WHEN OUR PERM

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# FIGURE 20 CENT

WORLD'S GREATEST BUILDING PAPER





# LICK THE MATERIAL SHORTAGES WITH THESE MULTIPLE-FUNCTION CELOTEX BUILDING PRODUCTS

#### **NOW AVAILABLE!**

Stumped by material shortages? Missing out on profitable jobs? You needn't! You can keep as busy as ever by replacing hard-to-get materials with these newly developed, multiple-function Celotex products. Available now!

Best part-they often do a better job

than traditional materials, as proved in plenty of farm, factory and housing projects where they've been used.

So take a tip from us contractors who are keeping busy and maintaining profits! See your local Celotex dealer—and soon!

#### CELO-SIDING

#### THE MULTIPLE-FUNCTION MATERIAL THAT DOES 3 JOBS



Ideal for farm buildings, factories, machine shops, warehouses and general buildings. Combines siding, sheathing and insulation in one weather-resistant, easily applied material. Applied direct to studding, Celo-Siding saves critical lumber, time and labor. Available in bufftone or green colors and in two thicknesses - 5/8" and 7/8". Sizes: 5/8" and 7's" in 4' x 8' with square edges; also 7/8" in 4' x 10' with square edges; and in 2' x 8' with T&G joints on long edges. Recommend 7/8" for greater strength and insulation value. Recommend 5/8" for lighter, lower cost construction.

#### OTHER CELOTEX BUILDING BOARDS

**Celotex 1/2" Building Board...** the famous cane fibre insulating board. For general use wherever a strong, rigid, light-weight board is required. Smooth ivory coated one side; back is natural. Ferox-Processed against dry rot and termites. Sizes: 4 feet wide by 6, 7, 8, 9, 10 and 12 feet long.

Celotex 1/2" Asphalted Building Board ... cane fibre board surface-impregnated both sides and all edges. Meets many varied requirements for both permanent and temporary work. Moisture-resistant, rot-proof and vermin-proof. Sizes: 4 feet wide by 8, 9, 10 and 12 feet long.

#### **CELO-ROK BRAND BOARDS**

For Interior and Exterior Construction



These gypsum wall boards meet the rigid Celotex tests for quality. Available in  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ " thicknesses for conventional interior wall construction.  $\frac{3}{8}$ " and  $\frac{1}{2}$ " have square, recessed or beveled edges.  $\frac{1}{4}$ " thickness has square edge only.

#### CELO-ROK WEATHER-PROOF SIDING

A fire-resistant gypsum wall board. This one structural material will serve in place of both sheathing and siding. Both sides and all edges are treated with a weather-proof compound. Exterior side is finished in attractive green and requires no painting. Available in 1-inch and ½-inch thicknesses, 24 inches wide, in 6-, 8-, 9-, and 10-foot lengths.



#### Homes Should Be Insulated with CELOTEX ROCK WOOL BATTS

Home owners should insulate now to save fuel and enjoy greater comfort this winter and to provide cool comfort in summer. Celotex Rock Wool Batts give insulation of proved efficiency at moderate cost—but with fine profits for you. Urge prospects to insulate now—Ceiotex Rock Wool Batts are available. New, easier FHA financing on insulation jobs available to your prospects.



### CELOTEX

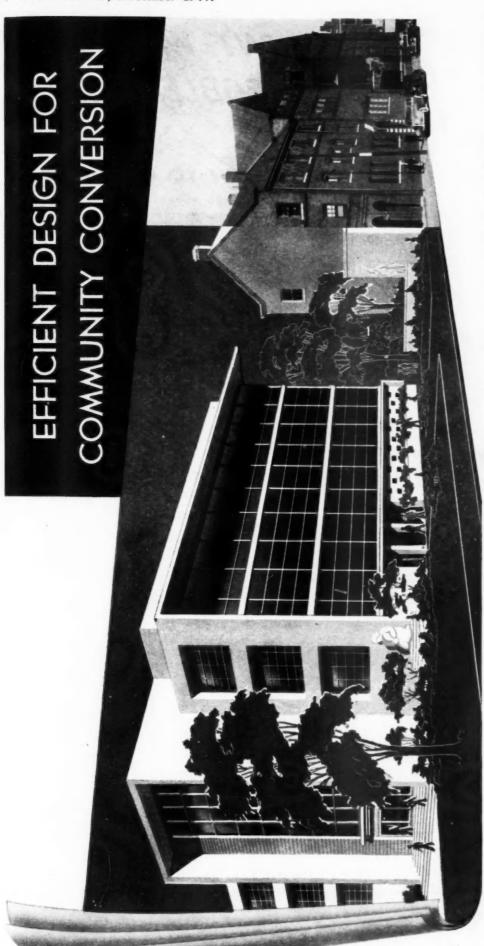
BUILDING PRODUCTS

THE CELOTEX CORPORATION . . . Chicago 3, Illinois

Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago 3, Ill. Subscription price, United States, Possessions, Canada, and Mexico. 1 926 \$2.02; 3 years, \$3.00; foreign countries; 1 year, \$3.00; 3 years, \$6.00. Single copies, 25 cents. Entered as second-class matter Oct, 11, 1930, at the Post Office at Chicago, Illinois address communications to 105 W. Adams St., Chicago 3, 111000

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The Navy's Famous Quonset Huts Are Built By

# STRAN-STEEL

DIVISION OF GREAT LAKES STEEL CORPORATION, PENOBSCOT BUILDING, DETROIT 24, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION

Wise communities are today planning construction of institutional buildings, hospitals, schools and welfare or health centers, replacing the old with new, efficient designs. In many such developments, Stran-Steel plays a prominent part in the plans. Its strength, durability, permanence and fire-resistance recommend it for economy of construction and maintenance, while the advantage of Stran-Steel's patented nailing groove provides full scope in the selection of collateral materials. Leading architects and engineers are thinking in terms of Stran-Steel construction.

Stran-Steel's present production is for military buildings, but the experience gained will be available to the construction industry soon. Investigate Stran-Steel; explore its possibilities.



# IF YOU DON'T WANT A HEATING "PROBLEM CHILD."...

...here's how to avoid it!



★ The chimney of your post-war home can become a "problem child" that will literally eat you out of house and home—as well as shrink the re-sale value. That's what often happens when a chimney is too small to handle all fuels equally well.

The sensible thing to do is to plan on an *adequate* chimney . . . a chimney that is *large enough* to handle gas, oil, or coal.

The extra cost of such a chimney is small—but its savings can be large. In fact, they can actually be large enough to pay a good part of your taxes or mortgage interest!

That's because an adequate chimney gives you freedom of choice to heat with *any* fuel, including Bituminous Coal. And, as you probably know, Bituminous Coal is far-and-away the *cheapest* home-heating fuel available. No wonder 4 out of every 7 homes in the United States depend on it for steady, reliable heat! And, when properly burned, Bituminous Coal is clean and odorless.

Discuss this with your architect or builder. Be sure your plans provide a chimney big enough to supply sufficient draft to burn Bituminous Coal. That's the way to insure minimum fuel bills!

BITUMINOUS COAL INSTITUTE, 60 EAST 42ND STREET, NEW YORK 17, N. Y.

er 1944.

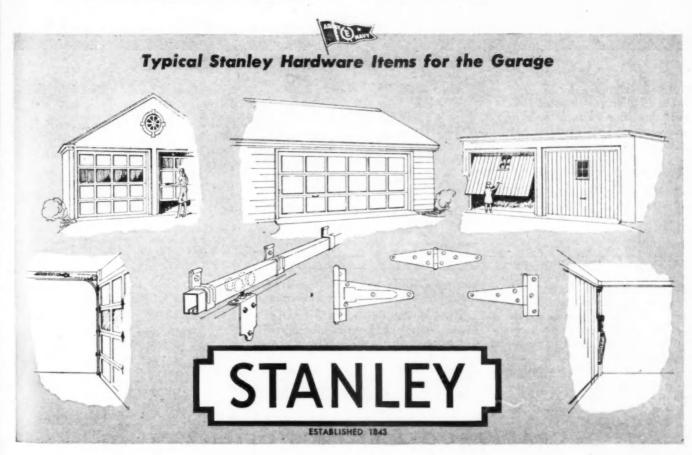


### **STANLEY Garage HARDWARE**

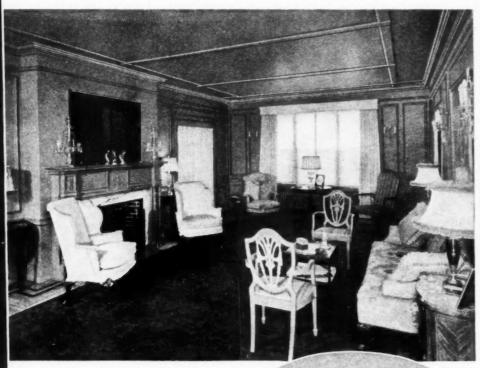
Leading the list of postwar improvements planned by many thousands of present and future car owners is a new garage. And the usefulness of a garage depends greatly on the quality of its hardware.

No name in America stands higher than that of

Stanley in the manufacture of garage hardware. Correct design, smooth performance, and long-lasting service are all sales and profit advantages. for you in the coming construction era. Standardize on Stanley Hardware. The Stanley Works, New Britain, Connecticut.



# Can Cracked Ceilings Make **Jobs for Contractors?**



Beauty in keeping with the most pretentious homes—yet at a cost within reach of the small home owner. Upson Ceiling in the home of Fred Ludwig, President, Merritt Lumber Yards, Reading, Pa.

YES-a whopping lot of jobs! The 1940 census revealed 18% of all dwelling units in need of major repairs. That figure is now estimated to be around 30%. Much of it is represented by long neglected cracked ceilings.

A great part of this business can be yours! For homeowners, bothered with cracking plaster, want ceilings of enduring beauty and permanence.

Using Upson Ceiling Panels and Upson Shad-O-Line Mouldings made specifically for the purpose, you can apply a ceiling which will remain forever crackproof-a ceiling which will be more than a bare, uninteresting expanse. You can apply a ceiling which will become an integral part of the decorative

scheme-adding modern character, design and charm to the interior.

You can do the job right over old plaster-without the dirt and muss which goes with replastering. You can do the job at a good profit. And you can do a great many of them because one Upson Ceiling job invariably sells others.

Plan now to handle these postwar jobs. Write us for details, or discuss it with your lumber dealer now. The Upson Company, Lockport, New York.

And in the meantime-make it a businessgetting habit:

When you look up, speak up! Where cracking plaster is causing trouble, always say . . . "You need an Upson Ceiling, madam."

UPSON

Upson Quality Products Are Easily Identified by The Famous Blue - Center

CRACKPROOF CEILINGS OF ENDURING BEAUTY



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# LETTERS

#### Somewhere in France

To the Editor: I take great pleasure in reading your editorials, which really hit the nail on the head. It is nice to know that the small contractor has ONE friend among the magazine publishers. Your journal is doing a lot in "debunking" the dreamers and making a firm stand against government meddling in private enterprise.

I for one am looking forward after the war to going back to my business unhampered by unfair government competition and countless agencies.—S/SGT. THOMAS CURTIS, somewhere in France.

#### **Reynotes labor practices**

To the Editor: On behalf of our Labor Relations Committee, permit me to express our commendations on your article "Will Labor Practices Nip Big Potential Building Boom in the Bud?"

The article has been taken as the keynote for the operation of our Committee which intends to open negotiations with local labor officials with the view to eliminating some of these practices from postwar housing construction.—MARTIN C. HUGGETT, Chicago Metropolitan Home Bldrs. Assn., Chicago, Ill.

#### Stinkeroo?

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LUTY

To the Editor: Houses you publish are mostly "stinkeroo" from a design and arrangement standpoint. They represent that vast majority of stuff built to contractor's wild ideas to be sold to that part of the public who know no better. Why don't you make a serious attempt to publish the best thinking on houses; good designs by good architects—not just anything that happens to be built.—GILBERT BURRELL, Lansing. Mich.

#### Money couldn't buy it

To the Editor: As a Director of the National Association of Home Builders, I want to express my appreciation for your policy of carrying the activities of this association.

In my opinion this move will give us prestige that no amount of money could buy, and will be a boost to private builders of the entire country.—LEX MARSH, JR., Charlotte, N.C.

#### For private builders

To the Editor: I wish to congratulate you on making what I consider an outstanding contribution to the Private Home Building Industry, and to the particular welfare of the Home Builders operating in communities where contact with the over-all picture is not so readily made and where vital information is not obtainable from direct, unbiased sources. Your publication has always held my interest.—A. E. FOSSIER, LaGrange, Ill.

#### Interested in concrete

To the Editor: I have just finished studying your article on pre-cast concrete houses. I must say I am very interested in this new type of house construction.—WALTER F. MOREHOUSE, Indianapolis, Ind.

(Continued to page 114)

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FOUNDED-1875

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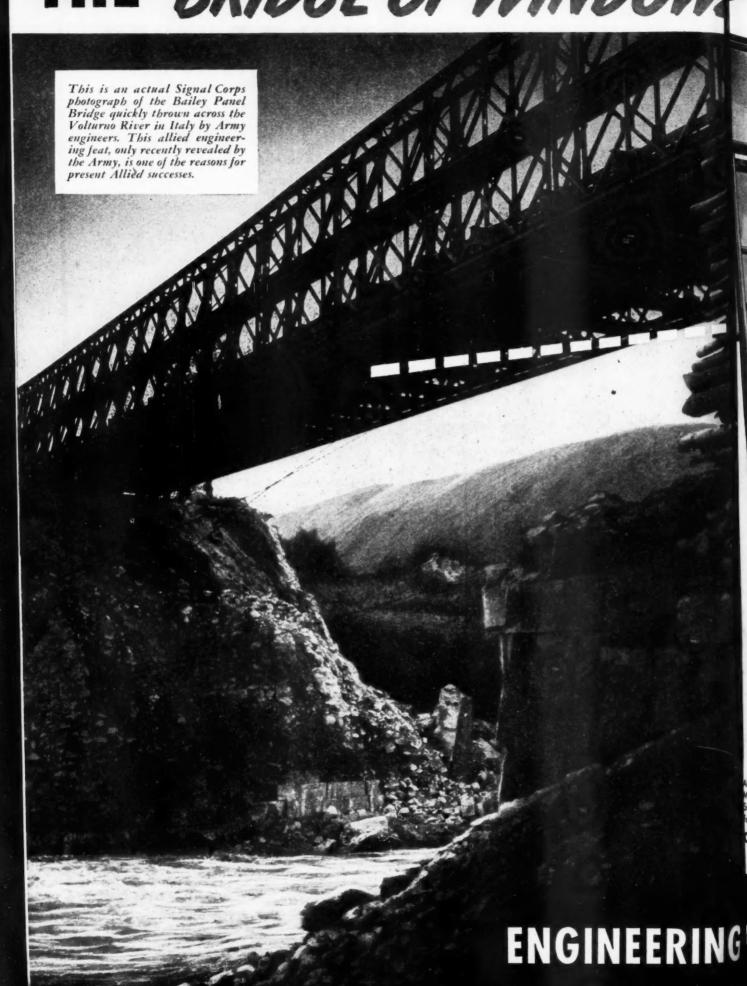
AMERICAN BUILDER and BUILDING AGE (originally "Carpentry and Building"), with which are incorporated National Builder. Permanent Builder and the Builder's Journal, was founded Jan. 1, 1879. Names registered in U. S. 1879. Names and the Standon Names of the St

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Member of the Associated Business Papers (A.B.P.) and of the AUDIT BUREAU OF CINCULATIONS (A. B. C.) Printed in U. S. A.

# THE" BRIDGE OF WINDOWA



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## ACROSS THE VOLTURNO

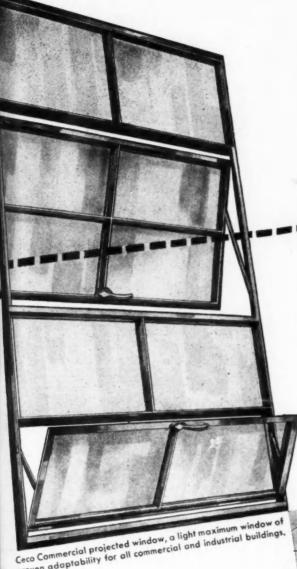
The Engineering skill, that produces the CECO STEEL WINDOW ... now makes possible the Bailey Bridge... spanning enemy streams on all fronts.



