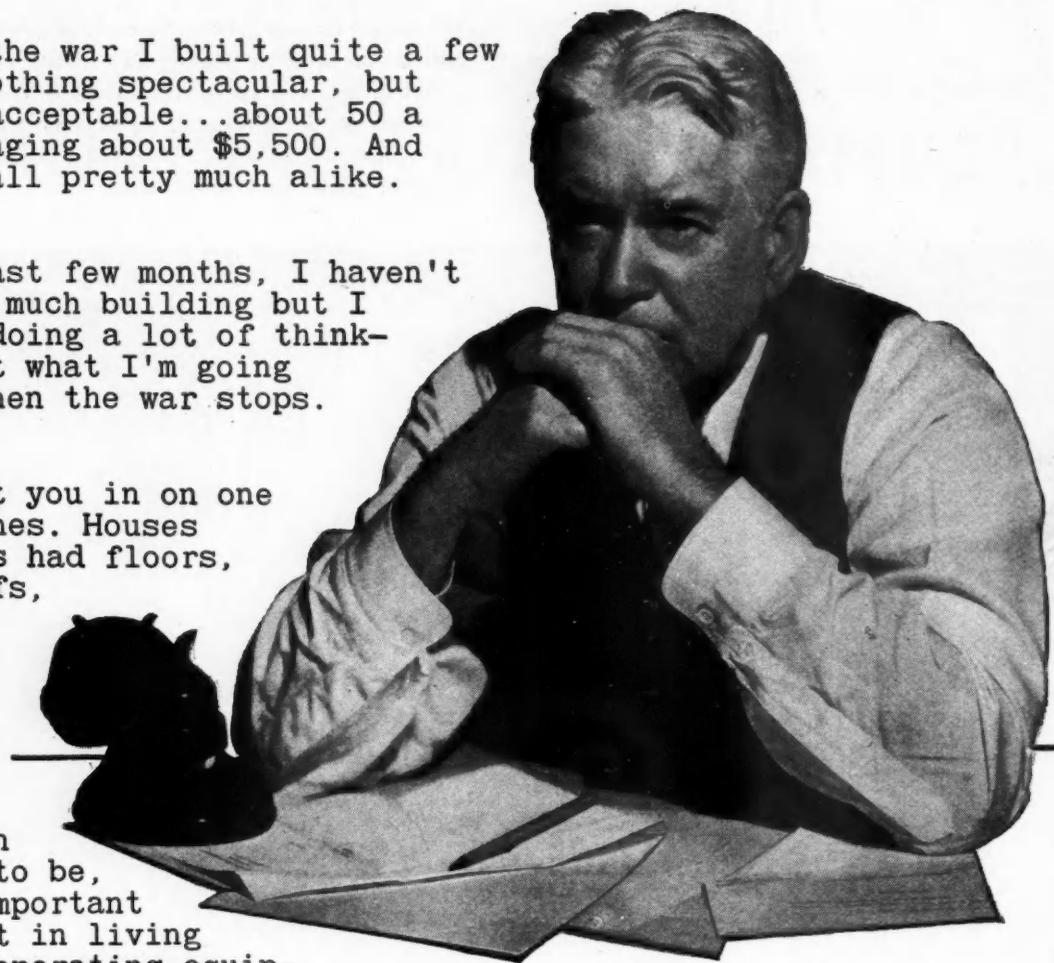
...ATORS OF THE
... FRONT
... MINUM RESIDENTIAL WINDOW

"...I'm not doing much building
but I'm doing a lot of thinking!"

"Before the war I built quite a few houses...nothing spectacular, but generally acceptable...about 50 a year, averaging about \$5,500. And they were all pretty much alike.

"These last few months, I haven't been doing much building but I have been doing a lot of thinking...about what I'm going to build when the war stops.

"I'll let you in on one of my hunches. Houses have always had floors, walls, roofs, doors and windows, and while all these structural features are vastly better than they used to be, the most important improvement in living is in the operating equipment...the things we use to cook and heat with, and the numerous other devices which have made housekeeping easier.



"I used to figure that I would hold down both the amount and quality of operating equipment because that would make the house cheaper. What I failed to figure was that, by using the most efficient equipment, I would have a better house to sell, and at the same time I would save money for the owner in his monthly operating bills.

"So here's my No. One Memo for post-war building:
Efficient, quality-built electrical equipment usually contributes more in operating economies than any increase it may cause in monthly amortization payments when financed under a long term mortgage.
It can actually cost less to live better."

We would be glad to receive comments or questions on this memo.

GENERAL  ELECTRIC

HOME BUREAU

BRIDGEPORT, CONN.



Today's **SYMBOL OF ACHIEVEMENT...**



Here, at Youngstown Pressed Steel, a new flag floats with the Stars and Stripes, the Army-Navy award for Excellence.

We are proud of this coveted insignia of quality in our war materials; even prouder than we are of the recognition of quality we earned from the women of America before the war and which we

pledge to maintain in the future.

Builders and Architects are the logical outlets for *Youngstown* kitchens — and *Youngstown* kitchens will be your symbol of leadership in the kitchen market.

TODAY invest in victory by buying War Bonds and Stamps and **PLAN** for your share of that tremendous kitchen market of **TOMORROW**

It's Our War Let's Fight It Now

Youngstown PRESSED STEEL DIVISION of MULLINS MANUFACTURING CORPORATION, Warren, Ohio

On and Off the Record

News, Views and Comments

BEATEN MEN?—Beaten paths are for beaten men, says Eric Johnston, dynamic head of U. S. Chamber of Commerce. He urges private business to create definite action plans for post-war business. "Private business is not dead," he declares; "it is just beginning to begin."

He spoke of plastics, light weight metals, synthetics, electronics and their effect on post-war living. He mentioned a goal of a million homes a year for business, finance and a building industry organized to do the job.

MAKE BIG PLANS—*American Builder's* survey, described in this issue, clearly shows that private builders are not "beaten men." They are ready to take on new ideas as fast as provided sound and workable.

So let us not make any small plans for post-war. Let us plan to build at least a million houses a year by private enterprise within a short time after the war ends.

This will produce business for small builders as well as big builders; for prefabricators as well as single house operators; for lumber dealers as well as real estate men; for building and loan league members as well as for financial institutions that are more enthusiastic about FHA.

LOW PAYMENT—An important feature of *American Builder's* post-war plan is the building of houses to rent, and the study of a plan to sell houses on either very low down payments or none at all, using the lease-option system of FHA Title VI.

Many conservative builders and financing people object to such an idea, but I believe enough safeguards such as higher construction standards and better planning can be set up to make some system of this type work.

In order to reach very low income workers, and in order to answer the accusations of the public housers that private enterprise cannot do a satisfactory job, the industry must have such a plan and must also build houses to rent.

Under any low cost housing plan there must be some risk. But if the houses are soundly built and soundly planned losses can be held to a minimum, which could be covered by a national mutual mortgage insurance fund. That is far better than having

the government do the building and the taxpayers pay the entire cost.

STAUNCH AND HOMELIKE—Among the phrases used by builders, describing what they think the public will want in post-war houses, the phrases "*staunch, homelike, livable, convenient,*" keep cropping up. The phrases most to be avoided, as far as the public is concerned, are "*revolutionary, radical, different, pre-fabricated.*"

Apparently as far as the average home buyer is concerned his habits of thinking are strongly rooted in the experience of his youth and the life about him. When he thinks of buying a home, he thinks of settling down; he wants something that is staunch, sturdy, homelike and comfortable.

HOMES BY MACY'S—Noteworthy building news was made last month when Macy's big department store in New York City opened a striking post-war home display, and started "Own Your Home" club savings accounts for prospective buyers. A number of six foot models of Homasote precision-built houses were on display. At frequent intervals a demonstration of the ease with which the houses could be erected and demounted was put on.

Back of this Macy display is an ambitious post-war home building and marketing scheme conceived by energetic F. Vaux Wilson, Jr., of Homasote Company. A number of other large department stores are planning to set up similar displays. Department store owners realize that new homes offer a lucrative market for furnishings, and may enter the home field.

FOR PRIVATE BUILDING—It is apparent that top government officials have finally awakened to the fact that positive action is called for to encourage private war housing construction. NHA Administrator Blandford has gone out of his way to call upon private builders to resume work. Revisions in procedures, standards and methods have removed some of the worst obstacles. Additional priority has been granted. *The government now says it wants private builders to provide 250,000 units this year, but it will take a lot of encouragement to get them to forget and forgive the troubles they have gone through.*

HUNGRY LOGGERS—The huge appetites of lumber jacks is a national problem. It seems that sharp reductions in lumber production are due to scarcity of workers. Lumber producers say an important reason is that their food allotments were sharply cut, and the lumber camp workers, who love their meat and beans in colossal portions, simply wouldn't take it.

BETTER AND BIGGER—Through all of the letters and comments on post-war from builders has run the theme that post-war houses will be *better, bigger and more fully equipped* than in the past. A definite reaction against small, flat roofed shack-like war housing has set in. The public will revolt against the standardized housing they have had in the war and will want individual, livable, well equipped houses.

SINGLE-LOT PROBLEMS—One significant fact often overlooked by post-war planners who talk about mass production of housing is that in almost every community there are large numbers of single lots with utilities already installed, which form the largest immediate market for home sites. In Detroit, for example, there are thousands of home sites already developed with utilities in. The houses that go on such sites must fit in well with the neighborhood—they *cannot be revolutionary in design*. Nor can they easily be "mass produced" in batches of 100 or more because the building sites are widely scattered.

FIFTY TO ONE—Since Pearl Harbor private builders have added more than 1500 family units in the city of Detroit through conversion or additions to old dwellings. It ought to be a lot more, and with the proper kind of a promotional campaign private builder could triple or quadruple that record. But what did the public agencies do? With all the money spent and all the hullabaloo and all the government employees on the public payroll—*only 31 family units were added* by conversion of old structures.

That ought to be some indication to government officials that if they want to get a job done, the way to do it is to encourage, promote and assist private enterprise rather than to set up some complicated new government agency to do the work itself.

DEWALT

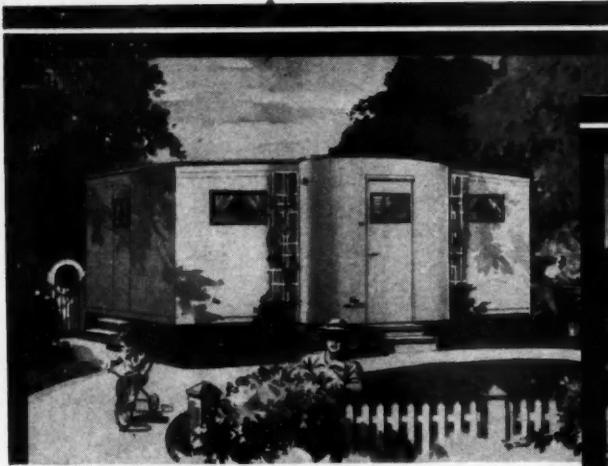
CUTTING MACHINES

help build and maintain farm buildings



Today—when all farm production is so important to the war effort—it is essential that farm buildings be built and maintained efficiently. DeWalt Cutting Machines have long been *custom-cutting* farm buildings in quantity. To help relieve the critical situation in lumber, DeWalt again comes to the front by re-working any lumber into usable material. Sturdy, flexible, dependable—DeWalt Machines do their cutting with a precision heretofore unknown.

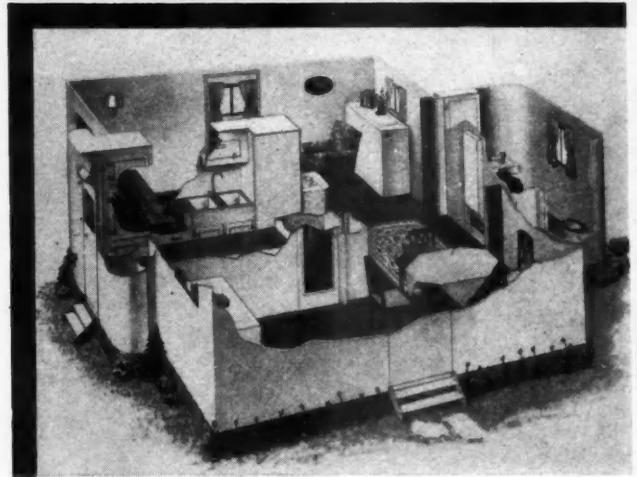
DeWALT PRODUCTS CORPORATION
Lancaster, Pennsylvania



Single-Family Unit
(With or without complete bath)



Two-Family Unit
(With or without complete bath)



Expansible Dwellings and Utility Units!

AN OPPORTUNITY for Contractors and Builders!

If new war plants are being built in your locality, or if old plants are undergoing expansion, investigate the possibilities of this new low-cost housing plan.

*Write for
Complete Information*

Factory-built, Factory-assembled and Factory-equipped

When emergency housing is needed at war production plants, Palace Expansible Dwellings and Utility Units quickly solve the building problem. Being completely factory-built, assembled and equipped, they can be delivered by motor truck direct from factory to building site.

With plumbing, wiring and electric fixtures installed at the factory, all that is necessary is to place the dwelling units upon previously prepared foundations and connect them with sewer, water and electric lines. Complete even to furniture, floor coverings and draperies when they leave the factory, they are ready for occupancy within a few hours after reaching their destination.

Two laundry and four toilet units are sufficient for every 100 dwellings. However, the dwelling units may, if desired, be had with private utilities installed, making separate utility units unnecessary.

Palace portable housing and utility units are now available for factory housing projects and subdivision building projects in war-production areas upon approval of the National Housing Agency.

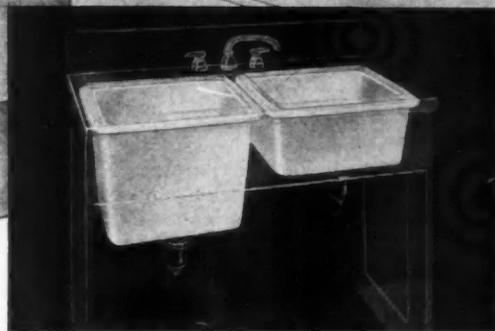
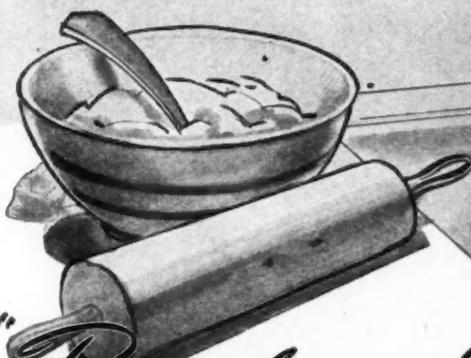
**PALACE TRAVEL COACH CORPORATION
FLINT, MICHIGAN**

Palace

TRAVEL COACH CORPORATION

*If you worked
in the kitchen*

**YOU'D WANT
PERMA-GLOSS TOO!**



"Remember me?"

I'm the housewife who works with the equipment you install in the kitchen. I use the Perma-Gloss sink and tray. I clean them. I want them to clean easily. I don't want to worry about chipping, cracking or staining. In specifying the 'Technical details' don't overlook me and my convenience.

"Take a tip and supply Perma-Gloss—it meets my requirements and if it meets mine, it will satisfy your other customers."

Through installations in Government housing units, dormitories and camps, Perma-Gloss is making new friends by the thousands. "After-the-war" customers are learning Perma-Gloss advantages now—they will insist on Perma-Gloss in new homes.

PERMA-GLOSS

- ▶ is light weight—easy to install
- ▶ is strong and durable—will not dent or craze
- ▶ is acid proof thruout, not merely acid resistant
- ▶ has no enamel to peel or chip—no iron to rust
- ▶ will withstand thermal shock
- ▶ is inexpensive

For detailed information send for our latest Perma-Gloss bulletin.

BUY MORE WAR SAVING BONDS

General Ceramics Co.



**SANITARY WARE DIVISION
METUCHEN, NEW JERSEY**

Letters

*Facts, Opinion and Advice
Welcomed for This Dept.*

Traditional Style

Lansing, Mich.

To the Editor:

We believe the American public will cling to the traditional styles of architecture such as have been popular for quite a few years back. In our area the attempts at modern and extreme modern design houses were not successful.

If we were allowed to continue building now we would probably go ahead with the four and one-half room Cape Cod which we have found very acceptable in this area.

If other merchandise becomes as streamlined as magazine articles and other advance publicity would indicate, then probably a trend to radical changes in other merchandise would have its effect on house design.—WILLIAM J. PORTER, Jr.

"Dream" Home Will Stay

Dayton, O.

To the Editor:

I can't see why anyone should expect very radical changes in people's sentiments when it comes to choosing their home. "Home" always meant more to prospective home owners than just a convenient pile of cement, timber, or brick, in which one merely eats and sleeps. These sentiments surrounding the word "Home" have not been born over night—they are the result of years and years of living. The majority of the post-war home owners are the people who would be building or buying their homes now, if the war had not intervened. Their "Dream Home" will stay with them in their minds, and I don't think it will be possible to impose anything upon them which doesn't closely resemble that same "Dream Home."—PAULINE HEIDELBERGER.

For Individuality

Arlington Heights, Ill.

To the Editor:

In the majority of cases, a man building his home wants individual design, different from those of his neighbors. It must meet certain requirements that only he and his family can decide; therefore he employs an architect or reliable builder and his thoughts and wishes are developed in a plan.

It is our experience, that these individual requirements can be obtained only by building individual units. The pre-fabricated, or mass-built, similar homes, are satisfactory for war camps, group factory homes, and the like, usually built for emergencies.

We are planning, immediately after the present ban on building is lifted, to start the construction of twenty-five homes of various types and sizes, ranging in price from \$6500 to \$7950.—CARLTON A. SMITH.

Working for "Uncle"

Whittier, Calif.

To the Editor:

My husband has joined the Army, and therefore cannot write you at the present time.

Mr. Colegrove has built over 900 houses. I am sure that what he intends to build after the war will be on the order of our pre-war houses. What was the matter with them? The house in your November, 1942, issue on page 50 is only a sample. They were all as good or better.

I am very sorry Mr. Colegrove isn't in a position to send you more material at this time, but working for "Uncle" is his big job now.—MRS. D. R. COLEGROVE.

Modernized Exteriors

Denver, Colo.

To the Editor:

Our experience in house building is that the public prefers conventional architecture, but the exterior must be modernized and as one builder expressed it, houses must contain up-to-date "gadgets."

Our construction in the past has been confined to residences costing \$10,000 and up, and when building is resumed, we doubtless will continue in this bracket although we have plans for a subdivision which we will endeavor to develop in houses ranging from \$6,000 to \$10,000.—VAN HOLT GARRETT.

Low Income Housing

Denver, Colo.

To the Editor:

If the cost is low enough, complete shop or factory fabrication may be used. Certainly pre-cutting of materials

with power equipment will be used. After the war, I expect more variation in exterior design in homes built in large quantities at a comparatively low price for as low income brackets as can be reached with new homes. I hope to provide sound construction with minimum luxuries, making home ownership available to as many as possible.—FRANKLIN L. BURNS.

Plastic, Glass, Lighting

Chevy Chase, Md.

To the Editor:

As my homes are traditional Colonial, I expect to adhere to somewhat the same construction after the war. Progress in home building will probably be reflected in improved lighting, most likely fluorescent indirect—kitchen and bathroom units that are part of the wall with no dirt-collecting space between—improved heating and air-changing units, maybe cooling—possibly plastic water tubing and glass partitions.—EVERETT A. R. SEARL.

Slow Change Best

Anderson, Ind.

To the Editor:

Post-war housing, I believe, will gradually adopt proven innovations. Radical changes are always dangerous and may not click. If they do click they may depreciate older properties too rapidly.—H. A. SMITH, Realtor.

Fireproof Construction

St. Louis, Mo.

To the Editor:

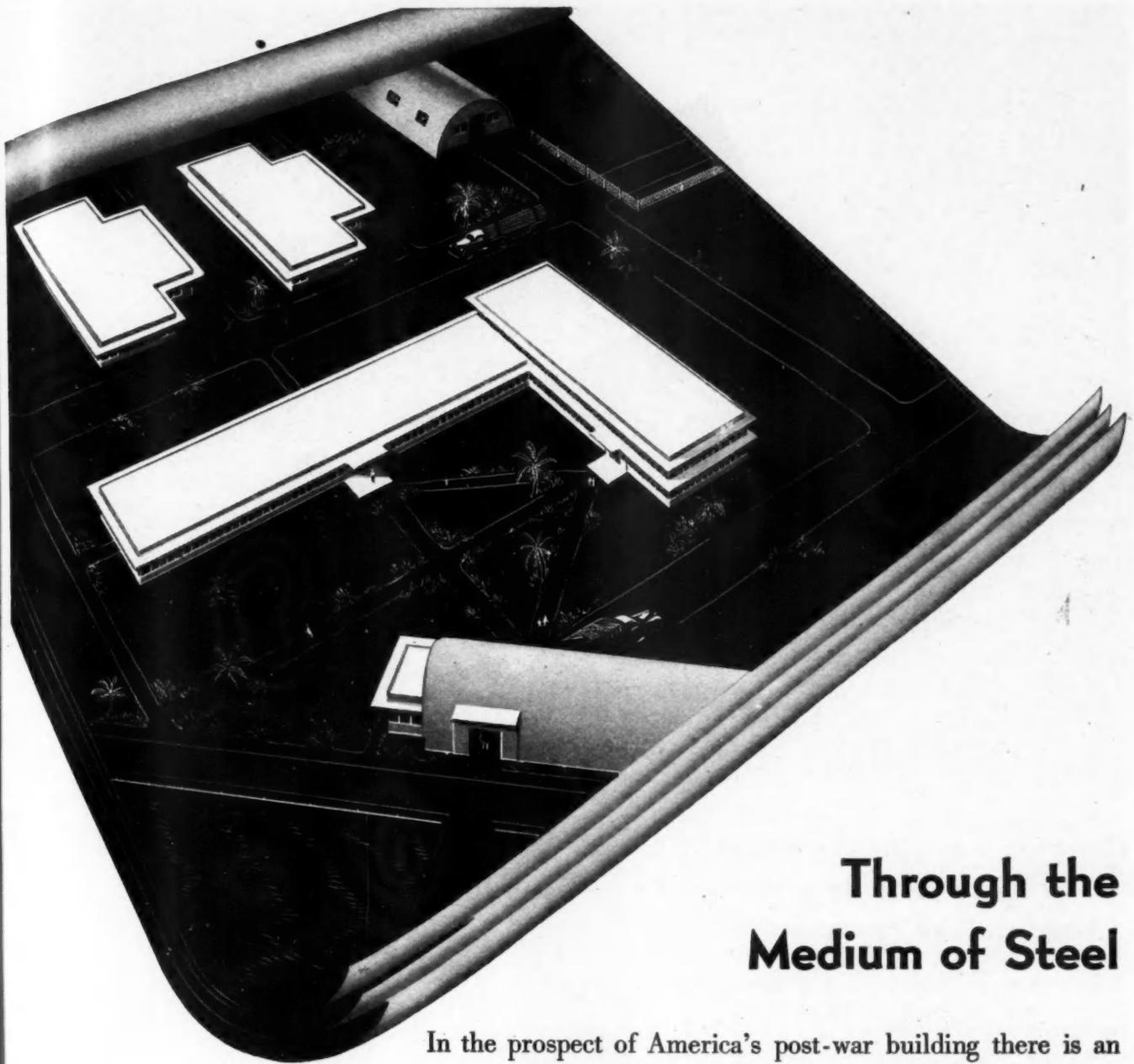
We believe post-war homes will tend toward fireproof construction. For the better grade of home there will be more electrical devices; extensive use of plastics, and brick exterior will prevail in this area.—ROBERT A. BURNS, Realtor.

Better, But Same Price

Weymouth, Mass.

To the Editor:

We expect that post-war houses will be better equipped houses at the old prices due to better methods of building with power equipment and lower cost of financing.—L. ROBERT ROLDE.



Through the Medium of Steel

In the prospect of America's post-war building there is an exciting challenge of new frontiers. Geographical limitations will be erased by the extension of air transportation, while boundaries of architectural thought and execution will be pushed back by new methods and materials.

Stran-Steel's wartime assignment has brought about far-reaching engineering developments in the structural uses of light gauge steel. Today this knowledge is of military value, and is being applied entirely to military uses. When the war is won, it will provide new latitude, new freedom of expression, in varied fields of peacetime construction.

STRAN STEEL

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

UNIT OF NATIONAL STEEL CORPORATION

used.
riation
uilt in
ly low
ets as
es. I
uction
home
ny as
RNS.

Md.

Coloni-
nat the
war.
proba-
ghting,
-kitch-
part of
space
d air-
-pos-
d glass
A. R.

Ind.

e, will
vations.
ngerous
o click
pperties
ealtor.

Mo.

will tend
For the
be more
use of
prevail
URNS,

Mass.

uses will
the old
f build-
d lower
DBERT



Flintkote 4-in-1 Utility Board
 ... a brand new, low cost
 product with many uses

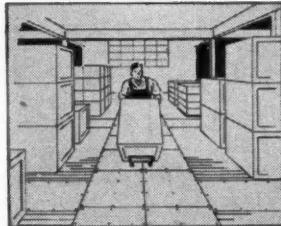
This versatile new product was developed by Flintkote as a wear-proof, weather-tight flooring for Army cantonments.

So effectively did Flintkote 4-in-1 Utility Board cover warped, "opened up" wood floors that it was tried on other hard jobs. As warehouse flooring, it proved very durable. As wall and floor lining in dairy barns, poultry houses, and other farm buildings, it proved an effective substitute for hard-to-get materials.

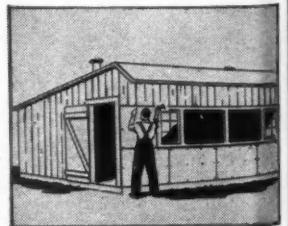
Easily applied even by unskilled labor... these large, rugged panels provide a quick and economical way to roof and side many temporary and portable buildings.

Flintkote makes this tough, versatile material from special felt... treated with stabilized bitumen... compressed onto asphalt-impregnated backing board. Standard panels are 3' x 4'. Lengths up to 8' on special order.

Available in quantity for immediate delivery, surprisingly low in price, the new Flintkote 4-in-1 Utility Board effectively replaces plywood, wallboard, metal roofing or siding and other scarce materials. And you'll discover dozens of other uses for this adaptable newcomer in the Flintkote family of building materials.



Flintkote 4-in-1 Utility Board in trucking allows without any destructive wear and tear... and reduces noise.



4-in-1 Utility Board speeds up repair and construction of many types of farm buildings and industrial structures.



● This illustrated booklet shows more than 40 uses for the new Utility Board. For your free copy, please write to the Flintkote Company, 30 Rockefeller Plaza,

New York. Branches located in Atlanta, Boston, East Rutherford, N. J., Chicago Heights, Ill., Detroit, New Orleans, Waco and Los Angeles.

FLINTKOTE

PO
 1. Ge
 2. Sti
 new m
 3. Int
 decide
 4. Sti
 5. Ge
 For i
 power
 incom
 tell yo
 people
 TM
 serious
 and m
 to 1 ov
 tise. W
 added
 have t
 And
 vertisi
 men in

**WILL
that building
balloon go
UP ?**

"SOMEDAY I'm going to be a millionaire!"...
"Boy, wait till I get going!"... Sounds like a small
boy boasting to his best girl—doesn't it?

Well, that's what a lot of today's post-war talking
sounds like. Realistic adults smile, mutter,
"Maybe..."

Fact is, when the war ends, there *may* be a great
rise in the demand for new buildings—or there may
not be. Certainly there will be a *need* for new hous-
ing. But you know from experience that need and
demand are not always the same thing.

To help you turn the need into demand as soon
as possible after Hitler is washed up, we offer this

**PLAN FOR BUILDING
POST-WAR BUILDING MARKETS**

1. Get ready to make sales the minute peace comes.
2. Stimulate confidence in and acceptance of your
new methods, materials, designs.
3. Interest both men and women, because they jointly
decide when and how to build a house.
4. Stir up prospects for non-residential building.
5. Get the middlemen on your side.

**You can do all five of these jobs
in one magazine, TIME**

For in TIME you can tap the dammed-up buying
power of over a million families with 2½ times the
income of the average U. S. family...in TIME you can
tell your story to America's most important people*—
people who set the pace of living for millions of others.

TIME is one magazine both men and women take
seriously—they add up to more than a million men
and more than a million women, who prefer TIME 7
to 1 over all other magazines in which you can adver-
tise. What's more, TIME's prestige gives your story
added weight with the bankers and executives who
have the say on non-residential building.

And in TIME you back up your trade-paper ad-
vertising with extra impressions on thousands of top
men in construction and finance.

VILLAS SUSPENDED FROM BALLOONS. To solve
the housing problem of London in the 1870s,
Dickens-illustrator George Cruikshank did this
tongue-in-the-cheek sketch to spur the hopeful
do-nothings of his day into action.



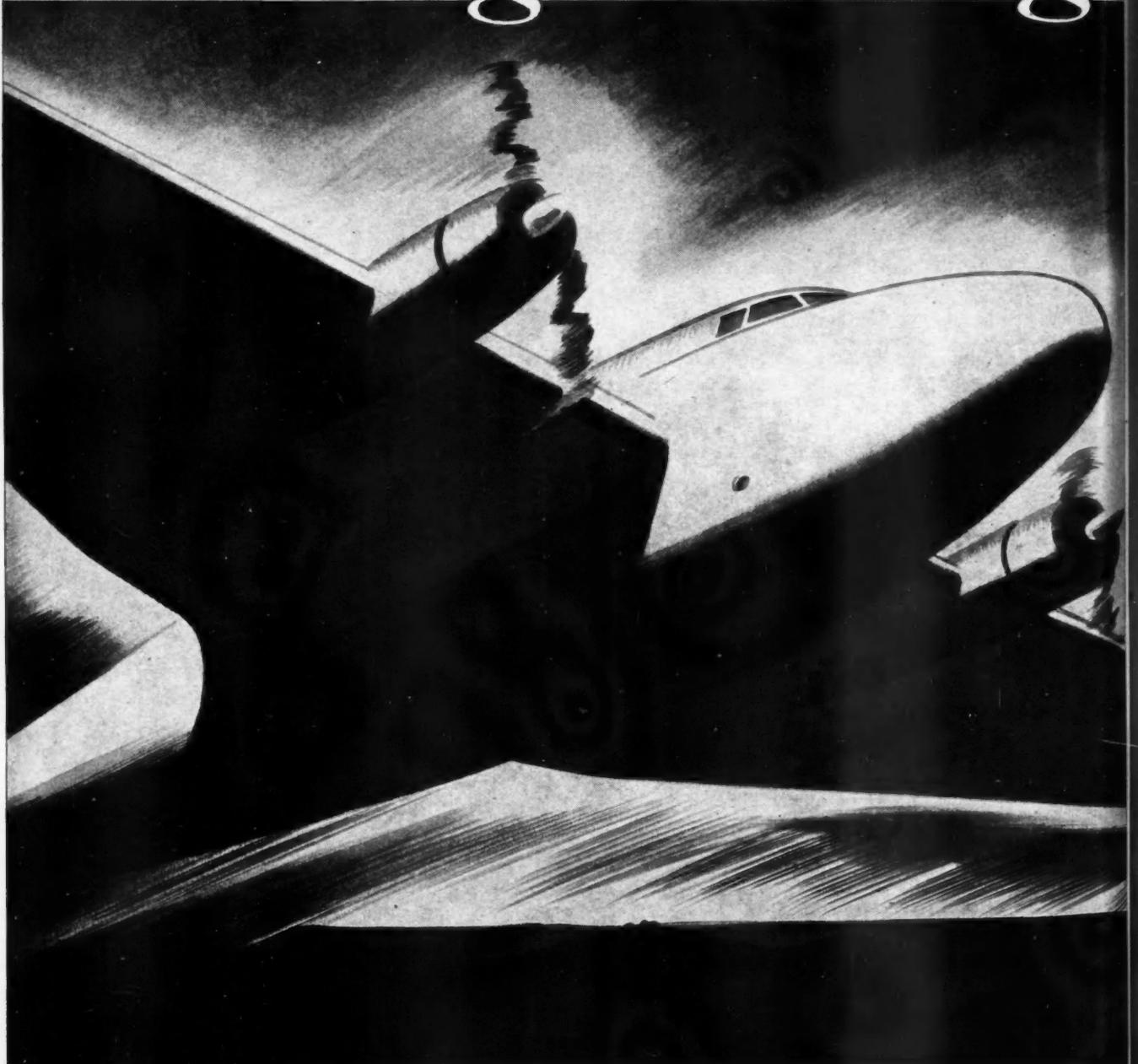
BETTMANN ARCHIVE



GATEWAY TO THE BUILDING MARKET

*These people include executives and editors, congressmen and college presi-
dents, government officials, mayors, radio commentators and 21 other groups
of leaders—all of whom have recently voted "TIME is America's most im-
portant magazine."

Engineering



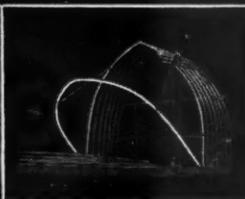
Engineering in Lumber is progressively increasing the efficiency of wood as a structural material. . . Modern wood products are making important contributions to better, more economical construction.



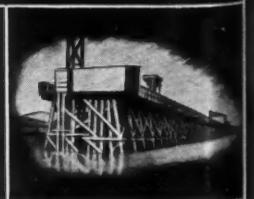
Teco Metal Timber connectors make it possible to join wood members; utilize 80% or more of the working strength of wood.



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.

Plywo
tality
Shape
deter

g in Lumber

promises a greater future for wood

FOR THE NATION'S essential construction, the products of the forest were always at hand—and ready for use. Logs built the early cabins and stockades—hewn into timbers, they built bridges and boats—fashioned into dimension and boards, *wood built America*—its homes, churches, schools, factories, stores and farm buildings.

Under the mandate of each new necessity, the quality, the form, and the application of lumber improved. Wood constantly serves new uses, both urban and rural, *because wood is economical and easily workable.*

The rush of war needs for countless materials made demands on all our nation's resources. High on the list was lumber. From timber-line . . . to laminated arch rafters, and Teco trusses for modern factories and airplane hangars, to plywood shells, for air and water craft, wood accomplished in weeks what would otherwise have required months.

The record of wood in the war marks still further advancement in the development of lumber. Research freed wood from former limitations of the log. New ways of forming and shaping wood, new methods of joining and bonding it have given us such products as laminated wood rafters, various forms of plywood, and many other newer products.

As a result of the marked advance in Lumber Engineering, contractors who will erect the future homes, service, commercial, and farm buildings, will find in wood a new, improved, more economical material.

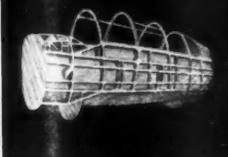
YOUR 4-SQUARE DEALER IS HEADQUARTERS FOR ENGINEERED 4-SQUARE BUILDING SERVICES

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 the use of these services, as well as providing modern Budget Payment Plans.

WEYERHAEUSER SALES COMPANY

FIRST NATIONAL BANK BUILDING • SAINT PAUL, MINNESOTA

Copyright 1943, Weyerhaeuser Sales Co.



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

4-SQUARE LUMBER



The Old Maestro...

YES, AND A NOTABLE CRAFTSMAN. He takes pride in the job he is doing—building the world's most satisfactory roof.

There are thousands like him throughout the land. Today they're doing a war job. They're drawing from their fund of experience and ability, are applying their craft toward the winning of the war. You'll see them perched on the roof-tops of hundreds of giant housing projects from coast

to coast. They're re-roofing houses by the thousand in every section of the country. They're busy building roofs for grain bins, poultry houses, implement sheds, dairy barns—busy putting the nation's food factories in top working condition.

Today, as never before, America's shingling craftsmen are doing a vital job. And with Red Cedar Shingles they are building roofs of highest quality, durability and appearance.

KEEP ON BUYING WAR BONDS



Red Cedar
SHINGLES

RED CEDAR SHINGLE BUREAU SEATTLE, WASH., U. S. A., VANCOUVER, B. C., CANADA

AMERICAN BUILDER Editorial

These are the men who will build America's post-war homes

IT IS high time the builders of this country were heard on post-war planning and building.

Everyone else has been sounding off on this subject—especially social planners, industrial designers, prefabricators, and revolutionary architects.

Yes, everyone has been heard—everyone but the experienced, private builders who in 1941 erected and sold 619,000 houses out of that year's pre-war record-breaking total of 715,000.

Was home building a failure in 1941?

The record shows that more *single-family* houses were constructed that year than in any year in the history of this country. They represented definite progress in design, construction and equipment.

They know public taste

In order to build and *sell* these 619,000 houses, private builders had to have a keen understanding of public taste and buying habits.

Yet in all the wild, weird fulminations about post-war home building, hardly anyone seems to have given credit to builders for the understanding of public taste and public needs that this selling job required.

At least 45 per cent of the 1941 houses were built for sale—that is, they were substantially completed before the buyer saw them. They represented the *advance* judgment of the builder, who had to risk his own money in the purchase of land, utilities, equipment and labor.

The many thousands of men and firms involved in building pre-war houses are going to be back in business more strongly than ever in post-war. And they will be in there *fighting*.

American Builder has just completed an extensive survey among successful residential builders, reported in this issue, as to what they are planning for post-war. The reports are stimulating and encouraging. They show this industry is on the march. They promise the American public the best houses the world has ever seen. But they are far different from some of the frenzied forecasting of industrial designers, and super-modernistic architects who have never had to subject their pencil dreams to the harsh reality of public taste in the low-cost home market.

Post-war building must start first with *land*. The men who know how to buy land economically and soundly, how to build well, and how to judge local customs and buying taste will be out in front.

American Builder's survey shows that builders are expecting a host of new products, ideas, new ma-

terials, equipment and methods. They will adopt and use new ideas *as fast as they can be tested and successfully sold*.

Have the "know-how"

These builders have the land, the experience, the money and the "know-how" to permit them to start quickly, using the best products available. They do not expect to wait several years for the pencil dreams of industrial designers to go through the long process of production, field testing and distribution.

The million homes a year (or more) market of the post-war era will call for the services of small builders as well as large, and of lumber dealers, real estate men and sub-contracting trades. It should also not be forgotten that repairs, maintenance and remodeling of millions of existing homes will get under way first of all.

To make all this possible quickly, an adequate post-war finance program backed by an educational campaign will be needed. *American Builder's* "War to Peace Plan" announced in this issue is a first step in a campaign to this end, and more will be heard of this in later issues.

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.

American Builder Presents

A Private Enterprise Program For Post-War Home Building

A Plan to Bridge the Gap From War to Peace with Private Building

1. Building industry groups should get together at once to lay out a private enterprise plan to build a million houses per year immediately after war's end.
2. The War Production Board's order L-41 restricting home building should be rescinded as soon as possible so that home construction can get off to an early start.
3. Congress should revitalize the Federal Housing Administration, charge it with energetically promoting home ownership and developing postwar plans.
4. Private building loan and mortgage groups should unite on a broad national finance plan.
5. A liberalized post-war FHA financing plan should be perfected now, incorporating any proven features of FHA Title VI relating to rental housing. Garden home projects should be encouraged, yield insurance studied.
6. Post-war finance plan should permit builders to sell houses up to \$10,000 on 10 per cent down payment with twenty-five-year amortized loans.
7. Post-war finance plan should consider lease-option alternative permitting occupants to lease houses (with proper safeguards) while accumulating enough equity to buy.
8. Better design, higher construction standards, larger homes, planned communities should be required to insure a sound backing for loans, prevent past abuses.