"bridge of windows"? Yes, in a sense ... for into the Bailey Portable Panel Bridge have gone all the skill and "know how we have acquired in manufacturing the Ceco precision-engineered Steel Window.

A remarkable engineering feat . . . this bridge that can be assembled like a giant erector set . . . by a surprisingly small group of men . . . to reach gaps up to 200 feet in only a few hours. It is rolled out in 10 foot sections from one bank of a stream and because of the perfect (no tolerance) fit of the sections, will support terrific loads

The Ceco Steel Window, like the Bailey Panel Bridge, is precision built and durable. For Ceco engineers build "small" with the same precision they build "big". This skill and exactness gives the Ceco window important lasting advantages in installation and operation. They assure longer life and greater beauty. For commercial, school, factory, or hospital builder, Ceco construction products and Ceco Steel Windows do a better job through precision engineering.



proven adaptability for all commercial and industrial buildings.





Ceco's line of Steel Windows includes Light and Intermediate Casements, Basement Windows, Architectural Projected, Commercial Projected and Pivoted Windows, Continuous Windows, Security and Utility Windows, Mechanical Operators, etc.

#### OTHER CECO ENGINEERED PRODUCTS:

All types of Steel Doors, Metal Frame Screens, Metal Lath, etal Weatherstrips, Steel Joists, Steel Roof Deck, Meyer deelforms, Adjustable Shores and Clamps, Concrete Reinorcing Bars and Welded Fabric.

#### ECO STEEL PRODUCTS CORPORATION

General Offices: Omaha, Nebraska Manufacturing Division: 5701 W. 26th St., Chicago, III.

# What the CECO engineered window means to Architect, Constructor and Factory Worker

- 1. Precision Engineering means an extra tight all weather seal— 2. Precision Engineering means easy opening, and closing—no keeps out cold, dust, rain keeps heat in.
- sticking, warping, or swelling. Ceco Windows always fit. 3. Precision Engineering means a far greater light area, lets
- 4. Precision Engineering means controlled ventilation—you'll
- always catch stray breezes—control draughts. 5. Precision Engineering means permanence—Ceco Steel
- Windows use more steel, last the lifetime of your factory. 6. Precision Engineering means Bonderizing, a special process
- for sure protection against paint failure and rusting. 7. Precision Engineering means all these important
- advantages at no premium cost!



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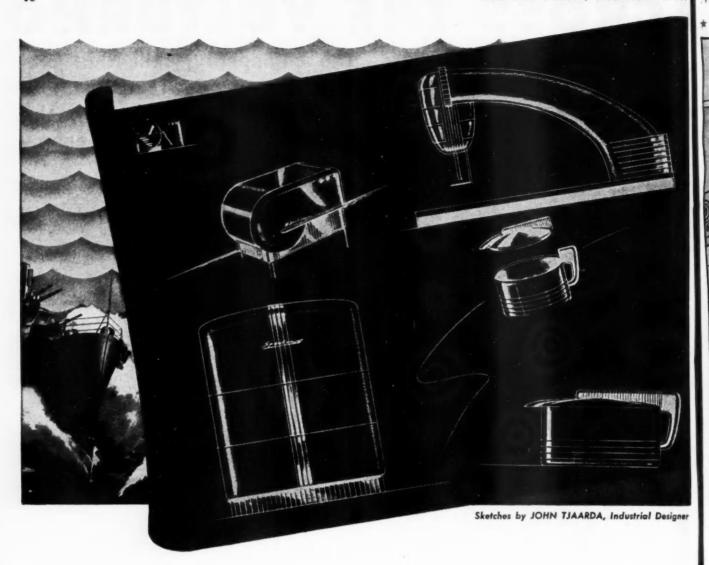
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#### Servants from the Seven Seas

The fleets of Defoe-built Destroyer Escort ships, PC boats and landing craft which have sailed the seven seas with the Navy have taught Defoe engineers many things in compact, functional design which might well be applied to create smart, new servants for dwellings of tomorrow! . . . These ideas are suggested by Defoe as typical of the many manufacturing possibilities that may be expected from industry to make America more livable and to help maintain a high level of employment in the future. Until Victory, of course, every one of Defoe's workers—there are now nearly 4,000 of them—will be engaged in building fighting ships for the Navy. And only craftsmen who build well can measure up to the shipbuilder's standards. For these reasons, whatever Defoe produces after the war will embody exceptional quality and value for peacetime America.

DEFOE SHIPBUILDING COMPANY, A BAY CITY, MICHIGAN

Defoe

We have E Andre work of Delte mor

BACK THE ATTACK
-BUY WAR BONDS

SHIPS FOR VICTORY
SERVANTS FOR PEACE

Designer

of

BETTER. WIRING FOR BETTER LIVING



## Something to be thankful for...

SHE "toils not, neither does she spin"—yet Solomon in all his glory never cooked a dinner like this one!

Yes, the Bjones family has much to be thankful for on this Thanks-giving Day—and every other day throughout the year.

Bill Bjones and little Oswald... not to mention "Barkus" the wistful wire-haired... are savoring the succulent delights of the wonderful feast to come.

As for Mary Bjones, her modern automatic electric range is doing wonders in timing the cooking, maintaining proper temperatures, preserving precious vitamins—without any effort, whatever, on her part.

All this is as it should be . . . thanks to the important part played by better wiring, in making this happy domestic scene possible.

To help you make certain that electrical equipment functions properly in the homes you design or build, the Westinghouse Better Homes Department offers you free technical advice on this important subject.

Refer your problems relating to home wiring, selection and installation of electrical equipment, location of convenience and lighting outlets and lighting controls, etc. to our housing specialists. You'll receive authoritative information, promptly.



THIS BOOK WILL HELP YOU, TOO!

Thousands of members of the building profession are using the new book, "Electrical Living in 194X," to explain to present and prospective home owners the many advantages of "better wiring for better living."

Write for your free copy, newl Address: Better Homes Department, (AB-114) Westinghouse Electric & Manufacturing Company, Pittsburgh 30, Pennsylvania.

# Westinghouse

Ameri

Only with completely
CONTROLLED PRODUCTION
could BIRD create these
Better Building Papers

Sticklers for Trifles
Since 1795



Other examples of Controlled Productions



BIRD MASTER-BILT Shingle—rich in texture and color, thick butts for extra protection.



BIRD TRI-TAB HEX Shingle—colorful, draftfree—wind-resistant,



BIRD INSULATED SID-ING, in many attractive brick tones.

HE waterproof experiment illustrated above can be duplicated in your own office with a sheet of Bird's Neponset Black Building Paper. It dramatically proves one of the many qualities which make Neponset Black ideal not only as a general building paper, but as a Vapor-Seal for insulation and air-conditioning.

For Neponset Black answers many insulation problems. Waterproof, air-proof, dust-proof and odorless, it handles easily because of its unusual tearing and bursting strength.

Neponset Black is the result of painstakingly Controlled Production, from raw materials to the finished product. These controls start with the most scientific and best balanced formula of any comparable product on the market. The dry paper base is made in Bird's own paper mill, long famous for heavy-paper production.

This dry base is felted by a special machine that gives it unusual strength both with and across the grain. This extra strength is necessary to hold sufficient asphalt to waterproof the paper thoroughly. At the same time the pores are kept open for maximum absorbency of the asphalt saturant. Each run is laboratory-checked for proportions of stock, weight and thickness, before it is sent to the water-proofing mill.

Here it is given another laboratory examination, then heavily saturated in an asphalt bath, and finally treated with a waterproof coating to seal all the pores.

The result? A building paper of unusually low moisture absorbency and penetration that retains its many qualities for years. When properly applied, Neponset Black creates an efficient vaporbarrier that keeps destructive moisture from any type of insulation.

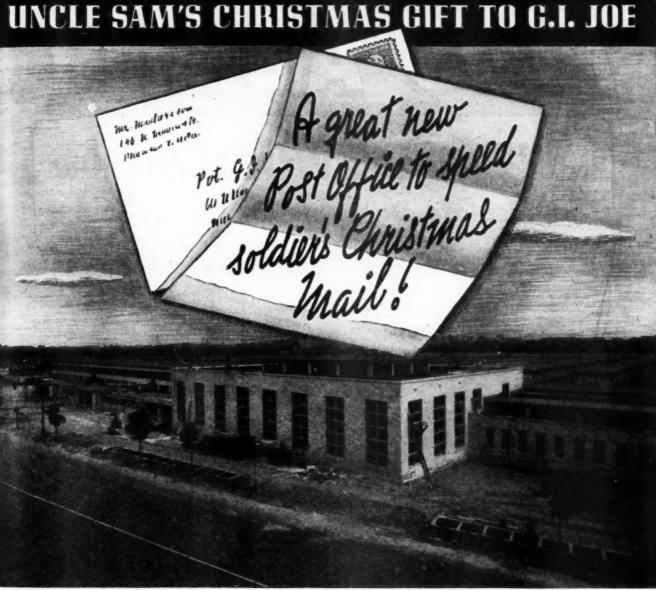
Building paper is a small item cost-wise. But Bird's Neponset Black has become a "tremendous trifle" no architect or builder can reasonably overlook. It is an excellent example of Controlled Production, which has contributed so much to the quality for which Bird has been famous for 150 years.



Bird & Son, inc. • East Walpole, Mass. • New York • Shreveport, La. • Chicago, Ill.

r 1944.

UNCLE SAM'S CHRISTMAS GIFT TO G.I. JOE



ARCHITECT: Alfred Hopkins & Associates, New York City, N. Y.

CONTRACTORS: John A. Johnson, Contracting Corporation, Brooklyn, N. Y.

YOOD news to G. I. Joe and the folks back home—is this new overseas Army Post Office at Long Island City, N. Y. Called "A miracle of construction" by Col. Edgar W. Garbisch, District Engineer, New York District Office, U. S. Army Engineers, under whose supervision it was erected—this building, covering 141/4 acres, was completed in 90 days-10 days ahead of schedule-during the hottest summer on record. It is intended to speed Christmas and other mail to soldiers overseas.

We are proud that Lehigh contributed in a measure to its construction. Lehigh was used in the concrete work, the manufacture of the exterior masonry units, and the cinder partition blocks.

Lehigh makes 3 types of cement:

#### LEHIGH EARLY STRENGTH CEMENT LEHIGH NORMAL CEMENT LEHIGH MORTAR CEMENT

Lehigh Early Strength Cement is the product that makes service strength concrete 3 to 5 times faster than normal cement. Ask for bulletin on concreting in cold weather with Lehigh Early Strength Cement.



LEHIGH PORTLAND CEMENT COMPANY · ALLENTOWN, PA. · CHICAGO, ILL. · SPOKANE, WASH.

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These attractive

patterns can be made with standard (right hand) Weatherwood Tile (1½") or Paneltile (¾"). Ame

### IN WEATHERWOOD INTERIORS

That Insulate, Decorate and Quiet Sound



Improvements like this are sure to please home owners, with their "Plus-Ability" advantages. Easy to sell for shops, stores, theaters and other commercial establishments.

### All in One Material . . . One Operation . . . One Low Cost

Choose Your Pattern—name your use . . . demand economy—Weatherwood\* conserves with "plus-ability"—For here is beauty—made from combinations of Weatherwood, Tile, Paneltile and Plank in various sizes, types and thicknesses.

Old interiors renew their youth and usefulness—made modern—all finished and done as the material goes on in one economical operation—no decorating—no waiting. These great opportunities are being realized in bringing new modern beauty to homes, schools, churches, auditoriums, shops and theaters.

You have a wide range of choice as to design and color in warm blended tones or ivory. There's almost no limit to the possibilities with Weatherwood "plus-abilities."

Get in line with this new Weatherwood program. Write for latest facts that are opening new profit opportunities for dealers and builders everywhere.

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

#### UNITED STATES GYPSUM

Manufacturers of Building and Industrial Products Since 1901

GYPSUM • LIME • STEEL • INSULATION • ROOFING • PAINT

We'll put portisans with double flories on every lot in the land!





Are you double-talking or straight-thinking about the building-boom?

HOUSING EXPERTS REPORT: The mere mention of tomorrow's housing needs makes many builders break into pure double-talk!

Tell such builders there'll be a need for 1,000,000 houses a year—and they see themselves building dream-houses like carpenters in a fast-motion movie!...

Practical building men know that need alone may start a flurry of sales—but it takes more than need to create a boom!

For, as Frank W. Cortright, Executive Vice-President of the National Association of Home Builders of the United States, puts it: "The success which the construction industry can achieve in supplying better housing at lower costs, and in providing work for millions of men, depends entirely upon intelligent, effective planning and follow-through between now and the time of total victory."

And after your selling plans are made they must be presented to the kind of people who can afford to buy new homes and the materials for modernizing old ones—the kind of people builders think of when they think of the readers of TIME.

These are the people builders think of when they think of the readers of TIME



Joe Kaufman

For with twice the average U. S. income, TIME's million families can afford to own more homes and better homes than any other million families in America! What's more, these readers of TIME are America's most influential families\*—so TIME offers the building industry a doubly responsive audience—an audience which is ready to pay for home building products and okay them for the rest of the nation.

\*Top U. S. executives and engineers, government officials, mayors, bankers, architects and 22 other groups of national leaders recently voted "TIME is America's most important magazine."

GATEWAY TO THE BUILDING MARKET

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ber 1944.

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1901 PAINT





TODAY—The Army and Navy use KIMPREG for bomber floors and doors, packing cases, luggage, hutments, parachute folding tables.

**TOMORROW**—KIMPREG will be used in construction of prefabricated houses, refrigerator car linings, table tops, piano and radio cases, etc.

Among the users of KIMPREG are: Buffelen Lumber & Manufacturing Company; Olympic
Plywood Company; Washington
Vencer Company; all of whom
are currently producing a Douglas Fir Plywood surfaced with
KIMPREG. This product is sold
under the trade name of Inderon.



Out of a wartime test tube comes the new and greatly needed KIMPREG!\* Not a plywood—not a conventional plastic laminate—KIMPREG is a remarkable surfacing material for bonding to the base plywood in conventional plywood hot presses. When applied to plywood, the finished product is more durable—has a higher flexural strength than ordinary plywood—offers resistance to vapor permeability, abrasion, decay. Application of KIMPREG assures moisture-resistance, easy washability. This new plastic surfacing material will make your product scuff-proof—it won't stain—the finish will wear better than paint.

In the post-war world KIMPREG will open new fields for the use of plywood. It may offer new opportunities for your product. It may well represent important savings of money and material to you. So be ready to take advantage of the tested KIMPREG plastic surfacing for plywoods when conversion to a peacetime economy comes. Write for FREE booklet today.

\*KIMPREG (Trade-Mark) means Kimberly-Clark Plastic Surfacing Material

War Products Division Kimberly-Clark Corporation, Neenah, Wisconsin	AB-1144
Please send me FREE KIMPREG book.	*
Name of Co	
Line of Business	
Address	
CityState	



SURVEYS show that Mr. and Mrs. America expect a better postwar home—one with the desired advantages of greater comfort, added convenience and improved appearance. You can contribute greatly to this looked-for quality by including Crane bathrooms and kitchens in the homes of tomorrow that you plan to build.

Crane plumbing fixtures—widely recognized as standing for the finest in quality, the most modern design—will increase the value and salability of the homes you build. Why not put this preference for Crane quality to work for you? In the Crane line of tomorrow you'll find plumbing fixtures to suit every budget. They promise new conceptions in style and beauty, plus the same sturdy dependability that in the past has characterized equipment bearing the name Crane.

For your immediate requirements Crane has developed a line of high-quality plumbing fixtures, made largely of non-critical materials, that are available without priority. For complete information call your plumbing contractor or Crane Branch.

CRANE

PLUMBING . HEATING . PIPE . PUMPS . FITTINGS . VALVES

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

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It may you. So arfacing

AB-1144

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### PLENTY OF HOT WATER-EVERYWHERE!

THE WELCOME WORK-SAVERS OF THE POSTWAR HOME WILL GIVE THEIR BEST SERVICE WHEN YOU INSTALL A GENERAL TANKLESS HEATER





THE SUPER-SINK, with built-in dishwasher, will make greater demands on the hot water supply. But with GENERAL Tankless Heater this demand is easily met.

washing machine takes, its laborsaving function will depend on plenty of good, clean hot water. That's just what you get from the

seamless copper tubing in the GENERAL Tankless Heater.