COMPELLING reasons why a private enterprise program for post-war home building should be adopted NOW are revealed in a survey of the prominent home builders of the country just completed by the editorial staff of *American Builder*.

More than 40 per cent of the merchant builders of the country own land ready to receive post-war houses. A large percentage are already drawing plans, perfecting new and improved construction methods. All of them say they expect to take advantage of new products, materials and equipment to produce the best homes the world has ever seen. These builders have the background, the experience and the "know-how." BUT—

LIBERAL LONG-TERM financing arrangements must be prepared and ready to function if private enterprise home building is to get an early start after the war.

A NATION-WIDE educational program in favor of home ownership and the private building of homes as contrasted with Government ownership must be started early.

ACTION MUST BE taken by Congress to revitalize the Federal Housing Administration which has done such a notable job in encouraging private enterprise home building through its national mutual mortgage insurance system.

AN END MUST BE called to the fantastic publicity regarding the post-war home which has been promising freakish and impossible things to the public. The result, builders say, may cause a hesitation on the part of buyers and may seriously retard the post-war building program.

In other words, the experienced, successful builders of the country say they will be ready, able and willing to embark on a post-war program the day the war ends that will quickly result in employment for millions of service men. A private enterprise program of a million homes a year, regardless of public housing, is a definite possibility if an adequate program is laid out now. Such a program would call for a united effort by building organizations and for constructive action on the part of Congress.

Since two committees of Congress are already embarked on an investigation of the National Housing Agency and of post-war housing, it is extremely important that action be taken promptly. Specific recommendations in the *American Builder* plan "to bridge the gap from war to peace" with private building are as follows:

1. Most of the principal organizations representing home building have headquarters in Washington. They should meet in the near future and formulate a program for private enterprise. Outlines of an educational campaign and a bond earmarking program to encourage people to build up down payments on post-war homes should be agreed upon. Advance sale of lots to prospective buy-

ers s
On
ment
ers o
the F
Natio
Deal
Estat
Bank
2.
how
may
of b
actu
homo
be a

3.
enter
mitte
and
statu
They
ordin
will
enter
Co

*Tax
finan
are

Builders Ready For Quick Start —Will Create Jobs For Soldiers

Private building firms are now busy preparing plans. They have the land, the know-how and the initiative to get home building started quickly.

Jobs and homes for millions of returning service men can be created by a vigorous private enterprise program.

Congressional Action Needed— Will FHA Exist After War?

FHA's staff of architects, underwriters, field men and building experts is rapidly dwindling—its educational work curtailed.

Congress may have to take steps to maintain and revitalize FHA, or set up another agency to encourage private enterprise housing and home ownership.

ers should be developed and encouraged at this time.

Organizations to head such a private enterprise movement should include the National Assn. of Home Builders of the U. S., the National Home Builders Assn., the Producers' Council, the U. S. Chamber of Commerce, National Homes Foundation, National Retail Lumber Dealers' Association, National Association of Real Estate Boards, U. S. Savings & Loan League, Mortgage Bankers Assn. and others concerned.

2. It is important that thought be given now as to how soon WPB Order L-41 restricting home building may be rescinded. It may well be that certain classes of building should be allowed to resume prior to the actual conclusion of the war. The building of model homes which would enable builders to take orders would be a first step.

Need Liberalized Finance Plan

3. Congressional action may well be required if private enterprise is to be preserved. The congressional committees now investigating the National Housing Agency and post-war housing should determine what the future status of the Federal Housing Administration will be. They should determine whether under its present subordinated position in the National Housing Agency it will be able to conduct an adequate and energetic private enterprise program.

Congress should then appropriate funds to revitalize

and enlarge the Federal Housing Administration, or a new agency, if deemed necessary, and charge it with energetically promoting home ownership. A special division in FHA should be set up to prepare detailed plans for post-war private enterprise building. FHA architects, valuation experts and field men know more about local building codes and building conditions than any group of men in the country. They are in a position to be realistic about a post-war program.

4. The key and core of a successful post-war private home building program must be a liberal, effective, private financing plan. *American Builder* recommends that such a plan be drawn up by both private lending groups and by the Federal Housing Administration. Until the advent of war and the submersion of FHA under the National Housing Agency, FHA had done a remarkably effective job for private enterprise housing. It had the confidence and support of building men and it had the field staff and organization to function effectively with private builders.

A liberalized post-war finance plan should be prepared incorporating the successful pre-war FHA experience and adding to it features of war housing finance—including rental housing—that have proved workable or desirable.

During the war many builders have acquired experience in building rental housing under Title VI of FHA.

(Continued to page 93)

Expenditure of Public Funds for Housing Would Be Small If Private Houses Could Be Financed Under These Terms*

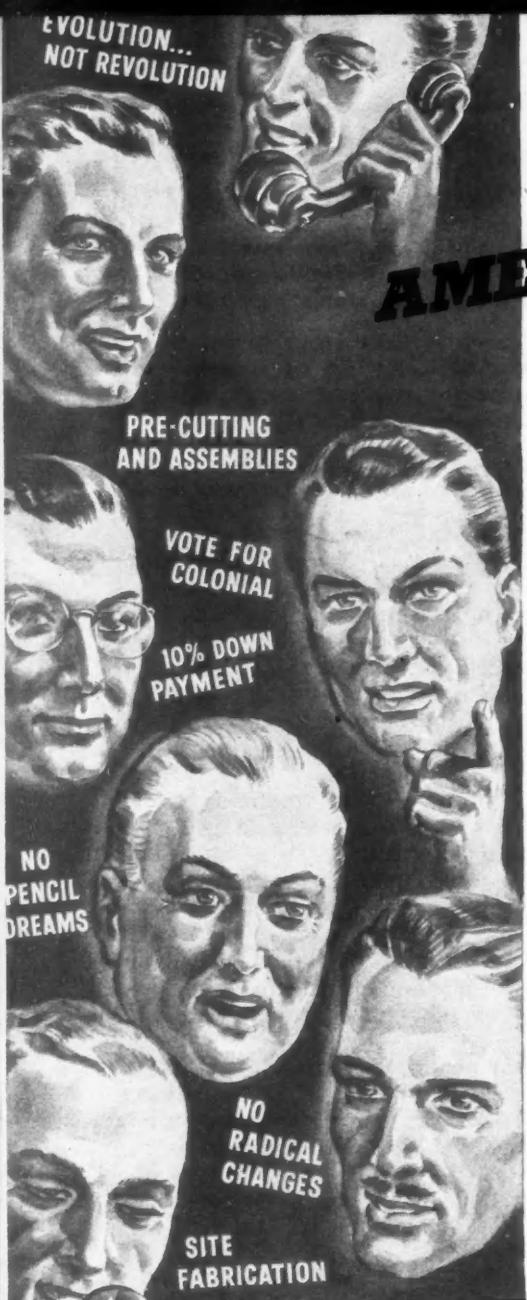
	\$2800 house & lot	\$4800 house & lot	\$5800 house & lot
Monthly Payment When Sold on 10% Down Plan (Includes interest, amortization and real estate taxes)	\$19.00 per month	\$33.00 per month	\$39.50 per month
Monthly Payment on Lease-Option or Contract Basis—No Down Payment	\$24.00 per month	\$41.40 per month	\$50.00 per month
Rent	\$26.00 per month	\$45.00 per month	\$55.00 per month

*Taxes, sales methods, financing details vary widely. Above table illustrates national averages, must be adjusted locally. Basis is a financing plan including a 10 percent down payment, twenty-five year amortized mortgage, 4½ per cent interest. Local real estate taxes are included at 1½ per cent of actual value of house and land.

AMERICA'S BUILDERS SPEAK

On Post-War Home Building

By Joseph B. Mason, Editor



AMERICA'S builders are busy now planning the finest houses the world has ever seen.

But their ideas about the kind of houses they will build are far different from the strange looking, weird, and sometimes utterly fantastic pencil dreams of a few industrial designers and revolutionary architects who have been getting so much publicity lately.

With this brief introduction, let me say that *American Builder* decided to ask the successful home builders of the country what their post-war plans are. More than 700 were questioned with letters, questionnaires and personal interviews.

In tabulating their responses, we have relied almost entirely on the judgment of men who have built and sold at least 100 houses in the past five years.

These men will fight to hold their business. They have land, money, experience, and will not be "caught with their plans down."

They are open-minded about new products, methods and ideas. They expect great things to come in the way of better home equipment and materials.

The stirring, stimulating conclusion of our reports from builders is that *this industry is on the march*.

Improved production methods, factory-built units, air conditioning, plastics, improved wood and metals, will contribute bit by bit to the better home of the future. Along with the better built home will come better planning of communities, more sun, light and air in the houses through better orientation, improved architecture.

These things are realities; they are within the grasp of millions of Americans who desperately want a better home of their own.

Don't take my word for it—read what American builders say. In each of the following, the name and address of the builder are given, and at the end, the number of houses he has built in the past five years:

LETTERS from hundreds of successful builders declare they will fight to retain their markets, using all the new ideas, materials, products or construction methods that prove practical.

Plywood, Plastics, Aluminum

THE most important and interesting thing about post-war houses will be new materials, such as plywood, plastics, aluminum and steel, which will be used to a much greater degree than ever before. These will be combined with traditional materials and new methods to speed construction.

E. F. Olsen Construction Co., Inc.
BUILDERS
R.D. No. 6
PITTSBURGH, 110 PA
March 17, 1945

Mr. Joseph B. Mason
Editor - American Builder
105 N. Adams Street
Chicago, Illinois

Dear Sir:

Your letter of February 17th and the expressed therein, are very timely and the builder, who actually is building for the future, should be interested in those

WALTER H. LEIMERT CO.
DEVELOPERS
4141 GARDNER AVENUE - "VANDERBILT"
LOS ANGELES, CALIF.

February 27, 1945.

Mr. Joseph B. Mason, Editor,
American Builder and Building Age,
105 N. Adams Street,
Chicago, Ill.

Dear Mr. Mason:

We are enclosing a little booklet containing types of small homes that have been popular in this community which may serve the purpose you desire.

We regret that we have not the time to write you at length on the subject. Additional copies of "Builders" for small homes. It presents a very wide range for discussion - it is a pamphlet written by a professional architect between Chicago and Los Angeles.

Garrett-Bromfield & Co.
BUILDERS - CONTRACTORS
PROPERTY MANAGEMENT
LAND DEVELOPMENT
SUPERVISORS

March 1945

Mr. Joseph B. Mason, Editor,
American Builder and Building Age,
105 N. Adams Street,
Chicago, Illinois

February 25, 1945

Dear Mr. Mason:

I am enclosing questionnaire which you requested and believe that the type and construction of homes after the war, will be quite similar to those in the past. There will be some improvement, on doubt, both in construction and style, due to the things we learn during our times.

NEWELL & DANIEL
Lake Success
L.I.C. N.Y.

Mr. Joseph B. Mason, Editor,
American Builder and Building Age,
105 N. Adams Street,
Chicago, Ill.

February 27, 1945

COX & BAKER
Quality Home Builders
105 N. Adams Street
Chicago, Illinois

Attention of Mr. Joseph B. Mason:

Dear Sir:

In reply to your questionnaire on Post-war (Home Building) we would like to

NEWLIN BROS. CO. INC.
all Complete Steel Frame and Insulated
1811 WEST 18TH STREET - CHICAGO, ILL.
TELEPHONE: 5-2100

February 10, 1945

Mr. Joseph B. Mason, Editor,
American Builder
105 West Adams Street
Chicago, Illinois

Dear Mr. Mason:

We appreciate receiving your questionnaire and are in accord with your views. We have been giving a lot of thought to the post-war policy of home building.

SMITH & DAWSON
BUILDERS - CONTRACTORS
PROPERTY MANAGERS
1410 NORTH WENDELL AVE.
CHICAGO, ILL.

February 18th, 1945.

Mr. Joseph B. Mason,
105 West Adams Street,
Chicago, Illinois.

Dear Mr. Mason:

I am enclosing questionnaire which you requested and believe that the type and construction of homes after the war, will be quite similar to those in the past. There will be some improvement, on doubt, both in construction and style, due to the things we learn during our times.

Garden Oaks
HOUSTON, TEXAS

March 9, 1945

Mr. Joseph B. Mason, Editor,
American Builder and Building Age,
105 N. Adams Street,
Chicago, Illinois

February 27, 1945

MILLER HOMES, INC.
Manufactured Homes
1322 ALPHEA AVENUE
DETROIT - MICHIGAN

February 20th, 1945

Mr. Joseph B. Mason, Editor,
The American Builder
105 N. Adams Street
Chicago, Ill.

Dear Sir:

Thank you for your questionnaire. We are certainly very interested in the policy of home building.

tion, t
differ
better
We
packag
heating
It ha
public
will n
functi
or bat
IEL, I
New Y
"Hom
THEY
the m
war,
equip
the ho
constr

Mr. Joseph B. Mason,
Editor,
American Builder and Building Age,
105 N. Adams Street,
Chicago, Ill.

February 27, 1945

WHAT BUILDERS SAY ABOUT POST-WAR HOME PLANNING

1. "We have the land, the plans, the know-how for a quick post-war start."
2. "Open-minded on new ideas and methods—will adopt new or approved materials, equipment, as fast as put on market and tested."
3. "Expect plastics, plywood, metals, synthetics, packaged kitchen and bathroom equipment to vastly improve houses. Will add them bit by bit in evolutionary process."
4. "Public will want bigger, better equipped, more 'home-like' houses—a reaction against wartime 'shanty-towns' and regimentation."
5. "Pencil dreams, fairy stories and freakish publicity about post-war houses are doing great harm by causing buyers to wait for miracles that probably won't happen—or at best will take years to develop."
6. "Thumbs down on flat roofs or extreme modern—or on radical or sudden changes in home design. Public won't accept."
7. "Site fabrication, pre-cutting, greater use of factory-assembled sections or 'packaged' units will enable builders to give more house for the money and produce the best the world has ever seen."

tion, to produce a house not much different in appearance but definitely better than any built previously.

We will have more and better packaged windows, doors, kitchens, heating, baths, prefinished floors, etc.

It has been our experience that the public likes something different, but will not go for strictly modern or functional designs except in kitchens or bathrooms.—PORTER O. DANIEL, Newell & Daniel, Lake Success, New York. (400)

"Home, Bleak Home"?

THERE will naturally come, from the mechanical tempo created by the war, a great number of gadgets, equipment and mechanical aids for the home of tomorrow. But the basic construction will not change ap-

preciably. We expect 70 per cent of our houses will be Modern Colonial.

The American home represents the spirit and soul of America; it will never become "home, bleak home" that the production line suggests. There was character and warmth in the crudest Colonial cabin for it expressed something of the spirit of the man who planned or built it.—ROBERT M. WATKINS, College Park Homes, College Park, Md. (260)

Improved Production Techniques

WE expect to apply improved production techniques; also use of plywoods, plastics and improved equipment. We plan use of most efficient

FACTS—Not Theories
—Stated by the Men
Who Meet the Payrolls

THESE are the men whose money will be risked—who will meet the payroll—who will buy the materials and equipment for post-war houses.

These are successful builders, who know what the public wants and will buy in their towns. Every builder represented has constructed at least 100 houses in the past five years, expects to be operating in the post-war market.

The collage contains several documents:

- H. MOLLGAARD**: Real Estate Broker, 100 W. Adams Street, Chicago, Ill. (February 17, 1943)
- DAVID D. BOHANNON ORGANIZATION**: Realtor - Builder
- J. C. NICHOLS INVESTMENT COMPANY**: Country Club District, Kansas City, Missouri (January 31, 1943)
- SMALL HOME COMPANY**: Patterson Building, Chicago, Ill. (February 20, 1943)
- LAKE SHORE HOUSING GUILD**: Northern Indiana Lumber & Coal Co., Lumber - Millwork - Coal (February 22nd 1943)
- CYRUS CRANE WILLMORE ORGANIZATION, Inc.**: Land Developers - Realtors, 157 W. Adams St., Chicago, Ill. (March 2, 1943)
- Mr. Joseph B. Mason, Editor**: American Builder, 100 W. Adams Street, Chicago, Ill.
- Mr. Joseph B. Mason, Editor**: American Builder, 100 W. Adams Street, Chicago, Ill.

How Builders Vote on Post-War Homes

	% That Voted Yes	% That Voted some or Maybe
<i>Do you expect a radical change in your post-war home as to:</i>		
APPEARANCE	1.9	3.8
EQUIPMENT	16.3	26.0
CONSTRUCTION METHODS	10.6	17.3
<i>Do you expect to use any of the following prefabrication methods:</i>		
COMPLETE SHOP OR FACTORY PREFABRICATION	2.9	11.5
PARTIAL, SUCH AS USE OF SHOP-BUILT PANELS.....	14.4	18.2
SITE FABRICATION OF STANDARD SECTIONS	14.4	16.3
PRE-CUTTING OF MATERIALS WITH POWER EQUIPMENT	54.8	19.2
OTHER	3.8	5.8
<i>What architectural type or style do you expect to start featuring:</i>		
TRADITIONAL	76.7	1.9
SOMEWHAT MODERNIZED STYLE.....	53.4	8.7
MODERN	8.6	4.8
OTHER	15.5	—

TABULATED results of post-war questionnaires sent to residential builders who have sold at least 100 houses in the past five years and are preparing to resume building after the war are shown in the chart above.

room sizes—modules—so as to employ standardized materials and thus produce maximum home value.

Will give careful attention to architecture to secure individuality and character. In addition to Colonial styles, we expect to feature California Modern and Monterey.—DAVID D. BOHANNON, San Francisco. (1950)

Fairy Stories by Visionary Designers



I. McC. MOWBRAY

THE sooner the public quits listening to fairy stories put out by visionary designers and ill-informed magazines, the better off both the public and the building industry will be.

There will be, I am sure, advancement in certain types of equipment, but there is nothing in this section of the country to indicate any trend away from the Colonial type house.

During the war houses of a design and quality have been built that will not be accepted by the public when they have an opportunity to make a free selection. A good many of the

low-cost Title VI houses will show unfavorable depreciation, and there will be a definite trend to a more expensive and better built house.—JOHN MC C. MOWBRAY, The Roland Park Co., Baltimore, Md. (200)

Will Build Servantless Houses

I EXPECT to build servantless houses which will have a strong appeal to thrifty purchasers. They will have automatic electric heat, complete laundries, dishwashers, garbage disposal units, vacuum cleaning systems and any other practical conveniences that become available.

I expect to build about the same size, type and quality house as before the war (Modern Colonial). Will prefab door and window openings, pre-cut materials with power equipment as we did before the war.—STUART FONDE, Fonde Construction Co., Nashville, Tenn. (250)

Gladly Compete with Prefabs

WE will use power equipment to cut labor costs and will gladly compete with any prefabricated houses, as we know we can build for less and have a better looking house.—L. W. GERLING, Gerling Realty & Bldg. Co., Pine Lawn, Mo. (400)

Evolution in Kansas City

I STRONGLY agree that post-war housing will begin where it left off before the war, and that the improvements that come will be by evolution and not revolution.—J. C. TAYLOR, President, J. C. Nichols Co., Kansas City, Mo.

Accelerated by Plastics

CHANGES in post-war housing will be accelerated by new plastics, synthetics, etc., and eventually a profound change will take place, though it will be slow and take a good many years. We will pre-cut with power equipment, feature modern Colonial.—J. R. ELLIS, Houston, Tex. (100)

Not Building for Architects

I BUILD to please people, not architects. Three or four years of war won't make much difference in people's tastes.

I have 71 houses under way, and am super of the Army Air Forces Technical Training Command from 3:35 P.M. to 12:35, so have little time to plan anything but winning the war.

But after the war, we will start 100 houses, a few at a time; 3-bedroom, about 1250 sq. ft. Will pre-cut materials, use prefabricated cabinets, etc.; perhaps some plastics.

Finance companies, lumber yards, and lumber producers are getting ready to build after the war, and I am going to tie in with some of these types of operators to reduce costs.—PHILIP NORTON, Los Angeles, Calif. (300)

Sectional Prefabrication

WE expect lower costs due to better and more intelligent management, sectional prefabrication, and standardized floor plans with varied exteriors. We always have pre-cut our materials, and expect some site fabrication. Probably will see real production of \$3,000 houses.—HERBERT TOBIN, Chilton Homes, Waltham, Mass. (100)

Screwball Publicity Harmful



FRITZ B. BURNS

CRACKPOT publicity about the radically different houses of the future may kill the very thing the building industry is expected to do, which is to take up the post-war sag.

If this type of publicity continues it will upset people planning to build—will make them delay and will thereby delay post-war revival of business.

These radical structures will certainly not be ready to be built right after the war, whereas improved but successful housing of the traditional type will be. The screwballs won't be ready to build but they can do a great deal of harm by causing buyers to delay, thereby harming the business of those who are ready and able to go into production right away.—FRITZ B. BURNS, President, National Assn. of Home Builders of the U.S. (3,000)

Precipitron, Partial Prefab

NEW products like the Precipitron (an air cleaner), and new heating and electric equipment are bound to influence the interior design of post-war houses. Prefabrication of addi-

Whose Money Will Be Risked in Post-War Home Building?

IT IS the builder, of course, who has to put up hard cash to buy land, install utilities and build houses. He is the one who loses if the job goes sour. Is he a conservative? Only to the extent that a product, an idea, or a house plan must be THOROUGHLY TESTED before he can risk selling it to a public which, as concerns home building, is very conservative.

Let the industrial designers and revolutionary architects invest some of THEIR money in freak designs, they say. A little practical, costly experience would do them much good.

IN t... ties'... lear... buil... tom... tern... mist... peac... of t... ly-s... don... and... mat... boo... that... gau... for... they... som... lyh... a n... the... tiona... close... nook... Bu... the... pote... take... main... thou... ably... I... Chic... pres... cour... NEI... stru... Mid... PE... and... ideas... ern

ry 1943

o better
gement,
I stand-
d exte-
-cut our
site fab-
real pro-
—HER-
Homes,



out the
the fu-
ing the
d to do,
war sag-
continues
to build
and will
rival of

will cer-
tlyt right
ved but
ditional
won't be
n do a
y buyers
ne busi-
and able
away.—
nt, Na-
s of the

ab
cipitron
heating
ound to
of post-
of addi-

Risked
ding?

e, who
to buy
I build
o loses
a con-
extent
, or a
THOR-
he can
which,
ing, is

signers
ects in-
ney in
A little
ience
od.



"For Progress; Against Radical Change"—Builders

**IN the "Terrific Twen-
ties" many lessons were
learned by the mature
builders of today and
tomorrow. They are de-
termined that the same
mistakes will not be re-
peated—row upon row
of uninteresting, poor-
ly-styled houses; over-
done period designs
and freaks; unproven
materials sold in a
boom market; financing
that didn't stand up;
gaudiness substituted
for practical values. If
they don't go along with
some of the current bal-
lyhoo they may foresee
a new wave of grief in
the making.**

**Say most of the drafting board
dreams, publicity stunts and scien-
tific miracles will not be available
till years after hostilities cease. Will
be ready to start with best of last
housing built, use proven new meth-
ods and add improvements when
they are put on market and tested.**

**PERHAPS the "Strato-
spheric Sixties" will see
some of the most violent
dreams of today be-
come realities. But
dreams can't be built
and sold until sketchy
ideas become working
drawings and hopes be-
come specified prod-
ucts. Builders well
know that progress
comes out of invention
and research, but at the
same time they fully re-
alize that years are re-
quired to accomplish
revolutionary change.
In the 60's there may be
rubber houses, circular
igloos, and homes that
fly to the site.**

BUILDERS are not reactionary nor are they radical. As the most important group in the building industry, they are, first and last, good business men and, as such, are forward-looking "middle-of-the-roaders." Nobody is more anxious to improve their product—homes—but they must know how their customers—home buyers—will react to any proposed change before accepting the novel. These men will determine what will be done in the 40's.

ditional units, such as wardrobes, closets, complete baths, breakfast nooks, etc., can be used economically.

Builders who actually will fashion the houses of the future will have a potent voice as to what form they take. We feel exterior lines will remain more or less traditional, although new products may be profitably used to enhance the appearance.

I propose a clinic or school in Chicago where manufacturers may present their products, with a brief course in their application.—L. H. NELSON, V.P., E. E. Olsen Construction Co., Pittsburgh. (400)

Midwesterners Conservative

PEOPLE here are very conservative and very reluctant to accept new ideas. We vote for Colonial or Modern Colonial design, not modern. Pre-

fabrication may be accepted if it can be done cheap enough. I would like to see plastics used for plumbing fixtures.—H. MOLLGAARD, Wauwatosa, Wis. (100)

Pencil Dream Illusions Debunked



R. P. GERHOLZ

OUR post-war, low-cost homes will be project-built, using power equipment and partial site prefabrication.

Essential saving will be done in the prefabbing of window and door bucks, stairs, and kitchen assemblies.

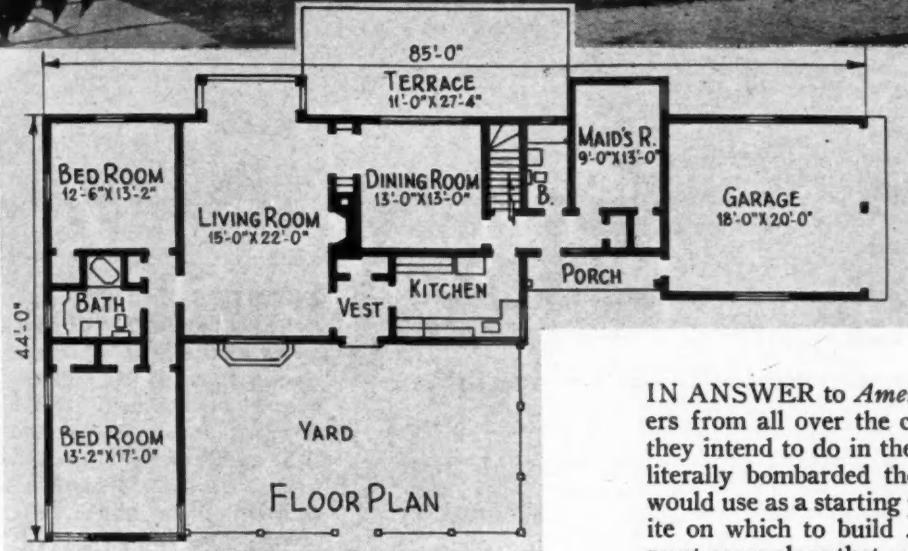
We do not expect any radical changes in exterior styles, but expect considerable equipment improvement.

Pencil dreams of post-war housing now being spread through newspaper and magazine articles and, in some instances through advertising campaigns, should be debunked. Such designs will not become a reality for the mass market, if ever, until years after hostilities cease.

Unfortunately I am not one of the strange men whom God has endowed with a crystal ball brain, so it is difficult for me to plan trips to the moon or Mars via pen and paper.

Of course there will be changes in design and equipment—new materials—but these changes will be gradual.—R. P. GERHOLZ, Gerholz Healy Co., Flint, Mich. (250)

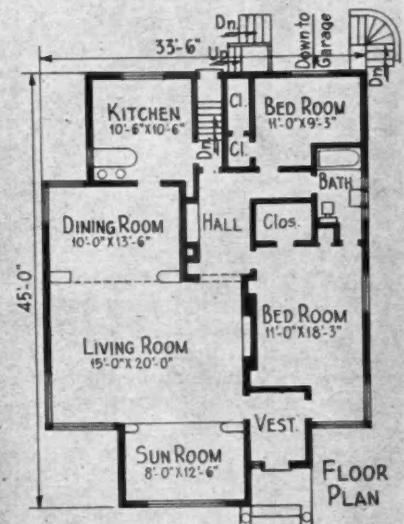
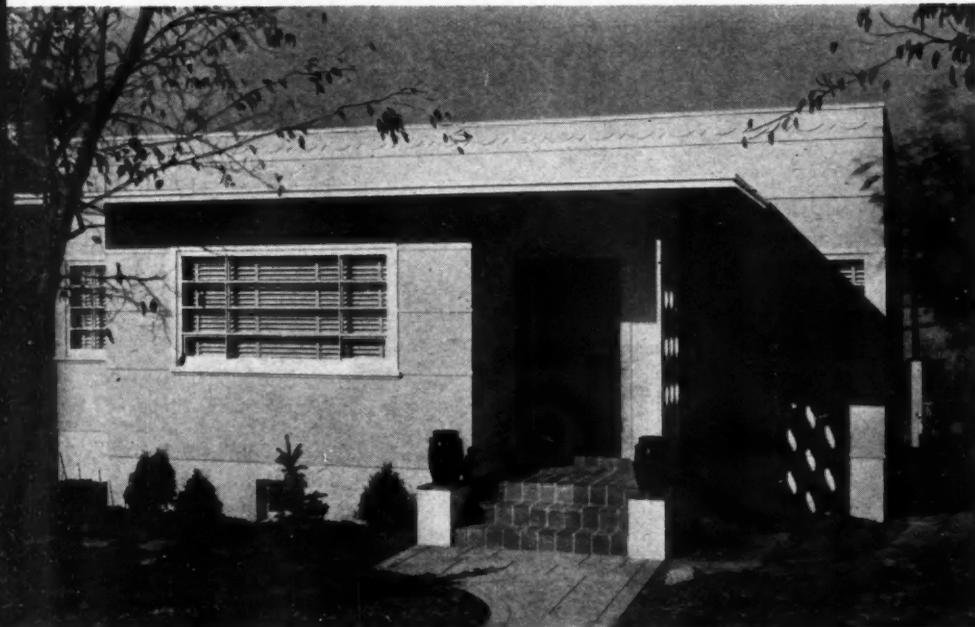
(Continued to page 64)



LOOK FOR DESIGNS

FORWARD-LOOKING STYLE. The trim appearance of the modern California bungalow above is in line with post-war trends; Henry W. Johanson, architect; it was built on Long Island by Walter Uhl.

IN ANSWER to *American Builder's* post-war survey, builders from all over the country not only told the editors what they intend to do in the way of turning out better homes, but literally bombarded them with photographs and plans each would use as a starting point. "We must have something definite on which to build . . . after the land and improvements must come plans that can immediately be turned into homes . . . here are arrangements and styles found best among the last built . . . not frozen for the duration but are being revised to keep up with any current improvement." That briefs the comments; here are four homes from hundreds sent in.

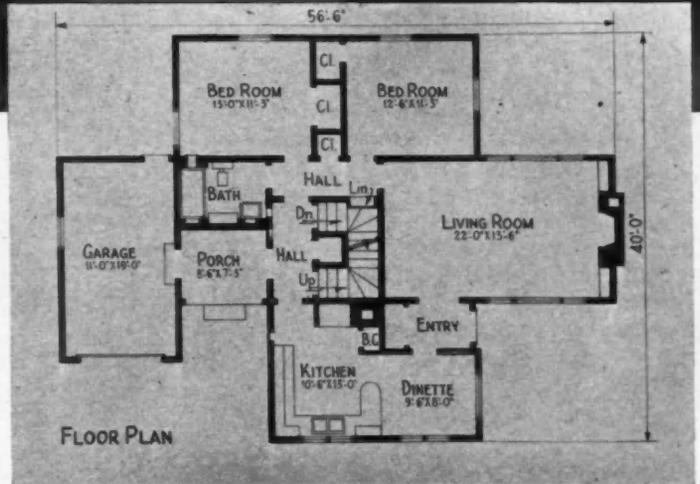


EXCELLENT PLAN. From Regina, Saskatchewan, comes this very well arranged 5-room design—the work of W. G. Van Egmond, architect, as his own home. Note excellent circulation of the open plan; large window areas; house of dry-wall construction.

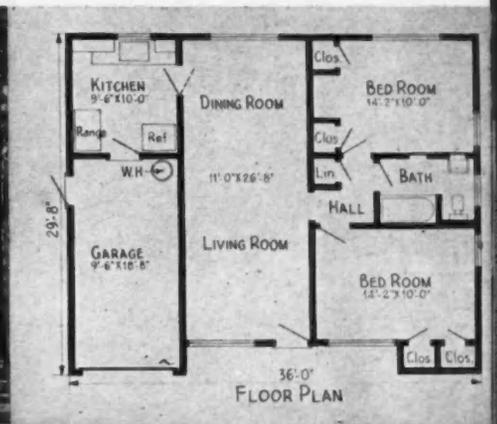


BEST OF PRE-WAR PLUS IMPROVEMENTS

Survey shows that the home planning now being done by builders for the post-war market will be based on those designs that had been most successful. Latest developments are being carefully studied, as will those still on the way, to assure buyers that waiting years for good homes of tested merit will not be necessary.



DIGNITY AND CONVENIENCE. This home in Ohio illustrates a two-fold objective ahead—clean-cut, simplified style and an up-to-date arrangement for post-war living. It was designed by E. L. Baker, and built by Fred Zarend. Highlights are the separation of living, sleeping and service portions of the house which are conveniently grouped around the stair hall; note the combination kitchen and dinette which can be closed off from the rest of the house; windows on two sides of the living room with traffic kept at one end; service porch connecting house and garage; ample storage.



FOR LOW-COST LIVING. From E. L. Crain's Garden Oaks subdivision, Houston, Texas, come these attractive small homes with a future. They are two of a group which combine variations of exteriors for a limited number of similar plans. These small homes are high in quality of design and construction and top-notch value; different materials are effectively used.



BETTER LOOKING HOUSES WILL COST LESS

Builders expect that, with the aid of new techniques and new products developed in these war years, they will be able to deliver a more attractive, better planned and better equipped home for less money. As a group, they do not expect pencil dreams to become immediate realities; a few years won't greatly change people's tastes, they say.



"Expect exterior lines to remain more or less traditional"

"... designed to fit site"

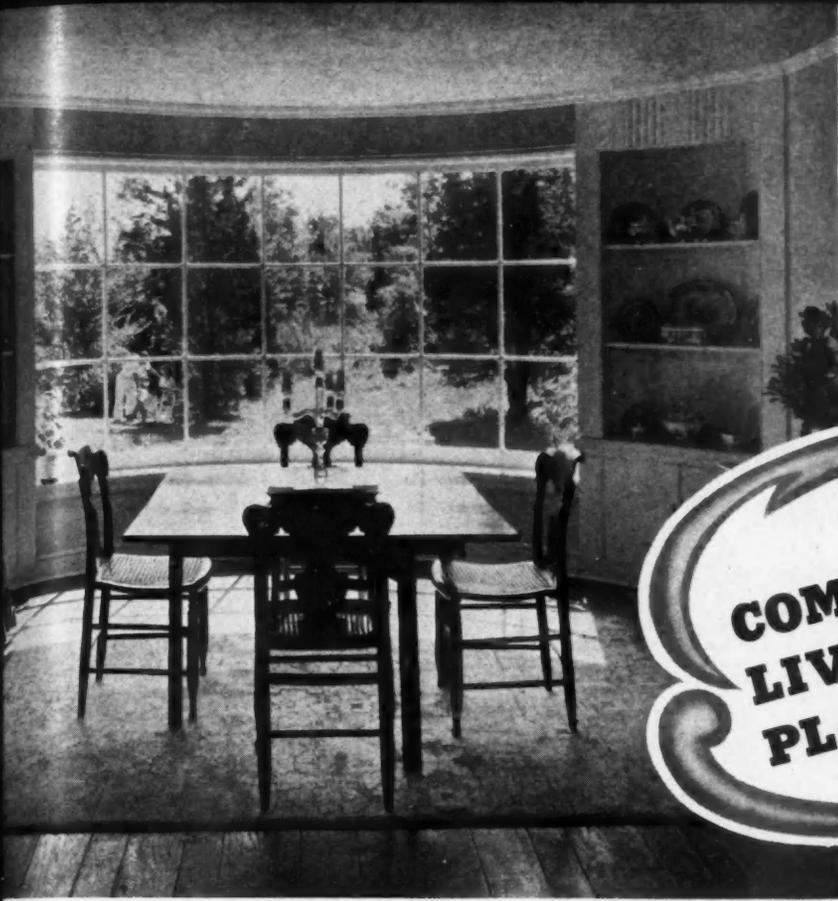
"Better lighting, larger windows"

"Foresee partial site fabrication"

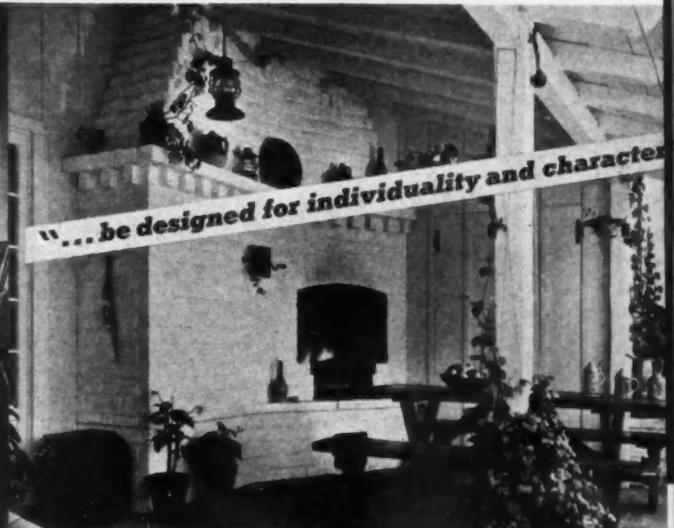
"There is still no trend from modified Colonial styling"

Reflecting the war-interrupted swing to Colonial, builders believe that buyers will demand a modified Classic styling inside as well as out. Simplification should be the keynote in plan and design. New materials will be used to a much greater degree than ever before, and building practice will change to include their use when tested and proven.

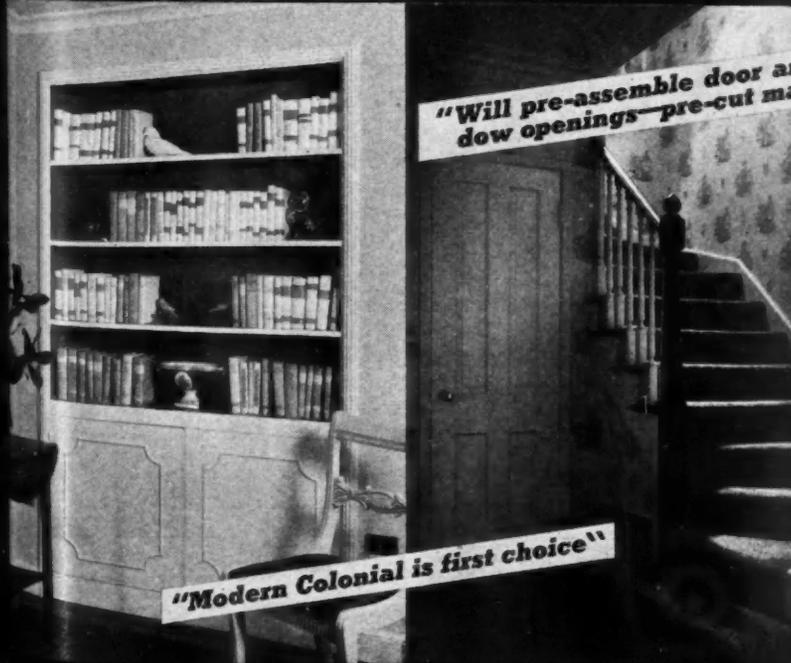
**COMFORT, CHARM,
LIVABILITY TO BE
PLANNED WITHIN**



"No 'Home, Bleak Home'—gradual transition"



"...be designed for individuality and character"



"Modern Colonial is first choice"

"Will pre-assemble door and window openings—pre-cut materials"



"Electrically cleaned air"

"New heating, ventilating and electric equipment will influence interior design"

rs
al

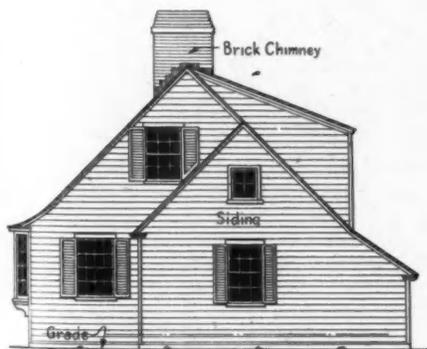
Say: "Modified Is Top Choice"

OF ALL the various types of styling, builders are in agreement on the choice that will be most popular as soon as building can be resumed; the most salable basic designs will be of Colonial inspiration. Of course, this will be modified to allow larger windows, clean-cut exteriors, functional plans, interiors that are adaptable to the newest heating, ventilating and electrical equipment. Pre-assembly is expected to play a part in post-war building, but this will not necessarily call for radical design changes as floor plans can be of such sizes as to allow efficient use of modules in the form of pre-built panels for door and window openings, wall and roof sections, and larger units of wall finish.

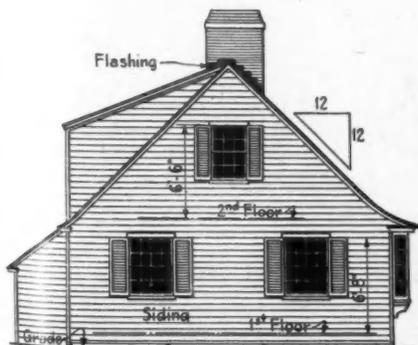
Livable Interiors →



ABOVE are two of the livable rooms in one of Wallace B. Goodwin's Wood-ridge homes near Hartford, Conn., showing how he has combined charm and individuality with a modernized Colonial styling. Note the horizontal wainscot, doorway to rear terrace from living room, built-in cases and attractive cornice board. Here are post-war ideas that are worth adding to your files.



RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



FRONT ELEVATION



"Continuing trend toward more glass"

"Demand for materials easy to clean"

"Expect to build servantless homes"

KITCHENS — BUILDERS FORESEE:

"Kitchens as production centers in the home to be better planned and equipped, more livable, reduce work."

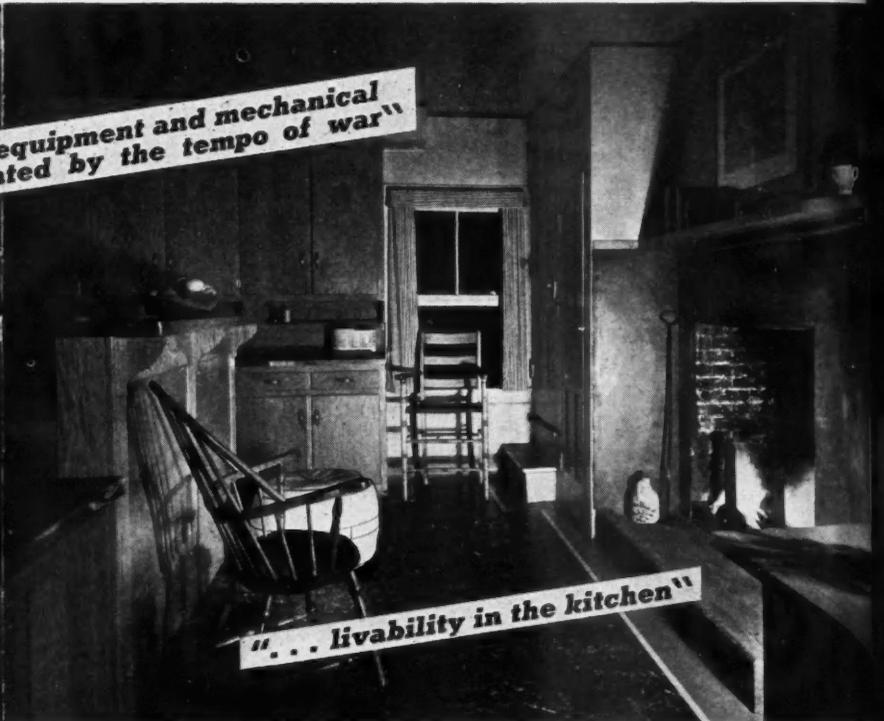
The kitchen is scheduled for one of the most pronounced changes of any portion of the post-war home, according to the consensus of builders. Here many products of wartime research, including new materials and new items of finish and equipment, will be used. Standardized, factory-built units are expected.

42



"Look for equipment and mechanical aids created by the tempo of war"

"Will use all practical conveniences that become available"



"... livability in the kitchen"



"Packaged kitchen assemblies"



"Foresee biggest change in kitchens and heating"

s"

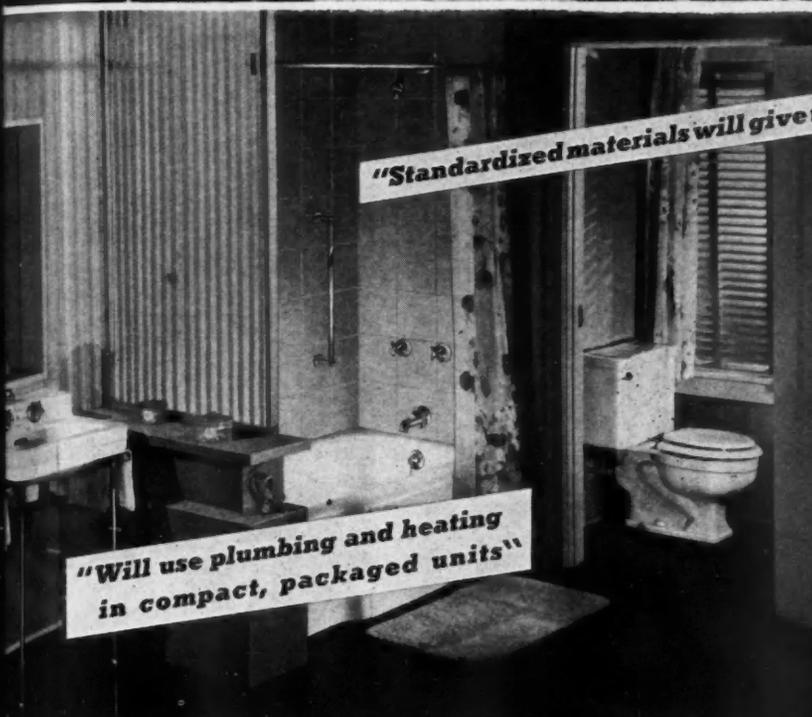


"Expect improved product techniques"



"Functional design in kitchens and baths"

pro-
ome,
many
erials
l be
ected.



"Will use plumbing and heating in compact, packaged units"



"Standardized materials will give top home value"

"Trend to more color"

BATHS—A MAJORITY OF BUILDERS SAY:

"Baths will be designed for new materials, for greater convenience; we will install the best tested equipment."

Plumbing and heating equipment design changes are also expected by builders. They anticipate pre-assembled, packaged units will be available to give greater convenience in the bath at reduced cost. Of new materials, including plastics and lightweight metals, many will find use in glamorous bathrooms.

ating"



"... convenience in the bath"



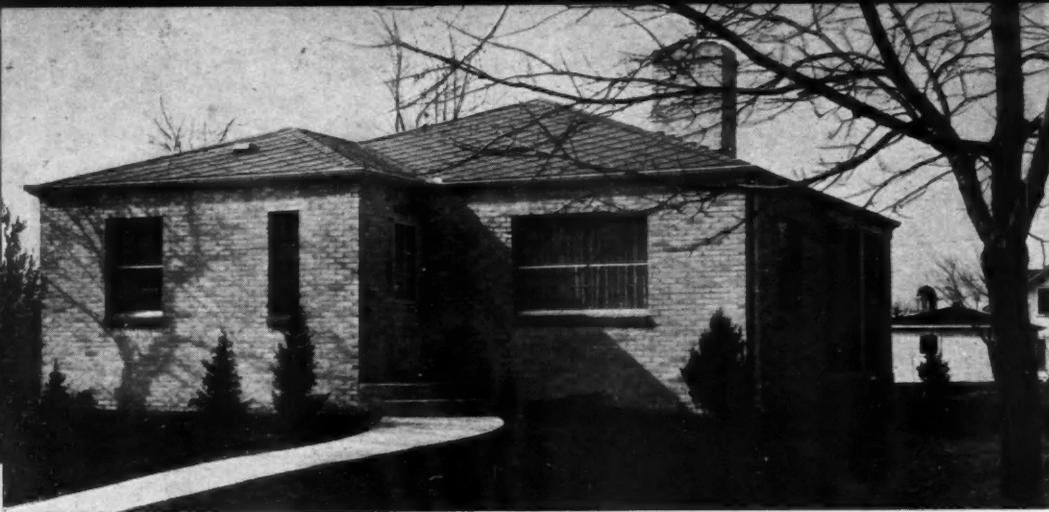
"More efficient storage facilities"



"Anticipate plastic interior trim"

"OUR SMALL

Builders agree, small homes will have added comfort through improved quality in equipment



"Exterior Lines to Remain More or Less Traditional"

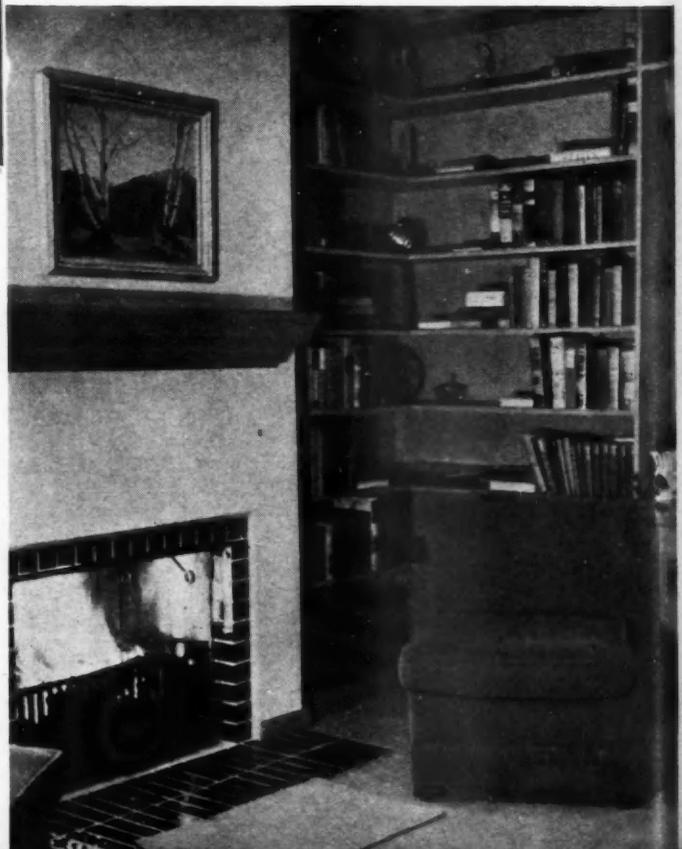
ONE of the findings of *American Builder's* post-war survey was the fact that builders expect to install all practical convenience equipment that becomes available after it has been thoroughly tested and proven to have salability. This gem of a little home, designed and built just before the war by Don J. Robinson, Elgin, Ill., presents a preview of a typical small home with quality equipment which should be a post-war starting point. It is styled in a clean-cut modernized manner with a Swedish Modern flavor. A check of the illustrations and plans will reveal many forward-looking features: open plan, fluorescent lighting concealed in the valance heads; large aluminum double-hung sash; insulated construction, combination pine-paneled den and bedroom.

HIGHLIGHTS shown here include glass-enclosed cupboards, convector, space-saving sliding door, picture window, built-in cases.

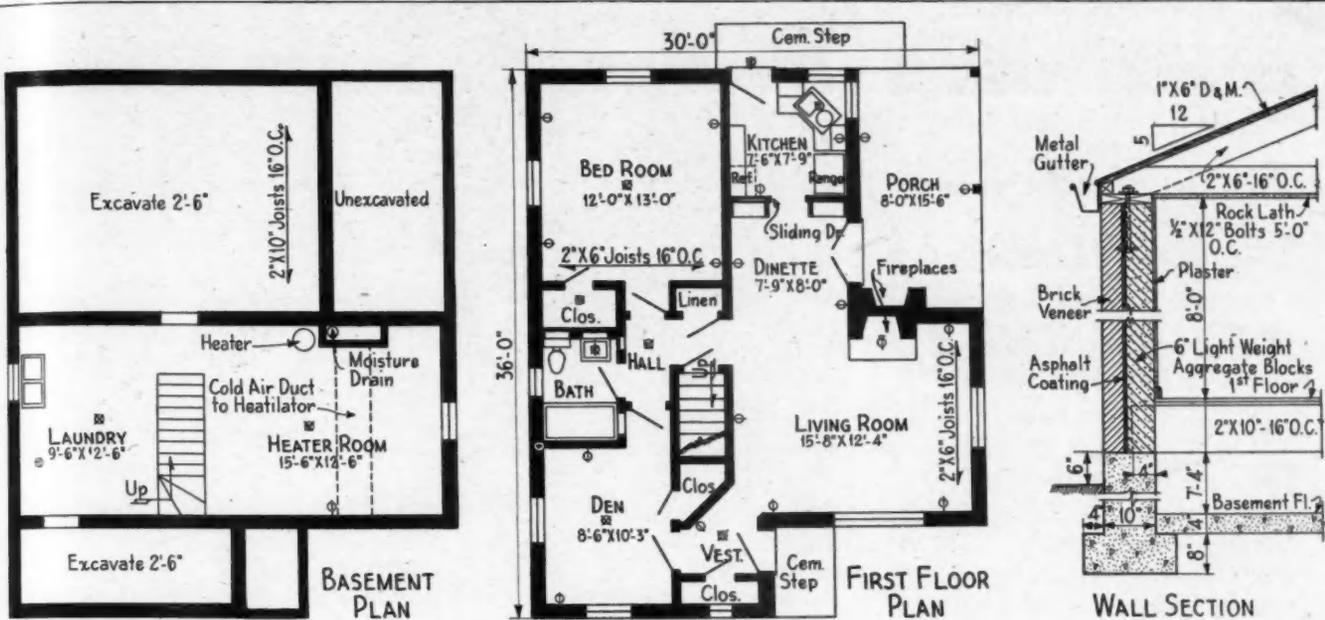


"Better Lighting—

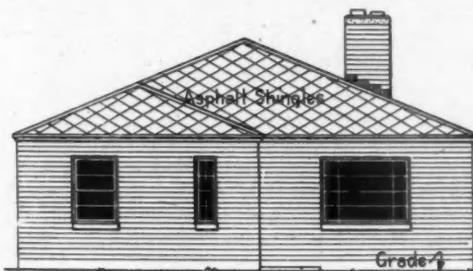
Larger Windows"



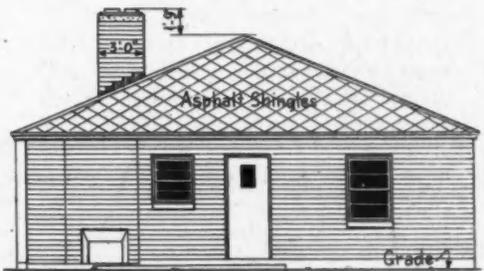
HOMES WILL HAVE ALL PRACTICAL CONVENIENCES''



THIS prize award small home, designed and built by D. J. Robinson in Elgin, Ill., for two people has a great amount of livability packed into small area. Note that the screened-in porch has a fireplace. Circulation is good and kitchen has all essential equipment in less than 8x8 room.



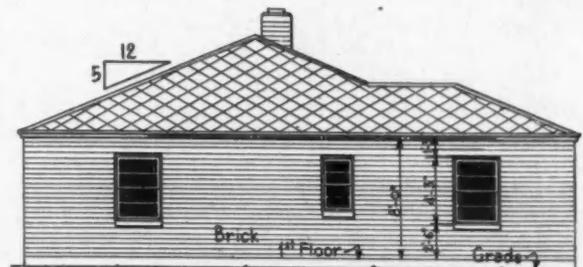
FRONT ELEVATION



REAR ELEVATION



RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



THE combination living-dining room gives a spacious feeling; framing the side window are bookcases ceiling high. A Heater unit is built into the fireplace, with cold air return duct coming from the far side of the living room and heat grilles in top of mantel out of sight; central heating is gas-fired.

You Can Expect PLANNED COMMUNITIES and GARDEN APARTMENTS

BETTER planned home communities will play an ever greater part in the post-war building era.

Builders have come to realize that automobile traffic and changed living conditions require new and improved community planning. The lives of future generations of children are at stake. Experience has also clearly shown that unplanned, uncontrolled and inadequately restricted communities of the past have depreciated far too rapidly.

American Builder felt that rather than get the opinions of inexperienced, impractical or too idealistic land planners on this subject, it would interview the one man who has done more than any other in this country to perfect a thoroughly successful well planned community.

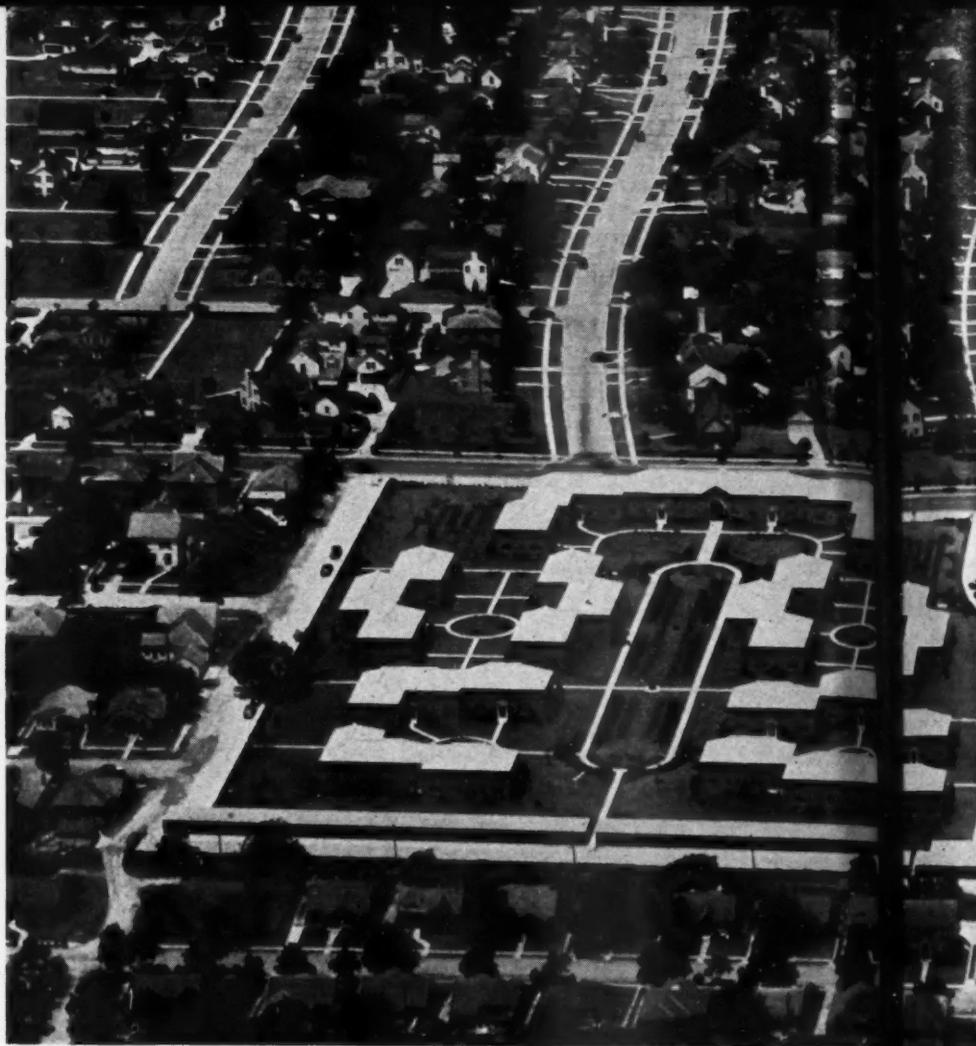
This man is Hugh Potter, president of the River Oaks Corporation of Houston, Texas, and recently elected president of the Urban Land Institute.

Twenty years ago Potter set out to assemble 1200 acres of raw land in a city which had no building code and therefore no protection for community values.

Today River Oaks is almost complete—a beautifully landscaped, carefully laid out, fully protected community of schools, churches, apartments and houses in a wide range of prices. It has an outstandingly successful shopping center, which will be described in next month's *American Builder*.

A few years ago River Oaks added a carefully laid out rental housing project of garden type, as pictured above. This too has been most successful and has been 100 per cent rented. It may serve as a pattern of the future for private rental housing.

After 20 years of progress at



BIRD'S-EYE VIEW of River Oaks, Houston, Texas, with garden apartment project in foreground.

River Oaks, Hugh Potter is more than ever an advocate of sound community planning, land use regulations, architectural control and neighborhood maintenance. He points out that aside from the human sentiments and values involved, everyone benefits by stable realty and property values. River Oaks has been selected by the Urban Land Institute as the foremost example in this country of sound community planning and as a pattern for study by future community builders.

Listen to what Potter says about his experiences at River Oaks:

Land Use Regulations

"We were able to accomplish good land use regulations through deed restrictions. The public desired this kind of protection and our deed restrictions, contrasted with the absence of zoning in Houston, gave us a potent sales argument. With the development of each new section of River Oaks we have revised the deed restrictions and each time we have improved them.

"Land developers would be unwise to depend upon zoning alone, for the net results in worthwhile

land use regulation under zoning ordinances are not as considerable as the control brought about through deed restriction.

Architectural Control

"Our deeds provide for architectural control in very general language. I can say from experience that this type of control is exceedingly difficult to establish and exceedingly difficult to administer, principally because architects are inclined to disagree with each other.

"We began by establishing a committee of three architects to approve plans, and this resulted in undue delay. Invariably the architects would not agree on what constituted good architecture. The method was revised by creating a committee composed of one architect, one engineer, and one so-called "practical mind" to make the decisions. Difficult as it may be, architectural control is essential to good neighborhood building.

"The River Oaks Corporation has established a maintenance fund which provides for the upkeep of streets, parks and other public property within the development. The

SHOPPING
pears at

HUGH P
Corporati

provisio
and is s
The fu
garbage
parks, c
plement
police c
"The
\$50,000
tered b
staff.
makes
propert
not pr
dwellin
improv

WILL POST-WAR COMMUNITIES be safe for children—protected against deterioration—planned for modern living, modern traffic?

Here is a practical pattern for the future — River Oaks of Houston, the result of 20 years of orderly growth in a city without zoning laws.

SOUNDLY PLANNED and carefully drawn restrictions set up 20 years ago have resulted in this beautiful, livable, home community where property values are highly stabilized. The garden type apartment project in center has been highly successful and also the skillfully laid out shopping center at right. Homes on broad, well landscaped streets, range in price from \$8,000 to \$50,000.



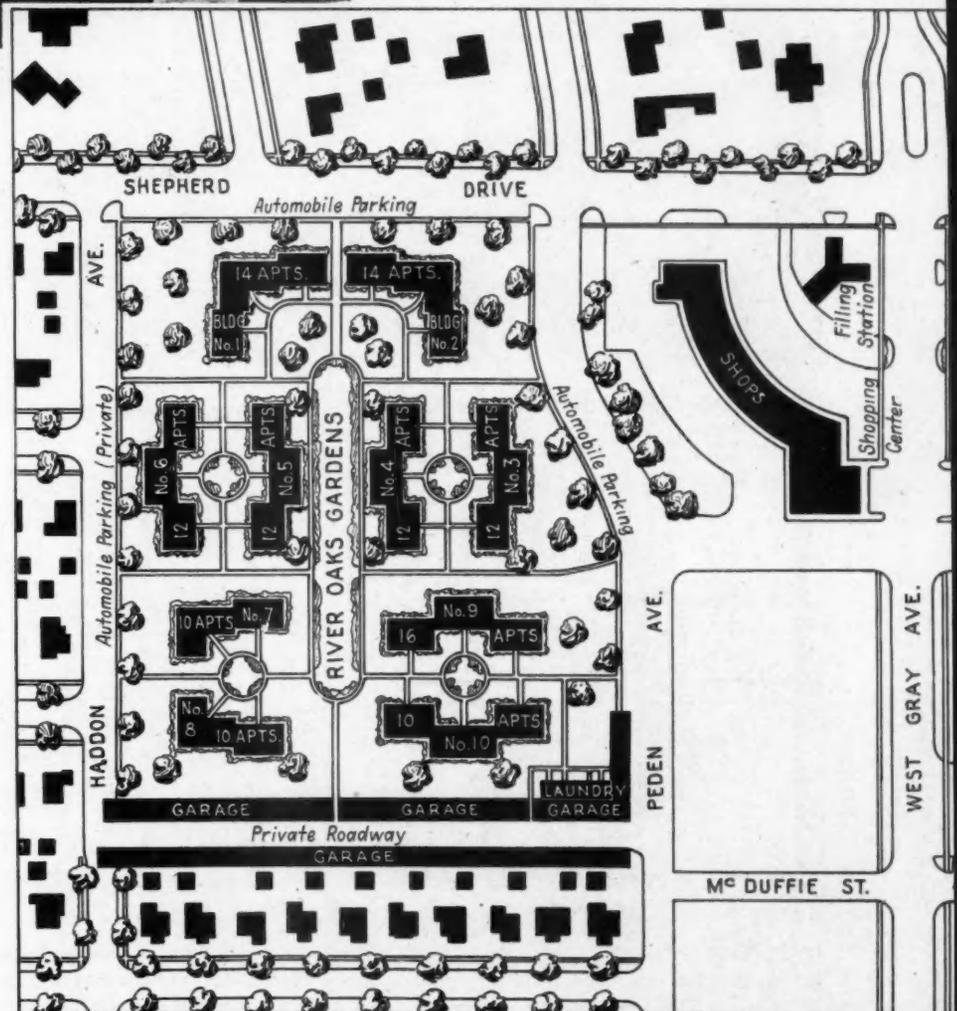
SHOPPING center with ample parking appears at right in the above illustration.



HUGH POTTER, president of River Oaks Corporation and of Urban Land Institute.

provision is written into every deed, and is secured by a lien on the site. The fund is also used to collect garbage and refuse, to maintain parks, clean the streets, and to supplement the work of the Houston police department.

"The fund now amounts to about \$50,000 annually and is administered by a capable engineer and his staff. The developing company makes its annual contribution on property that it still owns. It does not provide for maintenance of dwelling structures and other like improvements.





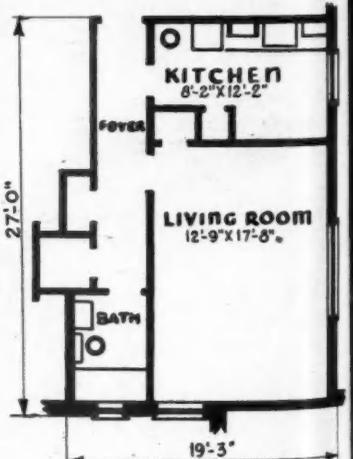
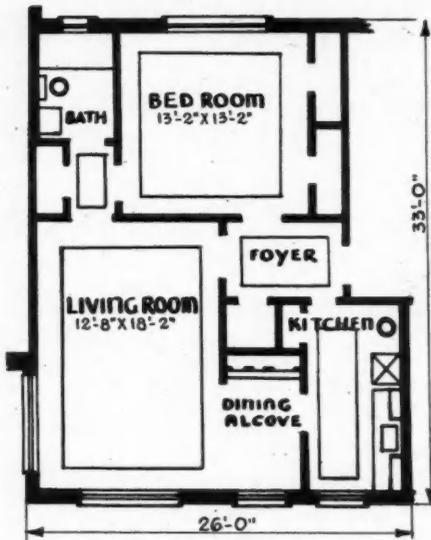
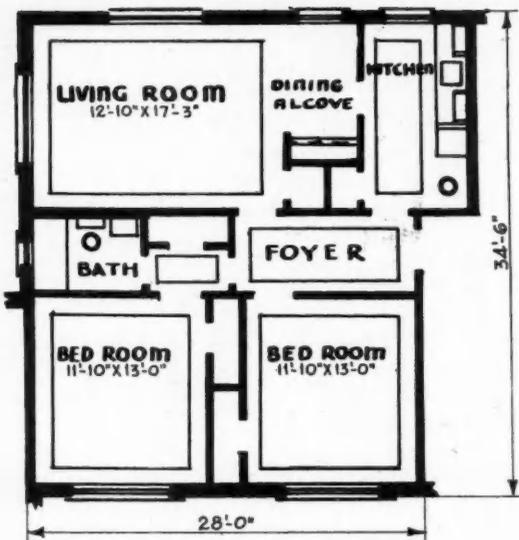
ENTRANCE TO River Oaks garden apartments is through this arched opening, framing a view of broad, well landscaped areas between buildings.

NEXT MONTH—An article on River Oaks shopping center, as part of a leading editorial feature "Commercial Buildings of Tomorrow."

The Metropolitan Area Problem

"There are about 15,000 people in what is known as the River Oaks area. When the development of the original 1200 acres got under way, other developers, seeing that it was succeeding, came into the territory and built around the edges. The population of River Oaks proper is over 5,000 people. As the property has been developed it has been taken into the city limits. We developed about fifty acres at a time, installed the utilities, and when the work was completed the area was annexed by Houston. Thus no metropolitan area problem was created. River Oaks is not only a part of Houston socially and economically as are other suburban communities, but it is also an integral political part of the City as many of the other subdivisions you study are not.

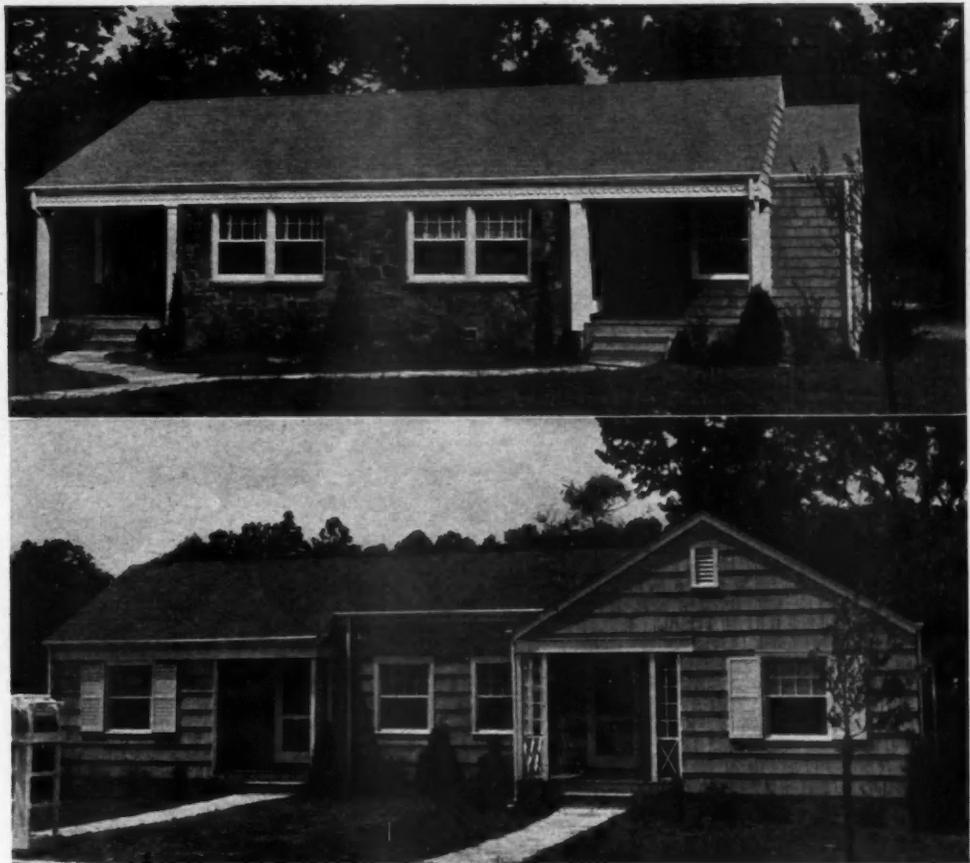
"Annexation is probably not the answer to the metropolitan area problem of some communities. In some situations it undoubtedly is the answer. The existence of numerous municipal units within a single urban community, operating as they do without coordination, has given the country one of its most severe urban problems. A high degree of unity of the metropolitan area is basic."



FOUR AND ONE-HALF, three and one-half and two room apartments are featured in River Oaks Gardens, with rentals ranging from \$37.50 to \$75.00 per month. Buildings are grouped around attractive landscaped courts. Garages are grouped in one end of project. Project has been 100 per cent successful; indicates a workable pattern for post-war private rental housing.

Duplexes— Low Cost Housing for Better Post- War Living

Attractive Proj- ects Developed for War Housing Point Out Econ- omies of Two- Family Construc- tion and Possibil- ities as units for Rental Housing



THE two duplex units above were built under Title VI to rent to war workers by Shepherd-Sloss Realty Company of Birmingham, Alabama. There were 36 units in the project, using combinations of three basic floor plans, below.

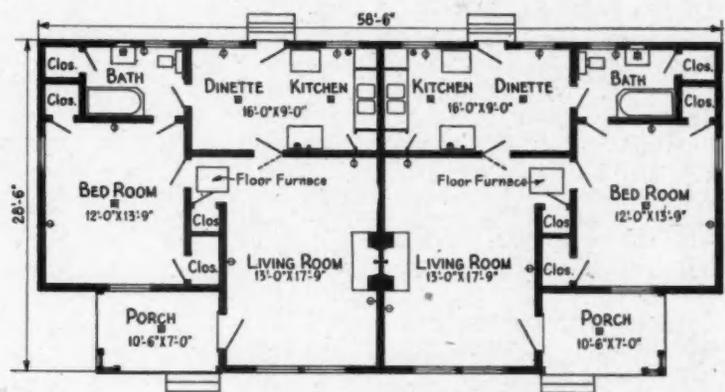
UNDER the twin pressures of the various war restrictions and the constant demand for houses to rent to war workers, the two-family unit has redemonstrated its possibilities as an economical means of housing. That charm, variety and high value appearance have been designed into many of the groups of such units scattered throughout the country calls attention to the careful study which has been given to the duplex in the past few years. A typical example of this progress is the type unit shown here; it will undoubtedly be part of the pattern of post-war housing.

As on other similar projects, two objectives guided Shepherd-Sloss Realty Co., of Birmingham, Ala., in their recent 36-unit double bungalow apartment development in that city. First, there was a desire to provide an acceptable housing project under Title VI for war workers. Second, the builders were actuated by a desire to create what would prove a sound investment from a rental standpoint after the war.

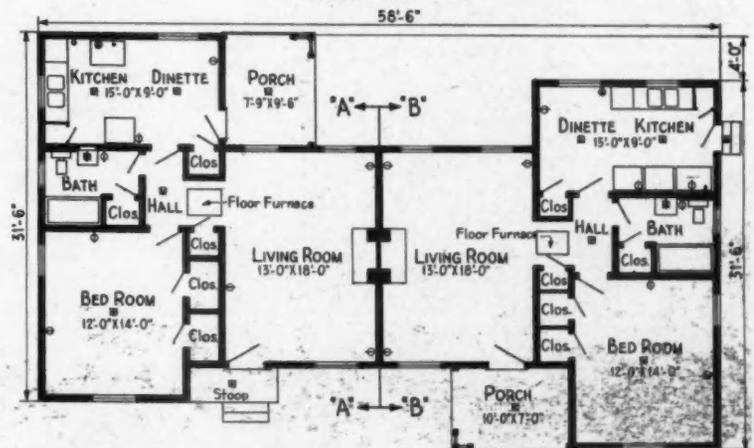
To comply with the first objective the development was located on the side of the city most convenient to workers in an ordnance plant some 35 miles away where housing for the better paid employees was not available. The houses rented as fast as completed to these workers at \$50 per month per apartment.

To meet the second objective the utmost care went into the design and location of the houses. They occupy the grounds of an old riding academy and are adjacent to

(Continued to page 94)



FLOOR PLAN TYPE "C"



HALF PLAN OF TYPE "A"

HALF PLAN OF TYPE "B"



New Procedures, Standards Speed Up War Housing; Ask for 250,000 Units This Year

JAMES H. MARCH, Tacoma, Washington, is building for rent under WPB regulations. He is a Director of National Home Builders Ass'n.; believes builders still have job to do.

EVER since WPB restrictions of last October curtailed private war housing, builders have been doing their best to adjust their operations so that the job might continue. However, there have been revisions and additional priorities, particularly recent ones, which have gradually made conditions more favorable (see news stories in this issue). Some builders who may have temporarily been out of the field will probably want to start again this spring, while others who stayed on the job can now proceed with more assurance.

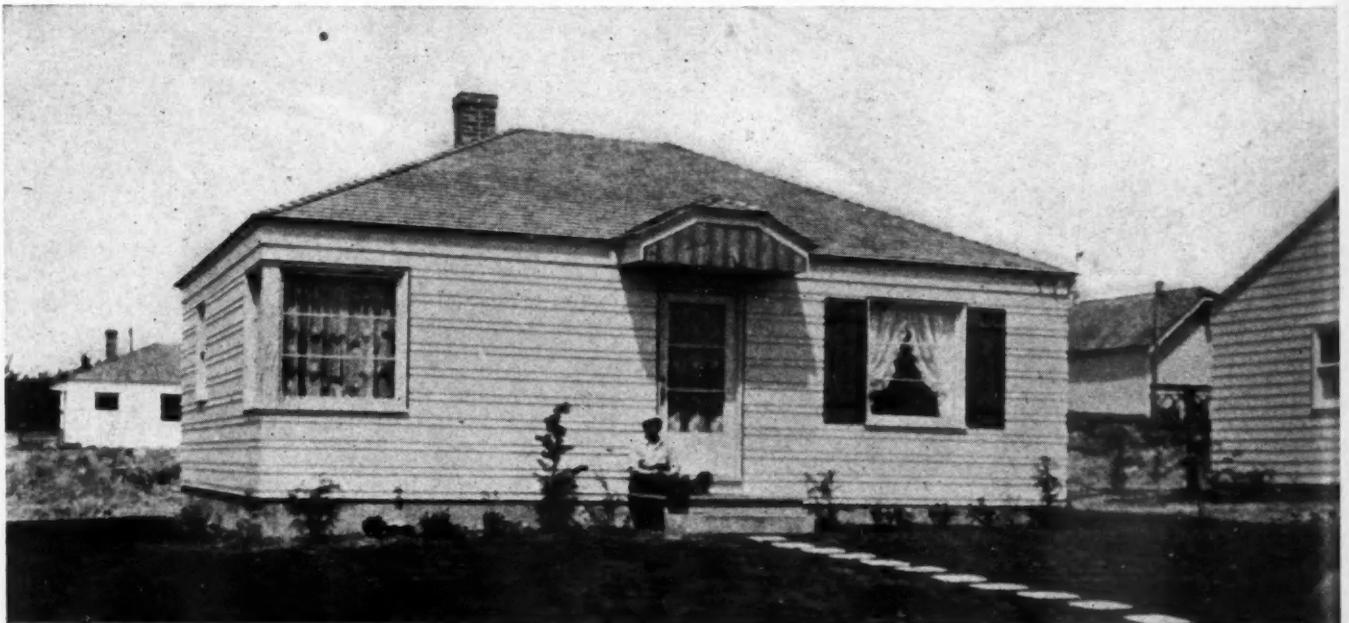
One of this latter group is Jim March of Tacoma, Wash., head of the March Construction Co., Inc. Up to last fall he had been actively engaged in building good little homes for sale in the up-to-\$6000 class, and they had been promptly snapped up by the higher type of war industry workers in the Tacoma plants.