EATING PLACES, large and small, will be installing modern, sanitary dishwashers requiring large amounts of pre-heated water – an easy job for GENERAL Tankless Heater! GENERAL TANK-LESS WATER HEAT-ERS-capacities 33/4 to 35 g.p.m. Seam-less Copper Heating coil.

INCREASED POPULARITY of showers, both for bathrooms and industrial washrooms, means increased need for constant supply of hot water
-which GENERAL Tankless Heaters deliver ....

PLAN PLENTY of hot water for postwar kitchen, bathroom and commercial units by recommending and specifying an engineered GENERAL Tankless Heater. Your clients will appreciate its generous performance - and your good judgment. This up-todate heater is compact, self-contained, quicker to install, takes less space, and costs less to install and operate than storage tank systems. It hooks up directly to any automatically-fired house-heating boiler and will give 31/2 to 35 gallons of hot water every minute! Trouble-free seamless copper tubing insures clear, sediment-free output and long heater-life.

UNTIL VICTORY, General Fittings Company makers of the only complete line of tankless heaters for domestic and commercial installations - is devoting a major part of production to precision war work...torpedo and bomb parts, fuse setters, special Navy water heaters.

SEND FOR CATALOG 15

describing Tankless Heaters and other specialties by: General Fittings Company, Dept. F, 123 Georgia Ave., Providence 5, R.I.

TANKLESS WATER HEATERS

Also Tank-Type Water Heaters . Thermostatic Mixing Valves

Water-Hammer Silencers • Coil-heated Tanks

Live-Steam Heaters • Pipe Unions

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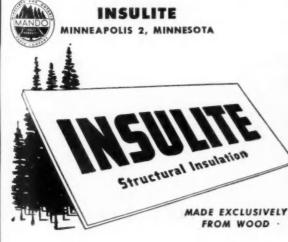


Eminent scientific authorities substantiate these statements. Send for free "Scientific Facts" booklet, which tells the complete story.

OUTSIDE THE STUDS. Insulite Bildrite Sheathing. The large boards provide a wind-proofed, weather-tight wall. Bildrite provides a bracing strength four times that of wood sheathing, horizontally applied.

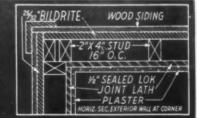
INSIDE THE STUDS. Sealed Lok-Joint Lath furnishes a second wall of insulation. The patented "Lok-Joint" provides a strong Joint" provides a strong, rigid plastering surface, prevents joints from opening under trowel pressure.

· How moisture condensation is • How moisture condensation is effectively minimized in the Ap-proved Insulite Wall of Protection. Sealed Lok-Joint Lath, with asphalt barrier against the studs, effectively retards vapor travel. Bildrite Sheath-ing, being permeable to vapor, per-mits what little vapor escapes to pass naturally towards the outside



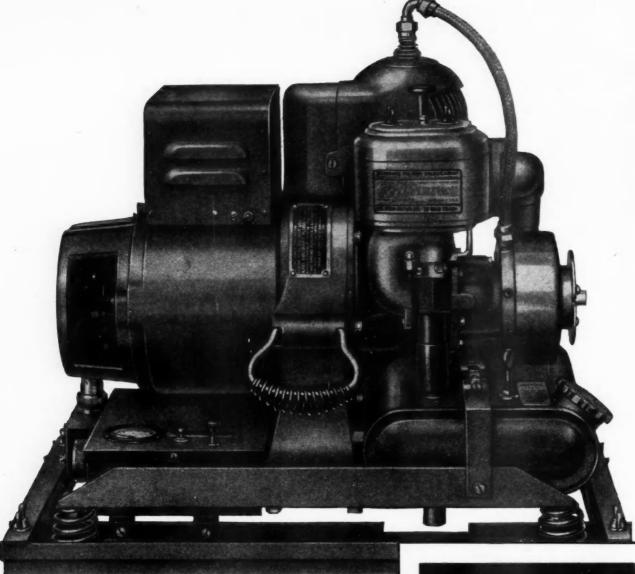


**BEAM FILL.** Sound construction and efficient insulation are assured with a mortar fill between joists and with Insulite in the floor. Insulite structural insulation board is used for insulation in sub floor areas.



WALL CORNER. Erect framing members, studs, joists, rafters and plates in the conventional manner. Insulite is securely nailed to the framing, insuring increased rigidity as well as better insulation.

Americ



# It has to work alone and like it

No and's, if's or but's about it, a Homelite Portable Generator, installed in a plane or a tank is in no position to receive nurse-maid attention. It's usually crammed into some hot, tight corner where it is practically impossible to service it.

Which means just one thing ... a Homelite Generator with its built-in gasoline engine has to work and stand up under the toughest kind of usage ... hours on end ... without receiving any attention or service. To meet demands like this ... born of war ... Homelite engineers have developed a higher powered, lighter-weight and, above all, a more dependable gasoline-engine-driven generator... a compact, portable Homelite that will meet and pass the performance requirements of any peace-time job.

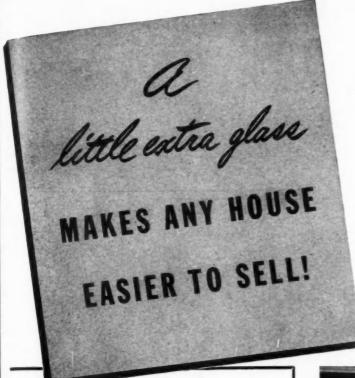


Portable Pumps - Generators - Blowers



#### FOR YOUR PEACE-TIME JOBS

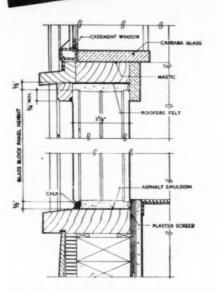
The new Homelite Portable Generators that you will use after the war for operating brilliant floodlights or electric tools will work better in winter and summer. They will be more dependable even under the toughest operating conditions. They will work longer hours without attention or service . . . and will be more rugged and powerful than ever

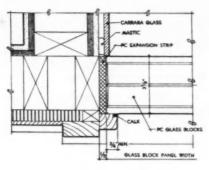


If ever there was a material that's really loaded with sales appeal, it's GLASS. Glass is modern, practical, good-looking, fashionable. It dresses up any house immediately, even when only a little extra glass is used. And the nice thing about it is, that every cent you spend for glass *shows*—helps instantly to stamp your house in the prospect's mind as a good buy.

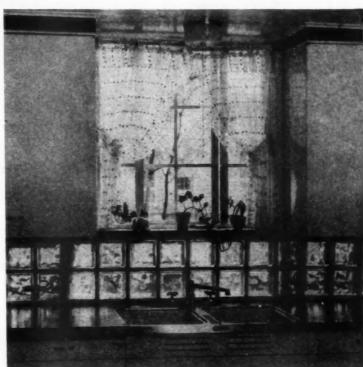
There are any number of ways to use glass inexpensively but effectively... in houses of every type and price class. Door mirrors, Carrara Glass kitchen and bathroom walls, a few glass blocks in the stairwell wall or around the front door, built-in mirrors over mantels... these are just a few uses of glass that always pay their way when it comes to getting a name on the dotted line.

Send the coupon... today... for our free booklet which contains scores of suggestions for using a little extra glass to give houses a lot of extra sales appeal. The book also provides many pages of detail drawings, like those illustrated, showing you exactly how each glass application is made.





These details for glass block application shown at right are based on wood frame construction. For brick veneer construction details see booklet offered in coupon.



FOR EXAMPLE: Imagine how appealing to prospects this little trick with PC Glass Blocks would be! Just a few blocks over sink and work surfaces make a lot of difference in a kitchen's lighting, smartness and salability. Installation is simple . . . see details.

"PITTSBURGH" stands for Quality Glass and Paint

			s Company			
2383-4	Grant	Building	. Pittsburgh	19,	Pa.	
Cantle	in an a					

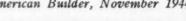
Gentlemen: Please send me, without obligation, your new book entitled, "A Little Extra Glass Means A Lot of Extra Charm."

Name.

Address..

City\_\_\_

State



Amer



### RCED HOT WAT

for Real Heating Efficiency



Supply Quick Controlled Heat

THE owner of this forty-two room apartment building is surely enthusiastic about Thrush Zone Control Hot Water Heat. As the building was being completed, he collected \$1,000 in rentals only because he could rent some apartments before all were finished, since he could furnish heat to any one as needed without heating the untenanted part of the building. With Zone Control each family enjoys the degree of heat preferred and none must regulate his living habits to suit those of any other tenant. The total amount of fuel saved because of this flexibility pays a real dividend to the owner every year. Tell the apartment house operators of your community about Thrush Zone Control forced circulating hot water heat and you'll get the business. Ask your wholesaler about it or write Dept. G.11.

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# Superior METAL TRIM IS A PROFITABLE INVESTMENT FOR YOU

For years a volume leader in the manufacturing of Aluminum Metal Trim, Youngstown Manufacturing, Inc., also maintains strict control of the qualities which installation men require. Our distribution plan with warehouses located in strategic locations permits jobbers and dealers to serve their trade quickly with a wide range of sizes WITHOUT CARRYING an excess inventory. Thus, Youngstown Manufacturing, Inc., provides a big money-making setup for you. WRITE TODAY FOR A WORTH-YOUR-WHILE proposition with Superior Metal Trim.

> **Branch Offices and Warehouses** YOUNGSTOWN MANUFACTURING, INC.

> > 363 W. Peachtree St., N. E. Atlanta, Georgia 363 S. Wall Street Columbus, Ohio 222 E. Sixth Street Cincinnati, Ohio 7-219 N. Alabama Street Indianapolis, Indiana 510 Arch Street Philadelphia, Penn

**ALUMINUM SHAPES** 

Each of these 54 SUPERIOR shapes is popularity-proven. All of them are alive Metal Trim money-makers. With them you can meet every need . . . with our distribution plan you can serve your customers economically on the spot. And remember, Superior Metal Trim has unexcelled finish and eye appeal. It has uniform dimensions . . . handles, cuts, and miters easily.

WRITE TODAY for an illustrated folder, showing all the 54 shapes, and an easy-to-use price list. Don't permit a minute of unnecessary delay. Get to your customers first, before the other fellow gets there. We will help you.



There's Only One Superior Metal Trim

66-76 S. PROSPECT STREET

YOUNGSTOWN MANUFACTURING,

YOUXGSTOWN. OHIO



# Give your customers THE BEST IN THE HOUSE!

I T costs you no more to give your customers the most for their building dollar. And that's what makes lifelong friends for your business.

When you handle Flintkote Decorative Insulation Board Products, you're selling more than just first-class building material.

You're selling comfort and beauty for your customers' homes . . . faster construction . . . lower labor costs.

You're selling economy . . . a bargain no customer can resist.

From a playroom in the basement to an extra bedroom in the attic...repair or remodeling is easy and fast with Flintkote Insulation Tile and Plank.

And they're ideal for new building. They give your customer the premium service of insulation, together

with structural superiority and decorative beauty.

That's also a bargain no customer can resist.

Made from selected materials in a huge plant at Meridian, Miss.... devoted solely to their manufacture... Flintkote Insulation Board Products are available now, and will be available in any quantities you desire when the post-war building rush begins.

Be sure you get your share of the big post-war business that's going to be done in Flintkote Insulation Board Products. Write for complete information.

#### THE FLINTKOTE COMPANY

30 Rockefeller Plaza New York 20, N. Y.

Atlanta • Boston • Chicago Heights Detroit • East Rutherford • Los Angeles New Orleans • Waco • Washington



Flintkote Insulation Board Products

# SEND NOW ...

for these
technical data sheets
on THERMOPANE
... prepared by
DON GRAF

For your convenience, we have asked Don Graf, Technical Editor of Pencil Points, to prepare these easy-to-use technical data sheets on Thermopane. Because Thermopane provides a solution to the problem of reducing heat loss, this material will help you design and install larger glass areas in modern buildings.



# Thermopune... the windowpane that insulates

Thermopane consists of two or more panes of glass, separated by an insulating air space. This space is hermetically-sealed at the factory with a patented metal-to-glass bond—the Bondermetic Seal. This bonds the panes into a single unit to prevent dirt or moisture from entering the air space. Thermopane fits into a modified single sash, just like a single pane of regular glass—stays there the year 'round.

#### Send for these sheets NOW

And get your name on our mailing list to receive technical data sheets on other Libbey-Owens-Ford Glass Products as they are prepared from time to time. Just mail the coupon below.

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LIBBEY · OWENS · FORD

a Great Name in GLASS

Libbey - Owens - Ford Glass Company 12114 Nicholas Building Toleda 3, Ohio

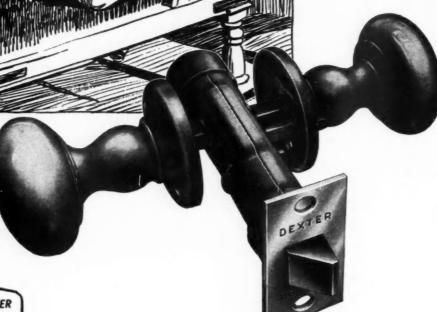
Please send me the new technical data sheets on Thermopane and put my name on your list for similar sheets, as they become available, on other L+O+F Glass Products.

Name\_

Address .



An early Hindoo lock, the locking security of which was in proportion to the reverence felt for the god it represented. The lock illustrated is in the form of a bird, the Hindoo god, Garuda; worshipped by the natives of Madras. The keyhole is on the side, concealed by one of the wings of the bird.



EVEN I KNOW IT'S EASIER TO DRILL A ROUND HOLE THAN TO MORTISE A SQUARE ONE

# 1944 War Housing Calls for DEXTER-TUBULARS

DEXTER
TUBULAR
LOCKS and LATCHES

There is nothing mystical about the performance of Dexter Tubulars. Their satisfactory performance is a matter of cold, realistic facts. Dexter Tubulars were originated and perfected by forward-thinking hardware engineers — are built of the best materials, to precision specifications, by skilled metal craftsmen. This is why they are guaranteed for lifetime service. Furthermore, the time and man hours SAVED by their faster, easier installation are advantages coming to be more and more appreciated by progressive builders.

There is a Dexter dealer in your community. Ask him for complete information. Write for your copy of the Commander Line Catalog conforming to revised WPB Order L-236.

Manufactured by NATIONAL BRASS COMPANY GRAND RAPIDS, MICHIGAN

1944

uild ster-aster ter

New Factri-Fit Features Save You Time and Labor On Every Hanging Job!

> Now famous Douglas Fir Interlor Doors are offered in a new precision-made line - pre-fit at the mill, cut to exact dimensions, ready to hang without sawing, trimming or fit-ting. These fine doors may be ordered completely machined, too-gained, bored or mortised for still further on-the-job savings.

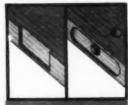
> And that's not all! Basic 3panel designs are included in the stock line of Douglas Fir Interior Doors — all-purpose designs, adaptable to every type of building.

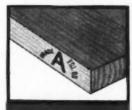
> Make full use of these new Factri-Fit features on your essential jobs today-and for all post-war building!

PRECISION-BUILT DOUGLAS FIR DOORS

Stock Douglas Fir Interior Doors are now available with these precision features. Savings on the job more than offset the slight additional cost.







Douglas Fir S **DOORS** FIR DOOR INSTITUTE

Now Available Only for Essential Building, Douglas Fir Doors Will Building, Again When War Needs Be Ready Again When War Needs

Lessen.

Tacoma 2, Washington

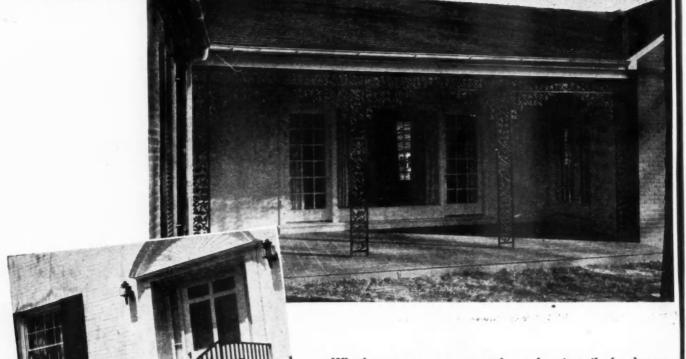
WRITE FOR CATALOG SHOWING THE COMPLETE LINE OF DOUGLAS FIR IN-TERIOR DOORS, TRU-FIT ENTRANCE DOORS, AND NEW SPECIALTY ITEMS.