With a population jump in the past two years from around 100,000 to a recent count of 160,000, the city was full to overflowing and the housing need was really critical. Public housing in quantity was threat-

ened—and undertaken. New regulations and restrictions were making it constantly harder to carry on private building.

Still, patriotism and a fighting spirit to stay in business urged March ahead. He consulted with FHA and WPB local directors and developed a plan for building small homes for rent; and a total of 108 units has been scheduled, with a number already built and occupied. They are located in various parts of Tacoma on lots previously developed and lost for taxes, now available on reasonable terms from the tax foreclosure authorities.

The construction of these rental houses had been of the simplest, conforming to WPB standards, both as to square foot floor area and use of materials. They are 4-room, 2-bedroom and bath houses, in size 30 by 23½ feet; floor area 705 square feet. By making the house width 23½ feet instead of 24 feet, March explains, 12-foot 2x8" joists, 16 inches on centers, can be used, lapping 6 inches on the center girder.



SMALL but livable is this March home at Tacoma, Wash.; rental \$37.50.

Ameri
The
are stu
includi
with t
over 1
is of
nailed
center
Ceiling
inch
inches
or so
15 po
The



TWO
and e
indica

POW
frami

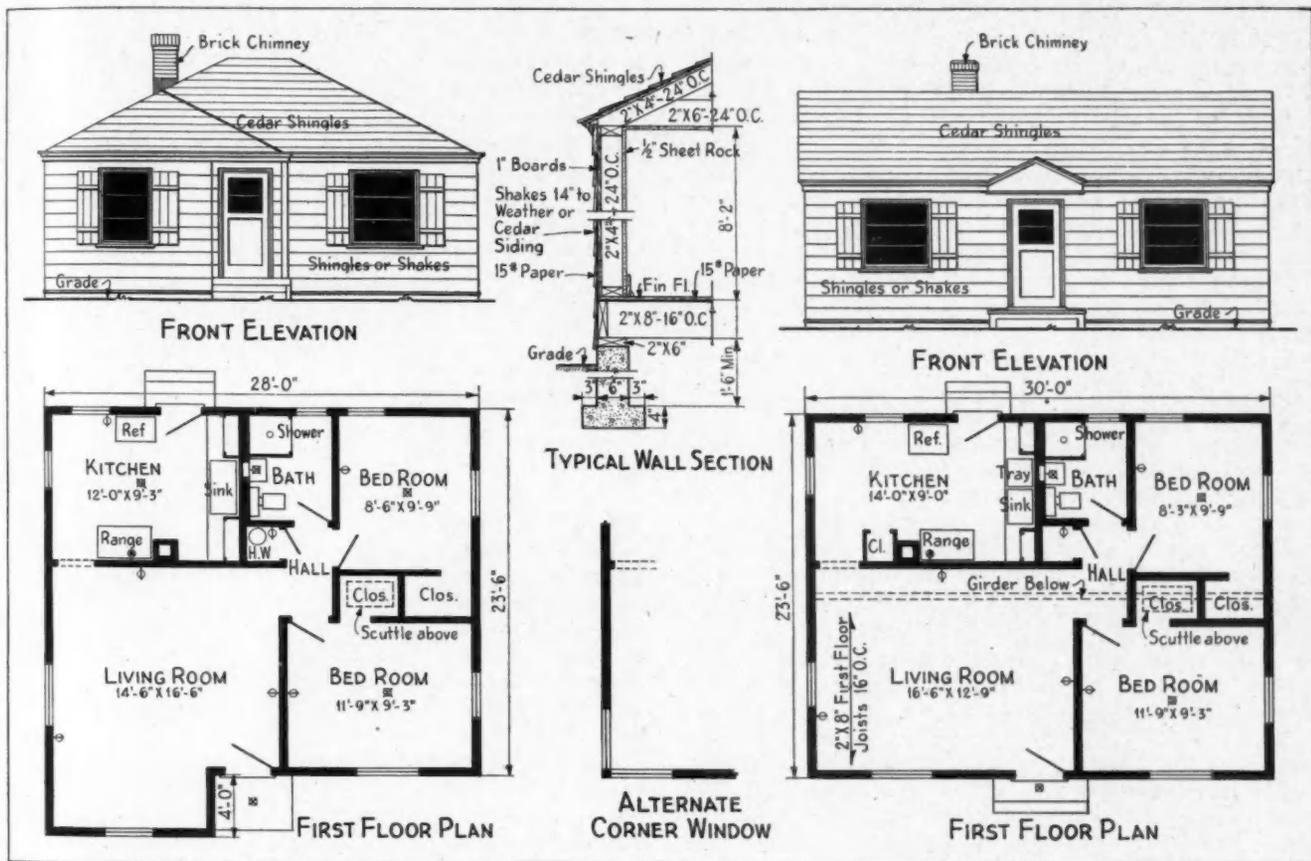
These houses are without basements; outside walls are stud framed, 2x4's on 24 inch centers. Inside finish, including ceilings and partitions, is 1/2-inch Sheetrock with taped joints; outside finish is wide cedar siding over 15 pound building paper and wood sheathing, or is of red cedar shakes laid 14 inches to the weather, nailed to 1 by 3 inch horizontal strips, 14 inches on center and covered with 15 pound building paper. Ceiling joists are 2x6's, rafters 2x4's, both set on 24 inch centers. Roofing is of red cedar shingles laid 5 inches to the weather. Flooring, either of hardwood or softwood, is single thick laid on floor joists over 15 pound building paper.

The March construction gang is organized into crews

to handle definite parts of the work on each house. All framing lumber is cut to length on a power saw set up at a convenient location. A light truck is kept busy taking the cut-up framing lumber from the saw to each building site.

These little homes are stove heated, the tenant furnishing stove and fuel. A kitchen range is, however, provided. Kitchen also has built-in sink and laundry tray, backing up to bathroom plumbing of toilet, lavatory and fiber-walled shower cabinet.

Construction costs figure close to \$3,000 for each house on a 50 by 120 foot lot. Rental is \$37.50 per month. Financing for these March houses is FHA insured under Title VI.



TWO STANDARD plans are used and exterior details are varied as indicated in the elevations above.



POWER SAW and one man cut all framing lumber to length on the job.

This Little House Goes to Market?

Developed as a prefab method for war structures by the famous research engineer, William B. Stout, Thermal Unit Housing System may fill post-war market needs for small houses, farm buildings, small stores, garages, etc.



WITH many systems of pre-assembly and special construction having been developed as tools of war to meet the housing and production problems of both the armed forces and civilian life, the question arises as to what will happen to these developments after the war. Many of the manufacturers and designers of these war-born systems look to the vast post-war market for purchasers of low-cost housing, farm buildings, commercial and industrial structures.

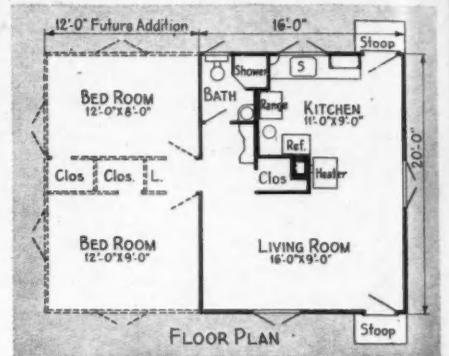
One of these is the producer of a prefabricated, climate-proofed, demountable dwelling that is now being built by Stout Houses, Inc., Detroit, for war workers. They are delivered completely equipped and ready to be set up for instant use. At any time they can be demounted for re-erection in a new location. Designed by William B. Stout, noted research engineer and designer of airplanes and automobiles, these dwellings were first developed for United States armed forces. They've proved their all-weather adaptability in Uncle Sam's service. These Stout Thermal Unit houses withstood temperatures ranging from 73 degrees below zero to those of tropical climates.

For post-war use new possibilities are being worked out for these assembly-line homes. Their all-weather design features a patented thermal panel as a barrier against temperature extremes.

Panels, packed like slices of bread for delivery, are made of double-thickness insulite with dead air space in between, permanently sealed in a rugged wooden frame. In construction they're locked together with a special joint to assure absolute weather-tightness.

A braced insulite roof capable of withstanding 42

BUILT by Stout Houses, Inc., Detroit, the above model was demonstrated as a war housing unit. Basic plan indicates how a bedroom extension can be added on later.



THE bath in these compact little prefabricated and demountable units is equipped with a Weisway shower. Below, is an interior view of the combination living room and kitchen; Stout expects to turn out these compact low-cost housing units for \$1,000 after war.



STOUT wall sections being built in the M & O Paper plant showing Insulite being attached to both faces of the built-up panel frames.



pounds pressure per square foot, more than double normal requirements, adds strength to the house.

Weighing slightly more than 3,000 pounds, complete with gas stove, ice refrigerator, automatic hot water heat, oil or coal heating unit, cupboards and electrical wiring, the dwelling can be set up in a few hours. And it's just as easily taken down and packed for transportation.

The Stout house is built in an original basic unit size of 16 by 20 feet. It is so arranged that one or two rooms at a time can be added as family needs increase, at little extra cost or inconvenience.

Interiors feature compactness and livability. Finished in various shades of insulite, the dwellings, now being built for war workers, contain a kitchen, complete with sink and other necessities, a bathroom equipped with lavatory facilities, including a shower bath, a dressing room and a 9 by 16 foot living room.

Well-ventilated, with plenty of window space, the floors are of hardwood, also insulated. The dwellings are designed to gain a maximum of living space and efficiency. Housework in these homes is cut to a minimum.

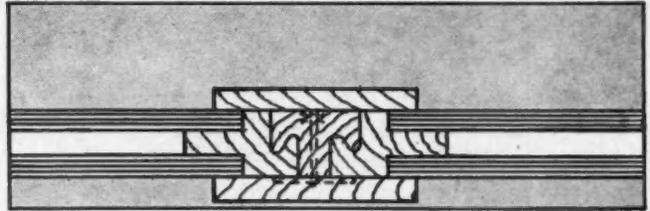
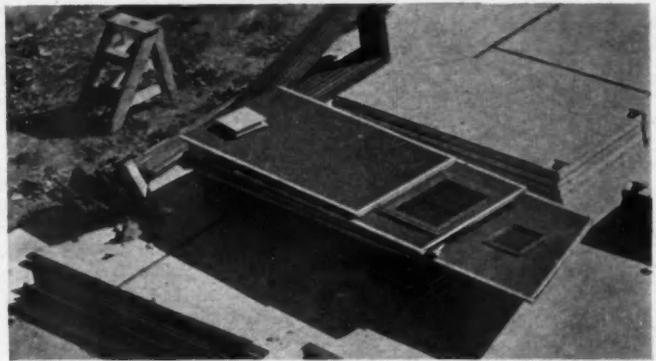
Further innovations and refinements now impossible in wartime will be added when peace comes. Now the houses are completely constructed of non-critical materials.

Shown for the first time at the Detroit Builders Show, a model home attracted wide attention from lumber dealers, mill representatives, building contractors. Thousands of inquiries also were received.

This type of post-war housing may open many possibilities in the building field. It is easily adaptable for farm buildings, garages, small stores, tourist cabins, summer cottages, club or guest houses and employee housing.

THE corners are pre-assembled and fit into place on the sill, as shown in the upper illustration at the right. Metal clips attached to base member to hold panels to sill and together at the joints.

THE Insulite surfaced panels are easily slipped into place; workmen here are starting at the corner with the first wall panel. (Note how bottom fits into grooved, built-up plate.)



PARTS of a Stout thermal unit house ready for erection (above) and detail of panels showing how they interlock at joints.

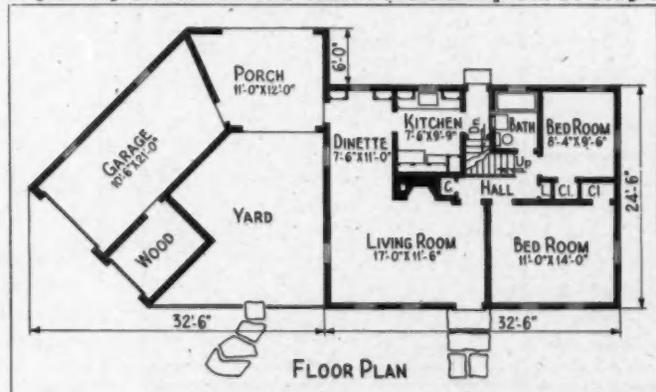
More than 7,500 Stout units have been constructed for the armed forces, ranging from 180-foot barracks, large headquarters buildings, hospitals, warehouses and airplane hangars, down to small portable two-man hutments.

Already proved thoroughly practical from a standpoint of weathertightness and efficient construction, future of these houses presents a new avenue in building.

FRONT COVER HOME



THIS peaceful Lexington, Mass., home designed by the well-known architect, Royal Barry Wills, is typical of expected post-war quality in planning and construction; comfort and stability will be sought.





Maintenance, Repair Are Top Jobs Today

Here is a collection of craft pointers that will come in handy on a wide range of work.

How to Replace Industrial Sash with Glass Block Panels

WARTIME replacements of metal sash are generally difficult, and glass block panels can frequently provide ready, economical substitutes. In some cases the ventilating sash member can be salvaged from the original, and inserted as

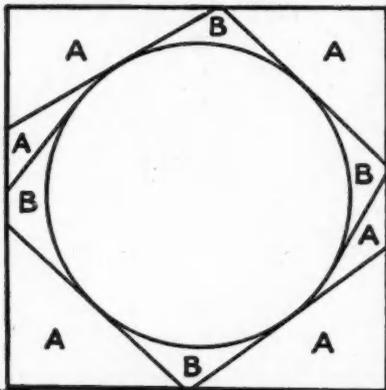
shown below, or a new wood sash ventilator used. Only a minimum of critical materials is usually required on such replacements, as the chases can be built up of almost any lumber if metal is not available.

IN installing glass block replacement panels, after the old sash has been removed, the block is laid up as shown at the right. Before starting the base course, the height of the opening should be carefully measured to make sure courses will come out right at the head. If adjustment is necessary, the sill can be built up with brick or channeled out of existing masonry. Adjustments in width of the panel are most easily made in the chases which hold the panel in place.



How to Cut Circles in Glass

IN these days of shortages of specialists it is sometimes necessary for the average craftsman to replace a piece of circular glass; here's how you can cut one. After making a clean, even cut with a Red Devil circle cutter, use a regular cutter to make the straight cuts shown in the diagram below. No straight cut should meet the circle cut at angles greater than 23 degrees, or run into the circle. Break away the pieces starting from the upper right corner, and continue counter-clockwise until all "A" cuts are broken off. Then follow with the first "B" section, and continue in the same way. Tapping glass under cuts until it cracks lightly and using breaker notches in cutter will insure against breakage in the wrong place.



METHOD of cutting glass circles as shown here devised by Landon P. Smith, Inc.

How to Surface Concrete and Salvage Form Lumber

IN converting factory buildings and basements to war use, it is frequently necessary to prepare concrete walls for direct application of finish, such as cement, casein or oil paint. If the concrete has been poured, rough projections were probably left when the forms were stripped. One of the easiest ways to obtain a smooth surface is to use a power grinder, as shown at the right. This saves much hand work and time.

With lumber as scarce as it is, there is a salvage possibility right in line with the above described operation. The same tool fitted with a circular sanding pad can be used to resurface and salvage old concrete forms.

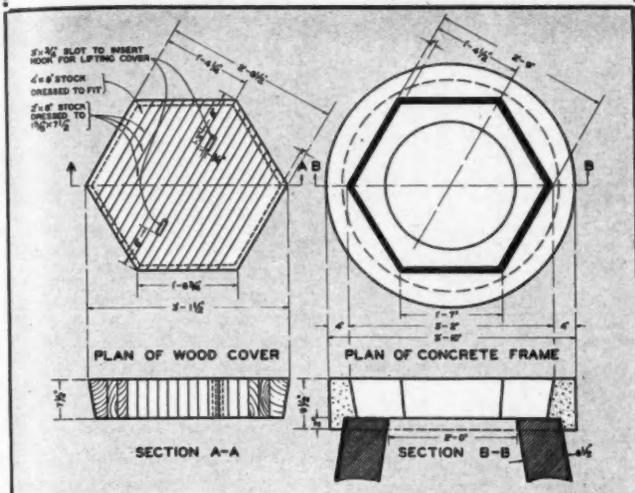
IN the illustrations to the right, workmen are using a Mail Jack-of-all-Trades units to surface concrete and form lumber.



How to Make Wood Manhole Covers

MANHOLE covers have gone to war. Stripped of all metal except bolts, nails and reinforcing rods, new Wollman Salts pressure-treated, Douglas fir manhole covers, designed by sanitation engineers of Los Angeles County, chalk up a saving of 250 pounds of iron each.

Adapted to construction in lumber yard woodworking



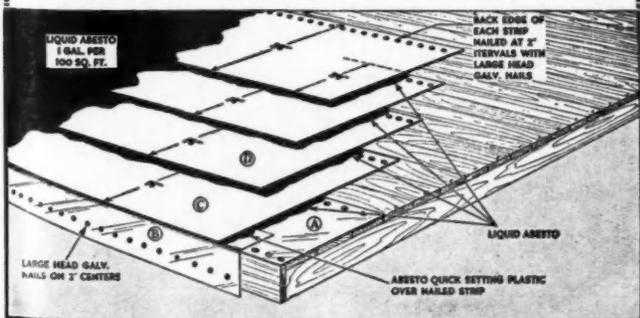
shops, the covers are made with short pieces of lumber that normally would be discarded. Covers may be fashioned in either hexagonal or circular shape depending on the kind of shop machinery available. Plans call for nailing 2-inch by 8-inch laminated strips with four 20 penny nails to each strip and running at least two 3/8-inch bolts through all members, countersinking both bolt ends. Where it is difficult to secure nails and bolts, wood dowels and waterproof glue may be used.

Circular covers of laminated wood can be turned out in one operation on the tilted table of a bandsaw. Hexagonal covers may be fabricated with a more limited amount of equipment. Cost of covers varies locally.

The hexagonal cover detailed above is 37 1/2 inches overall diameter and is 32 1/2 inches between opposite faces. Faces are 18 3/4 inches. Two lifting slots, each 3 inches by 3/4 inches, are set in 8 inches from the opposite corners. Weight of the metal-bound cover is approximately 130 pounds; dowel cover weighs slightly less.

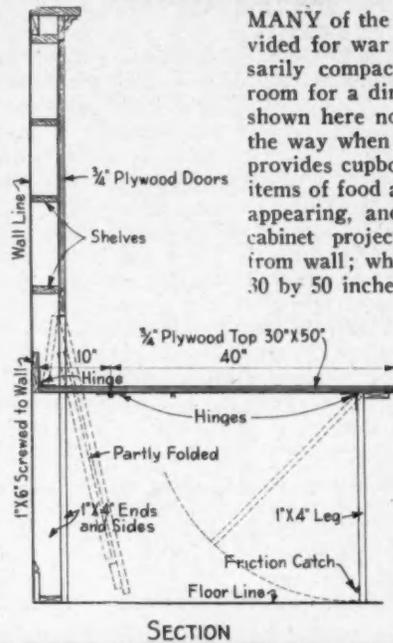
How to Put on a Cold Application Built-up Roof

IN THE illustration below is shown the Abesto method of putting on a built-up roof when the outside temperature is above 60 degrees. The rolled roofing to be used should be unrolled and cut into 12-foot lengths, turned over and allowed to flatten prior to application, then re-rolled in the opposite direction. After material is put on as shown, with an in-between layer of this asphalt product, the entire surface should be rolled to insure a firm bond. Then with a squeegee as a spreader, the top coat is put on by spreading the necessary amount of this cold application surfacer.



How to Build a Disappearing Table

MANY of the quarters being provided for war workers are necessarily compact and do not have room for a dining table. The one shown here not only folds out of the way when not being used, but provides cupboard space for small items of food and china. It is neat appearing, and, when folded, the cabinet projects only 4 1/2 inches from wall; when open, the table is 30 by 50 inches.

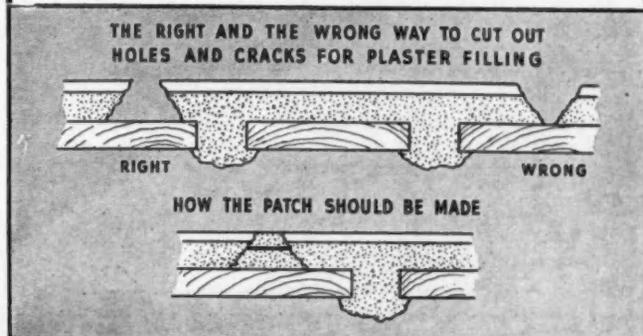


THIS folding table, as detailed at the left and shown below, was designed and built by Harold Roba, Swea City, Iowa.



How to Patch Plaster Properly

TO patch plaster properly for painting, the procedure is very simple but all too frequently cracks are merely widened on the surface and a little patching plaster knifed into place. Below is shown how a crack is properly patched. After being cleaned out to the wedge shape illustrated, the opening should be soaked with water and filled with patching material to within an eighth of an inch of the surface, and allowed to set for a while. Groove this plaster with a knife to form a key for the finish coat. Spray, and allow to stand overnight, then spray again and apply finish coat.



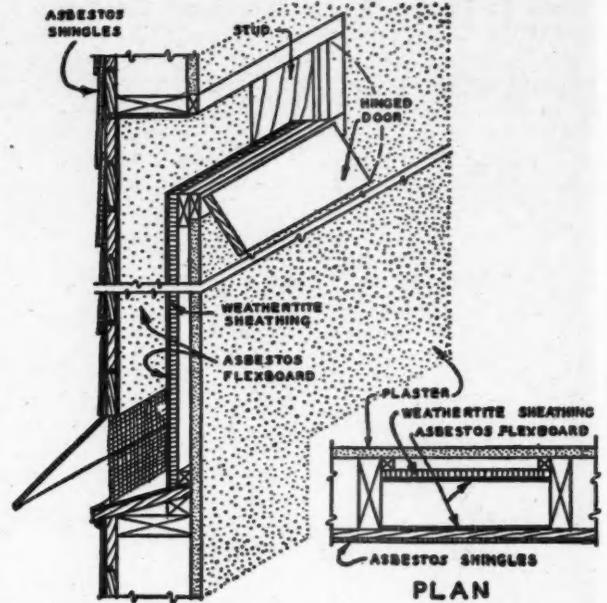
Farm Building Ventilation

In the old days barn ventilation was automatic through the cracks of the boards in the barn, but where tighter construction is being used to create warm buildings in which increased farm animal production can take place, ventilation has to be provided. Many barns troubled with moisture condensation and rotting sills can have their difficulties eliminated by the construction of proper ventilating intake and exhaust units.

The illustration at right shows the construction of such an exhaust unit, as recommended by the agricultural engineers of Johns-Manville. As heat is the element upon which ventilation systems are dependent for proper operation, it will be noted that the construction of the natural draft intake ventilator shown has the outside opening lower than the opening on the inside. As the warm air rises its forces a natural draft to be created which brings the colder fresh air in from the outside.

When insulating a barn, or where barn insulation is causing condensation trouble, such a simple unit or a group of such units will eliminate trouble.

Flues should be as straight as possible, sharp bends avoided, but all flues should be equipped with fireproof dampers that can be closed quickly in case of fire, as these intakes act very much as chimneys.



HOW TO DO IT • HOW TO DO IT

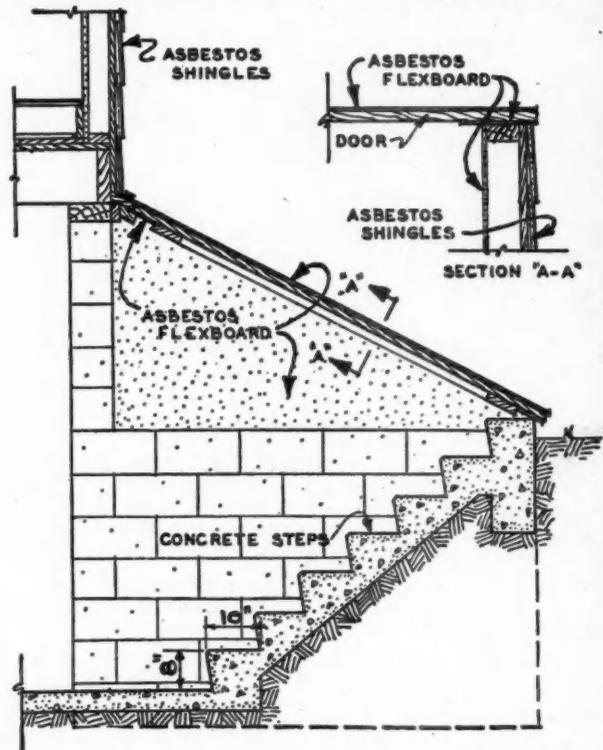
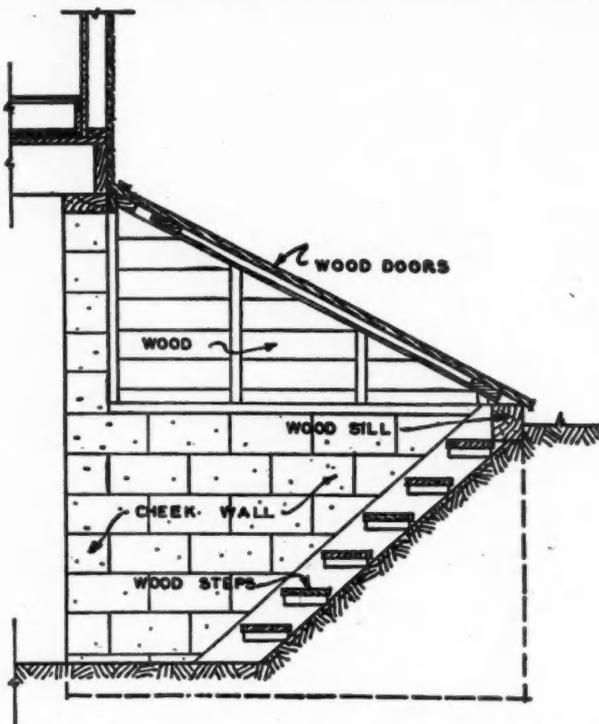
Ratproofing Cellarways

Below are shown two illustrations of cellarways which are similar. At the left is the conventional cellar construction showing no protection against rats and at right is the rat-proof permanent type of cellar. Cellarways with wooden steps, sills and earth floor are usually a source of rodent trouble that results in heavy losses to produce stored in the cellar. The sill soon rots or the rats burrow under it to gain entrance. The remedy is to construct the cellarway and floor from concrete.

Since labor has been a problem on the farm, a job for contractors is rebuilding cellarways as detailed at the right. Wooden stairways are not unusual on a farm and storage space is at a premium, therefore anything that can

be done to prevent rodents from stealing the food stuff stored, is a patriotic effort.

Cellarways are just one of the ratproofing possibilities on a farm. Rat breeding places are usually beneath wooden floors in barns, stables, corn cribs, granaries, poultry houses, in piles of fuel, wood, lumber and refuse, beneath concrete floors without curtain walls; inside double walls of buildings and in hay and straw piles. The first step in ratproofing the farm is to clean up possible harboring places, and then pay special attention to each building. An incinerator for burning all trash, as well as deep covered pits to take non-combustibles; a tightly covered garbage can for the kitchen, is a big help. Ratproofing our farm buildings is a job that must be done by someone familiar with construction.



A BOND WAGON Drive for Builders



BUY WAR BONDS TODAY—and save for home building tomorrow—is the theme which keynotes Hotpoint wartime advertising. It is making millions of Americans want new homes after Victory—truly modern homes with Hotpoint Electric Kitchens.

A Plan to Create "POST WAR" Prospects

Wine On The BOND WAGON NOW!
 Some Day Will Have The **ELECTRIC KITCHEN** That Bonds Bought!
BUY WAR BONDS TODAY—An Electric Kitchen Tomorrow!

NATIONAL ADVERTISING

PLAN BOOK

GET ABOARD THE BOND WAGON and BUILD for TOMORROW

HOME PLANNING FILE

Thousands of potential home builders have sent us 25¢ for this Home Planning File. They are starting to Plan new homes now.

● Hotpoint has prepared a promotional plan to help you secure plenty of prospects for post war home building.

The entire activity is outlined in the "Bond Wagon" Plan Book, especially prepared for the building industry. Included as part of the program is the unique Home Planning File, which has proved eminently successful as a prospect getter.

Get all the facts about this forward-looking wartime program now. Send the coupon below for your copy of the "Bond Wagon" Plan Book and free sample of the Home Planning File. Edison General Electric Appliance Company, Inc., 5641 West Taylor Street, Chicago, Illinois.



For outstanding achievement in War Production

☆ MAIL THIS COUPON FOR FREE SAMPLE ☆

This coupon attached to your business letterhead will bring you a copy of the "Bond Wagon" Plan Book and a Free Sample of the Home Planning File. Mail to: Edison General Electric Appliance Company, Inc., 5641 West Taylor Street, Chicago, Illinois.

NAME _____

TITLE _____

ELECTRIC Hotpoint KITCHENS

REFRIGERATORS • RANGES • WATER HEATERS • WASHERS AND IRONERS
CLOTHES DRYERS • AUTOMATIC DISHWASHERS • ELECTRASINK • STEEL CABINETS



War Housing Items from the CAPITAL

By Frank W. Cortright

Executive Vice-President, National Association
of Home Builders of the United States



PRIVATE CONSTRUCTION. In spite of the unsatisfactory current status of new construction being started by private enterprise, and applications received by FHA, the administration maintains an optimistic attitude. This is evidenced by the size of the program assigned to private builders for the fiscal year 1944, as outlined by Administrator Blandford in his request for critical materials for the third quarter. Although we are not permitted to disclose the extent of the construction which private industry must undertake, we can say that it is substantial in volume.

LET'S CURTAIL CONFUSION. While it is true that the curtailment of general construction for the duration has forced a considerable number of builders out of business, there still remain thousands of builders who have complete building organizations and are ready and anxious to do the job assigned to them if some of the obstacles impeding the program can be removed. Chief among these are: (1) The frequent and confusing changes by the government in standards, policies, and procedures; (2) The imperfect planning by NHA in the assignment of priorities in metropolitan areas to FPHA where the private builders could have done the job, and conversely, the assignment to private builders of priorities in isolated war production areas where only publicly financed construction is feasible; (3) The failure on the part of FHA to interpret Title VI as an emergency measure and to relax their requirements in line with wartime construction necessities. If this situation is to be corrected in time to permit private builders to accomplish the goal set for them this year, immediate action will have to be taken.

WHAT PRICE HOUSING? In retrospect, it is clear that new housing should have been planned and constructed, in large part, as a corollary to the planning and construction of new war plants. The simultaneous accomplishment of this would have prevented much of the delayed production of war materials which has occurred in areas such as Detroit, Norfolk, Mobile and Seattle. The cost in absenteeism and labor turnover will not be a complete loss if a more realistic approach is taken from now on.

MINIMUM CONSTRUCTION. In view of the really critical situation in

metals and lumber, it is imperative that builders approach new construction determined to design their projects upon a minimum basis. Mortgagees are naturally unwilling to finance projects likely to result in foreclosures. Agencies of Government must recognize that even beyond the FHA minimums, private housing must have reasonable postwar acceptability to interest the investing institutions.

LUMBER SHORTAGE. Builders are urged to effect economies in the use of sub-flooring, sheathing, and wherever one-inch lumber is used. In this way they will not only be making a substantial contribution to the overall war effort, but will be protecting themselves against the problem of securing an adequate supply of lumber at a later date. Eleven billion board feet for boxing and crating will drain off much of the lumber home building requires. The Lumber Division of WPB has requested that readers write us, sending supporting data, as to ways and means by which economies may be effected. If standards can be properly reduced, and lumber saved, revisions will be made.

LAND PLANNING. FHA's Land-planning Division has suggested that our readers submit specific instances of delayed or unreasonably meticulous procedures in the field offices. In a sincere effort to increase the effective function of the Agency, Commissioner Ferguson's staff has assured us that they will revise and correct conditions which are hindering builders unnecessarily.

TENANT REGULATIONS. At last NHA has seen the wisdom of the argument that present regulations in respect to tenant eligibility for newly constructed war housing do not give many war workers a fair break. Many of the early and ablest workers have been forced to put up with the worst makeshift type of housing accommodations. As modified by a recent executive order, the NHA regulations will now permit those whose occupations are vital to the war program to qualify as tenants if they have come into the communities since July 1, 1941, and if they can show that their accommodations are so unsatisfactory that their efficiency is impaired.

DEFERMENT. "Residential building construction (for war workers only)" and "maintenance of facilities

and services necessary for civilian health, safety, morale, and security" have been listed by the Selective Service System as "essential activities" and will be subject to general draft deferment policies.

CMP DELIVERIES. Sequence in which deliveries will be scheduled on purchase orders up-rated by the application of an allotment number under CMP Regulation No. 3 will be determined by the date of the assignment of the original rating, the same as if the higher rating had been assigned on that date.

P-55 AMENDED. Purchase orders bearing preference rating under any P-55 order—old or new—will no longer require countersigning by FHA officials. Since the issuance of Amendment No. 1 to Preference Rating Order P-55, however, periodic check-ups will be made by FHA officials to make sure only materials on the approved list are being used in the construction of war housing.

LUMBER CEILING. OPA officials are meeting this month with retail lumber dealers in the New England, Middle-Atlantic, and Great Lakes States to discuss interim price ceilings for retail lumber and lumber products, pending issuance of permanent price regulations to be based on cost studies currently being made.

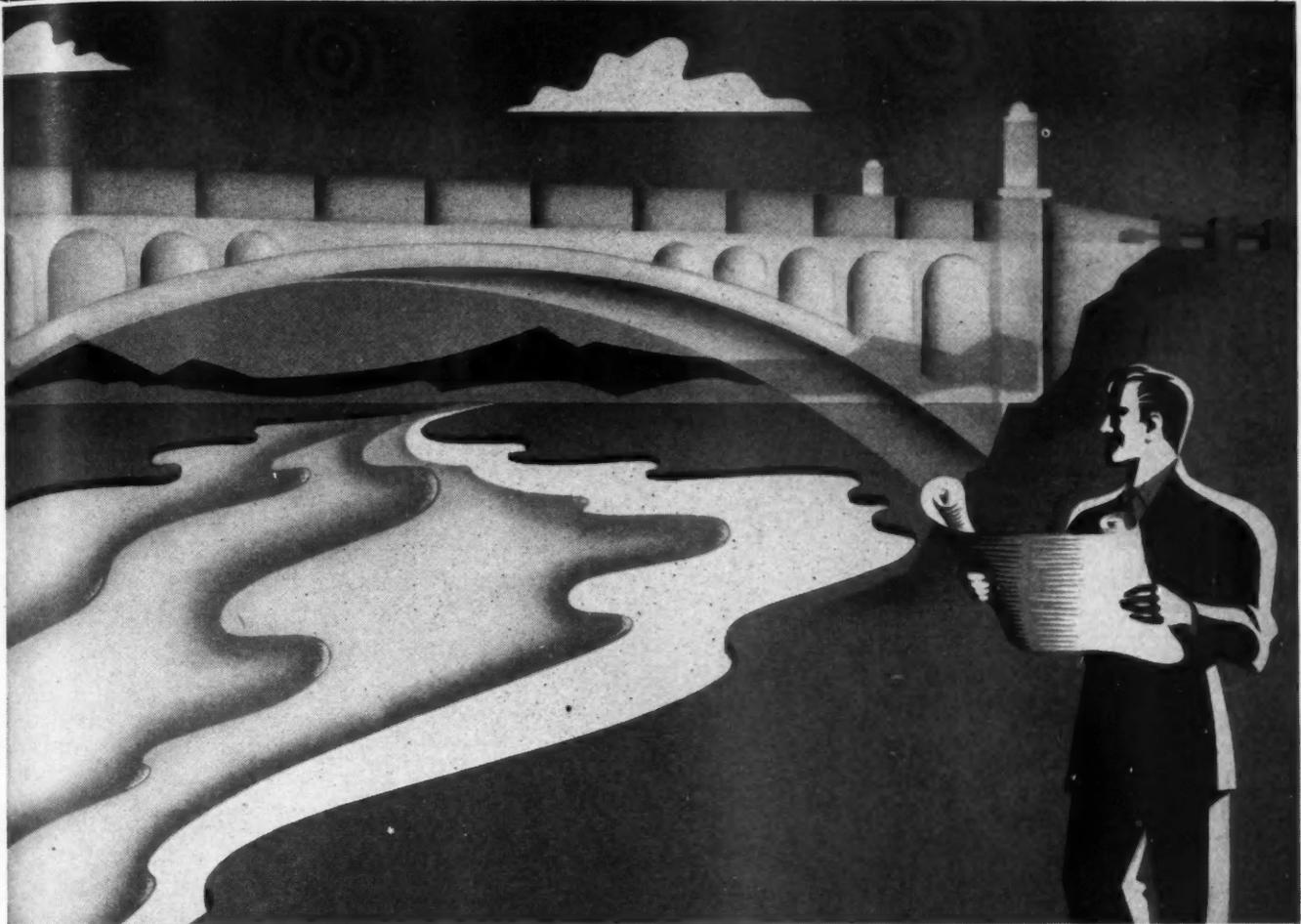
COORDINATION. In a move to bring about coordination of federal programs relating to such activities as housing, community facilities, health and welfare, and other essential services, the President has issued an administrative order creating a committee for congested production areas. This committee will represent the NHA, the War and Navy Departments, the War Manpower Commission, the Federal Works Agency, and the Budget Bureau.

RESTAURANT FACILITIES. We have received a communication from C. E. Reinholt, Acting Chief, Office Buildings, Hotels and Restaurants Section of WPB, in which he states that the Government is most anxious that restaurant facilities be arranged for in many war production areas. He has assured us that applications on PD-200 for such construction, where present facilities are inadequate, will receive their immediate and sympathetic attention.

CONVERSION. Since the NHA has made it clear that it will insist on making the maximum use of existing houses before new construction is authorized, the status of the conversion program is of more than usual interest to builders. After a slow start, this phase of the program under which the government leases or purchases existing

(Continued to page 74)

How to turn a blueprint into a bridge... QUICKLY



Whether it's to help the war effort... or to get civilian traffic through... there's one way to help assure a faster construction job

WHEN wartime transportation calls for a bridge... in a hurry... one way to help speed the job is with Atlas High-Early cement.

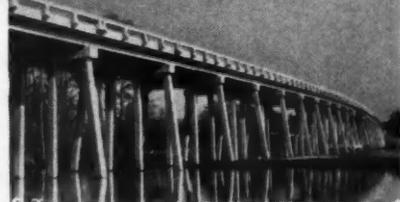
Atlas High-Early gains strength rapidly. It produces serviceable concrete often in one-fifth the usual time. It saves manpower by releasing men for new jobs more quickly. It saves lumber because forms often can be stripped in 24 hours instead of 3 to 5 days. It shortens the time required for protection and curing by as much as 70%. It reduces overhead by saving time, man-

power, and equipment.

For all types of wartime "Rush" jobs... housing, factories, airports, cantonments, access roads... you can depend on Atlas High-Early cement to give you serviceable, durable concrete... **FAST**. 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.

HOW THE LITTLE PEE DEE RIVER WAS BRIDGED...



...14 DAYS QUICKER

For construction of the Potato Bed Ferry Bridge over the Little Pee Dee River, Atlas High-Early cement was specified for piling. Why? South Carolina Highway Specifications state, "No pile shall be driven until it is at least 24 days old and in cold weather for a longer period as determined by the engineer. This period may be reduced to 10 days if high-early strength is used"—a saving of 14 days!

Atlas High-Early cement provided other advantages, too. Forms were stripped and reused... saving time, materials, and manpower.

AB-N-53



SAVE TIME IN WARTIME WITH

Atlas High-Early Cement

A UNIVERSAL ATLAS PRODUCT

SHORT CUT Estimating Methods For Fast and Profitable Selling

By Herbert F. Lotz, Estimating Expert

No. 4.

How to Figure Painting Jobs Quickly

TABLES on this and following pages give selling prices for applied finishes on old or new work—both interior and exterior.

Coverage: The indicated spreading capacities of the various finishes over many surfaces have been carefully tested and checked by several nationally prominent paint manufacturers and may be considered conservative.

Labor Production: Labor cost figures are based on national surveys conducted by these manufacturers and are

the broad averages of master painters in many cities covering thousands of actual jobs.

Windows, Doors, and Other Irregular Surfaces: To compensate for the added labor required for irregular surfaces, an additional labor allowance of 25% for the door and trim group and 40% for the window, stairs, and cabinet group has been added to the square foot selling prices.

Material Prices: Material prices per gallon as given in the tables represent the *base prices which apply to first quality, branded prepared paints. To adjust material prices for each coat, divide cost of material per gallon by
(Continued to page 92)

Paint—(Interior)—Applied Over New or Old Work—Prices per 100 sq. ft.																				
*Labor Prices @ \$1.00 per hour include 10% "Make Ready", 10% compensation and liability insurance and 20% labor profit																				
Fin. No.	Product and Surface	One Coat					Two Coats					Three Coats								
		Gal. Pr.	Cov. S. F.	Mat. Pr.	Lab. Pr.	Tot. Pr.	Local Price	Cov. S. F.	Mat. Pr.	Lab. Pr.	Tot. Pr.	2 Ct. Price	Local Price	Cov. S. F.	Mat. Pr.	Lab. Pr.	Tot. Pr.	3 Ct. Price	Local Price	
1	Varnish Plain			(New Soft Wood or Old Work)						(Varnish \$4.00)						(Varnish \$4.00)				
	Wood and Hard Bd.	\$4.00	600	.67	.97	\$1.64		600	.67	.97	\$1.64	\$3.28		700	.57	.97	\$1.54	\$4.82		
	Doors and Trim	4.00	600	.67	1.22	1.89		600	.67	1.22	1.89	3.78		700	.57	1.22	1.79	5.57		
	Wds., Cab., Stairs	4.00	600	.67	1.36	2.03		600	.67	1.36	2.03	4.06		700	.57	1.36	1.93	5.99		
2	Varnish and Filler			(New Open Grain Hardwoods)						(Filler \$3.00)						(Varnish \$4.00)				
	Wood and Hard Bd.	4.00	600	1.17	2.70	3.87		600	.67	.97	1.64	5.51		700	.57	.97	1.54	7.05		
	Doors and Trim	4.00	600	1.17	3.38	4.55		600	.67	1.22	1.89	6.44		700	.57	1.22	1.79	8.23		
	Wds., Cab., Stairs	4.00	600	1.17	3.78	4.95		600	.67	1.36	2.03	6.98		700	.57	1.36	1.93	8.91		
3	Varnish and Stain			(New Soft Woods)						(Filler \$3.00) (Stain \$3.75)						(Varnish, \$4.00)				
	Wood and Hard Bd.	4.00	600	1.42	1.94	3.36		600	.67	.97	1.64	5.00		700	.57	.97	1.54	6.54		
	Doors and Trim	4.00	600	1.42	2.44	3.86		600	.67	1.22	1.89	5.75		700	.57	1.22	1.79	7.54		
	Wds., Cab., Stairs	4.00	600	1.42	2.72	4.14		600	.67	1.36	2.03	6.17		700	.57	1.36	1.93	8.10		
4	Filler, Stain and Varnish	4.00		Varnish, \$3.00 Filler, \$3.75 Stain (Filler, Stain, Varnish)						2nd coat varnish						3rd coat varnish				
	Plain Wood	4.00	600	1.92	3.67	5.59		600	.67	.97	1.64	7.23		700	.57	.97	1.64	8.77		
	Doors and Trim	4.00	600	1.92	4.60	6.52		600	.67	1.22	1.89	8.41		700	.57	1.22	1.89	10.20		
	Wds., Cab., Stairs	4.00	600	1.92	5.14	7.06		600	.67	1.36	2.03	9.09		700	.57	1.36	2.03	11.02		
5	Filler, Stain, Wax	3.00		Filler, \$3.75; Stain, \$3.60 Liquid Wax (Filler, Stain, Wax)						2nd coat wax						3rd coat wax				
	Plain Wood	3.00	600	1.55	3.44	4.99		1200	.30	.74	1.04	6.03		1200	.30	.74	1.04	7.07		
	Doors and Trim	3.00	600	1.55	4.31	5.86		1200	.30	.93	1.23	7.09		1200	.30	.93	1.23	8.32		
	Wds., Cab., Stairs	3.00	600	1.55	4.82	6.37		1200	.30	1.04	1.34	7.71		1200	.30	1.04	1.34	9.05		
6	Stain, Shellac, Wax	3.75		Stain, \$2.00 Shellac, \$3.60 Liquid Wax (Stain, Shellac, Wax)						2nd coat wax						3rd coat wax				
	Plain Wood	3.75	500	1.50	2.45	3.95		1200	.30	.74	1.04	4.99		1200	.30	.74	1.04	6.03		
	Doors and Trim	3.75	500	1.50	3.09	4.59		1200	.30	.93	1.23	5.82		1200	.30	.93	1.23	7.05		
	Wds., Cab., Stairs	3.75	500	1.50	3.44	4.94		1200	.30	1.04	1.34	6.28		1200	.30	1.04	1.34	7.62		
7	Varnish and Wax	4.00		Varnish, \$3.60 Liquid Wax, 1st coat varnish						2nd coat varnish						1 coat wax				
	Plain Wood	4.00	600	.67	.97	1.64		600	.67	.97	1.64	3.28		700	.30	.74	1.04	4.32		
	Doors and Trim	4.00	600	.67	1.22	1.89		600	.67	1.22	1.89	3.78		700	.30	.93	1.23	5.01		
	Wds., Cab., Stairs	4.00	600	.67	1.36	2.03		600	.67	1.36	2.03	4.06		700	.30	1.04	1.34	5.40		
8	Shellac	2.00																		
	Wood	2.00	450	.45	.74	1.19		500	.40	.74	1.14	2.33		550	.37	.74	1.11	3.44		
	Doors	2.00	450	.45	1.22	1.67		500	.40	1.22	1.62	3.29		550	.37	1.22	1.59	4.88		
	Wds.	2.00	450	.45	1.36	1.81		500	.40	1.36	1.76	3.57		550	.37	1.36	1.73	5.30		
9	Liquid Wax on Wood	3.60	1200	.30	.74	1.04		1200	.30	.74	1.04	2.08		1200	.30	.74	1.04	3.12		
10	Flat Wall Paint			(1st coat primer \$ 2.50)						(Flat Wall Paint \$2.50)						(Flat Wall Paint \$2.50)				
	Ins. Bd. Glaze	2.50	400	.63	1.05	1.68		500	.50	.97	1.47	3.15		600	.42	.97	.39	4.54		
	Ins. Bd.	2.50	150	1.67	1.18	2.85		400	.63	1.05	1.68	4.53		400	.63	1.05	1.68	6.21		
	Std. Flexbd.	2.50	600	.42	1.05	1.47		600	.42	.97	1.39	2.86		600	.42	.97	1.39	4.25		
	Plaster—New	2.50	600	.42	1.05	1.47		600	.42	.97	1.39	2.86		600	.42	.97	1.39	4.25		
10	Flat Wall Paint			(Flat Wall Paint \$2.50)						(Flat Wall Paint \$2.50)						(Flat Wall Paint \$2.50)				
	Concrete Brick	2.50	200	1.25	1.45	2.70		250	1.00	1.45	2.45	5.75		300	.83	1.18	2.01	7.16		
	Wood and Hard Bd.	2.50	500	.50	1.18	1.68		550	.46	.97	1.43	3.11		550	.46	.97	1.43	4.54		
	Doors and Trim	2.50	500	.50	1.48	1.98		550	.46	1.22	1.68	3.66		550	.46	1.22	1.68	5.34		
	Wds., Cab., Stairs	2.50	500	.50	1.65	2.05		550	.46	1.36	1.82	3.87		550	.46	1.36	1.82	5.69		

NOTE: Where two or more materials are applied in a single treatment, the base prices have been indicated on the horizontal lines, i. e., \$4.00 varnish, \$3.00 filler, 1st coat primer \$2.50, flat wall paint \$2.50.

IT

PEO
P this
venien
always
home
bathro
Tha
bathro
Carran
this n
any b
design



IT WILL PAY YOU TO USE
Carrara
IN THE BATHROOMS OF TOMORROW

PEOPLE will always like the same things in a house. Comfort, convenience, good looks. And they'll always be prejudiced in favor of a home with a handsome, practical bathroom.

That's why they'll always prefer bathrooms finished in good-looking Carrara Structural Glass. Walls of this modern structural glass make any bathroom, whatever its size or design, a better, more practical, more

durable, and more attractive room.

Carrara walls are smart in appearance with their smooth, reflective surfaces and soft, eye-catching colors. (There are ten Carrara colors to choose from.)

Carrara walls won't check, craze, fade, stain or absorb odors. They're

easy to clean with a damp cloth.

In your post-war home-planning, remember that Carrara Structural Glass can be used in homes of every price class . . . not only for complete bathroom and kitchen walls set on the job, but also in prefabricated sections ideal for low-cost homes.

Send the coupon for interesting data on this structural glass which will help you put "buy-appeal" into the bathrooms of tomorrow.

"PITTSBURGH"
stands for Quality Glass and Paint

CARRARA
The modern Structural Glass
PITTSBURGH PLATE GLASS COMPANY

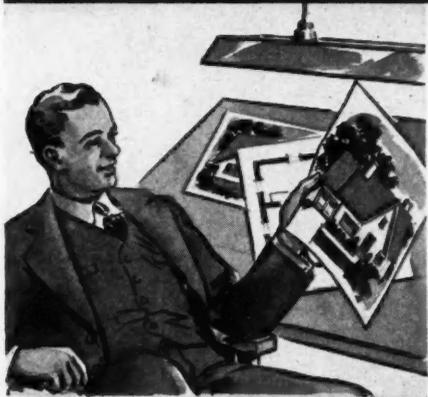
Pittsburgh Plate Glass Company
 2051-3 Grant Building, Pittsburgh, Pa.
 Please send me, without obligation, free literature on Carrara as follows: (Please check)
 ----- Full-color booklet, "How to make Bathrooms and Kitchens Better Looking."
 ----- Complete facts about Ready-Built Carrara Glass Panels.
 ----- Data on Utility Carrara Glass Tubs.
 ----- Data on Prefabricated Glass Showers.

Name.....
 Address.....
 City..... State.....

"Here's Why I'm PLANNING HOUSES FOR THE FUTURE



...All With Coleman Floor Furnaces!...



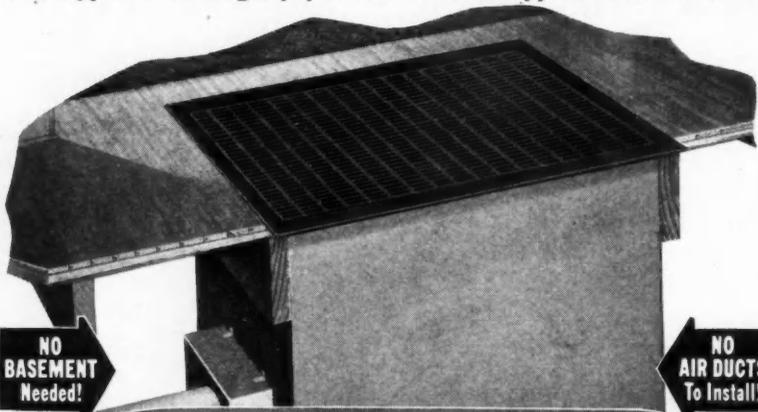
I've Been Catching Up On My Post-War building plans... and believe me, the hottest news — for the future — deals with Coleman Floor Furnaces! Their flexibility gives them such a big advantage over other types of heating equipment!...



I've Seen For Myself The Remarkable performance of these Colemans — both gas and oil — in thousands of government housing installations. They've been proved in war-time for real expansion in all types of homes after the war!



And It's So Easy To Sell Coleman's advanced automatic circulating furnace heat — at much lower cost than an average basement furnace, completely installed with thermostat controls. My post-war prospects are really excited!



Coleman
AMERICA'S LARGEST-SELLING AUTOMATIC GAS AND OIL
FLOOR FURNACES

How To Get Off To A Fast Start In The Home-Building Wave of The Future

See for yourself the flexibility—and saleability—of Coleman's "Furnace-of-Tomorrow"... the advanced type of automatic circulating furnace heat for post-war homes—with or without basements.

Here is warm-air heating at its best—warm floors, uniform temperatures, health-conditioned air—at much lower cost than an average basement furnace, completely installed with thermostat controls.

With the Coleman Floor Furnace no basement is needed. Where a basement is used the Coleman is up at the ceiling out of the way. This leaves all basement floor space available for laundry, recreation or hobby rooms. There is a size for every type of installation.

Coleman gives you new and exciting advantages in keeping with the "Home-of-Tomorrow!" Get full facts for yourself now! Write for Catalog!

FREE! Write us today on your letterhead for Builders' Catalog and typical floor plan ideas of the Coleman "Furnace-of-Tomorrow!" Please address your inquiry to Dept. AB-7.

THE COLEMAN LAMP AND STOVE CO.
Wichita, Kans. Philadelphia, Pa. Chicago, Ill.
Los Angeles, Calif. PFD-3

What Will Home Owners Want When the War is Won?



This colorful book packed with stimulating ideas on bathrooms, kitchens and heating in tomorrow's homes is being sent to thousands of home owners and prospective home owners the country over.

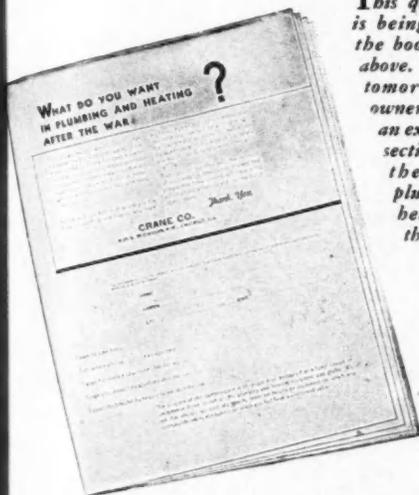
WHAT are home owners and prospective home owners expecting in plumbing and heating in their new homes after "V" Day? The answer to this question so vitally affects the market for homes of the future that we are seeking the answer.

A nation-wide investigation is being conducted covering the men and women who will be your market for homes after the war. This investigation is designed to learn what the preference of tomorrow's buyers will be for plumbing and heating. A colorful book filled with interesting suggestions on bathrooms, kitchens and heating systems is being furnished with a questionnaire to stimulate interest in new homes after the war. This book and questionnaire are being featured in national advertising reaching millions of prospects, and already thousands of inquiries testify to the interest of Mr. and Mrs. America in planning their new home.

The Crane line of the future will be built on the basis of the preference expressed in this investigation.

We would also like to know what Builders think about plumbing and heating for tomorrow's homes. A copy of this questionnaire and booklet will be furnished to anyone interested. Mail the coupon below.

This questionnaire is being sent with the booklet shown above. Filled in by tomorrow's home owners, it will give an excellent cross section of what they want in plumbing and heating after the war.



CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVENUE, CHICAGO
VALVES • FITTINGS • PIPE • PLUMBING • HEATING • PUMPS

CRANE CO. AB 5-45
836 S. Michigan Ave., Chicago, Ill.
Please send me copy of booklet "V" Day and questionnaire.

Name.....
Address.....
City.....State.....

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

BUILDERS SPEAK ON POST-WAR

(Continued from page 35)

Bugs Must Be Ironed Out



M. Y. COOPER

THE buying public will demand investigation of the marvels they have read about, and only when convinced the bugs are ironed out will they become boosters. More standardization of equipment to overcome custom-built prices is ahead. Houses of the better class require so much in mechanical equipment and individuality that "stock methods" will have hard sledding.

The approach to all the better designs will be modern in the best sense of the word—revealing the designer's ingenuity in adapting motives and principles from many sources. Simplification should be the keynote in plan and design. A building boom is in the making for free enterprise.—MYERS Y. COOPER, Cincinnati, Ohio (250)



Life Changes Constantly—So Do Plans

C. C. WILLMORE

THERE will be many changes after the war—but not immediate. It will take time. The house of 1941 did not look much like 1921.

All post-war houses will have automatic heat, better lighting, better ventilation, larger windows, more color, wider sites, Colonial and Modern Colonial styles. No modern.

Life changes constantly, and so do plans and methods.—CYRUS CRANE WILLMORE, St. Louis, Mo. (250)

Public Wants Homelike Design



J. W. BAKER

THE enclosed folder, "Colonial Farms," expresses our ideas about the post-war houses, which will be planned in line with public demand.

We have built over 600 houses in the past few years, and at present are completing a 130-unit war housing job.

Home buyers of the post-war era will not be much interested in the factory or box type of house that some of the crackpot planners are trying to put across. They will want something more homelike and custom-built, in the traditional Early American manner, together with practical improvements that are, or will be, developed from time to time.

We might add, *American Builder* has offered more interesting and constructive reading matter during the past twelve months than at any time in the past.—J. W. BAKER, Cox & Baker, Detroit. (600)

Selling Lots Now for Post-War



G. W. MILLER

I HAVE purchased two subdivisions containing about 1,000 sites, and am setting up a program using experienced salesmen to sell the land sites now and build the houses when the war is over.

The point I wish to make is that the properties we are selling to these people today are the houses contained in the book enclosed. This represents the *exact spot* where we have left off, and where we will start to develop new types and designs after the war.

In the lower brackets of post-war homes, there will be a tremendous experimentation; I very much doubt that prefabrication will lead any further than to the making of panels, cupboards, doors, windows, etc. The labor unions intend to unionize these shops, and with equal labor cost in the shop with that in the field, the shop method cannot hope to compete; especially with production methods where we set up our saws in the field and build houses down a line.

In the very small house of the trailer type, I would not be surprised to find realty developments in the big industrial centers catering to renting land sites to movable homes.

Above \$6,000, we will find a continued lessening of prefabrication up to the higher type—almost entirely custom-built. These must be individually designed to fit the site, the sun and wind facings, the view, etc.

Therefore, there is no one answer to post-war building, but instead, a multitude of answers stretching all the way from complete prefabricated and movable small homes up to the fine type of exclusive residence in a carefully restricted neighborhood.

I will have two, or possibly three, separate companies, one of which

will merchandise houses much the same as you sell an automobile. Another will build standardized homes in quantity on adjacent sites. The third will be the Miller Quality Home, and in this case the customer's needs will be carefully analyzed, and the house and site carefully prepared to suit the needs and personality of the family, with all the protection that a carefully restricted realty can give.—GEORGE W. MILLER, President, Miller Homes, Inc., Detroit. (2,600)

Build to Sell Quickly



W. T. RICHARDSON

WE expect to use panel or site fabrication methods, but expect little change in post-war house appearance.

I once spent a lot of time and money preparing plans that I thought perfect. Disposition of them was almost impossible and at a loss. Now we build houses that sell quickly.—WM. T. RICHARDSON, Los Angeles, Calif. (500)

Fads Come and Go

FOR the more than thirty years I have been engaged in the building of houses in Washington, I have seen fads in architectural design and materials come and go. But the traditional Colonial, English and French built in proper locations in neighborhoods where protective covenants are established retain their attractiveness and intrinsic value.—ALLISON N. MILLER, W. C. & A. N. Miller Development Co., Washington, D.C. (300)

More Glass—Monterey or Florida Type



J. W. DAVIN

WE expect to use site fabrication and pre-cutting of materials and power equipment, but no radical change in appearance of our post-war houses. We will feature Modern Colonial and the Monterey or Florida types. We expect better planning in the very low-cost houses, better equipment in the middle priced houses, and more glass in all types.—JOSEPH W. DAVIN, Whatley, Davin & Co., Jacksonville, Fla. (350)

(Continued to page 66)

h the
e. An-
nones
The
uality
stom-
lyzed,
y pre-
erson-
e pro-
cted
E. W.
Lomes,



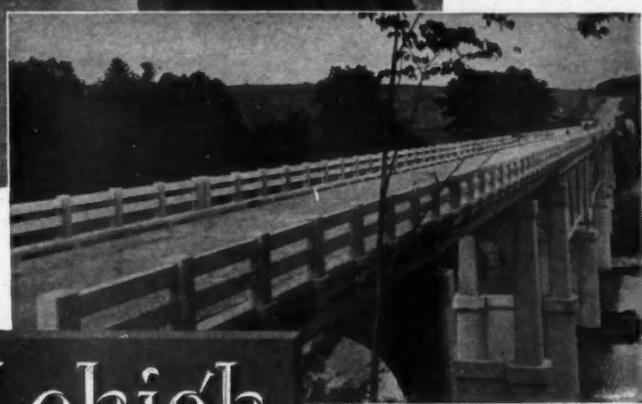
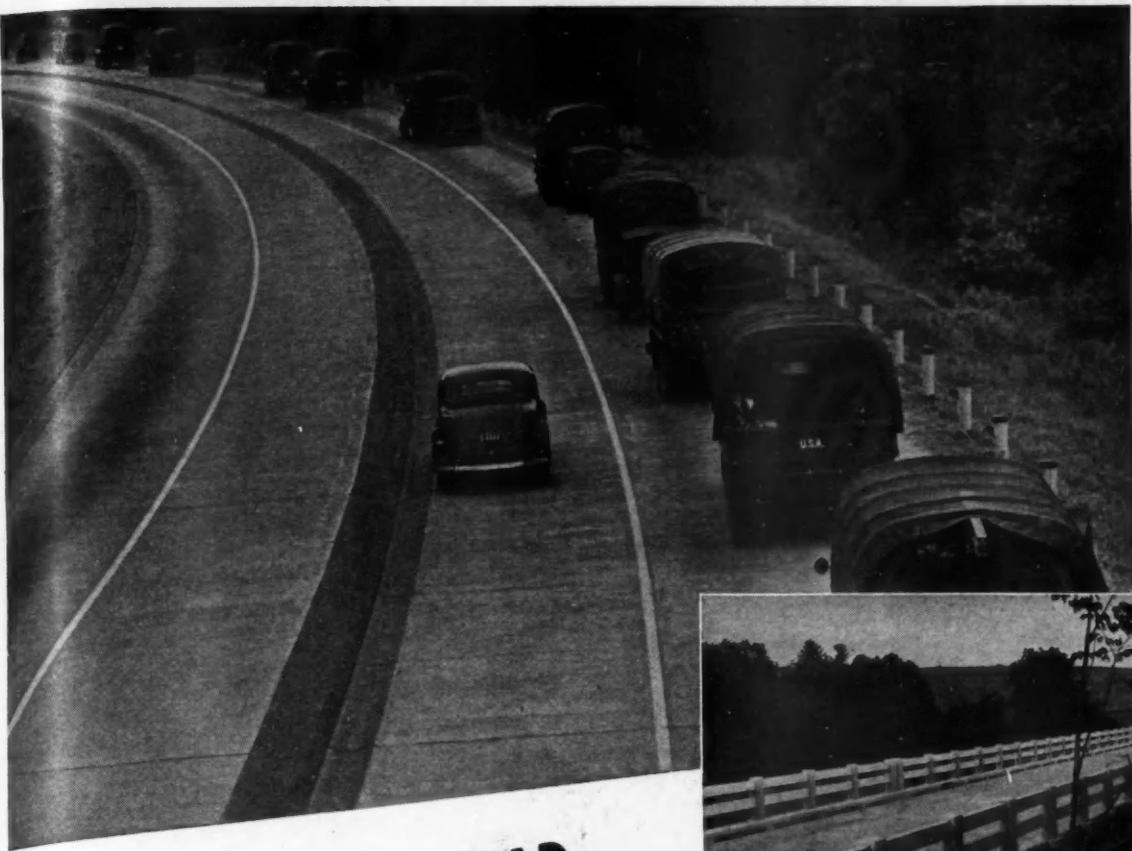
te fab-
t little
appear-

ne and
that I
of them
a loss.
quick-
N, Los

years I
uilding
I have
gn and
the tra-
n and
ions in
ve cov-
n their
value.—
W. C. &
at Co.



rication
als and
radical
ar post-
Modern
erey or
t better
houses,
middle
ss in all
DAVIN,
sonville,



Lehigh
CEMENT



ALL ROADS LEAD TO ROME... AND TO BERLIN AND TOKYO, TOO

It's an old saying that all roads lead to Rome . . . and we amend that by adding that they lead to the other Axis capitals, too. America's far-flung network of concrete roads is speeding the transport of vital war supplies.

In peace and war, Lehigh Cement has played an important part in the building of America's highway system. And when the concrete had to be put into use in a *hurry*, Lehigh Early Strength Cement answered the need. It saves time by coming to service strength in $\frac{1}{3}$ to $\frac{1}{5}$ normal curing time. It makes a denser, finer concrete, too.

In every type of concrete construction, for war work and private work alike, Lehigh Early Strength

Cement can contribute precious savings in time. It may be the answer to your own special problem. The Lehigh Service Department will gladly supply full details.

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

BUILDERS SPEAK—*(Continued from page 64)***Open Minded and Receptive to New Ideas**

WE are both open minded and receptive to any plans or ideas that will make it possible to reach buyers in the lower brackets; but we have seen nothing yet to justify the opinion that conventional methods will be scrapped.

The ideas of the operative builder are shaped by close contact with purchaser, and hard-earned knowledge of what the public will or will not accept.

There is a good deal of moonshine in the talk about innovations after the war. While the architect has his legitimate place in higher class residential construction, he is of very little assistance in a small house except to give architectural form to the ideas of the operative builder.—**JAMES W. FARRELL**, Fred'k A. Schmidt, Inc., Cincinnati.

Like It Fine

INTEND to go slow and see what various manufacturers bring out in new ideas. Have been subscriber to your magazine for years—like it fine.—**P. S. BAMBERGER**, Modesto, Calif. (150)

**Better Land Planning****G. F. NIXON**

MUCH improvement will continue in post-war housing and land planning. Higher priced houses will continue to follow traditional trends. This area is becoming educated to row housing for low-cost. We expect site fabrication and pre-cutting of materials. Changes in post-war construction methods will be subject to union regulations.—**GEORGE F. NIXON**, Chicago. (200)

Add Bit by Bit

OUR builders know that people, who are conservative, and who will cling to the best of the old, adding bit by bit the best of the flood of new gadgets, ideas, designs and devices which may come on the market.

I expect greater use of plastics, greater installation economies, use of coal stokers, trend to larger sites, more careful land planning.

We probably will have more factory-finished materials such as flooring, bathrooms and kitchens, and other factory-prepared features and equipment. But no great housing revolution for us!—**RALPH J. BLANK**, President, Wagg Inc., Schenectady, N.Y. (500)

What the Buying Public Wants**C. S. WANLESS**

WE have been using some factory prefabrication for five years, also pre-cutting and power equipment, and expect to continue about the same. We will feature Colonial and Cape Cod Colonial designs; expect no radical changes.

We will continue to build and improve as to plans and equipment, according to our judgment as to what the buying public wants.—**CHARLES S. WANLESS**, Springfield, Ill. (500)

Public Becoming Confused

THE public is becoming confused as to what they should do, and in our lot sales at the present time we are encountering this resistance. I do not agree with all I read and hear about radical changes in post-war houses. This company has long given special attention to the planning of small homes, and architectural study and supervision. We constructed 300 houses in one section alone using

(Continued to page 68)

BARCOL OVERdoors

MEET UNUSUAL REQUIREMENTS

Barcol OVERdoors of various types in hundreds of war production plants are giving long-lived trouble-free service necessary to efficient plant operations. This picture, for instance, shows a Motor-Operated Barcol OVERdoor of the hi-lift weight-counterbalanced type, specially arranged for a railroad track entrance and to clear a travelling overhead crane. For new installations, and to replace existing unsatisfactory doors, specify Barcol OVERdoor.



Factory-Trained Sales and Service Representatives in Principal Cities



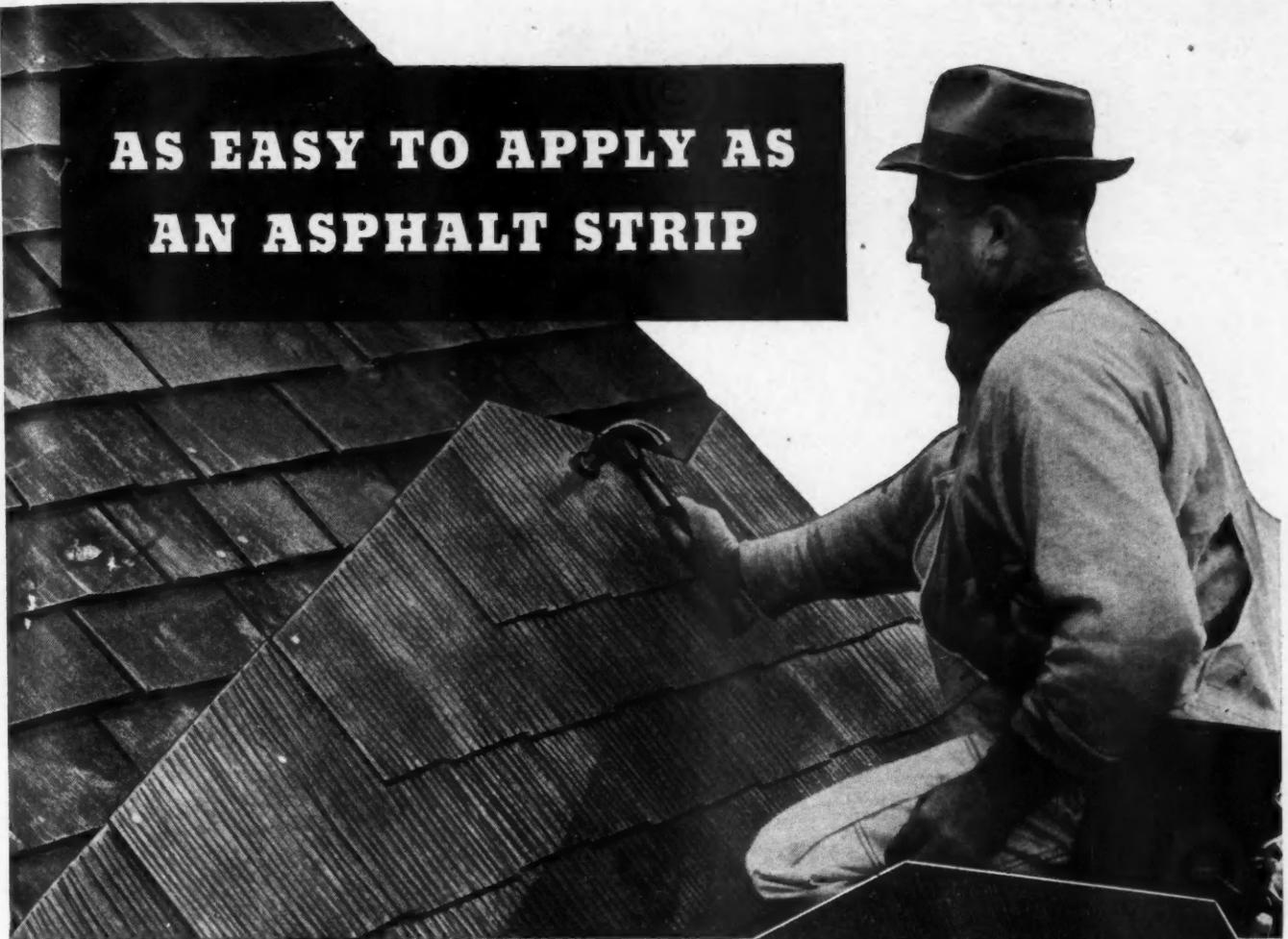
GET THIS MANUAL
Includes data on the principal features of Barcol OVERdoors, and detailed description of Electric Operators for Doors and Gates. Write for INDUSTRIAL MANUAL F-1298.

BARBER-COLMAN COMPANY

104 MILL ST.

ROCKFORD, ILL.

**AS EASY TO APPLY AS
AN ASPHALT STRIP**



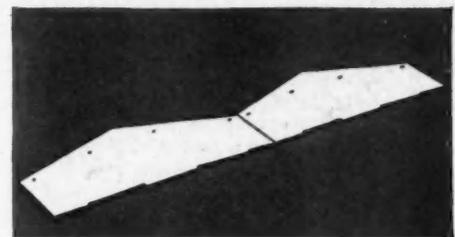
**Yet J-M Asbestos Shingles
are built to last 30 years plus*
and they cannot burn!**



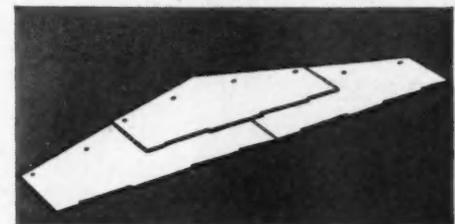
WHEN you recommend Johns-Manville Asbestos Shingles to a home owner for necessary reroofing during war-time, you are recommending one of the most durable and permanent types of roof he can buy—and at the same time, one of the most simple and economical to apply. The new J-M American Colonial Shingle is fabricated as an asbestos strip—5 shingles in one. It is easy to handle and is self-aligning on the job. There are no trick fasteners, just nails. And the nail holes are already punched. Any carpenter or roofer can lay them up rapidly even without previous experience.

J-M American Colonial Shingles provide a beautiful roof of American method appearance. They have the pleasing texture of weathered wood and come in several attractive blended colors.

They are built to last, too! *Thousands of J-M Asbestos Shingles have been in service 30 years or more and are still in excellent condition. For details, write Johns-Manville, 22 E. 40th St., N. Y.



EACH SHINGLE lines up automatically with the one next to it when the ends are placed together.



NEXT COURSE is lined up by placing shoulders over points of shingles on the preceding course.



JOHNS-MANVILLE *Asbestos Shingles*

BUILDERS SPEAK—*(Continued from page 66)*

slab foundations. Every one was sold prior to completion.

We plan to prefabricate our cabinets, closets, etc., and pre-cut framing; also possibly some use of shop-built door and window sections. We do not expect a radical change in appearance or methods.—C. R. BRACE, Garden Oaks Co., Houston, Tex. (400)

Will Use the New

WE will use the new to the extent that we feel the public will want and will buy, as we always have. We do

not believe they will stray far from traditional basic designs.—ROBERT P. TIFFEY, J. B. Tiffey and Son, Washington, D.C. (250)

Mass Psychology Moves Slowly

D. T. POMEROY

THE whole psychology of housing in the individual mind is for permanent and secure shelter. People buy

homes for reasons rooted in the habits of their youth. Many changes will be brought about, but they will evolve as a gradual transition. No one has yet discovered any design that could command quite so much ready acceptance among buyers as the Colonial home.

While larger builders may benefit by certain prefabrication techniques, small builders should also benefit. To a limited extent, building supply dealers are going to help small builders by doing some shop prefabrication. They will supply an even more complete assembly of window openings, exterior and interior door openings and casings, ready-built plywood coat closets and many similar items.

Thus the small builders will be able to compete favorably with the larger contractor.

Co-ordinated planning and direction must be taken over by a community developer who will be neither a contractor nor a realtor. The small builder and the realtor must organize their joint efforts to meet competition from large contractors entering the field of residential building for the first time.—DONALD T. POMEROY, Pomeroy Organization, Inc., Syracuse, N.Y.

"Prefabricated" with a Sneer?

THE use of prefabricated units around defense plants has given, and will continue to give, the prefabrication industry a black eye that it will take a long time to live down. Anyone wanting a home will say "prefabricated" with a sneer.

We will be able to build traditional houses more economically with improved construction methods, power equipment, and possibly with package units of plumbing and heating.—WM. BARNES HALL, Baltimore, Md. (150)

Wild-Eyed Talk

WE have been most conscious of the wild-eyed talk about post-war homes. At present, we are endeavoring to supply war housing, and it is our opinion that we will be able to deliver a quality house \$3500 to \$5000 for post-war; Modern Colonial or California type bungalows.—L. G. CARPENTER, Small Homes Co., Denver, Colo. (500)

Classic and Popular Taste

IF you should ask the head of a college to suggest reading for the masses, he would unquestionably prescribe many of the classics, while he himself perhaps indulges in modern detective fiction.

Precepts and practices often differ. While many builders lack aesthetic qualities necessary to good architecture, they more than make up for this lack by humanizing small houses with warmth, color, comfort and hu-

(Continued to page 70)**You'll Need White Cement in TOMORROW'S BUILDING**

What will tomorrow's buildings look like? Frankly, we don't know, but to be sure, there will be many changes from present-day construction. New designs and new materials will bring greater beauty and utility. In accomplishing these changes, we believe MEDUSA WHITE, the original White Portland Cement, will take a leading part. For example, you as a contractor will depend upon this material for white and colored effects in stucco and for making white floors for industrial plants where high light reflecting qualities and sanitation are needed.

Concrete products manufacturers will use it for white and colored facings on concrete masonry units . . . Terrazzo contractors will use MEDUSA WHITE for terrazzo floors, stairways, wainscoting, recreation room floors . . . Those who use

cement in brick, tile, cement asbestos shingles and cement asbestos boards, will rely upon the advantages of MEDUSA WHITE for their products.

You'll use it tomorrow, so get complete information on this versatile, widely used material today.

MEDUSA PORTLAND CEMENT CO.

1002 Midland Bldg. • Dept. B • Cleveland, Ohio
Also made by Medusa Products Company of Canada, Ltd., Paris, Ont.

**MEDUSA WHITE***The original white Portland Cement*

CERTAIN-TEED WAYS TO HELP YOU MAKE MONEY IN MAY!

- An Advertising Program that Works!
- That is Built around *Your* Business!
- That is Geared to Each Month's Operations!
- That is Practical, Down-to-Earth, Usable!
- That is Clicking everywhere for Certain-teed Distributors!

GET IN ON IT NOW...

TO MAKE MORE MONEY IN MAY!



Booklet for Your Prospect List. 12 pages featuring products for which there's big demand.



Ad of the Month! This stirring, full-color national ad will reach millions.



Farmer's Wartime Handbook. 24 big pages. Just what you need to help you sell the big farm market!



Local Direct Mail Plan! Beautifully illustrated letterhead to send to your best prospects with the above booklet.



Your Own Local Ads. To bring you the business stimulated by Certain-teed's magazine advertising.



"Wartime Ways" Kit. A file full of booklets on how to keep home and farm ship-shape with Certain-teed.

Certain-teed

REG. U.S. PAT. OFF.