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omplete Catalog

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# ORNAMENTAL METALS add the mark of distinction!



Whether you use ornamental metals primarily for decorative effects or for utilitarian purposes you'll find they add distinction to any type of building—either large or small.

Because of their great versatility, ornamental metals enable you to achieve almost any effect you want. In both ferrous and non-ferrous metals they offer you a wide choice in materials, qualities, colors and characteristics.

In doors, stairways, handrails, balconies, or any of a hundred and one types of exterior and interior decorations, ornamental metals enable you to combine beauty with practicality. Particularly is this true of aluminum and bronze windows which are being generally recognized for use in post-war building.

Fabricators of ornamental metals are anxious to work with you as you plan now for tomorrow's peacetime building. Write today for Directory of Leading Architectural Metal Fabricators. Address Dept. B-11.

NATIONAL ASSOCIATION OF

# ORNAMENTAL METAL MANUFACTURERS

209 CEDAR AVENUE

WASHINGTON 12, D.C.

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# ooms for OLD NEW



Remodeling - there's a backlog of home and commercial face-lifting too big to estimate today.

Peace will release it — and will release at the same time the versatile Masonite\* hardboards with particular advantages for such work.

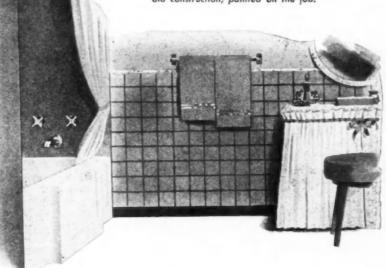
The Masonite boards easily apply over old construction. These hard, dense, durable sheets go up easily, may be cut and shaped with ordinary carpenters' tools. And almost any kind of finish may be applied to their smooth surface.

You think first of their use in modern kitchens and bathrooms - but you'll find them equally useful all over the home, for store and office work, for institutions and churches.

Write us for complete information about Masonite Presdwood, Tempered Presdwood and other special hardboards. We can supply considerable details on successful remodeling-and new construction. Masonite Corp., Dept. AB-11, 111 W. Washington St., Chicago 2, Ill.

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

Sketch of remodeled kitchen above shows wall surface of Masonite Presdwood Temprtile scored in 4" squares, enameled by manufacturer or painted on the job. Counter tops are Tempered Presd-wood, natural finish and varnished. Cabinet panels and doors of Presdwood, painted. Bath below shows Masonite Presdwood Temprtile and plain Masonite Presdwood panels, installed over old construction, painted on the job.





MASONITE BRAND PRODUCTS



It's tought trying to sell a woman something she doesn't want!

1900 "I love the house—but why didn't you put in Electric Lights?"

Ever try to "sell" your wife on the hat that you like—instead of the one she wants? Well, it's just as hard to sell the modern woman away from the cleanliness, convenience, economy and safety of a modern electric range! Make no mistake—women want to cook electrically now-a-days!

#### HERE ARE THE FACTS!

In 1941, ten times as many consumers demanded Electric Ranges as in 1933. The trend is rapidly towards Electric Cooking.

towards Electric Cooking.

Many surveys show that from 1.7 to 2.7 times as many women intend to buy Electric Ranges as now own them. Among these are surveys made by:

- OFFICE OF CIVILIAN REQUIREMENTS
- · CHICAGO TRIDUNE
- HOUSEHOLD MAGAZINE
- · THE J. WALTER THOMPSON COMPANY

The additional cost of wiring for an Electric Range adds less than 12¢ a month to payments on a 20-year F.H.A. loan! Get the details—now! Write for the FREE booklet, "WIRE AHEAD." Address:

ELECTRIC RANGE SECTION

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION 155 East 44th Street, New York 17, New York



194X "I love the house — but why didn't you wire it for an Electric Range?"

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





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Have Already Voted For



Don't overlook this important fact: 35% of today's home owners intend to buy an electric water heater! This has been established — this year — in an extensive survey made for the National Electrical Manufacturers Association.

It makes good sense, too! Because the electric water heater is

SAFE—Flameless, fumeless

CLEAN-Smokeless, sootless

EASILY INSTALLED—Requires no flues, vents or lengthy hot water types.

THOUBLE FREE as electric lights!

So be sure to install electric water heaters in all the homes you build. You'll be giving home owners and builders what they want!

ELECTRIC WATER HEATER SECTION
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

CLIK • ELECTROMASTER • FRIGIDAIRE • GENERAL ELETRIC • HOTPOINT • HOTSTREAM • KELVINATOR • MONARCH • NORGE • PEMCO • REX • RHEEM • ELECTRIC • THERMOGRAY • THERMO-WATT • UNIVERSAL • WESTINGHOUSE

House Wired For An ELECTRIC RANGE Is Already





**L-41 RUMORS**—For a time last month rumors were rife that L-41 would be drastically relaxed or done away with. Now it appears that it is only a change in H-2—but that's something.

V-E DAY AND ACTION—Within three months after V-E Day enough materials and home equipment will have been produced to handle a program of 350,000 units a year. This assurance has been given by W.P.B., whose offices are already working on the removal of obstacles to the manufacturer of home equipment.

end programing—The end of L-41 would be the end of programing and priorities, thereby taking the home building business out of control of the National Housing Agency. Blandford himself has stated that the end of L-41 means the end of programing.

This is one more reason why builders are so anxious to have L-41 kicked out as soon as possible.

F.H.A. VORTEX—In speaking of F.H.A.'s present position, Earl Draper, Assistant Administrator recently said that "F.H.A. is the center of a vortex—therefore it is now quiet."

It's an apt phrase: there certainly are some pretty violent whirlwinds in the vicinity.

**STRENGTHENING**—Draper also referred to the fact that F.H.A. during this "quiet period" is strengthening its position—adding some new state directors, increasing the pay of some important technical jobs that were formerly badly underpaid and in general planning for an active period ahead.

H-2 CAR—Chicago builders have been violently critical of the H-2 program. It was therefore with considerable disgust that a group of them on their way to the recent builders' meeting in Washington discovered that they were in Pullman car No. H-2.

\$500 FOR \$100—A gadget that costs \$100 but increases the value of a house by \$500 will be on display at the forthcoming NAHB Convention and Home Show in Chicago in January, according to George Nixon.

He cited this as just one more reason why builders will want to attend this Convention and Home Show.

BUFFALO BANKS—Buffalo savings banks are now offering home owners 80 per cent loans at 4½ per cent interest. These are made without F.H.A. insurance, and are possible under a recently revised state law. It's a good precedent.

MAN BITES DOG—A business man who went down to Washington with O.P.A. startled a group of N.A.H.B. builders recently with the remark: "Since I have been down here I have met far more crackpots from industry and business than from O.P.A. or other government departments."

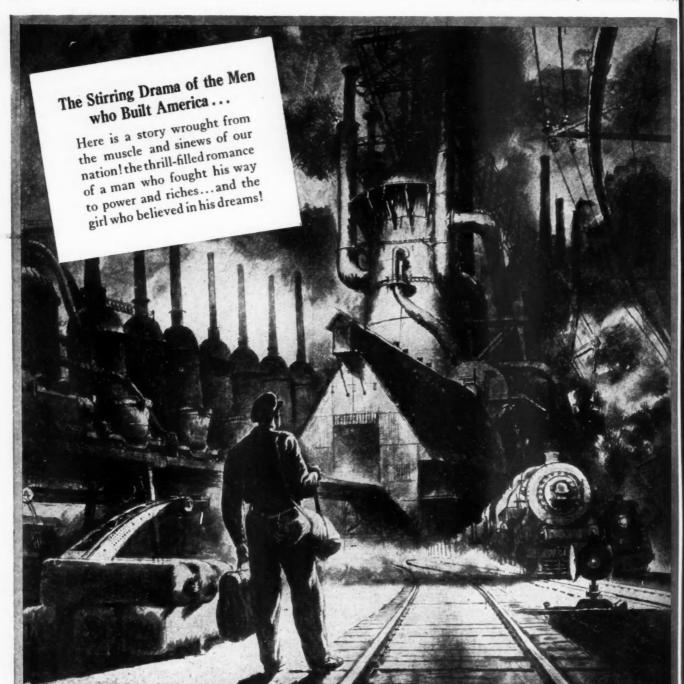
PREFAB WAREHOUSES—Officials dealing with surplus government properties, have some staggering jobs ahead. Just one of these is temporary storage. For this purpose plans are drawn for thousands of temporary steel warehouses which can quickly be erected on parking lots or on vacant property or on airfields adjacent to plants. When VE Day comes it may be important to move surplus materials and equipment quickly out of many plants to speed up reconversion.

FAST CUT BACKS—Cut backs of materials and munitions of war will come fast and furious right after VE Day, top W.P.B. men state. Present production will be reduced 40 per cent—probably within a 30 day period after VE. This will mean a 4½ to 5 million job cut.

conversion plans—Continuance of the war with Japan for some time after the end of European phase will in a sense be a help to conversion, W.P.B. experts declare. It will permit many people now employed in war production to shift to peace-time jobs in an orderly fashion. Expenditures for continuance of the Japanese war will tend to maintain purchasing power during the reconversion period.

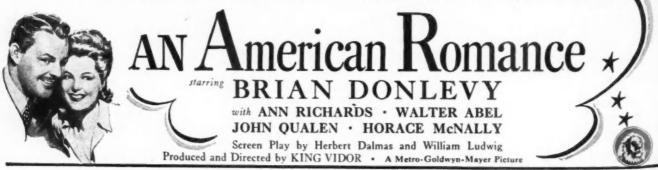
pants of Public Housing projects get used to being asked a lot of questions, but this one makes them blink.

The form asks: "Is baby expected? When?"



Drawing by Peter Helck

M-G-M PRESENTS KING VIDOR'S PRODUCTION IN TECHNICOLOR



### WOOD IS STRONGER. MORE DURABLE THAN EVER

Many a postwar construction job from small advantage of these 1. WOOD IS STRONGER. Synthetic resin waterproof structural polywoods and slues today ing architectural waterproof and slues today architectural possibilities. WOOD IS MORE DURABLE.

Modern chemicals and treating methods by increasing vastly the life methods organisms and to the its resolved for modern and to the ravages of wood insects. 

Now that these two leaders have combined to come look for research and experience, improvements

I. F. LAUCKS, INC.

I. F. LAUCKS, INC.
America's Glue Headquarters
SEATTLE (4)—911 Western Avenue. LOS
ANGELES (1)—859 E. 60th Street. Factories:
Seattle, Los Angeles, Portsmouth, Va., Lockport, N.Y. In Canada, address: Laucks, Ltd.,
Cranville Island, Vancouver, B. C., or Laucks,
Ltd., Eastern, Stanbridge, Guebec.

MONSANTO CHEMICAL COMPANY Organic Chemicals Division 1700 South Second Street St. Louis (4), Missouri

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#### PENN HYDRO-AIRE HEATING UNITS

Cut-away section of Hydro-Aire (split system) shows how all parts and controls are built-in at the factory.

the factory.
Cold, dusty air is drawn in through two large filters, cleaned and humidified. Steam heats the completely shielded copper radiator through which all air is blown directly into ducts.
Every heated boiler part is surrounded by heavily insulated water; no wasted heat. Long backward and forward fire travel ups efficiency, Hydro-Aire makes possible combining warm air with steam or hot water radiation in kitchen or bathroom to avoid odors. Year-round hot water cost compares favorably with other methods, eliminates extra basement equipment.

Here's how I'm making money with Penn Packaged Heat-I'm primarily "spec" builder although I do build some individual homes. Until I hooked up with Penn, heating was my most troublesome department. Penn Packaged Units ended that . . . instead of expensive and cluttered parts inventories, I store each unit as it is shipped to me from the factory—crated in one box and ready to pick up, set down and plug in.

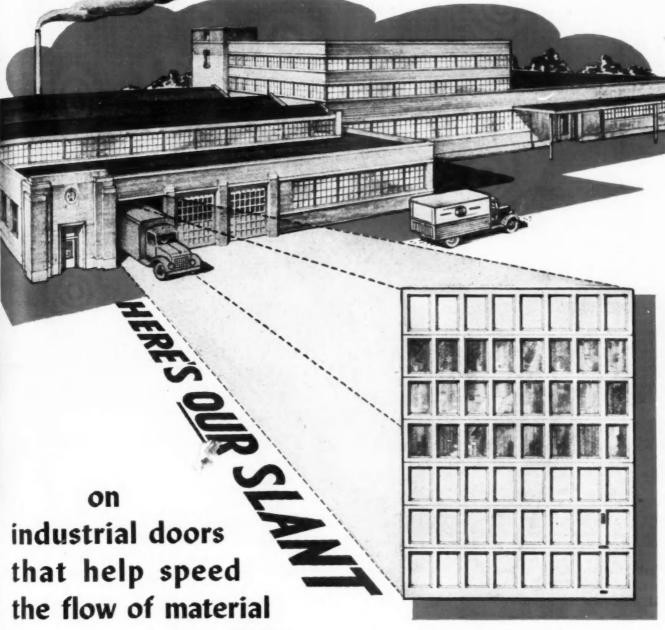
Penn saves me 90% of former installation costs, eliminates heat engineering headaches, reduces my overhead of skilled labor. When I know what b.t.u. a given size house needs, I have a Penn Packaged Unit to fit that house with no guesswork.

When it comes to sales appeal, Penn gives me more to offer my prospect than any heating equipment I've seen. Penn fits into mass production like cogs in a gear and mass production means money to me. These are just a few ways Penn has turned my heating liabilities into assets. If you want to know more write for the Story of Penn Packaged Heat. 50 Fruitville Road, Lancaster, Pennsylvania.

BOILER BURNER UNITS AIR CONDITIONER UNITS Packaged PENN

PENNGUN WATER HEATERS HYDRO-AIRE (Split System)

PENN BOILER and BURNER MANUFACTURING CORP. LANCASTER, PENNSYLVANIA



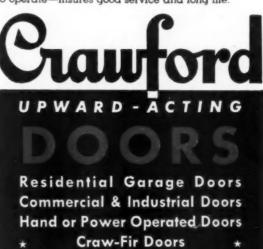
● An industrial door has first of all to be an efficient functional unit in a plant's operation. It has to be easy-acting and dependable in operation to expedite movement of materials and products. It has to be durable to withstand constant use and the onslaught of weather. It has to be tight to conserve heat and exclude wind, rain and snow. It has to be good looking to conform to advanced industrial architecture.

IN and product OUT!

Crawford Industrial Doors are engineered to meet industrial application needs. Quality materials, careful workmanship, skillful design based on experience combine to make each Crawford Door an efficient functional unit. Standard Crawford Doors in widths from 4 to 20 feet and in heights from 6 to 16 feet will meet the majority of needs. Crawford engineers will gladly cooperate to work out any need for special doors. Your inquiry will be given prompt attention.

Crawford Door Company, 401 St. Jean, Detroit 14, Mich.

Standard Crawford high-clearance Industrial Door, seven sections high with three sections glazed, shown applied to enclosed loading dock. Simplified mechanical equipment involves few operating parts. Easy to install, easy to operate—insures good service and long life.



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HEATERS System)

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• Medical miracles, today, are taken for granted on the battle fronts of the world! But even the lightest casualty can become a crucial case when assaulted by the enemy forces of Nature. Danger lies everywhere in the air raids of disease-carrying insects.

LUMITE, the new plastic screen woven from Saran\*, says, "No Admittance!" to these vicious marauders. Always on the job with our armed forces wherever disease-carrying insects are a problem, LUMITE is impervious to heat, cold, rain, snow, rust and corrosion. That's why LUMITE

stands the test - in hell on earth!

Today's fighting men know the strong selling points of LUMITE from twenty-four-hours-a-day experience. Home again, they'll expect—and demand—LUMITE plastic window screening in their homes... offices... factories. For they'll have seen the durability and effectiveness of LUMITE proved under every adverse condition; tested in the laboratory of hard experience.

Here is an important postwar product being "pre-sold" today across the globe. A great postwar market developing now for tomorrow... FOR YOU!

\*A product of the Dow Chemical Co.

# The new plastic screen cloth

# LUMITE

Chicopee Manufacturing Corp., Sales Office: 40 Worth St., New York 13, N. Y.