BUILDING



PRODUCTS

120 S. LaSalle St., Chicago, Ill.

BUILDERS SPEAK—

(Continued from page 68)

man needs.

I like architects and recognize their value, but for many of our small popular houses they have many things to learn.—WALTER H. LEIMERT, Los Angeles. (500)

Streamlining of Job Operations

WE expect some change in appearance but not radical; equipment will progress most. We expect the streamlining of job operations—do as much assembling as possible for each specialized trade, such as wiring

and plumbing, etc., in one set-up. Modern Colonial houses built with power equipment and site fabrication.—C. TAYLOR BURTON, Burton Lumber & Hdwe. Co., Salt Lake City. (350)

Fluorescent Lighting

WE expect to deliver air conditioned homes, gas or oil heating, fluorescent lighting, possibly plastic decorations or plumbing fixtures. No radical changes in design; Colonial for single-family, semi-modern for two family.—LESLIE MARKOVICH, Pioneer Builders, Inc., Milwaukee, Wis. (160)

Expects Some Modern



C. E. JOERN

THERE will be some modern architecture in post-war—very radical compared with modern as we know it now, utilizing sun rays, bright colors, new heating methods and extensive use of plastics.

But there will not be any radical change in the appearance of the large majority of houses built after the war. Changes will be mostly in kitchens and heating, and in air conditioning. Colonial type homes will find the best market. Use of factory-fabricated sections will not be successful due to labor conditions.—CHARLES E. JOERN, Wm. Joern & Sons, Chicago. (125)

Officers Want Colonial

SINCE I received your letter, I talked with 27 U. S. Army officers now renting our Title VI houses, and they all advised they want the "Modified Colonial" with lots of labor-saving devices.

Greatest post-war progress will be in package selling—house all complete, standard list price including all fees.

A \$7,000 property that could be sold for \$800 down and \$50 per month (25-year loan) would permit 80 per cent of the people in this city of 80,000 to step up their standards of living. Then the worn out, dirty, dark, houses can be torn down.—CHARLES R. MALOWNEY, V.P., Malowney Real Estate Co., Inc., Springfield, Ohio. (400)

Good to Look at Pleasant to Live in

SOMETHING should be done to counteract the lunatic fringe of designers who have been building paper houses in the magazine. It is necessary, not only as a protection to builders who desire to carry on with sound work, but also as a protection to the buying public.

I expect to specialize in Modern Colonial homes with all possible conveniences. They must be good to look at and pleasant to live in. I hope financing will be carried on through FHA.—THOMAS V. ALBERT, Cranford, N.J. (160)

Looks for Plastic Trim

I DO not expect a radical change in post-war house appearance, but do in equipment and methods. Interior trim will largely consist of plastics. Heating equipment and ventilation will be different, with air conditioning and possibly heating plants installed in the attic, thus eliminating cutting up studs and plates. I expect

(Continued to page 72)



59 Single Houses — Gauer Circle, Milwaukee, Wis. Builder: Fred A. Mikkelsen.

MUELLER
Supplies Thousands of
Furnaces in War Housing
Projects from Coast to
Coast

Designed for the job, Mueller all-cast-iron defense housing furnaces are continuing the Mueller tradition of quality and dependability — maintained through 85 years of war and peace. They are complete standard furnaces in every respect (following the proved principles of return-flue radiator design)—compact, good-looking, a credit to those who select and install them . . . While Mueller helps hasten the day of Victory through specialized war-production work, you have the assurance that the Mueller name will be a greater asset than ever in your post-war construction. Research and development continues apace. B-12



152 Single Houses — "Bridgeton Terrace," Bridgeton, Mo. Builder: Ball Lumber & Supply Co.

150 Single Houses — "York Gardens," Hatboro, Pa. Builder: York Garden Homes, Inc.



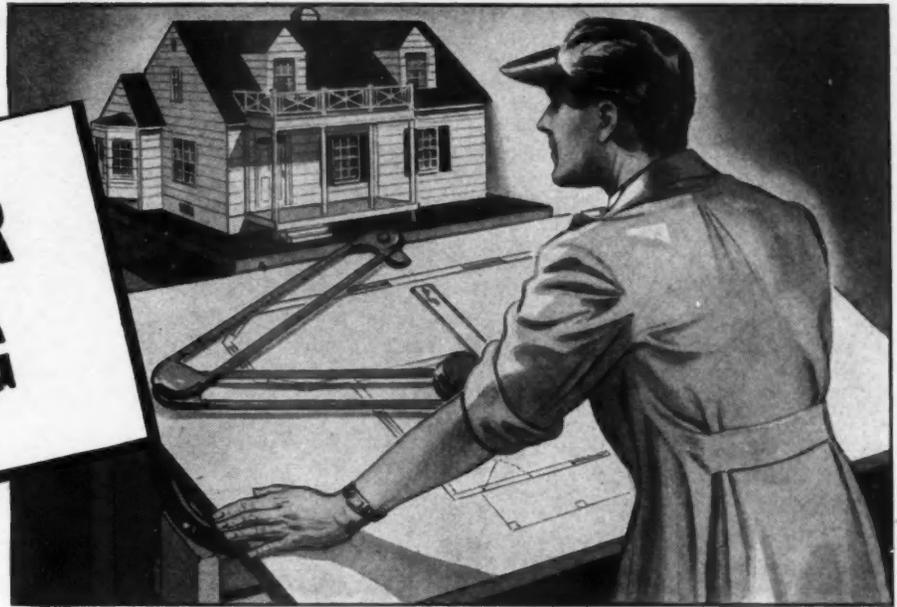
74 Single Houses — "Edmundson Terrace," St. Louis County, Mo. Builder: Harvey Vatterott. Architect: Winkler & Grueninger.



WG-42 (GRAVITY) defense housing furnace. All cast iron. Also available with blower for forced air.

MUELLER Milwaukee
HEATING AND AIR CONDITIONING

POST-WAR HOUSING



Designed for your new markets

Low-cost housing will be a large part of the residential building industry's post-war volume. Successful builders of low-cost housing pay close attention to design—studying each part that goes into the house from the standpoints of (1) waste, and (2) that part's relationship to every other part of the structure.

Builders of homes in all price classes depend on design for salability. People buy homes to meet their own needs and satisfy their own tastes.

For these reasons it is essential that a system of construction permit complete flexibility of design. At the same time, the system must possess a high degree of manufacturing efficiency, produce a structurally sound house.

Engineered housing is the answer. Partly because it is *decentralized* prefabrication, engineered housing sets no limit on design—or on salability.

Engineered housing

For seven years and at a research outlay to date of \$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;

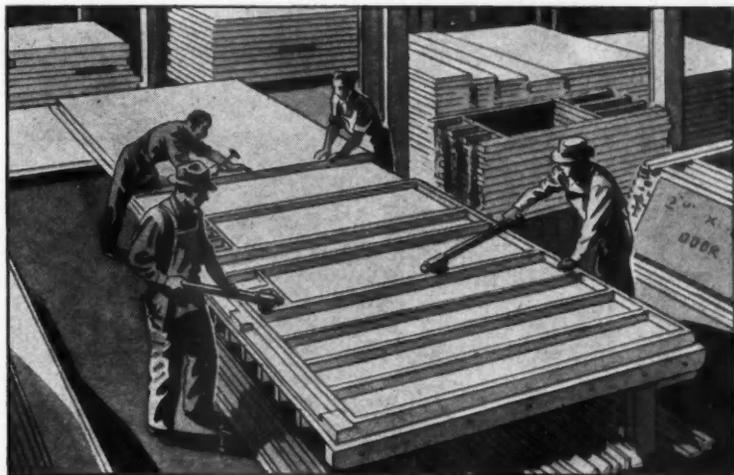
(5) is adaptable to any style, any size of house.

\$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

BUILDERS SPEAK—

(Continued from page 70)

compact heating plants, with boilers carrying 500 lbs. of pressure and requiring only 5 qts. of water.—E. G. B. BARK, Bark Building Co., Chicago. (100)

More Air Conditioning

WE expect post-war houses will have pre-war design with important improvements, such as increased glass area and air conditioning, which will come about as a result of the wide use of warm air furnaces during the war, and greater lot areas

—a result of the war Victory gardens. We expect some site fabrication, use of power equipment to pre-cut materials, and use of the Modern Colonial design.—IRVING STICH, Springfield Homes Corp., Springfield, Mass. (424)

Factory-Assembled Units Plastic Trim Expected

WE expect to have factory-assembled windows and inside doors, improved and more economical heating units, better insulation, better cooling and lighting, and plastic trim; Colonial row and group houses.—JOHN L. TREGELLAS, Baltimore, Md.

People Want Individuality

PREFABRICATION can only reduce costs by mass production, and that means a stereotyped product which, in my opinion, the American public will not accept. A man, or particularly a woman, may buy a car or a washing machine like the neighbors, but when it comes to a house or a hat, it must be distinctly individual.

I will use any improvements in materials and mechanical equipment, such as heating and plumbing, that come on the market, after I find them to have real merit and public acceptance.—FORREST W. TRUMPF, Milwaukee, Wis. (100)

Assembly Line Methods

WE believe we will be able to deliver better houses, in planned developments where values will be protected, at much less cost than government-subsidized houses. We expect to use assembly line construction, standardized plans whereby some prefabricated parts can be used.

Publicity now being run on post-war building is entirely too radical. Our opinion is based on present inquiries plus our experience in the past five years building more than 400 houses.—D. C. JOHNSON, Newlin-Johnson Co., Terre Haute, Ind. (400)

More Conveniences— Traditional Lines

MANY new conveniences will be worked into post-war plans, such as taking the laundry out of the basement; more glass and glass blocks to let in light. Also items such as milk chutes, incinerators, garbage disposal units, built-in refrigerators, built-in electric ironers, streamlined, condensed heating facilities.

Through years of practical experience, the builder learns the wants and needs of the average buyer in his community. Tradition will be hard to break.—N. P. NINNEMAN, Camp Hill, Pa. (400)

Basement Furniture

THE main change I will make in my post-war homes is to improve the appearance of basements by finishing them with knotty pine and also by building furniture out of the same wood. I also plan to improve layouts of kitchen cabinets and to pre-cut materials with our equipment.—NATHAN D. MICHELE, Chicago. (150)

Radical Changes Are Nightmares

IF Government regulations remain, the progress or improvement will be NONE. However, if conditions approach normal, I intend to go back to past construction methods, feeling that so-called streamlined construction and great change in architectural design are just nightmares of men without practical experience.—JOHN B. MARTIN, Oklahoma City. (300)



Photo courtesy Timber Structures, Inc.

ACRES OF ARCHES!

Laminated with Laucks Glues

VAULTING into national prominence through speedy, large scale production of vitally needed arches, beams, columns, is Timber Structures, Inc., Portland, Ore.

Included in the impressive list of Timber Structures laminated products are giant arches spanning 200 feet, wood beams 2' x 3' x 120' and larger, glued-up ships knees, built-up keelsons, monolithic gunwales, wide deck planking, etc.

Here—as in hundreds of other new-day uses—Laucks Glues serve with distinction in America's engineering battle to house, transport and supply our troops efficiently.

Why? Twenty years of leadership

in the glue field finds Laucks prepared with products, personnel and procedure to give patrons a "head start" in applying glues to new or unusual uses.

If wood and glue is a problem with you—won't you write or wire now? No obligation, of course.

I. F. LAUCKS, Inc. Lauxite Resins—Lauxein Glues

In U. S. Address Inquiries to—
SEATTLE—911 Western Avenue
LOS ANGELES—859 E. 60th Street
CHICAGO—6 North Michigan Avenue

Factories:

Seattle, Los Angeles, Portsmouth, Va., Lockport, N. Y.

In Canada Address Inquiries to—
I. F. LAUCKS, Ltd., Granville Island, Vancouver, B. C.
HERCULES-LAUX-MERRITT, Ltd., Stanbridge, Quebec

• Don't forget, LAUX REZ, the pioneer resin sealer and primer, protects wood as rust-proofing protects metal.



LAUCKS CONSTRUCTION GLUES

Consult LAUCKS—America's Glue Headquarters



4 Houses like this →

built to find the truth about insulation



Checking wind velocity by timing period between flashes of lamp activated by electric cup anemometer.

What will insulation do? How much fuel will it save? What thickness is required? These are questions that cannot be answered completely by laboratory tests and slide rule calculations.

The real truth can be obtained only by accurate tests in actual houses—on the job.

To get this exact proof, the Wood Conversion Company built four identical houses, each completely equipped with the most elaborate of testing devices and conducted the most complete testing program on insulation ever attempted.

No factor was overlooked by trained engineers who compiled test data night and day making up to 1,200 readings each twenty-four hours during certain periods throughout the entire heating season. No effort was spared in making these tests authentic and as exact as humanly possible.

Today the results of these tests are available to architects without cost or obligation. Here are new findings—exact findings—new data on insulation efficiency—facts that will help you to judge insulation values better. Mail the coupon today for your copy of the study as presented to the American Society of Heating and Ventilating Engineers.

Balsam-Wool

SEALED INSULATION

WOOD CONVERSION COMPANY
Dept. 119-5, First National Bank Bldg.
St. Paul, Minnesota

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

Name

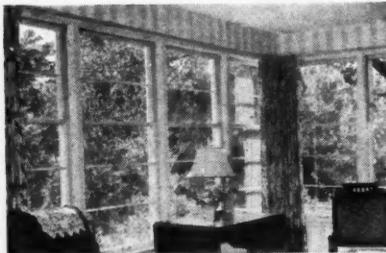
Address

City State



ARCHITECTS need no seer to prophesy what people will want in their dwellings of tomorrow. Factual information is available. Recent surveys show two major wants for postwar housing: better fenestration, and better use of space. For a full treatment of both subjects—with dozens of illustrations—you'll want the New "Open House"—a carefully planned 32-page booklet available to architects without charge. For example...

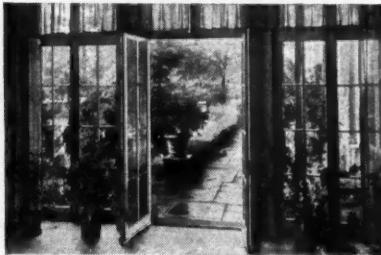
LARGER WINDOW AREAS will make postwar homes more cheerful, more attractive. Note the modern arrangement of the weather-tight windows at right. For such windows, durable toxic-treated Ponderosa Pine is the ideal material to withstand variation in temperature.



TOMORROW'S IDEAS of economy are fully met by assembled stock window units of Ponderosa Pine. Such windows are precision-manufactured to cut down installation labor and cost—provide greater weather tightness—assure easy operation.



SPACE WILL WORK HARDER in postwar houses. In this photo, notice how the French doors of Ponderosa Pine create extra living space and permit maximum access of sunlight and fresh air. Ponderosa Pine makes such effects possible at low cost.



★ *Ponderosa Pine* ★
WOODWORK

111 West Washington Street • Chicago, Illinois

You'll want to use the New "Open House" as a source book of ideas for postwar housing. A copy is yours without cost or obligation. Just mail the coupon.



PONDEROSA PINE WOODWORK
Dept. YAB-5, 111 W. Washington Street
Chicago, Illinois

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

Name.....
Address.....
City..... State.....

War Housing Items—Cortright

(Continued from page 58)

property and converts it into facilities for war workers, appears to be making progress. Leases have been signed for houses and buildings to provide living quarters for 4,000 war worker families. About 5,000 additional family units are expected to be placed under lease in April. At least 20,000 more should be supplied through applications on file, according to a recent announcement.

HOME OWNERSHIP. "OUR CIVILIZATION IS BASED ON HOME OWNERSHIP. THE GREATER THE NUMBER OF HOME OWNERS, THE GREATER THE STABILITY OF A GOVERNMENT AND THE DETERMINATION OF ITS PEOPLE TO PROTECT IT."

These words of the late Arthur Brisbane succinctly express our belief in the importance of home ownership. In opposing the directives of OPA, NHA and WPB which have consistently militated against the purchase of homes during the war years, we have carried on this fight with a deep conviction of its absolute essentiality to our economy and our democratic form of government.

PROBLEMS WITH OPA. Our Washington Committee continues to urge that OPA revise its ruling that homes may not be sold to other than the tenant unless a 1/3 cash down-payment is made. During the last six months innumerable conferences have been held on this subject, and a sympathetic attitude is now shown by Prentiss Brown and Paul Porter. If this payment is substantially reduced, it will relieve the pent-up condition now existing, permitting many people to acquire homes and invest a portion of their war earnings.

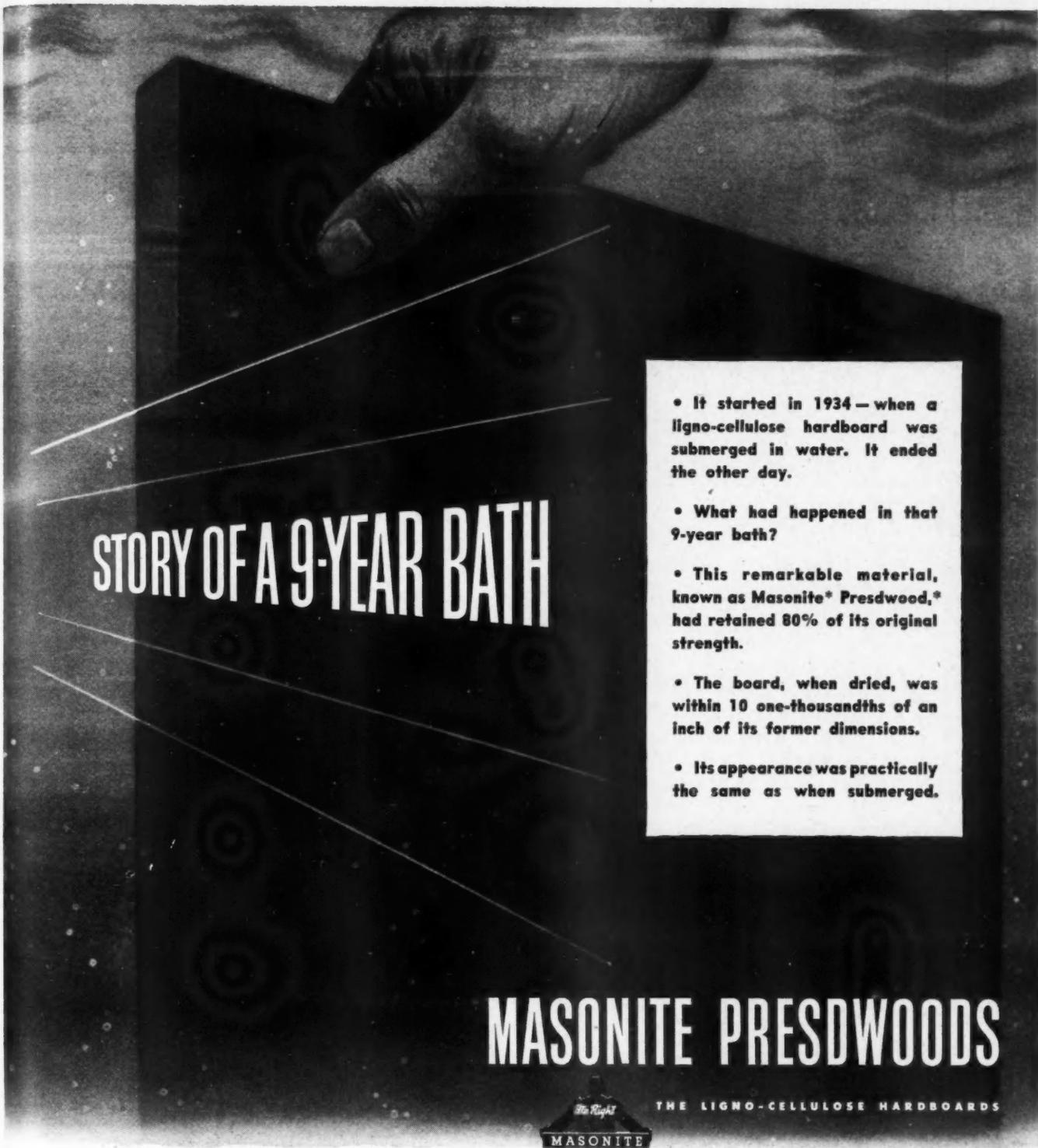
FOR LANDLORDS. Of greater interest to builders is our current appeal to OPA that they permit a second month's payment in the rental of war housing. We have held that such a deposit to insure performance of the contract, and proper usage of the housing, can by no reasonable interpretation be considered as raising the rent level. Such deposits have been a general practice in the past, and there is no good reason why they should not be permitted during the war years. Builders have no assurance that they will not abuse the premises and move without notice, as they are already doing.

HOUSING VS. ABSENTEEISM. The effect of improved housing conditions in certain industrial areas is now being reflected by a decrease in absenteeism with a corresponding increase in production. Employers in the copper mining and smelting areas of Texas and New Mexico report a decrease of 8% to 10% in absenteeism since the completion of the NHA programmed war housing in those areas. Production during this period has increased as much as 35%.

BATTLE OF WASHINGTON. Our readers should understand the function of coordinators. The latest definition is "A coordinator is one who tackles disorderly confusion and creates regimented chaos."

HUMOR. To prove that Government officials are not lacking in a sense of humor, we give you the phrasing of a sign now appearing on many desks—"The difficult things we do immediately, the impossible takes just a little longer."

RATIONING. A prominent official was observed being pushed in a wheel chair through Union Station one morning last week. The taxi driver (who told the story), thinking him a cripple, was surprised to see him walk from the chair to the cab in his stocking feet. He explained that his shoes had been stolen on the train. After waiting an hour for the nearest shoe store to open, he tried to purchase a pair of shoes. However, we have heard he is still in the store, or walking the streets in his bare feet, as his wife had already used his No. 17 Ration Coupon.



STORY OF A 9-YEAR BATH

- It started in 1934 — when a ligno-cellulose hardboard was submerged in water. It ended the other day.
- What had happened in that 9-year bath?
- This remarkable material, known as Masonite* Presdwood,* had retained 80% of its original strength.
- The board, when dried, was within 10 one-thousandths of an inch of its former dimensions.
- Its appearance was practically the same as when submerged.

MASONITE PRESDWOODS



THE LIGNO-CELLULOSE HARDBOARDS

THE secret of Presdwood lies in the two basic elements of natural wood: the tiny cellulose fibers, of which wood is composed, and the lignin which holds the fiber together.

The Masonite process starts with exploding wood, neither removing the lignin nor damaging the cellulose fiber. The result is a mass of fiber of varying degrees of plasticity.

The next step is to interlace the fiber so as to provide equal strength in all

directions, and then weld it together under varying heats and pressures, using lignin's own great bonding power.

Masonite Presdwoods—made in this way from ligno-cellulose fiber of varying degrees of plasticity in different weights and densities — are suitable for many special purposes and uses.

Today in America's War Program, Presdwoods have more than 500 uses — saving steel, aluminum, rubber,

and other critical materials, and are not readily available for civilian use. After Victory they will again be ready to provide the homes you build with sturdy exteriors, beautiful walls and ceilings, built-in furniture, kitchen cabinets and counter tops, and many other attractive features. Masonite Corporation, 111 West Washington Street, Chicago, Illinois.



*Trade-mark Reg. U. S. Pat. Off. "Masonite" identifies all products marketed by Masonite Corporation. Copyright 1943, Masonite Corp.

See Your MINERAL WOOL Supplier without delay...



Develop Your Insulation Business NOW!



To encourage insulation... this spring and summer... FHA will insure loans with first payment deferred until November first

Ease of application (batts, rolls or pneumatic), availability, wide acceptance, economy... plus the above U. S. Government Cooperation... make mineral wool your number one profit consideration.

Army cantonments, planes, ships and tanks are using mineral wool for protection against cold and heat. War demands will continue heavy, but this year there will be an ample supply for the early buyer of home insulation.

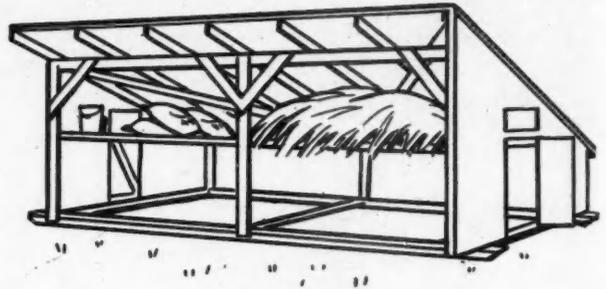
NATIONAL MINERAL WOOL ASSOCIATION

1270 Sixth Avenue New York, N. Y.

Build Farm Structures

FOR contractors in rural areas, and for builders with facilities to shop fabricate and ship to farmers, the utility multi-use hog house is a practical line production building.

One of the advantages in building such a farm structure is the fact that it can be used in so many ways, as is illustrated by the drawings accompanying this article. Further, this structure is easily built and can be trucked to any farm and sold to farmers without taking into consideration the \$1,000 limit imposed by L-41 on farm construction. Inasmuch as the building is on skids and can be moved from place to place, a number of WPB regional officials have held that this type of building need not be considered new construction in the

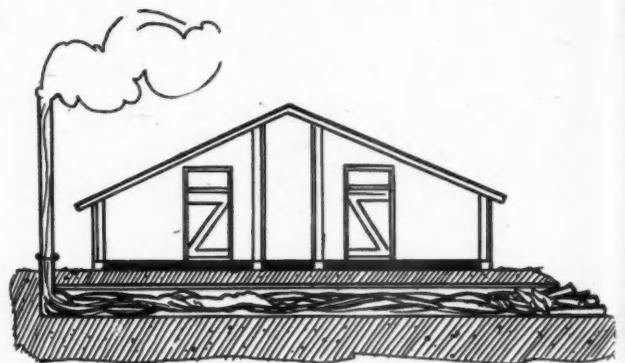


OPEN in summer, sunlight has chance to kill infection; space for feed and equipment out of the way.

sense used in L-41. As farm labor is short and the farmer extremely busy growing crops there is no one to make or repair buildings for the farm. Therefore, this situation has created a wide open market for the carpenter, contractor or builder.

Buildings such as these are not innovations, but have actually been tested under farm conditions by the Doane Agricultural Agency which has created them. Their practicality has been proved.

Any contractor with a crew of carpenters that he wants to keep busy can very profitably engage in this work be-



CLOSED in winter; easily heated using trench to bring in heat from outside the building.

cause of the ready sale farm buildings have today.

If you are located in a rural area, one of the simplest ways to merchandise such buildings is to advertise in the local papers, using copy similar to that which H. E. Kennedy used in Litchfield, Illinois. A sample of one of the ads he ran accompanies this article and he has reported that the results he is obtaining from advertising are keeping him

(Continued to page 78)

Every Farmer Can Use



ADVERTISING such as the one shown below will bring in business to contractors who go after it.

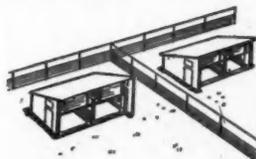
Drawings, courtesy of Weyerhaeuser Sales Co., St. Paul, Minn.

Mr. Farmer

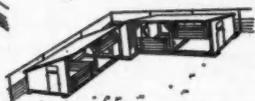
HERE'S YOUR ANSWER TO YOUR HOG HOUSING PROBLEM THE NEW AND IMPROVED PRE-FABRICATED

ALL PURPOSE HOG HOUSE

Made up in our own shop ready for delivery. It is made with so many advantages you'll want to have several complete units on hand at all times.



SHOWN AT THE LEFT for use in Spring and Summer. Open in front for full use of the sun's rays. Movable for complete sanitation.

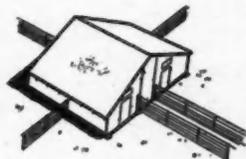


SHOWN AT RIGHT it becomes an ideal shelter for sheep or protection for hogs in the hot months of summer.



ANOTHER IDEAL WAY to use it as a summer shelter. Spread apart for full ventilation and movable to any place on the lot. Makes a fine calf feeding station when used in this manner.

HERE it provides an entirely separate pen unit for each sow and litter. Pens may be as large as convenience and space will allow. May be used as a chicken house for city residents who plan a small victory flock. Has hundreds of adaptations.



SEE US FOR PRICES TODAY

Delivered to your Farm or F.O.B. Our Shop

WE ALSO HAVE OTHER PRE-FABRICATED ITEMS THAT WILL HELP YOU SPEED YOUR VICTORY FOOD PRODUCTION.

Harry E. Kennedy Contractor

PHONE 65

SHOP LOCATED AT 723 BROWN STREET

LITCHFIELD - ILL.



Showing Carey Cabinet No. 640 and Soap Holder No 4022

Photo courtesy Henry Weis Mfg. Co. (Weisway Showers)

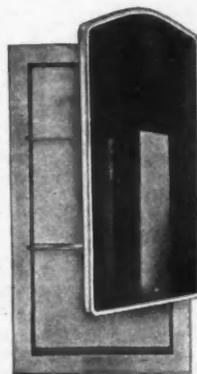
MIAMI BATHROOM CABINETS and ACCESSORIES

"Reflect Good Taste"

Production of Miami metal cabinets and accessories has been discontinued for the duration, but some models are still available from Distributor's stocks.

Architects have long looked to Miami for the ultimate in modern bathroom cabinet design and conveniences, and after Victory is won, these fine metal cabinets will again be available in the most advanced designs.

ATTRACTIVE WOOD CABINETS



No. 103W

Meanwhile, Miami Wood Cabinets are doing a good job of "pinch-hitting" in war housing and wherever replacements are necessary. These units, now in production, are available in quantity, and are equipped with convenience features that are standard in Miami metal cabinets.

Complete details and catalog sent on request.

Write Dept. AB

MIAMI CABINET DIVISION

The Philip Carey Mfg. Company—Dependable Products Since 1873 MIDDLETOWN, OHIO

WESTERN PINE ADVERTISING

is encouraging people from
Coast to Coast to plan
NEW HOMES

An analysis of the letters received in response to our national magazine advertising indicates that thousands of people are not only planning to build new homes after the war, but are saving money for this purpose. Alert builders, contractors, and lumber dealers will find it pays to constantly keep in contact with these prospects.

WESTERN PINE CAMERA VIEWS FOR HOME BUILDERS



WESTERN PINE ASSOCIATION • YEON BUILDING • PORTLAND, OREGON

FREE! You should have a copy of "Western Pine Camera Views" to see how it stimulates interest in postwar building. This profusely illustrated book shows exteriors and interiors of all kinds of homes. Sample copy is free—just write on your business stationery to Dept. 5 B.

WESTERN PINE ASSOCIATION

Yeon
Building



Portland
Oregon

*IDAHO WHITE PINE

*PONDEROSA PINE

*SUGAR PINE

*THESE ARE THE WESTERN PINES

Build Farm Structures—

(Continued from page 76)

busy. Although all the advertising he runs is not on farm structures, he has stated that his advertising in general is keeping men busy in about five places.

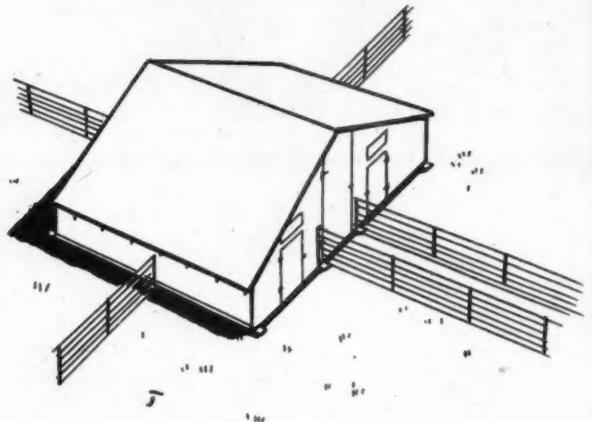
Some of the uses to which this farm structure can be put are explained below.

The utility multi-use hog house might better be called a utility animal production house, for this particular structure serves many purposes at a designed low cost of construction.

This unit includes the sanitary advantages of the portable hog house with the central control features of the centrally located house. It is built in two sections, each with two pens.

During the winter the house forms a tight, gable-roofed building, easy to heat, with a central passage for the convenience of the farmer.

The house, however, divides at the ridge of the roof for use in summer. Each section can then be opened to the sun, protected from rain by the overhanging roof, providing a healthful housing for two sows and their litters. Each section

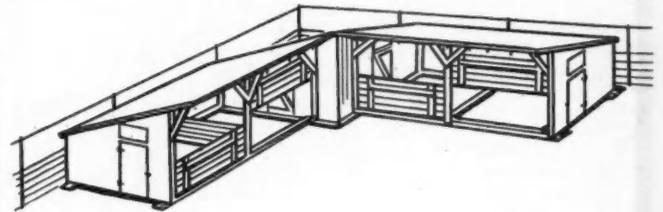


ONE method of using a fence so that each sow and her pigs have separate pens for first six weeks.

is mounted on two skids with replaceable skid shoes, and is individually portable.

In the winter a stove may be placed in the alley way out of reach of the sows and pigs and not in contact with the bedding straw. However, a trench similar to the one shown in the accompanying sketch can be used to bring heat in from outside the building.

As sunshine is the best infection killer known, the building



THIS arrangement is suggested for sheep raising. Place at right angles within a fenced enclosure.

has the advantage of coming apart in two sections so that the area can be flooded with sunshine. For coolness each unit can be raised up 10 to 15 inches on blocks to permit air to circulate around the hogs while it still acts as a shade and protects them from rain. A few loose boards laid across the top of the pens will provide plenty of space for all the feed and equipment needed for the hogs and while these are out

of the way and take up no floor space they can be reached without getting into the pens.

As can be seen from the illustration this building is designed to raise a maximum number of hogs in a healthful way while keeping the loss per sow down to the minimum.

One useful arrangement for growing hogs is illustrated in the sketch showing the house placed on the fence line so as to provide separate outside pens for each sow and her own pigs. Some farmers prefer to keep a sow with her own pigs exclusively for from four to six weeks.

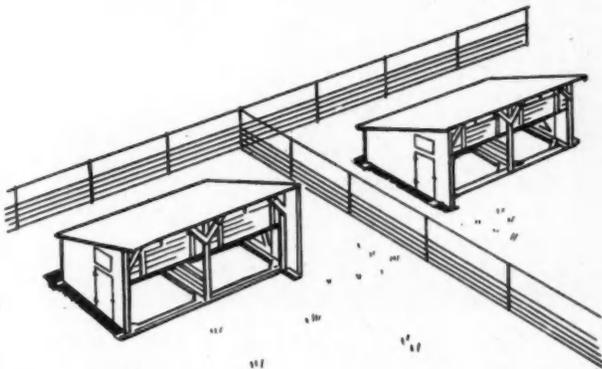
This same building, however, makes an excellent sheep shelter, and lambing pen, when placed at right angles within a fenced enclosure.



FOR coolness raise each unit 10 to 15 inches on blocks to allow the air to circulate around the hogs.

Also in growing turkeys the open halves make good turkey range shelters because they are easy to move. They can be moved to any part of the turkey range quickly. This is a big advantage for turkey farmers who run their turkeys on a range that has little natural shelter. Also these houses meet the most important requirement of rain shelters, low cost.

The portable feature of the house permits feeding on rotation crop land which is desirable in modern farming. The



FOR turkey range shelters, the open halves can be used as shown. They can be moved from one point to another.

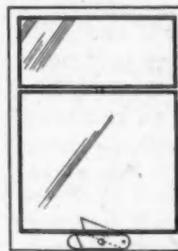
land thus receives the full benefit of the manure where it is needed without the cost of labor for hauling and the use of machinery.

Points worth considering in connection with this hog house are as follows: (1.) Low cost per sow. (2.) Portability—Sanitation plus the labor saving facilities of a central farrowing house. (3.) Less outside wall exposed to weather as compared to single unit houses, making warm quarters for winter farrowing. (4.) Place for stove without being in pen with sows. (5.) Straw loft if desired. (6.) Place for feed buckets, troughs in each unit. (7.) Room to work in the house without being in the pens with the sows. (8.) Replaceable skid shoes, protecting the skids. (9.) Provides summer shade and spring and fall quarters for sows and pigs. (10.) It may be used for calves, sheep or range shelters for poultry. (11.) Is movable through any 10 ft. gate.

Now available with
SCREEN and STORM SASH

FOR STANDARD 2 x 4 FRAME, THIN WALL OR MASONRY CONSTRUCTION

Units are completely assembled. No fitting is necessary on the job. Sash and frame are of white pine, toxic-treated with water repellent "Woodlife." Windows are set right in studing, requiring no frames, sash weights or balances. Flush-type lock handle is an exclusive design feature. Standard sizes: 2 to 4 lights wide by 2 to 4 lights high. (1'-11 1/2" to 3'-3 1/2" wide by 2'-5 7/8" to 4'-7 7/8" high.) Units can be glazed with standard size lights. The Pella Awning Window complies with Federal Housing Authority Specifications. Sizes can be readapted to your specifications if quantities warrant.



Inside storm sash easily removed for extra ventilation and window washing.

Rush your request for FREE, full size details to the Rolscreen Company, Dept. 353, Pella, Iowa

Pella
AWNING-TYPE WINDOWS
 Made by makers of
 Pella Rolcreens, Venetian Blinds, Casement Units

● The Army has ordered 5,000,000 of these rugged, lightweight plywood foot-lockers for soldiers' clothing. Each foot-locker requires 25 square feet of Douglas Fir Plywood. Among the firms manufacturing them is Seattle Luggage Corp.



We're "chesty" about CHESTS!

Douglas Fir Plywood is being used to build millions of them for the Army!

● We're proud that Douglas Fir Plywood's light weight, great strength and durability make it a preferred material for Army chests. We're also proud that this Miracle Wood's many advantages are enabling it to do hundreds of different war jobs. For the more ways Douglas Fir Plywood serves now, the more useful it will be to you after the war is won.

TO HELP SPEED VICTORY
the Douglas Fir Plywood Industry is devoting its entire capacity to war production. We know this program has your approval.



● More than 100,000 of these chests for Army Signal Corps communication equipment are in use on various battlefronts and outposts. These sturdy chests are built of 1/2-inch Douglas Fir Plywood faced with plastic sheets. (Left) Even the trays which fit in these chests are plywood.



SEND FOR OUR FREE WAR USE FOLDER

Dozens of actual photographs show you how Douglas Fir Plywood is aiding the war effort. Write Douglas Fir Plywood Assn., Tacoma, Wash., for your free copy.

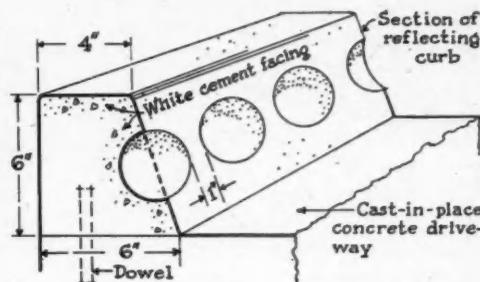
DOUGLAS FIR PLYWOOD

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

American Builder HANDY-BOOK

HOW TO MAKE A SAFETY ROADWAY CURB

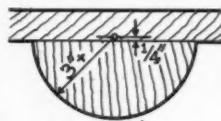
AMERICAN BUILDER FOR MAY 1943



This is a simple adaptation for private driveways of the reflective highway curb used with great success in New Jersey. This curb is visible at night because (1) it is a good reflector of light and (2) it is designed to reflect light to the driver's eyes.

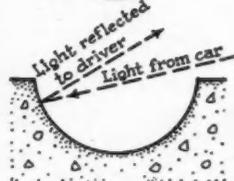
The curb may be precast or cast in place. White concrete should be used for the top and reflecting side in a 1 : 2 : 3 1/2 mix with white quartz sand as a fine aggregate.

In rainy weather, when ordinary curbs are difficult or impossible to see, the reflective curb becomes a better reflector than when dry and its visibility is increased.



FORM FOR HOLLOWS

Any wooden sphere, such as a croquet ball, which is 3" to 4" in diameter, should be cut to 1/4" less than half to make the reflecting hollows in the curb.



SECTION THRU HOLLOW

Note that light from the headlamps of the car will be reflected to the driver's eyes from any part of the spherical surface, no matter from what angle it strikes either horizontally or vertically.

Short Cuts & Time Savers

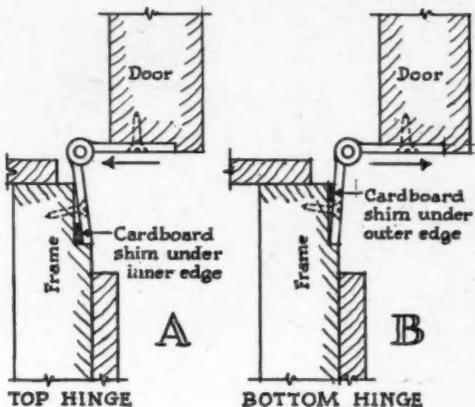
American Builder's Job Helps appear each month as part of an editorial series begun in the January issue. The purpose of this series of articles is to provide builders with practical "how-to-do-it" data for office or on the job.

Subjects covered in the series thus far are: *How to Find Volume of a Pile, How to Make a Secret Door, How to Estimate Roofing, How to Finish a Damp Cellar, How to Estimate Roll Siding, How to Find Slope of Valleys, How to Estimate Painting, How to Specify Backwards, How to Estimate Painting Labor, How to Plan a Closet, How to Make a Batten Door, How to Estimate Cement in Mortar, How to Make a Door Closet, How to Prepare Plaster for Paint.*

OF JOB HELPS

HOW TO CORRECT FAULTY HINGES

AMERICAN BUILDER FOR MAY 1943



Binding or sticking of a door against the door frame may be caused by:

1. Loose or out-of-true hinges
2. Settlement of the frame
3. Swelling of the door or frame
4. Warping of the door

If the trouble lies with faulty hinges the door usually sags, causing the upper free edge corner to strike the jamb and the lower corner to drag on the threshold, making an uneven margin around the door. To correct the condition loosen the screws of the top hinge in the leaf which is fastened to the jamb and insert a strip of cardboard under the inner edge, as shown in drawing A. Tighten the screws and try closing the door. This will usually correct the trouble, since it will tend to pull the upper part of the door closer to the jamb.

If the trouble is improved but not entirely corrected as shown by the margins, loosen the screws of the bottom hinge in the leaf which is attached to the jamb and insert cardboard under the outer edge, as shown on sketch B.

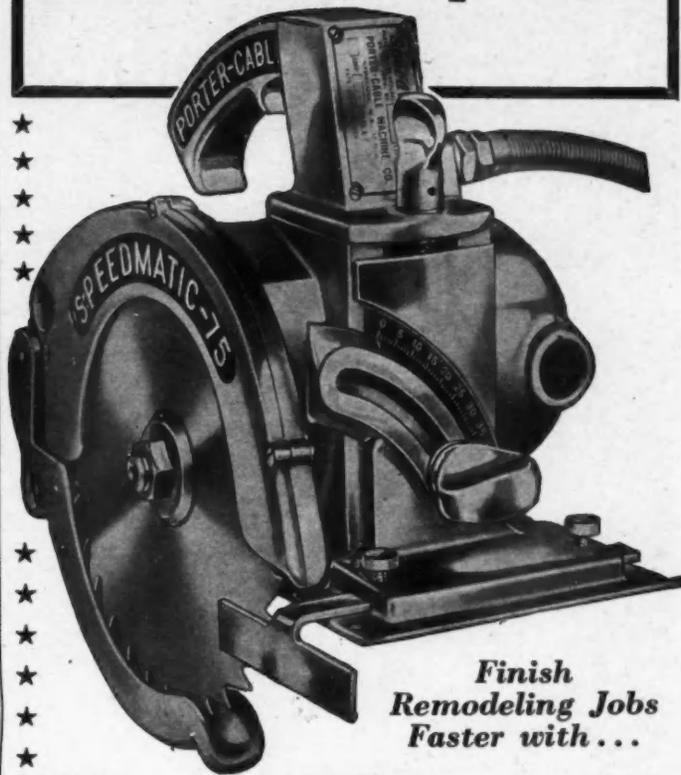
A Continuing Editorial Service

"Job Helps" is a continuing editorial service feature appearing in serial page form monthly. The information is arranged in convenient 3 x 5 notebook page size so that it may be filed or used on the job. The sheets are not for sale or available from any other source than the editorial pages of *American Builder*.

Additional Job Help sheets appear on the following pages.

Among numerous letters commenting on this "Job Helps" department have been requests from builders for notebooks in which to file the sheets. *American Builder* does not have notebooks for sale.

Short of Manpower?



Finish Remodeling Jobs Faster with...

Speedmatic

ELECTRIC HAND SAWS

Just heft this Model K-75 Speedmatic saw . . . balance it with one hand . . . lift it and tilt it to all the positions you use in sawing. Notice how easily you can control it. Then actually saw with it. See how the one-hand balance plus the wide shoe make it saw true to the line. Change the depth of cut and the angle adjustment. Notice that there's no tendency to swerve or tilt even with a shallow cut at a sharp angle . . . no tendency for the safety guard to clog even when you push the saw hard.

Save 1/2 the Time of

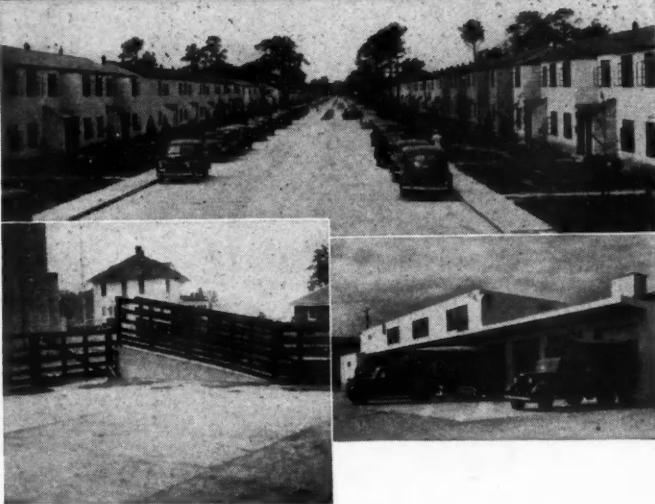
- Cutting New Doorways
- Cutting Openings in Floors
- Sawing Stair Stringers
- Sizing Studding, Joists and Siding
- Cutting Plywood
- Ripping Old Lumber
- Making Cabinets

You'll use it in all the tough spots, and particularly where you want to finish a job fast with a minimum of man power. It's a sturdily-built, all-around saw that's actually cheaper in the long run. In fact, you're losing money every day you don't own one. Find out today. Ask your local dealer or Porter-Cable representative (name in classified 'phone book.) Or drop a postcard for full details.

PORTER-CABLE MACHINE CO.

1721-5 N. Salina St., Syracuse, N. Y.

Being an American Builder in Wartime



AMERICAN builders in wartime must concentrate on jobs which further the war effort and save critical materials and transportation. Such jobs include essential improvements in factories, on farms and for war housing.

Modern concrete construction methods get essential work done with minimum use of steel or other critical materials. Because the bulk of concrete ingredients are usually found locally, there is little burden on transportation.

WAR INDUSTRIES—Concrete loading yards, floors, platforms, ramps, machinery bases, anti-sabotage walls, factory additions and repairs are urgently needed in many places.

FARMS—Weatherproof, firesafe poultry houses, dairy barn floors, hog or cattle feeding floors, paved barnyards and ratproof granaries save labor and help farmers to raise and preserve more food for war.

WAR HOUSING—War housing requires concrete for walls and floors, walks, driveways, steps, porches, retaining walls, streets, gutters and curbs.

Helpful literature on uses of concrete is available on request.

PORTLAND CEMENT ASSOCIATION
Dept. A5-3, 33 W. Grand Ave., Chicago, Ill.

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

BUY MORE WAR BONDS . . . SUPPORT THE RED CROSS

American Builder HANDY-BOOK

HOW TO EXPOSE WOOD SHINGLES

AMERICAN BUILDER FOR MAY 1943

Shingle Size	3 Layers Exposure	4 Layers Exposure
24" SHINGLES	7 1/2"	5 3/4"
18" SHINGLES	5 1/2"	4 1/4"
16" SHINGLES	5"	3 3/4"

One bundle covers 25 sq. ft. of roof
One bundle covers 19 sq. ft. of roof

Roofs having a slope of less than 6" per foot of run not only require heavier framing to carry the load, but also must have a smaller exposure. For these reasons, the flat slopes are not generally used, although in the South where no snow load has to be provided for, the flatter slopes are sometimes employed with wood shingle covering.

New FHA Finance Plan To Aid Fuel Saving Jobs

To assist the national drive for fuel economy, the Federal Housing Administration has established a delayed payment plan for loans insured under its Title I program which finance fuel conservation installations this spring and summer, Federal Housing Commissioner Abner H. Ferguson announced April 24.

The FHA has notified the 5,000 private lending institutions authorized to operate under its Title I program that initial payments on loans made between April 20 and September 1 may be deferred until November 1, 1943, if the entire proceeds are used for the conversion of heating equipment to the use of other fuels, for application of insulation within existing structures, or for installation of storm doors, storm windows, or weatherstripping.

In making this liberalization of its Title I loan terms, the FHA's objective is to encourage home owners to under-

OF JOB HELPS

HOW TO MIX OIL-SAVING LEAD-OIL PAINT

AMERICAN BUILDER FOR MAY 1943

3 COATS ON NEW WOOD

Ingredient	Primer	Body Coat	Finish
White Lead*	100 lb.	100 lb.	100 lb.
Raw Linseed Oil	2½ gal.	1 gal.	2 gal.
Turpentine	2¼ gal.	1¾ gal.	¾ gal.
Drier	1 pint	1 pint	1 pint
GALLONS PAINT	8¼	6¼	6

2 COATS ON NEW WOOD

Ingredient	Primer	Finish
White Lead*	100 lb.	100 lb.
Raw Linseed Oil	1 gal.	2 gal.
Turpentine	½ gal.	¾ gal.
Spar Varnish	¾ gal.	
Drier	1 pint	1 pint
GALLONS PAINT	5¼	6

2 COATS REPAINTING ON WOOD

Ingredient	Body	Finish
White Lead*	100 lb.	100 lb.
Raw Linseed Oil	1¼ gal.	2 gal.
Turpentine	2 gal.	¾ gal.
Drier	1 pint	1 pint
GALLONS PAINT	6¼	6

High quality paint can be made of pure white lead and linseed oil thru a considerable range of proportions. Slight changes in mixing formulae, reducing the quantity of oil, increasing the white lead proportion slightly, and adding a little more thinner, can be the means of saving appreciable quantities of oil.

Paints made according to the formulae above will have slightly greater hiding power, so that usual estimating procedure will be entirely safe in determining amounts needed for a job. It is believed that the paints will have a satisfactory durability.

*Formulae are for SOFT white lead paste; for heavy paste white lead use 1 quart more turpentine in all formulae.

take fuel conservation work during the warm weather season and thus prevent a heavy congestion of this type of work next fall, Mr. Ferguson said.

Home owners having funds available should undertake fuel conservation work on a cash basis, Mr. Ferguson declared. The Title I plan, he pointed out, is available for the assistance of those unable to pay for such work in one lump sum. The new delayed payment plan will permit them to defer payments until the start of the next heating season.

Under Title I, loans for heat conservation measures are available through lending institutions in amounts up to \$2,500 and are payable in monthly installments over as long as 36 months. The Board of Governors of the Federal Reserve System have exempted loans for these purposes from its restrictions on consumer credit. Similarly, the construction involved in converting oil or gas burning furnaces to the use of other fuels or in installing inside insulation, weather-stripping, storm doors, or storm windows may be undertaken without authorization from the War Production Board.

TOOLS for Electricians at War



Nerve centers for our intricate war machine are the electrical systems... motors, generators, and accessories of every size and type... from midgets concealed in automotive equipment, to giant portable power plants that serve a roving army.

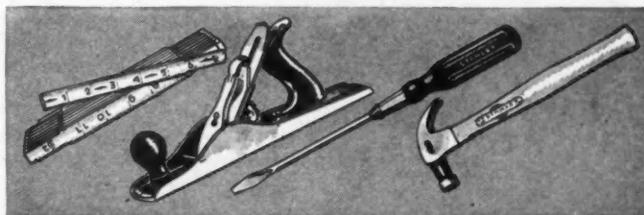
In the busy plants that build them, and the thousands of field shops that keep them in repair, the demand for Tools is by far the largest in history.

To supply the Stanley Tools necessary to meet this, and other needs of both the war plants and fighting forces, requires our utmost production effort. While the war demand continues, few Stanley Tools will be available for normal needs.

Tools are vital to Victory. Buy only for essential use. Stanley Tools, Division of The Stanley Works, New Britain, Connecticut.

1843 **STANLEY** 1943

TRADE MARK



STANLEY TOOLS

"The Tool Box of the World"



**ABESTO IS NOW BEING USED
FOR NEW ROOF CONSTRUCTION
BY LEADING ROOFERS
ALL OVER THE COUNTRY**

ABESTO eliminates hot kettles and hot mopping. It is a cold process application with an exclusive Viscoroid base. Its endurance is proven for built-up roofing and damp proofing.

ABESTO is lower in cost, easy to apply, and requires less labor.

ABESTO means better roofs and gives the contractor a better margin of profit.

*Write today for full particulars
and specifications.*

**ABESTO MANUFACTURING
COMPANY**

131 WABASH AVENUE
Michigan City, Indiana

WPB Releases Items

(Continued from page 13)

not permitted, WPB recently released for civilian purposes a quantity of such bases and accessories held in inventory. The bases released cannot be used in any other way in war production.

Likewise, restrictions on the sale or delivery of completely fabricated metal windows were removed by amendment of order L-77 on March 19th. It is estimated that about 150,000 of these windows, most of them of the residential type, have been made available for general use.

In connection with the release on metal lath and plastering accessories it is stated that lumber is now so critical that it is deemed wise to substitute metal bar joists for wood joists. This in turn requires ribbed type metal lath for combination forms and reinforcement for concrete slabs over the bar joists. The manufacture and sale of ribbed type metal lath is expressly permitted under the amendment.

**War Housing Occupancy
Requirements Broadened**

Eligibility requirements for occupancy of war housing have been broadened by the National Housing Agency to include otherwise qualified war workers who have moved into critical housing areas since July 1, 1941, and whose efficiency is im-

paired by temporary or makeshift living conditions, NHA Administrator John B. Blandford, Jr., has announced.

Previously, eligibility has been limited to those workers in this category who had moved into the locality within 12 months of the date of their lease or purchase of war housing facilities. The NHA's present action therefore extends eligibility to workers whose in-migration occurred between July 1, 1941, and April, 1942, and who are not now adequately housed.

**New WPB Head Appointed
For Civilian Requirements**

Donald M. Nelson has announced the appointment of Arthur D. Whiteside as Vice Chairman in charge of civilian requirements. Mr. Whiteside will report direct to Mr. Nelson. The details of the way in which his office will be organized will be announced later.

Title I and Title VI

(Continued from page 13)

maintenance of existing structures, loans may be made for amounts up to \$2500 for the maximum term of three years.

Most loans, however, are subject to the Federal Reserve Board's regulation W which limits the maximum term to twelve months. This does not affect loans for insulation or storm sash jobs for example.

HUTTIG Chemical "TREAT"

GIVES WOODWORK LONGER LIFE

This remarkable combination of water repellent and wood preservative, originated and developed by Huttig, completely impregnates the cells of the wood thus preventing absorption of excessive moisture and preserving its natural grain, texture and beauty. Painting costs are also reduced because this special Huttig "Treat" serves as a preliminary priming coat.

DOUBLE PROTECTION!

- 1— The tested toxic wood preserving ingredient gives protection against black mold, blue stain, mildew, termites, fungus, rot and decay.
- 2— The genuine water repelling ingredient gives protection against excessive swelling, shrinking and warping from exposure to high humidity, wet plaster, damp, rainy weather or other climatic changes.



This brand identifies the original and genuine Huttig Red-E-Fit "Treated" window . . . the only window that's guaranteed for 25 years against rot and decay. Demand it when you buy.



Specify this Huttig special "Treat" brand on all plain rail windows, sash, doors, frames, blinds, screens and other woodwork that you order.

WRITE TODAY!

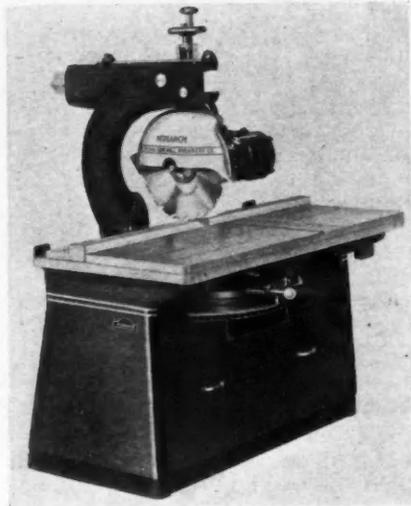
Get the full story of this special "Treat" approved by the National Door Mfrs. Association and furnished exclusively by the HUTTIG MANUFACTURING COMPANY, MUSCATINE, IOWA.

Restyled Saws on Fighting Fronts

ANOTHER illustration of the stimulating effect the war is having on American industry is given in the account of the restyling of the line of equipment of the American Saw Mill Machinery Co., Hackettstown, N.J.

The output of this company has been in demand since the beginning of the war for a wide variety of war purposes. The Army, for example, is sending complete sawmills with troops, crated and boxed so they can be landed under fire, and yet ready to set up in short order to cut lumber for use in housing and other purposes.

There has been a demand for woodworking machines in all theatres of war. Every air field, for example, has to have one for use in repairing wood parts of airplanes.



STRIKING change in appearance of old-style radial saw (above) is shown at right. New product has increase capacity and power, greater rigidity.

Every ship needs such equipment, and every shop for the repair of truck bodies and other equipment of wood.

As part of its program to speed up and improve its products for the armed services, American Saw Mill Machinery Co. decided to restyle and rebuild its line. This resulted in increased capacity, greater power and greater adaptability to many uses, but at the same time it also effected a remarkable transformation in appearance.

Illustrated with this article in one typical example—the Monarch radial saw which was redesigned by Francisco Collura, a New York industrial designer. The restyled product has a substantial streamlined appearance; it actually has a greater capacity and wider range of use, but what is equally important—it looks much more powerful and up to date. The solid base provides rigidity, and at the same time a place for the storage of tools. Working parts are carefully enclosed and protected.

The result is a streamlined product that is already serving on numerous battle fronts, and in the post-war period will be providing builders of the country a more powerful, versatile type of equipment than they have ever had before.

Vento Planning for Post-War Market

THE management of Vento Mfg. Co., Muskegon, Mich., manufacturers of steel sash and specialties, has been improving production technique and making changes in its line of products. With the post-war market in mind, additional items are also being planned to round out the company's group of building products. The management, which changed recently, hopes to be able to make an announcement of these developments within the next two or three months. The new Vento personnel includes Thomas J. Reid of Chicago, president, R. B. McWebb, vice president in charge of sales, and W. C. Krause, vice president in charge of production.

SKILSAW

SAWS

FASTER!

... SAVES HOURS ON WAR CONSTRUCTION TO SPEED THE DAY OF VICTORY!

SKILSAW—Sizes plywood for concrete form work . . . faster, better. Makes every cut in wood, metals, compositions.

You'll finish War Projects sooner with SKILSAW because SKILSAW speeds all sawing from start to finish on every job! SKILSAW sizes plywood faster for concrete form work . . . cuts structural beams and timbers quicker . . . notches rafters, trims floor and roof decking in less time! On every sawing operation SKILSAW saves minutes that mount up to weeks saved on vital War Construction!

SKILSAW saws faster because it is more powerful . . . yet it's lighter, more compact for easier handling . . . more rugged for longest service without time-wasting breakdowns for repairs. Ask your distributor to demonstrate SKILSAW . . . today!

9 POWERFUL MODELS.

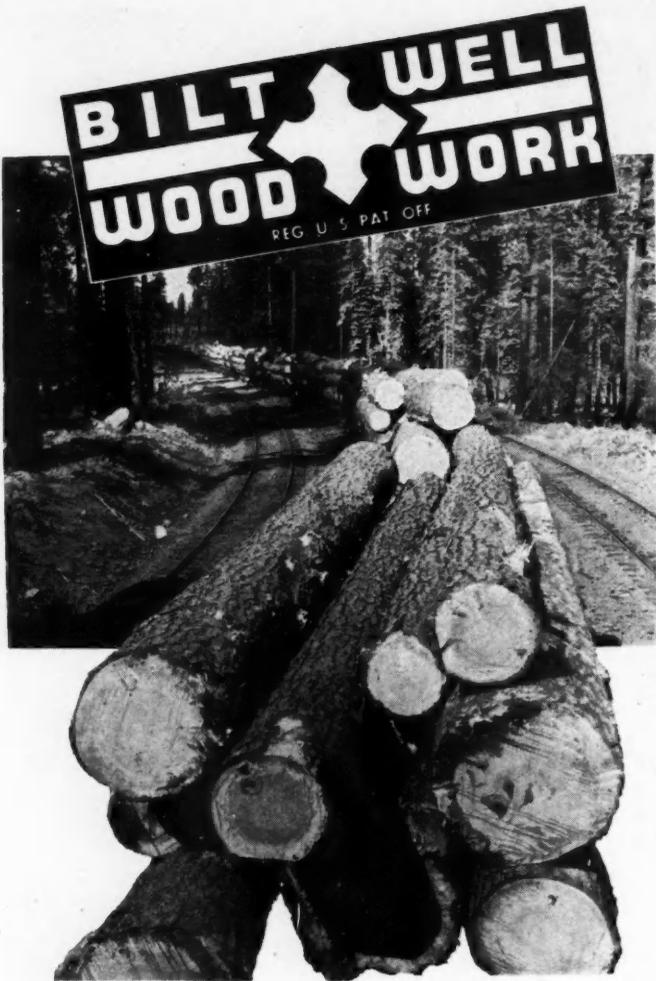
SKILSAW, INC., 5031 Elston Ave., Chicago

New York • Boston • Buffalo • Philadelphia • Cleveland • Detroit
 Indianapolis • St. Louis • Kansas City • Atlanta • New Orleans
 Dallas • Los Angeles • Oakland • Portland • Seattle
 Toronto, Canada

SKILSAW—Saves extra time trimming off floor and roof decking after standard lengths are nailed in place.

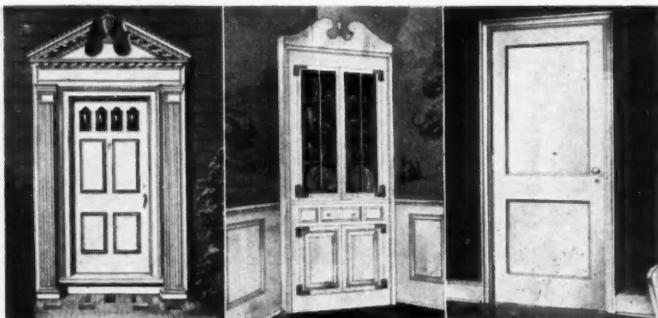
SKILSAW PORTABLE ELECTRIC TOOLS

★ MAKE AMERICA'S HANDS MORE PRODUCTIVE ★



**FROM FOREST
TO MILL
TO AMERICA'S HOMES**

Bilt-Well Woodwork products are always made of the best materials obtainable, carefully selected and prepared; carefully designed and fabricated . . . a service that only an organization such as Carr, Adams & Collier Co. is qualified to render.



CARR, ADAMS & COLLIER CO.
Dubuque, Iowa

Drills with Plastic Housings

THE Black & Decker Mfg. Co., Towson, Md., has designed practical housings for the 1/4" standard drill and the new 3/8" standard drill, using a new plastic material called "Drillite." This plastic is made with a shredded cotton duck base, which gives it a high impact resistance, and enables it to withstand considerable abuse and wear. The plastic is also heat resistant, and a perfect insulator against di-electric shock. The housings are smooth and easy to handle, and the lustrous black finish maintains the appearance of the tool.



ONE-QUARTER-inch standard drill with plastic housing.

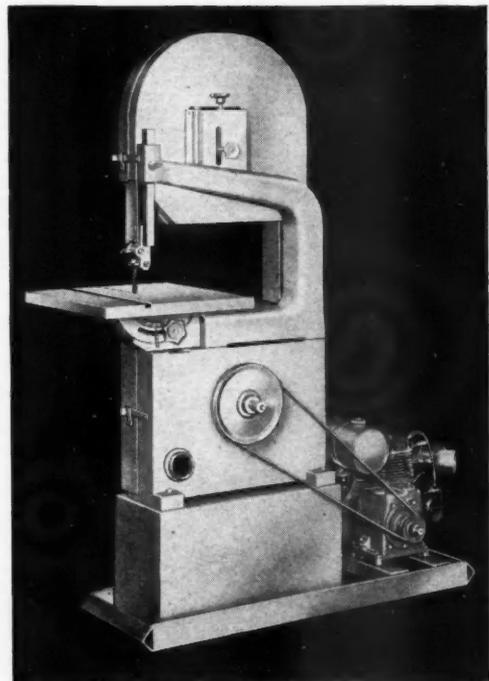
For long, productive life, steel inserts have been cast into the plastic housings to carry all ball-bearings, and threaded steel inserts in the field housing for housing assembly screws. Steel air vents in the commutator end housing insure ample motor ventilation. In addition to these marked advantages, the use of Drillite plastic housings makes a definite contribution to the conservation of critical aluminum. Both units are offered with either end handle or side handle control, equipped with the famous "Pistol Grip and Trigger Switch"; and with Universal motors, operating on either alternating or direct current.

Band Saw for Use on Construction Site

THE C. H. & E. Manufacturing Co., 3862 N. Palmer St., Milwaukee, Wis., has just put on the market a 20-inch band saw with 1 1/2 H.P. engine mounted, for on-the-job work.

The entire machine is enclosed with sheet metal guards, has a tilting table, and the saw frame is of cast iron.

The unit can be furnished without power for belt drive, or with electric motor.



TWENTY-INCH band saw which can be furnished without power, or with electric motor.



Odorless

POST-WAR COOKING

Sit in the Pureaire-equipped room where a modern housewife is cooking dinner, and you'll get not a single whiff of kitchen heat or odor. Pureaire's patented ventilation whisks all that away into the outer air.

That's why Pureaire is the ideal kitchen for the small post-war homes—separate or multiple—which you're expecting to build in such big volume.

Every kitchen facility in less than eight square feet of floor space! That's Pureaire. And at no price penalty too!

Investigate—today! But remember—*none for sale till after Victory.*

TRAVERSE BAY MFG. CO.

(Affiliated with The Parsons Co.)

15000 Oakland • • Detroit, Mich.

PARSONS *Pureaire* KITCHEN

One man fits 75 Doors a Day!

Good carpenters are hard to find, but the men you now have can turn out perfect work, and do it *six times as fast* with this Carter door-fitting set. One man can handle up to 75 doors and jambs a day!

In the circle, the Carter T3 Templet is shown mounted on the jamb, guiding the Router for hinge recesses. Below, the Templet is shown reversed and mounted on the door, for cutting mortises that match accurately.



**CARTER HINGE BUTT ROUTER
and DOOR and JAMB TEMPLET**

Cuts accurate mortises for butts six times faster than by hand. The high speed Router (18,000 R.P.M.) leaves a smooth, flat, accurately fitting mortise. The motor housing screws into the base, permits extremely accurate depth adjustment. Recutting, shimming, or driving hinges are eliminated.

Get the complete details of this important Time-saver. Write for specifications today. **R. L. CARTER DIVISION, The Stanley Works, 133 Elm Street, New Britain, Conn.**

CARTER TIME-SAVING TOOLS



Samson Spot Sash Cord



By specifying and using Samson Spot Cord for hanging windows, with suitable weights and pulleys, you obtain perfect balance by a time-tested method. You also guard against the use of inferior unidentified cord.

Samson Cordage Works, Boston, Mass.



 FREEDOM
 Freedom is a government of, for and by the people. As Americans, we inherit it. As a Nation, we have earned it. Let's preserve it.



READY - AFTER VICTORY

Better see Bennett for...

**FIREPLACE UNITS
 FLEXSCREENS
 CONSTRUCTION SUPPLIES
 BUILDING SPECIALTIES**



BENNETT FIREPLACE CO.
 NORWICH, N. Y.

New Products and Ideas

Non-Critical Gatehouse

WITH so many industries engaged in secret war work today, the need for sentinel houses is on the increase. One practical and ingenious solution is the glass block gatehouse that guards the entrance to a midwestern manufacturing plant.

Non-transparent, light-diffusing Insulux glass blocks form the lower halves and corners of the walls of the gatehouse, while inserted panels of clear blocks in the upper portions give the watchman clear vision.

Inside, electric lights and a telephone serve as a control station for guard activities twenty-four hours a day.



GLASS block gatehouse for sentinel duty.

A small electric heater has sufficed to keep the guards warm and comfortable in their glass house on the coldest days of winter, due to the high insulating capacity of the glass walls. The roof is covered with asphalt shingles.

Not only is the glass block gatehouse workable and good looking in itself, but it blends in with the rest of the plant building where glass block is used throughout. With so many industrial plants turning more and more to the use of glass blocks for greater light, privacy and as a replacement for critical metal sash, this new type of sentinel "shack" makes a harmonious addition and can be built with a minimum of critical materials.

Asbestos Cement Conduit Flexible Coupling

A NEW asbestos cement conduit, intended principally for cable installation, is now being produced by The Philip Carey Mfg. Co., Lockland, Cincinnati, Ohio. An outstanding feature of this conduit is the "Flexcaulk"



WORKMAN applying joint sealing compound to asbestos-cement conduit.

Speed Up War Building

coupling, which is made for and supplied with conduit.

"Flexcaulk" coupling consists of a tubular housing of tough, rigid, blow-resisting asbestos-cement, to which is bonded a liner of time-resisting mineralized asphalt compound, formed into a barrier-type, tapered liner. It permits a flexible, self-aligning, water-tight joint when properly assembled with a joint-sealing compound.

The conduit itself is tough, hard and dense, and meets the demand for an earth enveloped duct system that is permanent, trouble-free, and proportionately inexpensive in its initial installation. It is made in two thicknesses, for installation with or without concrete encasement, is assembled rapidly and cheaply and easily cut on the job. Only unskilled labor and simple tools are required.

Ready-to-Use Concrete Floor Patch

A NEW material for laying a quick, inexpensive, resilient, waterproof floor or patch, over any surface, is the Hercules Speedy Patch made by Evercrete Corp., 19 W. 44th Street, New York City. It is emery strengthened, and may be used for industrial plants, sidewalks, runways, driveways, pointing brick, as well as for basement floors.

This Speedy Patch, which can be used on a surface of any material, damp or dry, fills in all ruts and holes without the necessity of chopping or tearing up the old surface. It comes in red, green, brown, black and gray.

Rolling Wood Grille

ANOTHER new product which has been designed to conserve critical materials is the rolling wood grille now being made by the Cornell Iron Works, Inc., Long Island City, N.Y. It uses wood bars strung on light steel tapes, operating up and down in wood guides, and coils overhead on a horizontal counterbalancing shaft. No wall or floor space is taken up, as the coil is entirely overhead

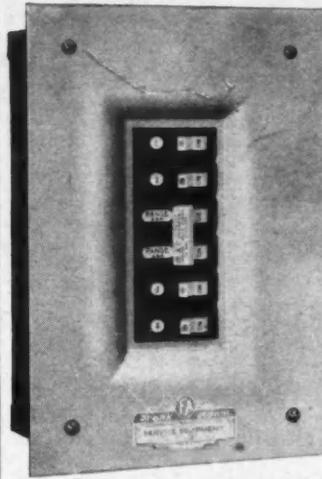


NEW rolling wood grille or barrier which uses a minimum of critical materials.

and out of the way. The grille locks into the side guide with a padlock and hasp on the bottom bar, and offers the advantage of being replaceable with a rolling steel grille later, if desired.

This wood grille makes a substantial barrier, and can be fabricated for opening widths up to 19 feet, with no limit to the opening heights. Operation is either push-up or, for larger sizes, by hand chain or electric motor.

Modern Protection Assured



FA TYPE AC
CIRCUIT
BREAKER
SERVICE EQUIPMENT
AND LOAD CENTERS

are especially suitable for war housing. With the thin wall wire, which permits additional circuits in the same size conduit, they are particularly desirable, because they afford more circuits in the space occupied by old type equipment. Besides, they afford modern protection. Reasonably priced, the maintenance cost is negligible.

There is a Wholesaler
Near You

Service Equipment with D.P. 35 Amp. AC Circuit Breaker for range circuit. Also 4 S.P. AC Circuit Breakers for light and appliance Branch Circuits.
Cat. No. SE41-3L7F
List Price . . \$11.00

who carries Service Equipment and Load Centers in stock, ready for quick delivery. Write us, for his name and address and for Bulletin 63.



...QUARTER-CENTURY Prefabricating experience

FUTURE PREFABRICATION IN OUR SOUTHLAND



We have built more than 10,000 homes in 25 years; we were in the vanguard in giving validity to the prefabrication principle; our credo—time is what we make—speed

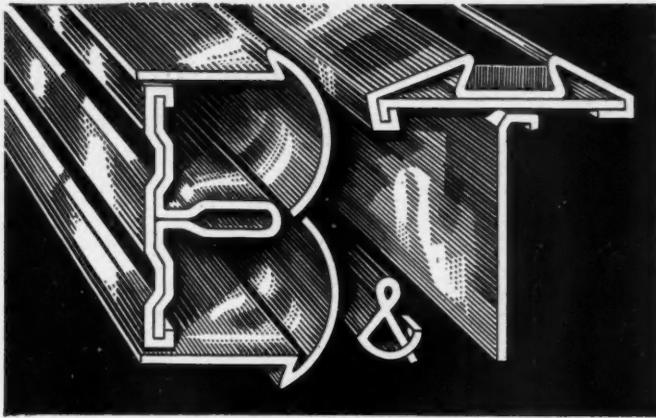
is what we deliver—quality is what we provide.

Our plant is now in full production, serving industry in its war requirements; after VICTORY we'll be on the alert to serve again civilian needs.

Buy a home in the peace to follow
—with the Bonds you buy today.

WORKING NOW FOR U. S. BUT LATER FOR YOU

HOUSTON *Ready-Cut* HOUSE CO.
25 years Prefabricating Houses
POLK AVENUE HOUSTON TEXAS



METAL TRIMS *Trademarked*
CHROME DGE

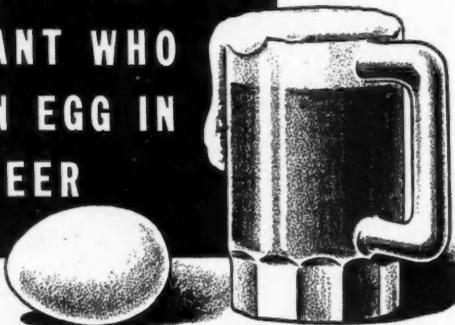
In the "Chromedge" line you'll find the right metal trim for every floor and wall covering job. It includes a wide variety of types, sizes, and designs, from distinctive, plain-metal edgings to beautiful curved-face panel trims and color-insert nosings.

Chromedge trims are designed and manufactured by people with years of special-

ized, first-hand experience in the rolling of metal. Many ROLLED METAL sections in the famous line trademarked Chromedge are still available, for immediate delivery, from large stocks existing before the war curtailed production. Write for bulletin "Chromedge."

The **B & T METALS COMPANY**
Columbus, Ohio

**THERE ARE MEN IN
OUR PLANT WHO
WANT AN EGG IN
THEIR BEER**



As the outstanding manufacturers of home ventilators, Victor naturally has more than passing interest in tomorrow's home makers. One thing we know about these folks we can see right in our own plant, and we're convinced it's the same all over. It's the demand for something better — something extra.

One of the things the war has taught us all is a taste for the increased precision in manufacture that is reflected in finer products. When tomorrow's ventilation is ready, we promise it will please the folks who want an egg in their beer.



VICTOR ELECTRIC PRODUCTS, Inc.
Dept. 1B-133
Robertson Rd. Cincinnati, O.

**TOMORROW'S
FOR AN AIR MINDED NATION... Victor Ventilation!**

CATALOGS AND HOW-

37—HOW TO REPAIR FARM BUILDINGS—A timely book prepared by the Agricultural Engineering Department of Johns-Manville entitled, "Repair and Maintenance of Farm Buildings," gives information as to how farm buildings can be made to produce more under wartime conditions, points out the critical parts of buildings, and suggests the repairs that will make them last longer. It also provides examples where non-critical materials can be used to protect and make buildings more productive. The chapter headings are as follows: Bracing of Farm Buildings to Protect Against Damage from Wind and Snow; Hints on Chimney Maintenance and Construction; How to Repair and Rebuild Worn Out Flashings; Repairs to Roof Coverings; Practical Fire Protection; Ventilation and Insulation; Effective Protection Against Rodents; Temporary Silos That Can Do a War Job Inexpensively; Some Rules on the Maintenance of Fences and Fence Posts; and Materials Recommended for the Repair and Maintenance.—Johns-Manville Corp., 22 E. 40th St., New York City.

38—HOW TO MAINTAIN ELECTRIC TOOLS—A new 20-page, pocket size manual, Booklet No. JE-199, detailing how to obtain maximum service from portable electric tools, has just been published by the manufacturers of Thor electric tools. It contains complete and brief instructions on the proper operation and care of all types of tools, and special attention is given to the more common and simple problems in connection with the maintenance of the motor, cable, switch, and brushes. "Right" and "Wrong" operating methods are clearly stated and pictured with simple instructions. Full information on what to do when a tool fails to operate is also covered.—Independent Pneumatic Tool Co., 600 W. Jackson Blvd., Chicago, Ill.

39—NEW FINISHING MANUAL—A 16-page booklet entitled "Architectural Specifications for Painting, Varnishing and Finishing" has just been issued by the Department of Architectural Service of the Sherwin-Williams Co. It is illustrated with black and white photographs, and two pages of color chips cover finishing of exteriors and interiors of private and commercial properties and of structural steel and ornamental metal work.—The Sherwin-Williams Co., Cleveland, Ohio.

40—PLUMBING FIXTURES—The Eljer Co. has recently put out a large wall chart which presents its line of vitreous china fixtures for war housing, industrial installations, and cantonments, feeling that the dealer is anxious to know what is still available in the plumbing fixture line for him to sell. Many types of bathroom fixtures are included.—The Eljer Co., Ford City, Pa.

41—WOOD FINISH TO REPLACE SHELLAC—V-Lac is the name of a new product which has been developed to take the place of shellac, now a critical material. It is described in a small 4-page folder, and gives information as to its use on floors, linoleum, furniture, Venetian blinds, and boats.—20th Century Paint & Varnish Co., Brooklyn, N.Y.