World's Largest Maker of Plastic Screen Cloth

### TESTED IN WAR READY FOR PEACE

- ★ Will not rust or corrode... long-lasting
- ★ Non-staining...no streaking of sills or sidewalls
- ★ Strong, resilient . . . no dents or bulges
- ★ Unaffected by fumes or salt air
- ★ Translucent . . . admits more daylight
- \* Non-inflammable
- ★ Will be competitively priced

#### **Memo to Building Contractors:**

Include LUMITE New Plastic Window Screens in your postwar plans for homes, factories, offices, schools! Write now for detailed information.

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#### ... This is the house that Gas



runs!

MANY OF THE MOST STRIKING ADVANCES that can be offered in post-war homes of all prices are now being perfected in the laboratories of the Gas industry. Today the public is being told about these new improvements, as well as about the established advantages of Gas, in a broad program of national advertising. As part of your thinking and planning, we suggest that you consult your local Gas company for latest information on Gas service and Gas appliances! AMERICAN GAS ASSOCIATION



THE MAGIC FLAME THAT WILL BRIGHTEN YOUR FUTURE

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Until th

Yes - better hardware is ready for the postwar Craw-Fir-Dor





THE Crawford Door Company, maker of Craw-Fir-Dor hardware, is now ready for production of an improved Craw-Fir-Dor unit — a unit that is better because of two factors:

1—Crawford has gained valuable experience through the manu-

- facture of precision airplane parts.
- 2—Crawford has carried on an extensive research program to discover every possible improvement that would result in even easier installation, longer life, more trouble-free operation.

In your planning, remember: the new, better-than-ever Craw-Fir-Dor will be ready the moment the reconversion "go-ahead" is given!

For special residential or industrial installations, write: Crawford Door Co., Detroit, Mich., who make a complete line of sectional overhead-type doors.

Fir Door Institute, Tacoma 2, Washington

1944



YOUNGSTOWN'S Post-War Kitchens are Builders' Kitchens in every sense of the word. They save installation and finishing time. They are modern and attractive to prospective purchasers.

They are delivered on the job when (and not until) needed from a nearby warehouse.

The wide variety of standard factory fabricated and finished units permits the builder to assemble any amount of storage space and work surface that his house can afford.

Send for the new Youngstown "Builder's Kitchen" Catalog and find out why they are so popular in new construction.

#### MULLINS MANUFACTURING CORPORATION WARREN, OHIO

LARGE PRESSED METAL PARTS • PORCELAIN ENAMELED PRODUCTS
DESIGN ENGINEERING SERVICE

Youngstown Kitchens.

Until the last shot is fired—buy bonds—give blood—salvage fats and paper — work for Victory. Then do your part to



PLEASE SEND ME BOOKLET ENTITLED, "The BUILDER'S KITCHEN" YOUNGSTOWN KITCHENS Mullins Mfg. Corp.,

Dept. AB-1144, Warren, Ohio

Name

Street

City

State



THEY'RE ALL MIXER... NEWEST FEATURES SURPRISING YARDAGE... LIGHT ENOUGH TO HANDLE... HEAVY ENOUGH TO LAST... PROFIT WINNERS BACKED BY OVER 30 YEARS OF MIXER EXPERIENCE

You'll need this kind of modern equipment for the MASS of building and remodeling that's on the boards. Wonder Small Job Mixers have been FIRST CHOICE among builders since the beginning of the Mixer industry. New models NOW AVAILABLE on skids with pulley for hand or power drive — also on 2 steel or pneumatic tired wheels, or complete with husky engine.

**GET INFORMATION NOW!** 



CONSTRUCTION MACHINERY CO.
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For the Latest in

PUMPS . . MIXERS . . CON-CRETE GUNS . . BATCHING AND PLACING EQUIPMENT . . HOISTS . . POWER SAWS . . CARTS AND BARROWS!

ONLY

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#### A FAMOUS FAMILY WITH A HOST OF FRIENDS

These fifty-five quality products forgreaterhome-owner satisfaction make Norge America's largest single pre-war producer of a complete line of Rollator refrigerators, electric ranges, washers, gas ranges, home heaters and commercial refrigeration. A BORG-WARNER INDUSTRY Norge Division, Borg-Warner Corporation Detroit 26, Michigan

ONLY PRE-WAR PRODUCER OF A COMPLETE LINE OF MAJOR APPLIANCES

# 20 MANUFACTURERS will make Gas Ranges bearing this SEAL OF APPROVAL

A-B STOVES, INC. AMERICAN STOVE CO. CALORIC GAS STOVE WORKS CRIBBEN & SEXTON CO. DETROIT-MICHIGAN STOVE CO. THE ESTATE STOVE CO. GLENWOOD RANGE CO. JAMES GRAHAM MFG. CO. GRAND HOME APPLIANCE CO. HARDWICK STOVE CO. A. J. LINDEMANN & HOVERSON CO. O'KEEFE & MERRITT CO. ROBERTS & MANDER STOVE CO. GEO. D. ROPER CORP. STANDARD GAS EQUIPM'T CORP. THE TAPPAN STOVE CO. WESTERN STOVE CO., INC.

IN CANADA

CLARE BROS. & CO., LTD.

GURNEY FOUNDRY CO., LTD.

MOFFATS, LTD.



#### TRADE-MARK OF THE ASSOCIATION OF GAS APPLIANCE AND EQUIPMENT MANUFACTURERS

This is the Seal of Approval you will see spotlighted in model homes and showrooms all over the United States and Canada. For Gas Ranges bearing this Seal will be built to the newest and highest performance specifications of home economists and engineers—and pretested by world famous laboratories to provide a certified buying guide. And it is the buying guide women will look for—\$6,000,000 is being spent to tell them.

For complete information about Gas Ranges bearing the "CP" Seal, ask your dealer or Gas Company or write Association of Gas Appliance and Equipment Manufacturers, 60 East 42 Street, New York 17, N.Y.



THE FLAME THAT WILL BRIGHTEN YOUR FUTURE

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#### HELP CLINCH SALES WITH THESE NEW

# Easy opening

Show your postwar house-buying prospects this new double window (a Fenestra Steel Casement linked to outside storm sash)...show them how both windows open together, easily—even over a bathroom toilet.

Fenestra Casement Windows have many features that please prospects. They add beauty inside and out . . . larger glass areas provide more daylight . . . ventilators swing out to catch breezes . . . both sides are safely cleaned from inside the

room...low-cost screens and storm sash are attached quickly,

#### **DOUBLE WINDOWS**

easily . . . and Fenestra Windows are low in cost.

Although we cannot make Fenestra Windows until our war job is done, we have determined our postwar line of residential windows so you can plan now. This simplified line will provide a window that is right—in size, shape and method of opening—for every room. Write, now, for information. Detroit Steel Products Company, Dept. AB-11, 2260 East Grand Blvd., Detroit 11,

Michigan. Pacific Coast Plant, Oakland, California.

Fenestra

STEEL CASEMENTS

FOR EVERY ROOM

A RIGHT WINDOW



Building Managers use panels of Insulux to light up corridors and hallways and to transmit daylight from office to office.



Factory Owners use panels of Insulux to solve problems of light, temperature, humidity and dust control. And — there are operating economies right from the start.



Store Owners use panels of Insulux to dress-up an entrance way and to flood salesrooms with natural daylight.



Home Owners use panels of Insulux to add cheerfulness and charm to a kitchen, living room, bedroom or bath.

#### OWENS - ILLINOIS

#### INSULUX

**GLASS BLOCK** 

# You Can Make Money *Right Now*Installing Panels of Insulux

Why wait for the building boom to start? There's plenty of remodeling work to be  $had - right \ now - right$  in your own community.

Install panels and partitions of Insulux Glass Block. In homes, stores, schools, hospitals, offices and factories!

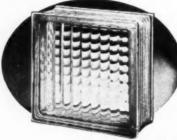
There's money in it - for you!

Insulux is available now – and it can be purchased and installed quickly and economically.

Insulux Glass Block come in many face designs. All of them diffuse light better than ordinary windows. Some of them are best suited for decorative purposes. Others give all the advantages of natural daylight — without objectionable glare.

Panels of Insulux transmit light; obscure vision for privacy's sake; reduce fuel loss; keep out noise and dirt; are easy to clean, and add to the cheerfulness and attractiveness of any building.

By all means – get the facts! Consult with the Insulux Glass Block jobber or mail the coupon below for complete information.



Insulux Glass Block is a functional building material—not merely a decoration. It is designed to do certain things that other building materials cannot do. Investigate!

#### MAIL COUPON FOR FREE BOOKLET



OWENS-ILLINOIS GLASS COMPANY
Insulux Products Division, Dept. 107, Toledo, Ohio
Gentlemen: Please send, without obligation, your
book entitled, "Methods of Replacing Worn-Out
Windows with Insulux Glass Block."

Name and Title.

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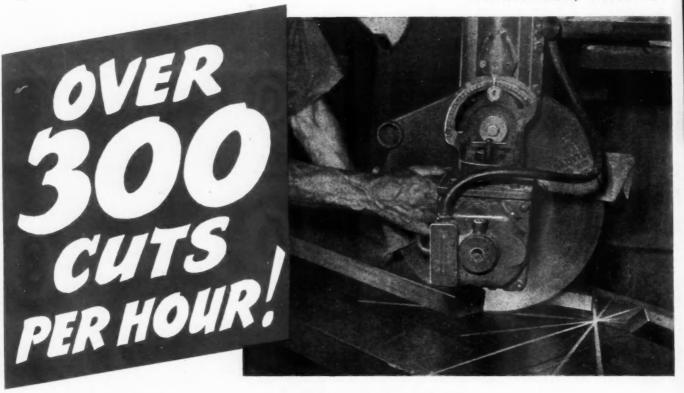
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#### MONARCH UNI-POINT RADIAL SAW

Actually, 714 rafters, with two angle cuts on one end, third angle cut on other end, in seven hours, using two machines, two operators and two helpers. Yet, it is no unusual record, just an idea of the speed and amount of production achieved with Uni-Point.

> It is also a preview of what will be needed in the post war building era to meet competition successfully.

This much is certain, production woodworking machinery is here to stay. It is no longer a question whether machinery should be employed. Al-

> ready, it is a question of operator ingenuity plus the best machinery, to create better short cut methods, to increase precutting efficiency, to cut costs to the bone, to give the public the best built home at the most attractive price.

> Uni-Point provides mechanical simplicity to save time. speed to save man-hours, adaptability to save dollars by short cut methods. In the hands of men with imagination Uni-Point can perform production miracles. Make Uni-Point your next machine and watch the costs go down!

> > Send for catalog 60





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## Builders' News Review

Latest Washington developments—News of the National Association of Home Builders and Local Associations

#### WPB Eases Home Building Restrictions to get Private Housing Started

Best news for home builders during October was the announcement that WPB has relaxed construction standards m houses to be build under NHA's H-2 program to the point where homes approximating pre-war standards may be built. Though a far cry from the complete lifting of L-41, the move is a step in the right direction in that it makes possible the reation of homes equal to FHA standards under Title II, and be attractive to the huge reservoir of mortgage money lying idle in the lending institutions of the nation. This is still a war housng program and the structures may be built only in areas where NHA determines the need to be ritical.

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The demonstrated unworkability of the previously announced H-2 program, plus the renzy of apathy with which it was greeted by builders and bankers throughout the country, had much to do with NHA's push for the revised program. In effect, the insuring powers at FHA stated what was the minmum their agency could insure the authorities at WPB controling materials set forth what wild possibly be spared for bousing without injury to the war effort, and a series of round the table talks was held to iron nut the differences. Hoped-for lifting of sales price restrictions, on homes that could be built, to new ceilings of \$8000 and \$9000, depending on location, have not been forthcoming as we go to press, but expectations are that something in the way of relief along this line will be worked out shortly. OPA has a loud voice in that decision.

Specific relief afforded under the instant order includes:

- 1. Elimination of the regulation setting a maximum total floor area. Retained, however, is the restriction on maximum board foot area of dimensional lumber allowed per square foot of floor area.
- Elimination of the requirement, heretofore in effect in certain areas, that exterior walls be of clay, masonry or concrete products.
- Removal of the restriction on the size of hot water tanks that may be used.
- Removal of the restriction on the number of electrical outlets allowed per house.
- 5. Removal of the requirement that bathrooms and kitchens must be "back-to-back."
- Permission to use in new home construction any materials that builders can obtain without priority assistance.

(For an overall story on reconversion prospects, as they affect the home-building industry, see page 70.)

#### Twelve New Local Associations Join National Body

Twelve new local associations have recently become affilited with the National Association of Home Builders. Approved by the NAHB Board of Directors these Associations, their location and their officers follow:

Marin Builders Association, Sausalito, California: Mr. Otis Smith, Pres., Larkspur, Cal.; Mr. E. Racouillat, Vice Pres., San Anselmo, Cal.; Mr. S. L. Sefton, Secy., Sausalito, Cal.; Mr. Wm. Wagner, executive officer, Larkspur, Cal.

Home Builders Association of Jacksonville, Florida: Mr. Joseph W. Davin, Pres.; Mr. Walter Crabtree, Vice-Pres.; Mr. Chas. E. Commander, Jr., Secy.; Mr. Lawrence C. Pearce, Treas.; Mr. Joseph W. Davin, executive officer.

Home Builders Association of South Florida, Miami, Florida: Mr. Chas. I. Babcock, Pres., Miami; Mr. Lester F. Preu, Vice Pres., Miami Beach; Mr. M. M. Mason, Sec'y-Treas.,

Miami; Mr. M. M. Neumann, Exec. Secy., Miami.

Fort Wayne, Indiana, Chapter of NAHB: Mr. Leonard C. Smith, Pres.; Mr. Horace C. Horn, Sec.

Marion County, Indiana, Residential Builders: Mr. Fred L. Palmer, Pres., and Executive Officer, Indianapolis; Mr. Everett J. Holloway, Vice Pres., Indianapolis; Mr. Rollin E. French, Secy., Indianapolis; Mr. Delbert B. Meyer, Treas., Indianapolis.

Home Builders Association of Des Moines, Iowa: Mr. A. I. Madden, Pres.; Mr. Oscar Powell, Vice Pres.; Mr. James R. Leverett, Sec'y-Treas.

#### Greater Boston Joins

Home Builders Association of Greater Boston, Massachusetts: Mr. Arnold Hartman, Pres., Newton Centre; Mr. Merrill C. Nutting, Vice Pres., Newton Centre; Mr. Robert Rolde, Brookline, Mass.

Springfield, Massachusetts, Home Builders and Contractors Association: Mr. Fred G. Pothier, Secy., Springfield. Memphis, Tennessee, Asso-

Memphis, Tennessee, Association of Home Builders: Mr. Wallace E. Johnson, Pres.; Mr. John B. Goodwin, Vice Pres.; Mr. R. A. McDougal, Secy.-Treas.

Nashville, Tennessee, Home Builders Association: Mr. Sam F. Coleman, Pres; Mr. C. B. Kelley, Vice Pres.; Mr. C. W. Russell, Secy.; Mr. John S. Cartwright, Treas.

Home Builders Association of Dallas, Texas: Mr. Hugh Prather, Sr., Pres.; Mr. A. P. Simons, Vice Pres.; Mr. M. M. Frost, Secy.; Mr. Grover A. Godfrey, Exec. Secy.

Seattle, Washington, Master Builders Association: Mr. F. R. McAbee, Pres.; Mr. Edgar Johnson, Vice Pres.; Mr. G. Weldon Gwinn, Secy.; Mr. Bernard Dahl, Treas.; Miss Irene W. Jones, Executive Secretary.

#### **Restrictions Out**

The requirement that plumbing be backed up for the saving of critical materials, and other offensive war housing restrictions have been wiped out by WPB. See local FHA offices for details.

#### Gerholz and Merrion on Wide Speaking Trips

In a pair of simultaneous swoops about the country, President Bob Gerholz and First Vice-president Joe Merrion of the NAHB are scheduled for more than thirty calls on building groups. President Gerholz's itinerary, which started on October 25th, includes Cincinnati, Dayton, St. Louis, Louisville, Nashville, Chattanooga, Memphis, Little Rock, Oklahoma City, Fort Worth, Dallas, San Antonio, Houston, New Orleans, Birmingham, Atlanta, Miami, Jacksonville, Richmond, and Baltimore. Vice-president Merrion will swing into action on November 11th at Canton, Ohio, and then go on to Newark (N.J.), Jamaica, (N.Y.), Stamford, Bridgeport, New Haven and Hartford (Conn.), Springfield, Worcester and Boston (Mass.), and wind up at Camden (N.J.) on the 24th. Both tours will include calls on groups presently affiliated with the National Association, and meetings with groups interested in affiliation.



POSTWAR PLANS DISCUSSED
—Paul Harris, Yeoman 2c. U. S.
Navy, and Wallace E. Johnson,
builder, of Memphis, Tennessee,
and President of the Memphis
Association of Home Builders, together recently in the Nation's
Capital. Yeoman Harris at the
time of his induction nine menths
ago had risen to the Vice Presidency of Johnson's Small Homes.
Inc., a half million dollar corporation. Johnson and Harris will team
up again for post-war to provide
Memphis with better homes.

#### **NHA's Postwar Budget**

In a document submitted at the request of the Budget Bureau, NHA, the "war housing" agency, comes to the conclusion that for the fiscal year 1946 it will need two and a half million dollars to operate. Figures call for \$1,813,000 to run the Central Office and \$700,000 for its several Regional Offices; a "total" of \$2,508,000. (The \$5000 mistake in addition isn't ours; we're just quoting.)



WORCESTER BUILDERS PLAN SPRING HOMES SHOW-John A. Olson, Director and Clark Sundin, President of the Worcester Master Home Builders Association, discuss plans for their Spring Homes Show. The Home Builders hope to feature one or more of the prize-winning model homes from the National Homes Show sponsored by the Chicago Metropolitan Home Builders in January. If materials and manpower situations permit, a home or homes will be built from these models, on a site convenient to all parts of the city, in accordance with the past practice of the Worcester Homes Show. In 1941, the last year in which the exposition was held, more than 70,000 people attended the show, and some 32,000 passed through the model house.

#### A WORD OF THANKS

to those associations and members who have sent in material and pictures for these pages, and a request

to keep up the good work. To those of you who haven't—your fellow builders all over the country want to know what you're doing, and we want to tell them. Let us know what's going on in your association and your city, in the building business. Send the facts to Jim Bonnell, Eastern Editor, American Builder, 30 Church St., New York City 7, N.Y.

#### Dodge Corporation's Findings on Postwar Home Market

Findings recently released by the F. W. Dodge Corporation show that most American families who plan to build postwar expect to spend an average of \$5500 for construction costs alone (exclusive of land), with two-thirds of the expected postwar demand for homes higher in cost than the \$6000 war time limit set by WPB. Sixteen per cent of those interviewed expected to spend more than \$9500 on their postwar home, while less than twelve per cent expected to get a home built to order for \$4500 or less, land cost excluded in each instance.

In a separate survey among operative builders conducted by Sweet's Catalog Service some 200 builders polled stated that they expected to build a total of more than 15,000 new homes in the first two years after materials and manpower become available, of which more than one half will sell for \$7000 or higher, according to advance orders and conferences on architectural plans with prospective home owners.

#### Ferguson Reminds Builders of Enormous Home Repair Job Ahead

FHA Commissioner Ferguson has again called attention to the huge postwar job of "putting the nation's 37,500,-000 homes, neglected of necessity during the war, back in a state of good repair." It is, he declares, the Number One job of the nation's financial institutions as well as its allied building interests, and a job that can be tackled without reconversion problems; "paint," he points out, "has remained paint, plaster plaster, and they need only the stroke of a pen" to be directed back to civilian needs once war's demands have ceased. Pointing out the possibilities for wide employment of both skilled and unskilled labor in the home repair field, the Commissioner quoted figures to show that even in 1940 more than 6,500,000 of our dwellings needed some form of major structural repair, while 10,800,000 needed plumbing improvements. Even in peace times, he declared, repairs never caught up with the full market, and we are now running more than four years behind because of innumerable jobs necessarily deferred by wartime conditions.

#### San Antonio Builders Plan New Homes Campaign

President L. E. Fite, of the San Antonio, Texas, Home Builders Association, has announced plans for the resumption of the cooperative advertising campaign and the traditional home exhibition project that were formerly a twice yearly event among members of the Association. Designed to show the public exactly what it can expect in the way of

postwar homes, the plan will follow the Association's past practice of having each member-builder select an exhibition home for display to the public, place before it a sign carrying the Home Builders' emblem and, inside the house, list the addresses of all other exhibition homes. Newspaper publicity will feature a city map showing location of all models, as well as invitations from individual builders to visit their projects. In the past the competition and the good will created by these activities have paid dividends, according to President Fite.

The San Antonio Association has also gone on record as strongly endorsing refusal of the City Inspector to issue permits for small, make-shift houses, of one or two rooms, chiefly to serve tenants in the Latin-American quarter of the city. Pressure from groups promoting cheap subdivisions of such structures, without even adequate sewage facilities, had recently become heavy and the action of the Home Builders Association, plus a similar resolution of the San Antonio Real Estate Board, seems to have had much to do with holding the line. Good cooperative action, boys.

## Banker Calls For Permanent Federal Housing Administration

Declaring that FHA "fills a place in our economic system which belongs properly to Government because, instead of competing with private enterprise, its operations make it possible for private initiative to enter wider fields constructively and safely," Levi P. Smith, president of the Burlington, Vermont Savings Bank and former president of the National Asso-

#### Dallas Builders Association Off to Fast Start

The Home Builders Association of Dallas, a comparative newcomer to the National organization, has started things rolling in a typically big Texas way. Under the direction of Hugh E. Prather, President, and Grover A. Godfrey, Executive Secretary, a first meeting was held at the end of September at which more than a hundred builders and representatives of allied industries (see right) heard Ben H. Wooten, vice President of the Republican National Bank, on "What's Ahead for Home Builders in the Postwar Program?" Robert E. Adams, NAHB Director, one of Oklahoma's largest builders and developers, presented the Dallas group with its official charter on October 10th, and at its next



meeting, scheduled for November 15, NAHB President Robert P. Gerholz will be guest of honor. Other plans include a Hallowe'en Night, complete wth buttermilk, fried pies, doughnuts, costume party, fiddle band and magic show. One of the noisiest features of the new Association is its 18-man glee club called the "Builderoos" guaranteed, according to Secretary Godfrey, to make builders everywhere swoon.

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In an article titled "The FHA [s Here to Stay" appearing in the forthcoming issue of Insured Mortgage Portfolio, the agency's quarterly publication, he says no private insurance company ever existed to perform the work FHA was created to do, and he doubts that any private company could, without the government behind it, "ride out an era of falling prices and stave off possible collapse." He concludes that the country will demand continuance of FHA serv-



MOTHER BUILDERS—and literally brothers, though building in is separated parts of the County, are Howard W. Pearce (left), d Buffalo, New York, and Lawnence E. Pearce, of Jacksonville, florida. Howard, a member of to building firm of Pearce and fearce, is President of the Niagat Frontier Builders Association, while Lawrence, a prominent fleridg builder and developer, is wasurer of the Home Builders Association of Tacksonville.

#### Temporary Public Housing Takes to the Road

The FPHA has created what ounts to a national pool of vacant temporary and deuntable housing to meet ture needs. Even some temrary units not considered deountable at the time of their ection have submitted graceally to the saw and are now ere panels in transit. The lea is to ship the dismantled mits from locations where ley have served their purpose spots where there is a presnt need for them, thus saving cost, insuring maximum
servation of lumber and her scarce items, and lesseng the temporary housing its that the government will ave to get rid of postwar.

#### Boom-bah! House Collapsed? Ohh, Pshaw!

A number of "fairly high class fellows" will shortly be chosen from NHA ranks, according to Training Officer McFarland of that Agency, to study housing under NHA direction in Washington for six months on their own time, and then proceed to graduate scholarships at Harvard for at least one term. This, according to McFarland, will give these employees a chance "to redunk themselves in an academic atmosphere." How jolly!

While wondering at this strange performance on the part of a strictly "war" agency, we particularly enjoyed Frank Cortright's comment: "Joe Builder sez three months on a building project would be worth three years at Harvard."

#### NAHB's Lady Builder Addresses Indoor **Climate Institute**

Mrs. Henny Mollgaard, of the Mollgaard Company, Mil-waukee, who is NAHB's only lady builder and a member of its Postwar Committee, was on the program of the recent session of the Indoor Climate Institute in Detroit. Speaking from her own experience in the building field, Mrs. Mollgaard stressed the educational job of acquainting the public with possible "indoor comfort," and the problems of financing the postwar home. She pledged cooperation of builders with manufacturers in making possible the production of a better home for less money.

#### **New Judge Appointed for Builders Home Contest**

Mrs. Herbert F. French of Braintree, Massachusetts, Chairman of the American Home Division of the General Federation of Women's Clubs, has accepted an appointment to act as one of five judges in selecting the six prize-winning postwar designs to be featured at the Home Builders Exposition and Convention to be held in Chicago next January. The other four judges include: Mr. Raymond J. Ashton, Salt Lake City, Utah, President of the American Institute of Architects; Mr. Abner H. Ferguson, FHA Commissioner; Mr. John Cummings Lindop, Chicago Builder; and Mr. John H. Stelle, Chairman of the American Legion's G. I. Bill of Rights Committee.

(Continued to page 94)

#### Cortright's Column

By Frank W. Cortright

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



Builders Propose Unprecedented Volume-More than 200 representatives of the country's builders met in Washington recently to determine the full extent of the industry's transition and postwar responsibilities. It was agreed that a two-fold opportunity exists; first, to provide the maximum volume of construction in order that millions of workers, on and off site, may be employed; secondly, to initiate a total housing program to the end that all Americans may be adequately housed. Some of the means necessary to accomplish this are: (a) lower costs of materials and equipment through standardization in production and more efficient distribution; (b) lower site assembly costs through new efficiencies in factory and site fabrication and new techniques; (c) constantly improved design of structures; (d) cooperation with labor to effect new economies in construction costs; (e) modernization and standardization of building codes; (f) new financing devices with moratorium and maintenance features; (g) better planned subdivisions and communities.

Canada's National Housing Act for 1944 is designed to promote a vast volume of new construction, repair and modernization of existing houses. Members interested in securing the complete story should write to: F. W. Nicolls, Director of Housing, Department of Finance, Ottawa, Canada, for a copy of the Act. Under a partnership arrangement with approved lending institutions, the government loans up to 25 per centum at various specified interest rates and for various terms. Losses are shared on a proportionate basis according to pre-established regulations. Special inducements are made to encourage the construction of low rental housing projects by limited dividend housing corporations. Most interesting of all is the adoption of the yield insurance plan guaranteeing to trustee institutions a net return of 2½ per centum per annum of the cost of the project for a period not exceeding the estimated useful life of the project. In addition to housing research and community planning by government, grants to municipalities for slum clearance, replanning, rehabilita-tion and modernization are provided for. All in all, our Canadian cousins appear to have killed the public housing menace and established a government-aided private enterprise procedure which will solve their housing problem and supply employment in their critical postwar years.

G. I. Bill-It is no secret that the building and loan associations are extremely happy about the liberal interpretation the Veterans' Administration has placed upon Section 500. On the other hand, the mortgage bankers, various other groups and some agencies of government are disturbed over the fact that the great bulk of the financing is not being forced into Section 505 procedure. It is their fear that, in an inflationary market, appraisal procedures will be loose and great damage to the market and to the veterans will result.

A Brief Resume of the Act-

ELIGIBILITY-"Any person who shall have served in the active military or naval service of the United States at any time on or after September 16, 1940, and prior to the termination of the present war and who shall have been discharged or released therefrom under conditions other

(Continued to page 92)



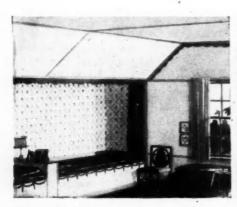
#### PLENTY OF GOLD BOND MATERIALS FOR EVERY TYPE OF JOB!

DON'T believe those crepehangers who go around saying the lumber shortage is going to prevent large scale remodeling as soon as building restrictions are lifted. Most of the jobs people are planning require little or no lumber at all!

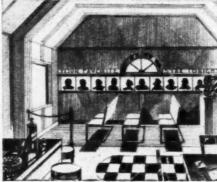
Take these rooms, for instance. They represent a pretty good cross-section of what most of the remodeling jobs will be. More room for growing kids. More play space for the whole family. Extra bath-

rooms. These jobs can be done almost entirely with Gold Bond materials that are available right now at your Gold Bond Dealer's!

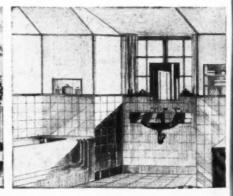
Why wait any longer to get this type of work? Lots of remodeling can be done within the present building restrictions. And as soon as the go-ahead comes on building, there will be many more remodeling jobs that you can do with versatile, available Gold Bond Materials!



Take this girl's attic bedroom. It's a perfect example of how available Gold Bond materials can do a good job with a minimum of scarce lumber. Just use Gold Bond Rock Wool Batts to insulate side walls and ceilings. And for the walls use fireproof Gold Bond Gypsum Wallboard that takes any decoration!



Attic or basement game rooms—a place to show movies or to raise the dickens—are sure to figure in most people's plans for postwar remodeling. Little in the way of lumber is needed for a job like this! Walls and ceilings are attractively done with Gold Bond Gypsum Wallboard, either plain or in wood grain finish.



Increasing families have a way of making that powder room or extra bathroom a must on the remodeling list of many families! Here, fireproof Gold Bond Gypsum Tile Board solves a problem. Enameled any color, it makes a permanent, attractive, water-repellent wall at about 1/10 the cost of ceramic tile!

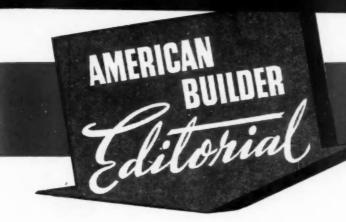
Gold Bond is in stock at your Dealer's!



#### BUILD BETTER WITH GOLD BOND

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NATIONAL GYPSUM COMPANY . EXECUTIVE OFFICES . BUFFALO 2, N. Y.



#### Time to be on your toes

ONDITIONS confronting the builders of this country will be far different at the end of this war than at its beginning. There will, it is true, be a vast market for new homes-probably the biggest that the country has ever seen.

But will residential builders, as we have always known them, be able to survive and turn this mar-

ket into actual construction?

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The answer seems clear; builders will prosper in the post-war home building field only if they are progressive, on their toes, and prepared for quick action under swiftly changing conditions.

#### Severe competition seen

The builder of tomorrow will require more skill, intelligence, and scientific knowledge than he did in the past. And he will face very severe competition which will call for everything he has in the way of ability if he is to stay in business.

Two powerful but entirely different forces will enter and compete for the post-war home market.

In the first place there will be hundreds of thousands of men returning from the services who will want to get into the building business. Many of these men have had extremely useful training and experience with the Seabees and the Construction Divisions of the services. They will get additional training from special courses and schools financed with public funds after the war.

Thus the building industry, which during the past decade has lost thousands of builders and building men due to retirement and old age, will find itself flooded with young men full of new vigor and new ideas. Most of these young and vigorous new competitors for the building dollar will start as small operators. But many will be-

come the big builders of tomorrow.

The second competitive force, entirely different from the first and at the opposite pole, consists of "big business" applying mass production techniques to home building. The formation of a million dollar home building corporation is described in this issue. There will undoubtedly be otherslarge, well-financed firms, which will attempt through mass production methods to produce better houses for the American public at lower cost.

American Builder believes that the housing need of America is so great that there will be ample room for both small builders and big builders to prosper after the war. But to be permanently successful, both the small builders and the big ones will require an extensive knowledge of new materials and new methods and a scientific approach to the construction of homes. Residential building has come out of the horse and buggy era into the age of science and precision operation. The builder of tomorrow will have a host of highly scientific precision built materials and equipment at his disposal. More and more of the materials and prod ucts he uses will consist of sub-assemblies accurately and skillfully put together in a factory. Such factory built units will have to be installed in houses that are carefully planned and scientifically laid out to receive them. This will call for more office work on the part of the builder and careful detailing of everything that goes into the houses, leaving less to chance.

#### Do preliminary work now

The builder of tomorrow will require more me chanical and scientific ability. The houses he constructs will be crowded with machine age devices and equipment, including air conditioning, electrical controls, extensive kitchen and bathroom equip-

ment of a highly technical sort.

Although competition from new firms, both large and small, will be keen, we have no fear for the established, experienced firms and building men now preparing for vigorous expansion. The smart ones have been acquiring choice home sites. have been studying new and improved building methods and have in many cases been actually preparing plans of post-war homes they will soon start building.