42—WALL CHART OF EXPANSION BOLT AND SCREW ANCHORS—A broadside has been issued by The Rawlplug Co., in which is described and offered a 14" x 20" handy, ready-reference wall chart covering "Expansion Bolt and Screw Anchor Dimensional Chart." The Company offers to send one of these charts to any user of expansion bolts requesting it on his busi-

TO-DO-IT INFORMATION

ness letterhead. The broadside explains and describes the chart in detail.—The Rawlplug Co., Inc., 98 Lafayette St., New York City.

43—STORY OF WEST COAST HEMLOCK—A catalog issued by the West Coast Lumbermen's Association presents the story of this particular wood, which was once not highly thought of by the Douglas fir industry, but which, after a thorough investigation of its properties by government technicians and the lumber industry, has been found to be an ideal wood for many purposes when properly manufactured and seasoned. West Coast hemlock has long been used interchangeably with Douglas fir in ordinary construction and with spruce for boxes and other shipping containers, but when spruce was unable to meet the war demands for aircraft lumber, it was tried and found satisfactory in every respect. It is also much in demand for ladder stock, is being used in the manufacture of blonde-finish furniture, and in flooring, paneling and siding.—West Coast Lumbermen's Assn., 364 Stuart Bldg., Seattle, Wash.

44—COMPLETE KITCHEN UNIT—A compact but complete kitchen in eight square feet is described in a folder issued by the Parsons Co. This "Pureaire" kitchen is fully illustrated, showing how it is possible to include a range, sink, oven, refrigerator, work space and storage space in such a small piece of equipment. Complete specifications are also offered.—The Parsons Co., Detroit, Mich.

45—WATERPROOFING PAINT—Aquella is the name of a new paint for waterproofing concrete, cement and brick walls, and a small folder gives complete information through use of the popular Question and Answer form. Some of the points covered are what Aquella is, where it should be used, how it is applied and prepared, and how to prepare the wall before applying it.—Modern Waterproofing Paint Co., 1270 Sixth Ave., New York City.

46—CAREY ASBESTOS CEMENT CONDUIT WITH FLEXCAULK COUPLINGS—A 12-page catalog, with covers, introduces this new product, giving specifications, illustrations and results of typical tests, photographs showing its installation, and several detail drawings.—The Philip Carey Co., Lockland, Cincinnati, Ohio.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department, American Builder, 105 W. Adams St., Chicago, Ill. (May, 1943)
Please send me additional information on the following product items, or the catalogs, listed in this department:

Numbers

Name

Street

City..... State

OCCUPATION*

*Please note that occupation must be stated if full service is to be given.

A PRODUCTION MACHINE

for
*Production-Line
Housing!*



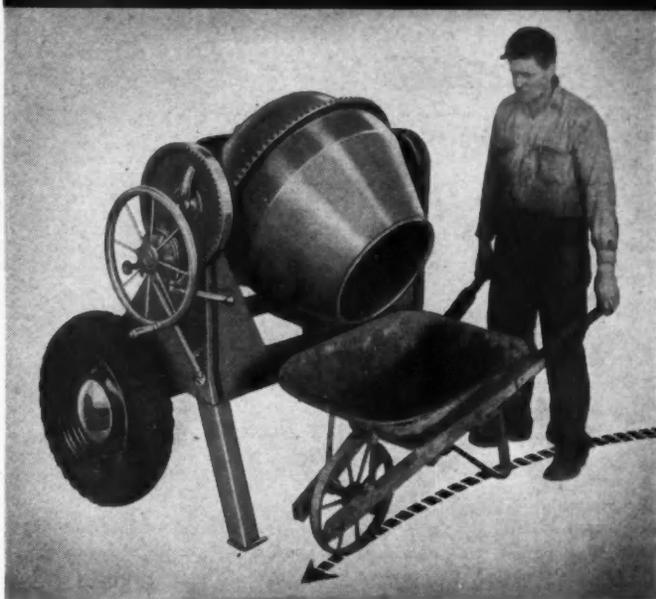
To successfully turn out the volume production necessitated by war housing developments, you need the time-saving, labor-saving Walker-Turner Radial Saw. Hundreds of builders, holding important war contracts, rate this remarkable machine the busiest, most useful piece of equipment in their shop.

It crosscuts, rips, dados, shapes, routs and tenons . . . on wood, metals, transite, tile and plastics

. . . fast, accurately and economically. One man, operating a Walker-Turner Radial Saw, can keep an entire erecting crew busy. Sliding Ram design eliminates overhanging arm, affords clear view of work. Patented, geared, shockproof motor permits deep cuts with smaller blades. Priced at only \$354.50 it is promptly available for war work. Get literature. Walker-Turner Co., Inc., 1059 Berkman St., Plainfield, N. J.



3 1/2-S TILTING KWIK-MIX



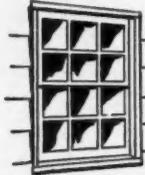
End discharge
Air-cooled engine
Light weight
Welded construction

Anti-friction bearings
Spring mounting
High speed trailing

Write for Bulletin AB

KWIK-MIX CONCRETE MIXER CO.
PORT WASHINGTON WISCONSIN

protection in the public interest



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



Keep busy with *Tile-Text*

Low in first cost—easily and quickly installed, Tile-Text falls well within the limitations placed on residential remodeling. For example, it costs less than \$200 to install the average basement play room with Tile-Text or to cover the floor of a residential kitchen. Tile-Text is non-critical and highly practical for installation on concrete sub-floors at or below grade. Here's your opportunity to keep busy during this period of restricted construction. Tile-Text is still available promptly in a good range of colors and sizes. Write today for our attractive, full color catalog, "Floors That Endure."

The Tile-Text Company Chicago Heights Illinois

How to Estimate Painting

(Continued from page 60)

the square foot covering capacity for each coat. Blank columns for price adjustments are provided in the tables, and local prices should be entered in pencil to permit erasures for future price changes.

Estimating: The tables give *selling prices for 1, 2 or 3 coats per 100 sq. ft. By moving the decimal two points forward, the 100 sq. ft. figure becomes a price per sq. ft. Example: Varnish on wood 3 coat price 100 sq. ft. = \$4.82, 1 sq. ft. = .0482 or 4-4/5c.

Combination Surfaces: For items such as stairs where two or more finishes are used, prices may be developed by adding the price of each finish used together and then divide by the number of finish prices to obtain an average. For example: a flight of stairs requires: risers, stringers and balusters in enamel finish. Treads and hand rail in stain, filler and varnish finish:

Enamel—3 coat finish (Stairs) \$ 6.70
Varnish, Stain and Filler (Stairs) 11.12

$$\text{Total} : \dots \$17.82 \div 2 = \$8.91 = .0891 \text{ or } 9\text{c sq. ft.}$$

Caution: Use a workout sheet; place all items on it, price them carefully. Remember that a three-coat job means three trips for the painter, and that the minimum charge on a small job must be adequate to enable the mechanic to charge at least 1/2 day and preferably a full day, otherwise any profits will disappear.

Editor's Note: Additional estimating painting tables will appear in the June issue.

Interior Paint Labor Costs and *Selling Prices

Including "Make Ready" *Compensation Insurance and *Profit With Price Adjustments for Special Surfaces

Base

*Labor at \$1.00 per hour ÷ by square feet production = cost per square foot.

Cost Schedule		Base Rates for Flat Work			Extra for Special Surfaces		
1	2	3	4	5	6	7	8
Sq. Ft. Production per man hour	Sq. Ft. 10% "Make Ready" Allowance	Base Cost Price sq. ft.	Add 10% to Col. 3 Comp. Ins. sq. ft.	Add 20% to Col. 4 Lab. Profit sq. ft.	Add 25% to Col. 5 for drs. etc.	Add 40% to Col. 5 for wds. etc.	Add 50% to Col. 5 for corn. etc.
100	90	.0110	.0121	.0145	.0181	.0203	.0218
105	94	.0106	.0117	.0141	.0176	.0197	.0212
110	99	.0101	.0111	.0133	.0167	.0186	.0200
115	104	.0096	.0106	.0127	.0159	.0178	.0191
120	108	.0093	.0102	.0122	.0152	.0171	.0183
125	112	.0089	.0098	.0118	.0148	.0165	.0177
130	117	.0085	.0094	.0113	.0141	.0158	.0170
135	122	.0082	.0091	.0109	.0136	.0153	.0164
140	126	.0079	.0087	.0105	.0131	.0147	.0158
145	131	.0076	.0084	.0101	.0126	.0142	.0152
150	135	.0074	.0081	.0097	.0122	.0136	.0146
155	139	.0072	.0079	.0095	.0119	.0133	
160	144	.0069	.0076	.0092	.0113	.0129	
165	148	.0067	.0074	.0089	.0110	.0125	
170	153	.0065	.0071	.0085	.0106	.0119	
175	158	.0063	.0069	.0083	.0104	.0117	
180	162	.0062	.0067	.0081	.0101	.0114	
185	167	.0060	.0066	.0080	.0100	.0112	
190	171	.0059	.0065	.0078	.0098	.0110	
195	176	.0057	.0063	.0076	.0095	.0107	
200	180	.0056	.0062	.0074	.0093	.0104	
205	185	.0054	.0060	.0072	.0090		
210	189	.0053	.0059	.0071	.0089		
215	194	.0052	.0057	.0069	.0087		
220	198	.0051	.0056	.0067	.0084		
225	203	.0049	.0054	.0065	.0082		

*Any reference to base prices for material and labor of percentages added for labor profit, compensation insurance and sales commission, etc., are illustrative only and have been used in order to illustrate the method of estimating and are not intended to suggest in any way resale prices. All base prices for material and labor and percentages added for labor profit, compensation insurance and sales commission, etc., must be adjusted to meet your local conditions and the standards of your business practice.

Private Enterprise Program

(Continued from page 31)

This experience should be carefully studied and used as the basis for drawing up a truly workable rental housing plan for private enterprise. In this connection the principle of yield insurance might well be considered.

American Builder recommends a post-war finance plan which will encourage well laid out garden rental housing projects by private enterprise. Garden type projects making up well planned communities are a definite pattern of the future and should be encouraged.

Many builders feel that the post-war finance plan should also permit private builders to sell houses on the flexible lease-option plan—a method that permits them to provide houses with little or no down payment. Under Title VI war housing the lease-option method has been tried out on a large scale, but has not yet been proven over a period of years. Instead of a house being sold, it is leased to a prospective buyer for a term of from three to five years. A small sum guaranteeing the lease is required as a deposit, and varies with the credit condition of the customer. During the five-year lease period the occupant of the house carries the regular amortization and interest payments on the mortgage, and in addition an extra sum each month to apply on his down payment. If the usual FHA down payment is \$300, for example, and the lease period runs for five years, he would merely pay an extra five dollars a month. At the end of the five years he takes title to the property. During that time he has not only accumulated his down payment but has built up an equity, because each month he has been reducing the mortgage.

The lease-option idea should be reviewed to see whether a sound system can be worked out for low cost homes. It would make home ownership possible for millions of stable job holders who are never able to save enough for the usual down payment. Obviously it would require special safeguards as to credit and construction standards.

American Builder also recommends that the post-war plan be set up to permit the private financing of houses up to \$10,000 with a down payment of 10 per cent and an amortized mortgage running for twenty-five years. For houses in very low brackets the down payment might further be reduced to 5 per cent.

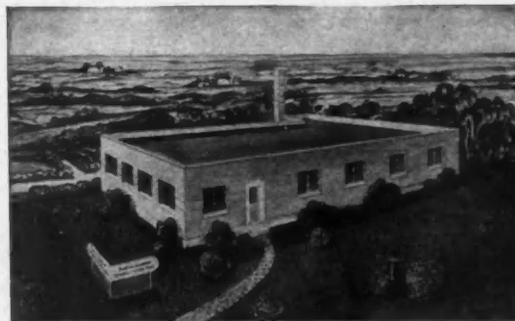
All of the above features have been tried in actual experience. They should be thoroughly reviewed and adapted to the expected post-war conditions. If complete details are worked out in advance and a few test projects gotten under way before the war's end, many months of valuable time will have been gained. If a large home building program by private enterprise can get under way quickly after the war, it will contribute enormously to preventing a slump. It will not only provide homes but jobs for returning soldiers and sailors.

Higher Standards Expected

Higher standards of planning and construction in post-war houses can and should be insisted on in return for more liberal long term financing. In pre-war days the Federal Housing Administration contributed greatly to better construction and better planned home communities. This work should be continued and expanded. In return for liberal financing features the post-war construction standards should require better architectural design, better built and equipped houses, well planned garden communities. The building industry realizes that community deterioration has been the greatest threat to property values and to decent living. The undoubted post-war trend is toward garden type home projects laid out with winding streets, proper landscaping, adequate traffic controls and provision for playgrounds and parks.

Private enterprise builders will benefit by higher standards, the public will benefit and the communities themselves will provide sounder backing for long term financing.

Forward-looking builders feel that private enterprise's best answer to public housing is to provide better homes and better communities. Through the medium of a properly drawn and executed national financing plan, the whole level of private building can be raised without coercion and without interference with the rights of any individual.



Modern Plant Built to Manufacture Serviceable Portable Electric Tools

FRED W. WAPPAT Portable Electric Hand Saws are now being produced in our new plant at Mayville, N. Y., on Chautauqua Lake. Increased operations, resulting from our improved facilities, are important because all Wappat Saws being made here go to vital wartime construction jobs.



Service to our customers will be as prompt and complete as before. Requests for replacements or accessories for Wappat and Alta Tools will have immediate attention.

★ When they are available without priority, Fred W. Wappat Portable Electric Hand Saws will again be delivered for free trial.

Model A-9"

Fred W. Wappat PORTABLE ELECTRIC TOOLS
MAYVILLE, N. Y.



IS THE JOB "ESSENTIAL"?

Then you can get many stock items from our line of "Trouble Saving" units which save you time, labor, and money.

The illustration above shows "Trouble-Saver" Studding Brackets in use on a defense project. Brackets like these fold compactly; last for years; eliminate accidents; and often pay for themselves out of savings on the first job.

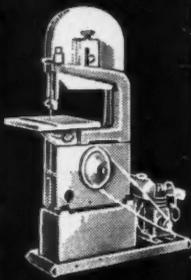
The Steel Scaffolding Company, Inc.

1101 North Governor Street

Evansville, Indiana

C.H.&E. CONSTRUCTION EQUIPMENT

Band Saw With Engine Drive
 A portable unit for out on the job or in the shop work. Rigidly built and easily moved from shop to site.
 20" Band Saw, driven with 1½ H.P. Wis. air cooled engine thru V belt drive. Can also be furnished with electric motor drive or without power.
 Price \$275.00
 • 3862 North Palmer St.



SAW RIGS-PUMPS-HOISTS-MORTAR MIXERS-TANDEM ROLLERS-BAR BENDERS-BAR CUTTERS

C. H. & E. Manufacturing Co.
 Milwaukee, Wis.

JAEGER 3 1/2 S MIXER
Faster on the Road and on Your Job!



Get double the mixing action with Jaeger patented "V" Bottom Drum—get trailing speed with Timkens, spring shock absorbers—get longer life, lowest upkeep cost of any mixer you ever owned.

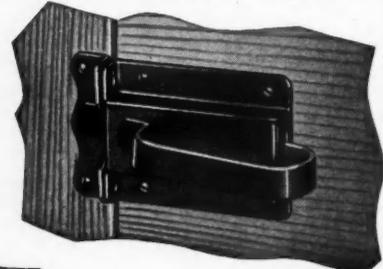
Tilters, Non-Tilt, 3 1/2 S to 56 S Sizes.

THE JAEGER MACHINE COMPANY
 521 Dublin Avenue Columbus, Ohio

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.



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.

Furnished with back latch to protect door from damage, from wind, etc.

WAGNER MANUFACTURING COMPANY
 Dept. AB-543 Cedar Falls, Iowa



Duplexes—Low-Cost Housing for Better Post-War Living

(Continued from page 49)

high class residential property. A shopping center, school, and bus transportation are also within two blocks. The grounds are carefully landscaped and include a park area with tennis courts and play equipment for children.

The two apartments in each duplex have four rooms. Three basic floor plans were worked out by Architect James L. Gatling; variety was achieved by varied use of brick, stone and wood siding and by changing the front elevations and color trims so that no two are alike. The houses are 58½ feet long in front and have every appearance of residences valued at \$8,000 to \$10,000. Lots have an average frontage on paved streets of 85 to 90 feet.

In the design of the houses, front porches are provided for some apartments and rear porches for others. This was not only for the sake of variety but for greater privacy for the occupants. Thus in the same house one apartment may have a front porch and the other a rear porch, this being achieved by using floor plan A for one half of the house and floor plan B for the other half.

Heating is provided by means of a Coleman gas floor furnace in the hallway in front of the bath, but for a more homey atmosphere a Humphrey radiant gas burner is also provided for the living room fireplace. Another convenience the men will like is double closets in the bedrooms.

Interior walls are of "dry wall" construction, the wall-board being either papered or painted. Rock wool insulation is provided for the attic. Modern kitchen equipment includes a Westinghouse electric range and electric water heater, a metal cabinet sink and other built-in features. The tile bathrooms are equipped with showers as well as tubs. All the houses have Carey composition shingle roofs. There are no garages, but drive-ins, so occupants may get their cars off the street.

"We did not go into this development just to provide



EQUIPMENT and typical kitchen includes steel cabinet sink, electric range and hot water heater (just out of view).

STREET w
 curved st
 housing
 said Ev
 is a pa
 which w
 though
 plished
 In desi
 discrim
 Indust
 Stand
 CHANG
 tiona
 industria
 America
 report o
 recently
 Hund
 ning pro
 full emp
 and bett
 is based
 views.
 "Man
 employn
 tility is
 war plan
 or world
 Indust
 who exp
 war. Jo
 from th
 accordin
 "Man
 sold on
 life as a
 relativel
 RA
 G
 R
 AUTO
 Glazie



STREET view of Shepherd-Sloss project showing arrangement along curved street; landscaping and park area make them easy to rent.

housing for defense workers, as important as that is," said Everett Shepherd, who with A. Page (Pete) Sloss is a partner in the business. "We wanted a project which would prove thoroughly sound after the war, even though the rent may be some less. We believe we accomplished that in the design and location of the houses. In design and appearance they are all that the most discriminating home owner could desire."

* * *

Industry Sees New High Living Standards After War

CHANGES in post-war products and services of an evolutionary rather than revolutionary nature are expected by industrial management to lead to the highest living standards America has ever known, according to a cross-sectional report of post-war plans of industrial companies published recently by the National Association of Manufacturers.

Hundreds of companies have launched peacetime planning programs, embracing the study of means of providing full employment, developing new products, new methods, and better distribution, according to the NAM report which is based on responses to a questionnaire, letters and interviews.

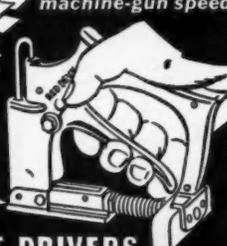
"Manufacturers recognize their responsibility for re-employment of former workers, and fulfilling that responsibility is one of the major objectives in every company post-war plan, as well as it is of an industry-wide, country-wide or world-wide plan," said the report.

Industrial management is skeptical of post-war planners who expect the world to be spectacularly different after the war. Jobs, manufacturers say, must come as they always have from the sale of goods that the public is willing to buy, according to the opinions expressed to NAM.

"Many manufacturers fear that the public has been oversold on the prospects of revolutionary changes in post-war life as a result of plastics, light metals and other new or relatively new materials and new designs."

For RAPID-FIRE GLAZING

Drives 'em in at machine-gun speed



Red Devil
AUTOMATIC DIAMOND POINT DRIVERS

Speed up Victory! Glaze with one hand. Efficient from EVERY position and angle. Securely holds clips of 100 DIAMOND POINTS which won't bend or corrode and drive into hardest wood • Red Devil Diamond Points 3/8" and 1/2" are available in boxes of fifty sticks of 100 each (5,000 points).

LANDON P. SMITH, Inc. • IRVINGTON, N. J., U.S.A.

Glaziers and Painters Tools and Machines Since 1872



Mallsaws
TRADE MARK
SET THE PACE
For VICTORY Construction

MODEL 85 Cutting Capacity 2 1/4"

Faster, accurate cuts with a MALLSAW reduce sawing and fitting time and save man hours on concrete form construction, framing and trim work. Additional time, labor and lumber can be saved by ganging like members and cutting them at one time.

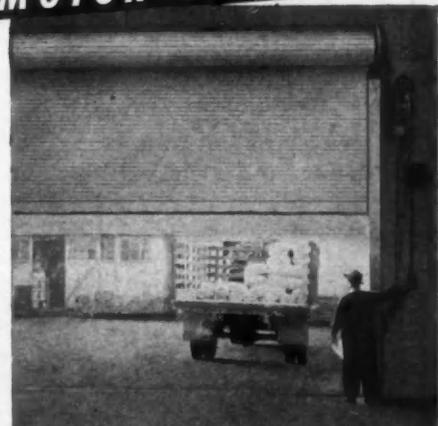
MALLSAWS also speed up cutting of metal, cutting and scoring concrete, tile and stone. MALLSAWS are packed with power . . . ruggedly constructed for long continuous service . . . are light in weight, easy to handle . . . and perfectly balanced for safe one-hand use.

Available for VICTORY Construction with 8", 8 1/2", 9" and 12" blades. Cutting capacities 2 1/2", 2 3/4", 3", 4 1/4".

Literature and prices mailed upon request

MALL TOOL COMPANY
7737 S. CHICAGO AVE., CHICAGO, ILL.

Two Wartime Advantages
COILING UPWARD ACTION
MOTOR OPERATION

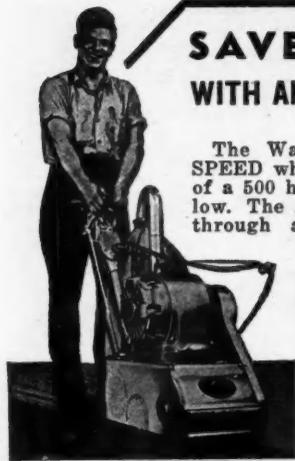



Kinnear Motor Operated Wood Rolling Doors open or close quickly at the touch of a button. The heavy-duty motor does the work, saves time and labor.

And coiling upward action saves floor, wall and ceiling space! The doors open out of the way, safe from wind or traffic damage. **Kinnear Wood Rolling Doors** also assure highest economy of war-vital metals! Strong inter-lapping wood slats form a rugged curtain that blocks out wind and weather, yet presents a neat appearance. Any size, for old or new buildings. Manual control only, if desired. Write for details today! The Kinnear Mfg. Co., Fields Ave., Columbus, Ohio.

SAVING WAYS IN DOORWAYS

KINNEAR
ROLLING DOORS



**SAVE MAN POWER
WITH AN AMERICAN SANDER**

The War Housing Program calls for **SPEED** whether you are sanding the floors of a 500 house project or a single bungalow. The American Standard floor sander through actual performance on recent housing jobs has proven itself 25 to 40% faster than machines formerly used. Investigate the greater production possibilities with latest High-Speed American equipment. Write today for details and prices.

THE AMERICAN FLOOR SURFACING MACHINE CO.
511 So. St. Clair St., Toledo, Ohio

**Get STRONGER
Fastening Quicker**

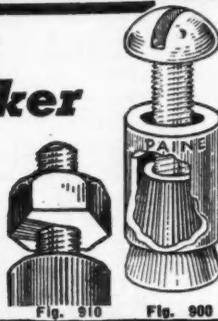
WITH

PAINE Anchors

PAINE Lead Expansion Anchors eliminate "oilbacks"—save time and labor, and assure a permanent workmanlike job. You simply place in hole, tap with setting tool and tighten. Precision threaded, rust and vibration resistant. Fig. 900 available in 3 standard diameters from 6/32" to 1/2", Fig. 910 in 1/4", 3/8", 1/2" diam. in standard lengths.

Ask your Hardware Dealer and Write for catalog

THE PAINE CO.
2959 Carroll Ave., Chicago, Ill.
Offices in Principal Cities



★ PAINE ★
FASTENING DEVICES
and HANGING

WHEN YOU NEED CONSTRUCTION EQUIPMENT

Think First of

CONSTRUCTION MACHINERY CO.

WATERLOO IOWA

**MIXERS • PUMPS • HOISTS
BATCHING & PLACING EQUIP.
SAWS • CARTS • BARROWS**

Quick SALES

QUALITYBILT CORNER CHINA CASE

Ideal for today's new, low cost homes or remodeling. Carried in stock for immediate shipment. No critical materials. Low cost, yet QUALITYBILT in every detail. Authentic styling. Write today. Address Dept. AB-53

Qualitybilt WOODWORK

FARLEY & LOETSCHER MFG. CO.
Sash - Doors - Frames - Etc.
Dubuque, Iowa

**INDEX TO
ADVERTISERS
MAY, 1943**

A

Abesto Mfg. Co..... 84
 Adam Electric Co., Frank..... 89
 Allied Chemical & Dye Corporation..... 14
 American Builder..... 97
 American Floor Surfacing Machine Co., The..... 96
 American Roof Truss Company..... 97
 American Saw Mill Machinery Co..... 3
 Arkansas Soft Pine Bureau..... 4

B

B. & T. Metals Co..... 90
 Barber-Colman Company..... 66
 Barrett Division, The..... 14
 Bennett Fireplace Co..... 88
 Bruce Co., E. L..... 11

C

C. H. & E. Manufacturing Co..... 94
 Carr, Adams & Collier Co..... 86
 Carey Mfg. Company, The Philip..... 77
 Carter Division, R. L..... 87
 Celotex Corporation, The..... 2
 Certain-teed Products Corporation..... 69
 Coleman Lamp & Stove Co., The..... 62
 Consolidated Machinery & Supply Co., Ltd..... 97
 Construction Machinery Co..... 96
 Crane Co..... 63

D

Detroit Steel Products Company..... 5
 DeWalt Products Corporation..... 19
 Douglas Fir Plywood Association..... 80

E

Edison General Electric Appliance Co., Inc..... 57

F

Farley & Loetscher Mfg. Co..... 96
 Flintkote Company, Inc..... 24

G

General Ceramics Co..... 21
 General Electric Home Bureau..... 16
 Great Lakes Steel Corporation..... 23

H

Homasote Company..... 71
 Houston Readycut House Co..... 89
 Huttig Manufacturing Co..... 84

I

Insulite..... 98

J

Jaeger Machine Co., The..... 94-97
 Johns-Manville..... 67

K

Kawneer Company, The..... 15
 Kinnear Manufacturing Company, The..... 95
 Kohler Company..... 10
 Kwik-Mix Concrete Mixer Co..... 91

L

Laucks, Inc., I. F..... 72
 Lehigh Portland Cement Company..... 65

M

Mall Tool Company.....	95
Masonite Corporation.....	75
Mayes Brothers Tool Manufacturing Co., Inc.....	97
Medusa Portland Cement Co.....	68
Miami Cabinet Division.....	77
Mueller Furnace Co., L. J.....	70
Mullins Manufacturing Corp.....	17

N

National Brass Company, Mfrs.....	12
National Door Manufacturers Assn.....	92
National Gypsum Company.....	8
National Manufacturing Company.....	4th Cover
National Mineral Wool Association.....	76
National Steel Corporation.....	23

O

Overhead Door Corporation.....	3rd Cover
--------------------------------	-----------

P

Paine Co., The.....	96
Palace Travel Coach Corporation.....	20
Parsons Co., The.....	87
Pittsburgh Plate Glass Company.....	61
Ponderosa Pine Woodwork.....	74
Porter-Cable Machine Co.....	81
Portland Cement Association.....	82

R

Red Cedar Shingle Bureau.....	28
Rolscreen Company.....	79

S

Samson Cordage Works.....	88
Skilsaw, Inc.....	85
Smith, Inc., Landon P.....	95
Stanley Works, The.....	83
Steel Scaffolding Co., Inc., The.....	93
Stran-Steel Division.....	23

T

Tile-Tex Company, The.....	92
Time, Inc.....	25
Traverse Bay Mfg. Co.....	87

U

United States Steel Corporation Subsidiaries.....	59
Universal Atlas Cement Co.....	59
Upon Company, The.....	6

V

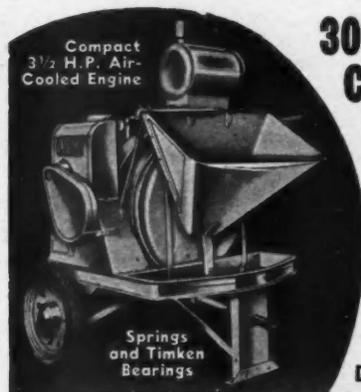
Victor Electric Products, Inc.....	90
------------------------------------	----

W

Wagner Manufacturing Co.....	94
Walker-Turner Co., Inc.....	91
Wappat, Fred W.....	93
Western Pine Association.....	78
Weyerhaeuser Sales Company.....	26-27
Wood Conversion Company.....	73

Y

Youngstown Pressed Steel Division.....	17
--	----



30% to 40% MORE CONCRETE with this MIXER!

Load the Measuring Batch Hopper (12" lower) while you mix and discharge — fast as power loader. Criss-Cross "Re"-Mix Drum, Accurate Measuring Tank (siphon type). End discharge design. Get catalog, prices. The Jaeger Machine Co., 521 Dublin Ave., Columbus, Ohio.

JAEGER 3 1/2 SPEEDLINE

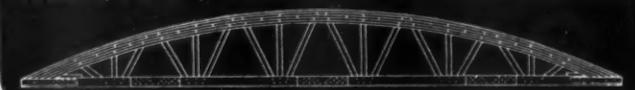
Speed up with COMETS

Almost all building jobs are based on the TIME factor today. The Comet Senior Radial Power Saw is geared to present tempos. It cuts with greater speed, power, accuracy. It is built to stand around-the-clock use. More Comet Seniors are put on defense work every day. Comets save TIME... Speed up the job. Order from your dealer or write Consolidated.



CONSOLIDATED MACHINERY & SUPPLY COMPANY, LTD. LOS ANGELES, CALIFORNIA

BOWSTRING, CRESCENT, SCISSORS PRATT AND HOWE WOOD ROOF TRUSSES



AMERICAN WOOD BOWSTRING TRUSSES

for factories, drill halls, hangars, garages, etc. Built on the job anywhere in the U. S. A. or fabricated in Chicago and shipped ready for erection.

FREE ESTIMATES

For free estimate give number of trusses needed, span, spacing between trusses, loading condition and location of job.

WRITE US TODAY

AMERICAN ROOF TRUSS COMPANY
Engineers and Constructors of Roof Trusses
6852 Stony Island Avenue, CHICAGO, ILL.

BOOKS ABOUT BUILDING

Authoritative information about the designing, construction and financing of buildings can be found in up-to-date books. We will be glad to recommend suitable books on any subject you are interested in. **BOOK SERVICE DEPARTMENT**
AMERICAN BUILDER AND BUILDING AGE
30 Church Street New York, N.Y.

CARPENTERS



WOOD AND ALUMINUM

MAYES LEVELS

ORIGINATED 1896

MAYES GUARANTEES ACCURACY, SERVICE AND DURABILITY.

MAYES BROS. TOOL MANUFACTURING CO., Inc. PORT AUSTIN, MICH.

MASON'S



WOOD AND ALUMINUM

ASK YOUR DEALER FOR MAYES TOOLS

CATALOG FOR ASKING



TALL TIMBER

...invaluable in War as in Peace



◀ A few short years ago, the use of trees was confined mainly to the manufacture of a few products—lumber, pulp and paper. Today, from the natural wood fibres of trees, modern science has developed products of wider usefulness than wood as nature made it.

One of these products is INSULITE. ▶ In the vast Insulite mills at International Falls, Minnesota, in the center of the northwoods, logs are placed into giant machines that grind them to pieces—reducing them to sturdy natural wood fibres.

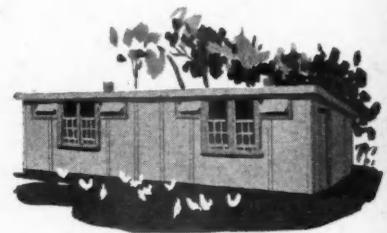


◀ These fibres, the live, sturdy sinews of the tree, are processed into panels or boards called Insulite. It has a bracing strength four times that of ordinary wood sheathing, horizontally applied. Insulite is also effective insulation—it insulates as it builds.

Insulite has many uses. For example, ▶ the lightness and rigidity of Insulite make it a very important material in the construction of certain types of oxygen tent equipment.



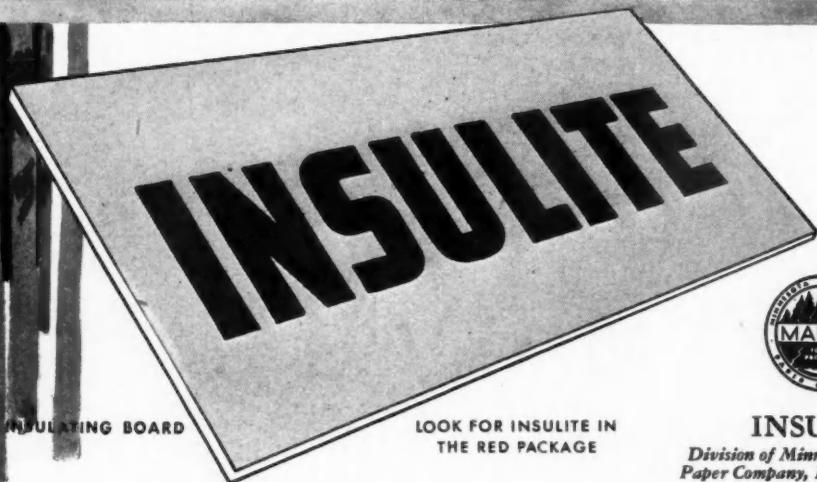
◀ Insulite has many structural advantages. Speed in building is important today. It has been used in the construction of many of the nation's war buildings. The large panels of Insulite are rapidly applied. The saving in time is apparent when you consider the many square feet of surface one panel of Insulite covers in one operation.



On farms, Insulite has many uses. Hog ▶ houses, brooder houses, laying houses, are quickly built with Insulite, which provides insulation and weathertight construction . . . cattle and poultry are healthier . . . require less feed . . . produce more.



THE ORIGINAL WOOD FIBRE STRUCTURAL INSULATING BOARD



LOOK FOR INSULITE IN THE RED PACKAGE

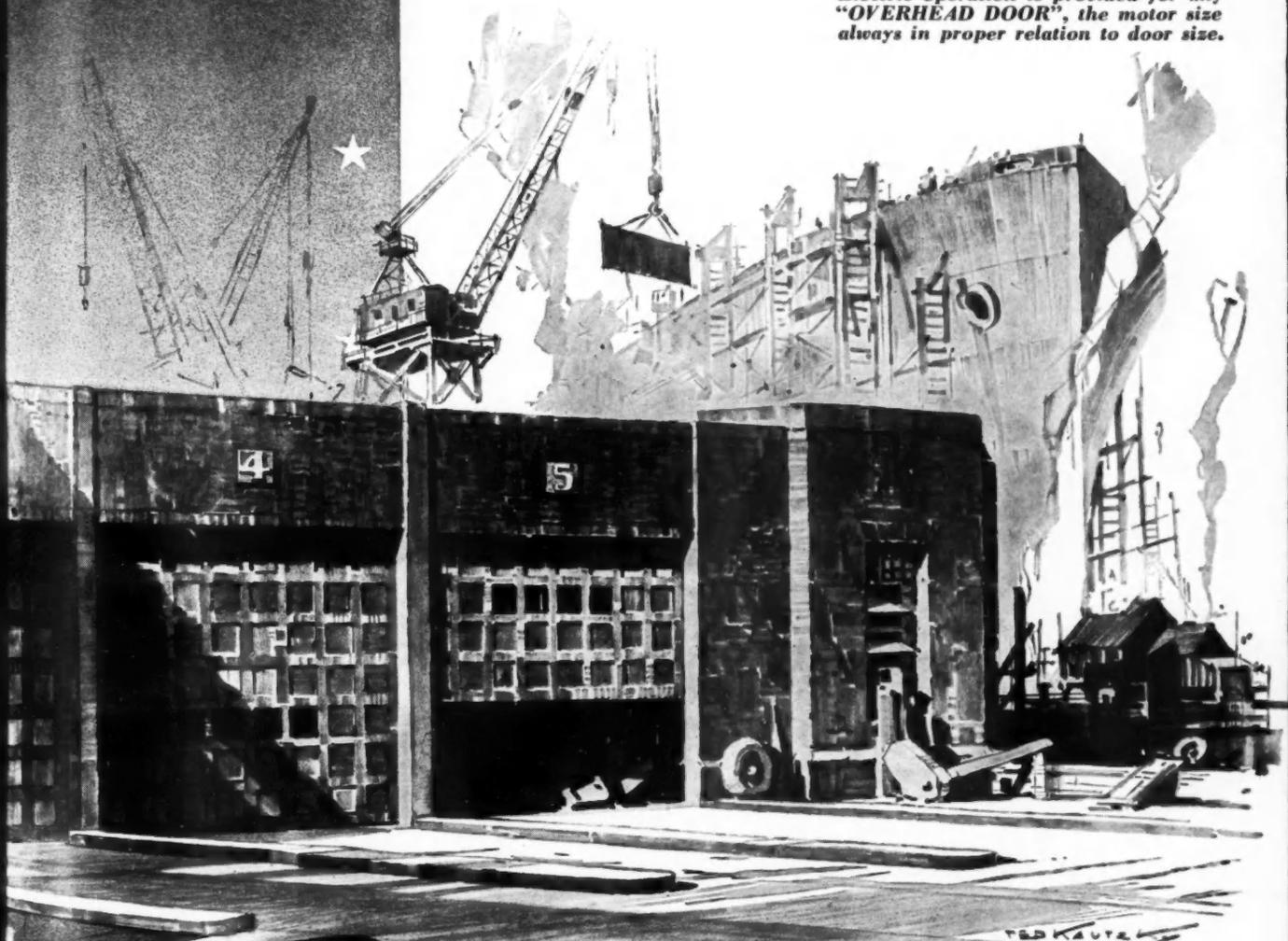


INSULITE
Division of Minnesota and Ontario Paper Company, Minneapolis, Minn.

LASTING SERVICE!

Quality materials and expert construction are responsible for the unvarying performance of The "OVERHEAD DOOR". Each door is built as a complete unit in any size to fit any opening. With its fast, easy operation, The "OVERHEAD DOOR" provides a weathertight, tamperproof closure, and saves space and valuable man-hours in army, navy or marine structures and war production plants. Nation-Wide Sales-Installation-Service.

Electric operation is provided for any "OVERHEAD DOOR", the motor size always in proper relation to door size.



THE
"OVERHEAD DOOR"
TRADE MARK
WITH THE
MIRACLE WEDGE

OVERHEAD DOOR CORPORATION
Hartford City, Indiana • U. S. A.

FUTURE

Homes

Will Need

FOR AMERICA NATIONAL HARDWARE

The appearance of the homes of tomorrow may change—their comforts increase—their livability expand. Regardless of these changes, they will need good hardware. Easy operating garage doors will be a *must*. Reliable hardware for windows, doors and cabinets will be required.

National Hardware will be first choice for thousands upon thousands of builders from Coast to Coast. Our builder friends know National's quality and long life—they know how easily National Garage Door Sets are installed—and they know they can guarantee satisfaction wherever they use National Hardware.

BUY BONDS NOW—TO BUILD HOMES TOMORROW

National

Builders' Hardware



GET THIS CATALOG FREE

NATIONAL MANUFACTURING CO. STERLING ILLINOIS

War
Stirs
on P
CO
B
P
p
Sta
How
WPB-