Some builders have already placed definite orders for materials and equipment in order to get first priority when these become available. Others have not only prepared plans and specifications but have gone through the early stages of F.H.A processing and of financial approval. Thus when the go-ahead signal is given there will be little or no delay in completing the final financial arrange-

We know of no better way to assure yourself of your share of the post-war building market than to get as many of the preliminary planning and financing details taken care of now as possible In short, this is a time to be on your toes



Photo by Ewing Galloway

# Build a Model Home For G. I. Joe

Get an order to build a new home for a veteran on his priority. Then arrange with him to show it as your first post-war model home.

WETERANS of World War II who are honorably discharged from any of the services can now secure priorities for building new homes for their own occupancy and ownership.

American Builder last month received the following statement, issued jointly by the War Production Board and the National Housing Agency: "Under the new procedures, applications may be approved for the construction, alteration or betterment of houses to be owned and occupied by veterans who have received an honorable discharge from the Army, Navy, Marine Corps, or Coast Guard since December 31, 1940, and who are unable to find other suitable living quarters.

"This action to meet the housing needs of returning veterans was taken by broadening the scope of the H-3 housing program administered by the National Housing Agency. Previously, eligible applications under that program had been limited to housing to relieve personal hardship to a specific individual or his family, reconstruction or replacement of housing damaged or destroyed, and remodeling or conversion

of existing dwelling structures to provide smaller housing units in designated areas of extreme housing shortage.

"Veterans seeking authorization to build or remodel homes under the new procedure should file their application on Form W.P.B.-2896 with the nearest office of the Federal Housing Administration. Approval of the application will authorize the veteran to extend a priority rating and use an allotment symbol for the purchase of his material and equipment in accordance with the War Housing Critical List and the War Housing Standards," officials said.

Of course, you have noticed that the order says the homes will have to be built "in accordance with the War Housing Critical List and War Housing Standards." Do not let this discourage you. The standards are constantly being revised as materials are released from war production. More and more quality materials and equipment are being made available by daily orders of W.P.B.

By the time you get the first order lined up, the lot selected, the plans drawn and approved, and the

HOME BUILDERS will be very anxious to erect beautiful small homes of the types illustrated on these pages for returning veterans.



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specifications agreed upon, you will be able to locate the materials and equipment to build the veterans the types of homes you know they deserve—the type you want to build for them.

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American Builder knows that home builders all over America are anxious to get started on their post-war building programs. They want to show the public what beautiful, livable homes they can create out of the experience they have gained from building war housing.

In the October issue we urged you to build model homes to show the public exactly what the industry can provide for the money—to bring the public down to earth from the ride in the clouds on the magic carpet of the dizzy dreamers.

Now American Builder brings you a method of at least getting started. How? Simply by suggesting that you get orders from G.I. Joes to build new homes for them and using those same homes as Model Homes to show the public.

(Continued to page 96)

#### American Builder shows you how to BUILD MODEL HOMES NOW!

ANY VETERAN of this war who has been honorably discharged from the services can secure a priority for building a new home without any questions asked. ALERT BUILDERS will seek out discharged veterans and get orders for new homes. Because they're alert, they will strike up deals to show some of these as model post-war homes after the veterans have taken title but before they actually move in.









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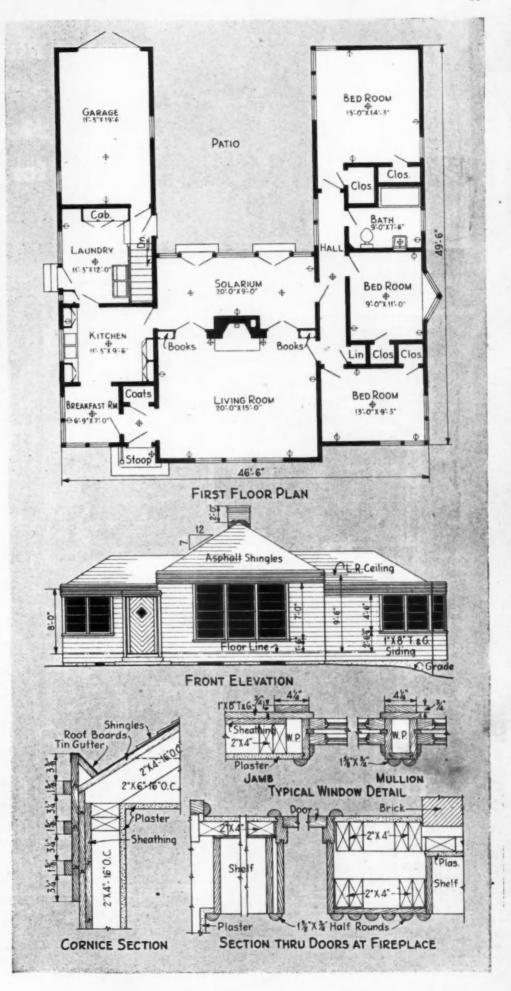
#### MY MAN!

**B**UILT on a 60 by 100 foot corner, lot, this Portland. Ore. home, because of its U-shaped plan with a patio in the rear, creates its own private back yard. The original plans called for 1 by 8 inch tongue and groove flush siding, but the construction was changed to poured concrete exterior walls.

While the house is a modest appearing, one-story structure, the plan consists of three bedrooms all connected by a hall which also connects with a bath room and both the living room and solarium. The opposite side of the house contains a breaktast room, kitchen, laundry and garage.

The front of the living room has three extra large windows, and two bedrooms and the breakfast room have four windows each, built around the outside corners of the house.

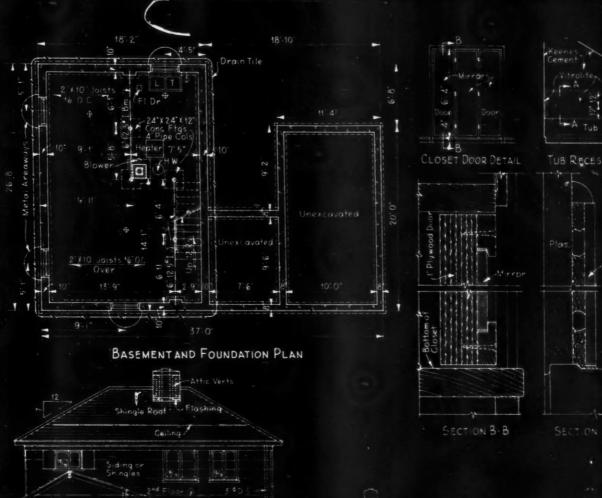
The detail drawings at the right show how extra narrow trim, which is merely 15% by 3/4 inch moulding, is used to create an attractive interior. A horizontal effect to the architecture of the house is achieved by the window muntins and the three strips of 15% inch moulding around the cornice, as shown in the sectional drawing.





#### Blue Print of a Proposed Model Home for "G. I. JOE"











FRONT ELEVATION

#### A Practical Plan With A Modern Feeling

No. 11 of Blueprint series—The broad chimney topping a hipped roof with extended cornice, the wide siding and large glass areas, the clean line in which the projecting garage roof bridges the areaway and reaches over the boxed picture window—all these give a modern touch while the horizontal lines seems to pull this two-story home closer to the ground.

Mirrors, adroitly placed, give the illusion of spaciousness to this compactly planned house which fits a fifty-foot lot. With triple, full length mirrors in master bedroom and Vitrolite No. 11 of Blueprint series-The

rors in master bedroom and Vitrolite around tub, it incorporates the De-signed for Happiness theme featured a few years ago by Libbey-Owens-Ford Glass Co.

It was conceived by Designer Clyde Reynolds in collaboration with Architect Walter G. Lamphear. Many smart details are shown in the drawings.

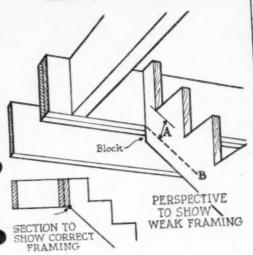
#### HANDY NOTEBOOK WORK SHEETS

#### American Builder JOB HELPS

#### Prepared by Don Graf

Builders' short cuts, time savers and how-to-do-it ideas for use in office or on the job. A continuing editorial feature appearing monthly. Sheets or notebooks are not for sale or available in any other form.

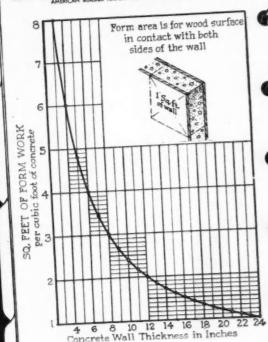
#### HOW TO FRAME STAIRS



The weakness lies in the small effective depth marked A on the drawing together with the low resistance of wood to splitting along the dotted line B. This error could be corrected in some measure by nailing a substantial block under the double joists at the heel of the stringer so that the vertical face of the stringer would have bearing.

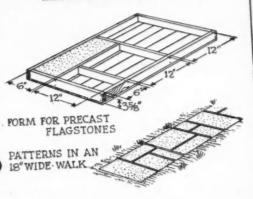
The only correct way to frame the stairs, however, is shown in the small section. The double joists should be placed far enough from the face of the top riser so that the line of the underside of the stringer intersects the lowest corner of the double joists.

#### HOW TO ESTIMATE CONCRETE FORMWORK



It can be seen from the little diagram that a 12" concrete wall would have 2 square feet of formwork, counting both sides. In the same way the chart shows, for example, that a 20" thick stone wall would have 1.2 square feet of formwork per cubic foot of concrete.

#### HOW TO MAKE CONCRETE FLAGGING



The sizes of flagstones obtained by using the simple forms shown, may be placed in a number of interesting designs. The forms should be made so they may be easily taken down for removal of the cast pieces and re-use. The wood should be well oiled each time before concreting.

Mineral pigments are often introduced in several shades to produce flagstones of different shades so that they vary not only in pattern but in color as well. The stones may be laid on a concrete base or on cinders with earth joints so that grass may grow between them. A number of different textures can be given to the stones by brooming, troweling, patting with a wire brush, etc. A1.21/4:3 mix with maximum aggregate wire brush, etc. A 1.2.74.5 lills with hazalman appregate 11/2" will produce a good quality concrete. Using very wet sand and pebbles, about 41/4 gallons of water should be used in the mix to each 1-sack batch. Using damp sand and pebbles, 5½ gallons should give a workable mixture.

trols are dropped. Mr. Ferguson says that F.H.A. will resume full peacetime pace in insuring loans under title I of the National Housing Act as soon as war controls on materials and credit

# 37,500,000 Homes Need Repairin

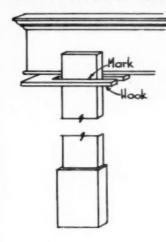
WITH such a huge market for builders to get jobs both big and little, and with no reconversion problem in the home repair business, the ob can start very shortly after the present con-

> Commissioner, and that this SAYS A. H. Ferguson, F.H.A. take precedence new will work

construction



#### How to Fit Door Casings to Cabinet Heads

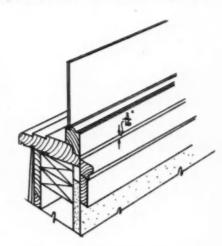


SELECT the two side casings of the frame. Square the bottom ends and place the squared end of one casing on top of a plinth block and the back of the top end against the fillet of the cabinet head, as shown in the drawing. Slip a base hook over the casing and along the bottom side of the fillet. Hold it tight against the fillet and mark the face of the casing along the top side of the hook with a hard, well-sharpened pencil. Saw along the line with a fine cross-cut saw.

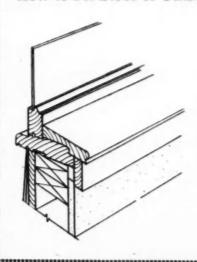
Replace the casing on the jamb and line it up so that it shows a 3/16 inch margin. Inspect the fits at the top and bottom and if they are correct, nail the casing in place. Repeat these operations on the opposite jamb. The plinth block is usually a little wider than the casing.

#### **How to Fit Stool of Inswinging Casement Window**

AT THE RIGHT is a detail drawing of an inswinging wood casement window, and below is an outswinging casement detail. The difference in fitting the casings and stool of the inswinging casement frame and a regular double-hung frame is that the stool is butted against the inside edge of the window sill and a margin of 3/16 inches is left between the top of the sill and the stool. The side and head casings also show a margin at the jamb rather than being flush as in the double-hung frame. Select the stool stock and cut it to length Form the returns on the ends Rip the stool (continued below)



#### **How to Fit Stool of Outswinging Wood Casements**



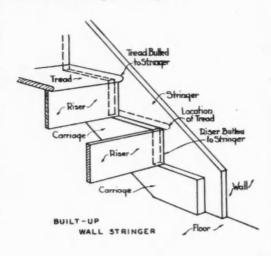
(continued from above) to fit the edge of the sill. Allow the front edge and the ends to project over the face and ends of the apron the same distance as in the double-hung frame. Now nail the stool to the sill temporarily. Fit the apron and nail it permanently in place. Nail the stool permanently by driving 8d finish nails through the edge into the sill. It should also be nailed to the apron. Next secure the head and side casings.

For the outswinging wood casement, the frame is cased in the same way as the double-hung frame except that an extra wide stool is provided, as shown in the drawing at the left. Be sure the stool is level both ways before nailing the apron securely in place.

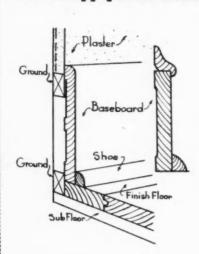
VERY often in remodeling or modernizing a house it is required to do over the existing fireplace and bring it up to date with glass and mirrors. To do this, the sketch at the left shows the best method for setting a mirror above the mantel shelf and for a 3/4 inch Carrara shelf and thinner glass around the face of the fireplace. Notice that mirror mastic is placed between the mirror and the masonry and that the mirror rests upon a wooden setting block on top of the shelf. Carrara mastic is used for the heavier shelf and a cushion of electrician's tape is placed along the inside edge. Asbestos and a metal angle at the bottom are advised.

#### How to Install Stairs on Built-Up Stringers

A FINISHED stringer and a rough carriage are shown nailed in place in the drawing at the right. The risers are nailed to the riser cuts of the carriage on each side and butt against each side stringer. The treads are nailed to the tread cuts of the carriage and also butt against the stringer. as shown in the drawing. This type of construction is often used where the rough carriages were fitted temporarily at the time the stair bridgework was framed. It calls for good butt joints.



#### **How to Apply Plain and Moulded Baseboards**



A BASEBOARD may be a plain single board or it may be a built-up type that consists of a moulding fitted to the top of a plain board. The design of the baseboard should be in harmony with the door and window trim. Plain baseboards vary from 4 to 8 inches in width, and are usually hollowed out at the back to avoid warping and twisting and to make it easier to apply to a plaster wall. The drawing shows this type of baseboard in place against a plaster wall. Note the location of the grounds for nailing. A shoe is used on all types of baseboards and it usually is a quarter-round moulding about 25/32 inches, and is used to cover the joint between the floor and the baseboard. The base shoe should be nailed to the base and not to the floor.

### Another of

# Basement and Grade Stairway Details Explain Best Methods of Construction

BASEMENT stairs may be built either with or without riser boards. The treads may be fastened to the stringers by cleats. Stringers should be at least 15% inch thick, the thicker the better. They must be wide enough to give full width bearing for the tread. If cleats are used, they should be at least 25/32 inches thick, 3 inches wide, and as long as the width of the tread. Treads should be at least 1-1/16 inch thick or, if the stairs are more than 3 feet wide, they should be thicker.

Dado joints are often used to hold the treads to the stringers. This type of construction is quite common in steep stairs. If dado joints are used, they should be only one-third as deep as the stringer is thick

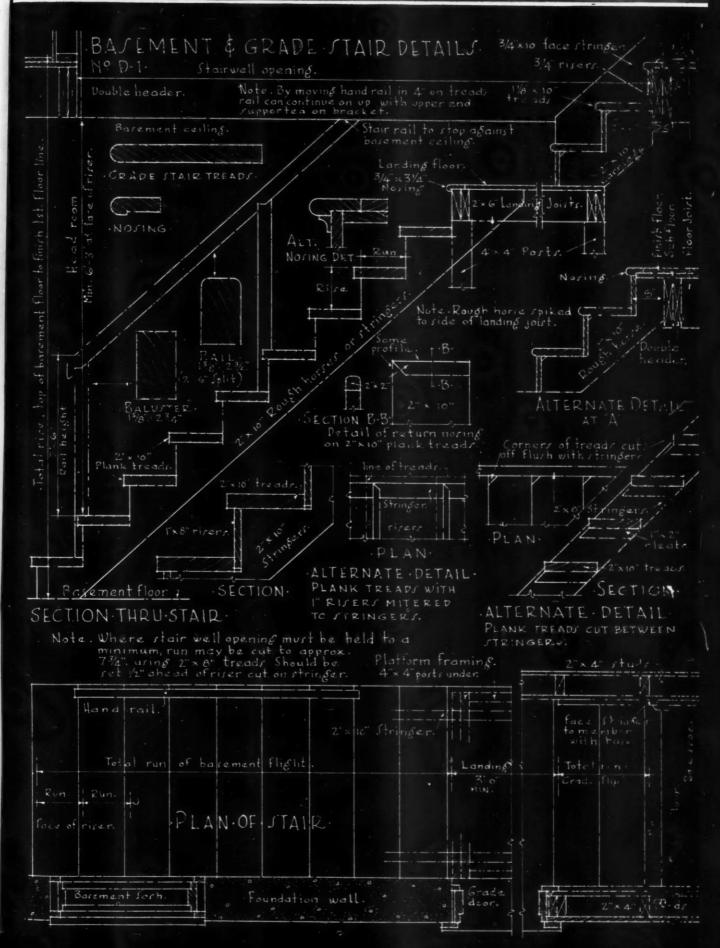
# PREPARED FOR AMERICAN BUILDER BY R. J. ALEXANDER

Plate No. D-1 on the opposite page shows complete details and alternate details for constructing good stairs for the uses indicated. Open stairs—that is, without risers—as well as stairs with risers are detailed on the plate. Different kinds of treads are shown, and the use of a separate nosing as part of a tread is explained. Ordinary plank treads on cleats are shown, as well as plank treads with 1-inch risers mitered to stringers.

Perhaps more home accidents occur on stairs than any other part of the house, and a major portion of these take place on basement stairs. This can be attributed to several reasons, one of which is awkward steps. The proper height of risers and width of treads ought not to be sacrificed to saccommodate lack of space for stair well from first floor to basement.

#### AMERICAN Builder's

#### BETTER DETAIL PLATES



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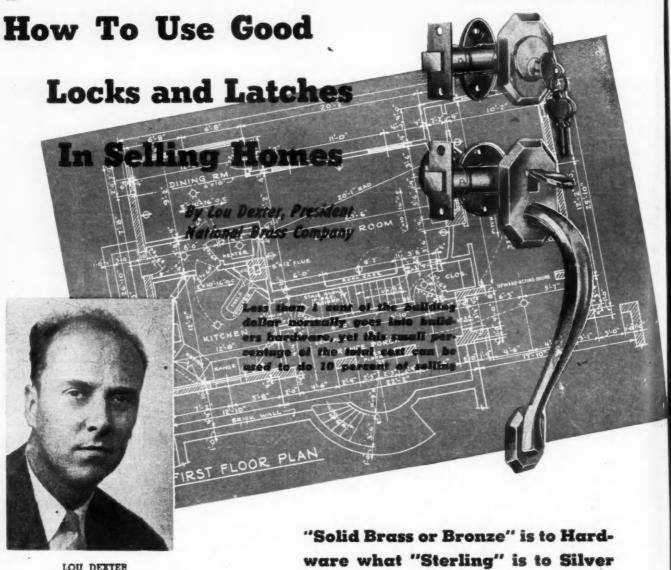
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their illustrations and descriptions in consumer magazines of all sorts have done one good thing, and that is to make every citizen want to own a home. Upon investigation, of course, the prospective home owner will find that most of the miracle gadgets, like door openers run by electricity, are not practical nor would they last the long amortization periods future houses will be sold under.

In fact, there isn't any one item used more often than the knob of a door, so in place of the miracle opener, the door knob should be of the best quality material to be found, which is solid brass or bronze. Such material will function dependably and last indefinitely with a minimum of upkeep.

The cost of good hardware is a relatively small item. Locks and latches with trims of solid brass represent about ½ percent of the total cost of the building. So the advantage of fine

hardware in helping to merchandise a home is not a matter of cost but one of technique when showing the home to a prospective buyer. Properly done, this ½ per cent can be made to do 10 percent of the selling job, perhaps more.

In the first place, all houses in a given price bracket will have about the same amount and quality of equipment in them, such as heating, lighting, kitchen and laundry equipment, styled bath rooms and the like, so there will be little opportunity to talk up your house above a house of your competitor. However, with solid brass hardware installed throughout your house, and a definite program of selling, you can pave the way in the mind of your prospect for increased appreciation of the other and more obvious equipment in your house.

A good principle in selling is to direct the attention to items that are not obvious, and to explain their virtues, and then leave the eyes and other senses of the prospect to do the job of selling the obvious to himself. Good hardware offers this opportunity since it is one of the smallest yet most important of functional devices in the home.

In most instances when prospectapproach a new house for sale, they get a fleeting glimpse of the exterior and the general type of architecture then they dash inside and look over the kitchen and bath room, following up by having a more leisurely look at the other rooms. Little or no emphasis placed on the over-all quality built into the house because the "showyness" of the new modern equipment overshadows the seemingly lesser at tributes of a good home.

Supposing, therefore, the builder who is showing his house to prospects stops them at the front door, which is kept locked, and proceeds to open it while they wait. As he draws the key out of his pocket he brings along with it a small magnet. Before unlock-

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the door, he explains that the locks chroughout the house are of solid brass. This he proves by showing that the magnet is not attracted as it would be with hardware made of steel merely coated with a plating of brass that would eventually wear off with use. Not only that, but steel hardware will discolor paint as the prospect has undoubtedly seen on many houses.

Further, with key in hand while unlocking the door, the builder explains to his prospect, that the one key will open any outside door of the home, pointing out that a pocket full of assorted keys is no longer needed

#### What has taken place?

In causing the prospect to pause at he front door, the builder has accomplished three basic selling ends. First, the prospect was given a tactful overall of the house as his first and lasting impression. Second, his atention was focused on one relatively small thing, the entrance lockset. In finding this to be of fine quality, it influenced him to realize that the house is quality built throughout. And, third, there is a still greater interest created in what the house offers due to the deliberate pause at the front foor. Normally, people are not indined to wait, but this arouses their curiosity and they become all the more interested in what's ahead because of

Upon entering the living room, the builder calls attention to the obvious teatures, such as an attractive fire-place or large window, but does not fail to repeat the fact that all the hardware is solid brass and that it will last the lifetime of the house. A warranty furnished by the manufacturer should be displayed prominently and its worth explained to the prospect.

Mention might be made that there are usually substitutes for all real things. A 5-disc tumbler lock sounds

quite similar to a 5-pin tumbler lock, but in locking security there is considerable difference, and the 5-disc tumbler is very much inferior. This difference can be interestingly dramatized by having an illustration prominently displayed which shows the "workings" of a 5-pin tumbler lock.

Since the two types cannot be keyed alike, that is the 5-pin and 5-disc, the fact that the lock on the entrance door is a 5-pin tumbler cylinder lock and keyed alike to the other outside doors, is assurance that all outside doors are equipped with the finest in locking security.

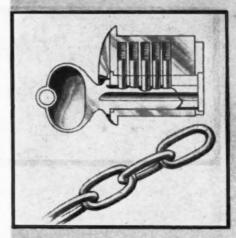
Most manufacturers of hardware have broad selections of designs from which to choose. However, a practical formula to follow in choosing designs is to, first, select a pleasing one Second, have that one of small proportions in keeping with the less massive and smaller sizes of rooms in the modern house. Third, avoid the ornate and raised metal patterns as they do not show up the luxurious appearance of brass and they are next to impossible to polish by hand. Such patterns are usually found in a catalog by referring to the Colonial or modified Colonial designs which, by the way, have proven to be the most popular during the last several years.



This merchandising angle in the selling of a home surprisingly may be accomplished without substantial additional costs. The secret lies in an understanding of quality hardware and knowing where corners can be cut without affecting the quality. The proper selection of good hardware will go a long way toward matching the price of inferior grades. One of these cost-saving means is the rapidity and ease of installation of tubular locks and latches. In fact, doors may now be purchased with the installation holes (Continued to page 98)

SOLID brass locks of the 5-pin tumbler type come in sets includ ing a master key which will un lock all outside doors thus eliminating the accessity of carrying several keys.

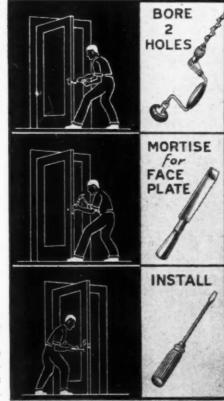
PICTURED here are the three simple steps in installing a tubular latch. Appreciating that the total cost of hardware is the cost of the hardware itself plus the cost of installation, the simple process of fitting a tubular latch reduces the overall cost.



PIN-TUMBLER locks have no weak links



IF buying plastic knobs, get them solid.





# the HANDWRITING on the wall

\* \* By Bror Dahlberg

\* \*

POR ten years I have been saying that an attractive, comfortable, durable \$2,500 house must be developed—can be developed—will be developed. In recent months, as a result of these views, I have been termed a wishful thinker—an impractical dreamer.

There are many who counsel the building industry to forget what they call a "will-o'-the-wisp" market and devote 1000 per cent of its time and energy to building houses in the same way that they have always been built and for the same group of people—the middle and upper income group. I am not one of those. It is inconceivable to me that the building industry should not progress toward better merchandise for less money, just as every other major industry has progressed.

I would like to state my views here

very clearly.

The requirements for new homes in our postwar world will spring from two different sources. First, members of the middle and upper income groups, who generally have been able to have homes of their own. Second, members of the lower income group, few of whom have heretofore been able to own a home.

#### Two Groups Covered

The homes of the first group, ranging in cost from \$5,000 to \$50,000 or more, have been built principally by the operative builders, or by independent architects and contractors. Judging from what these builders, architects and contractors have said in public pronouncements, houses built for the \$5,000 to \$50,000 group immediately after the war are not going to be radically different from those built before. There will be refinements and new developments, of course. Available new techniques and new materials will be used. But, very largely, most changes made in the houses these builders construct will come gradually.

The second group (some 30 to 40 million people), whose needs for housing are even more acute than those of the first, would probably also like to have houses built to their individual specifications, if it were financially within their grasp. But these people can't pay \$10,000—or even \$5,000—for a house. At pre-war price levels, most of them will be able to pay from \$2,000 to \$3,000. And I believe every effort should be made to provide them with durable, healthful, comfortable, attractive homes for that money. I am convinced that the answer to this problem will be one of the greatest contributions ever made to the progress of our country.

Up to this time, most of these families have accepted their lot as inevitable, but evidences of a new spirit are appearing. A consciousness of their plight and a desire to do something about better housing for themselves are becoming increasingly apparent. For one example, a recent United States Chamber of Commerce survey indicated that 1,540,000 families intend to build or buy a new home within six months after the war ends. Of those families, 23 per cent indicated that they would spend under \$3,000.00

for their home.

With the return of millions of our fighting men, this consciousness of the need for better housing will surge still stronger. These men know the production job done for war, and how it has been done. They have been where they could see the results in operation, and will never be convinced that a nation

(Continued to page 100)

#### Form Million-Dollar Homes Corporation

FORMATION of Precision-Built Homes Corporation, said to be the largest single corporate organization devoted exclusively to promoting housing construction, was announced last month by F. Vaux Wilson, Jr., president, who is also vice president of Homasote Company. Griffith S. Clark and George L. Apple, Jr., are vice presidents of the new company, E. L. Simmons, treasurer and John A. Heinrich, secretary. J. F. Barrett of Los Angeles is chairman of the board. The authorized capital is \$1,000,000.

Financed largely by contractors, dealers in building supplies and others engaged in various branches of the housing industry in all parts of the United States, the new company's functions, it is stated, will be to merchandise houses directly, to license constructor-builders and to

engage in research, servicing and mass purchasing.
Stockholders include Mr. Wilson and Homasote Company, Trenton, N.J.; Barrett & Hilp, San Francisco; Prefabricated Products Company, Seattle; E. L. Simmons, Decatur; R. W. Kuhne, Rantoul; Sidney F. Dwyer, Milwaukee; Armor Products, Inc., and Erich Loeb of New York City; Woolsey & Cadwallader, Pennington, N.J., and employees of the new company.

Precision-Built Homes Corporation plans to merchandise houses in three ways: 1.—Through department and furniture stores such as R. H. Macy & Co., New York; L. Bamberger & Co., Newark; Jordan, Marsh & Co., Boston; Barker Brothers, Los Angeles, Lit Brothers, Philadelphia; Kaufman's, Pittsburgh; Frederick & Nel-

son, Seattle. 2.—To operative builders, lumber dealers, contractors, realtors, insurance companies, lending institutions, prefabricators, and industrial companies for employees. 3.—Through the export market.

Explaining the new organization, Mr. Wilson said that

Explaining the new organization, Mr. Wilson said that the licensed constructor-builders will set up fabricating plants in the major centers to service department and furniture store customers as well as others. These fabricating plants will normally operate in a 75-mile radius.

"The Precision-Built system of construction," Mr. Wilson stated, "is, as far as known, the only system of mass production in housing which is available to every branch of the building industry. The experience of Homasote in this broad field during the past nine years has proved that mass production methods can be applied successfully to conventional construction—thus acquiring speed and economies without sacrifice of flexibility."

He voiced the prediction that if Germany is defeated this year, the new company's licensees should start large scale residence building early next April. "Hundreds of thousands of families," he added, "are eagerly awaiting the opportunity to build, and theirs is an impatient demand; they will not be content to rely on the slow building processes that formerly prevailed. Thousands have placed their names on our waiting list as a result of our department store exhibits.

Directors are: J. F. Barrett; J. J. Dempsey; Sidney F. Dwyer; B. Outerbridge; E. L. Simmons; C. F. Dally; Paul W. Cadwallader, and F. Vaux Wilson, Jr.

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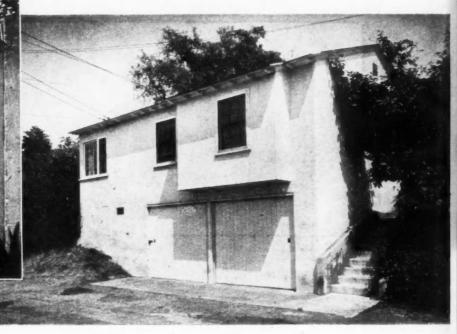
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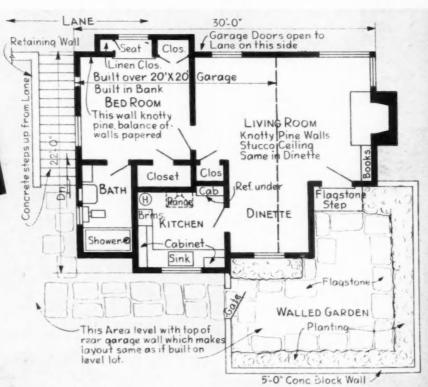
THE front of this house is screened by the patio wall and tall shrubbery shown in the photo at the left. Below is the rear view showing double garage on an alley and the steps leading up to front grade level of house.



FRONT entrance (above) to the house is through a walled and flagstone-paved garden 18 feet square. The 5-foot concrete block wall gives complete privacy to this outdoor living room space.

#### Big Home Value In Small Space

IACK GERNANDT, Los Angeles, Designer and Builder.



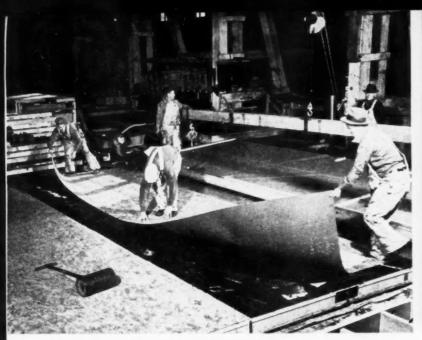
BEDROOM (above) is snug; 10 by 11 feet; but full of character and comfort. Floor plan (right) shows fireplaced living room with dining alcove, efficiency kitchen, bedroom, bathroom and three good closets. "A BIG RO
is the secret successful home. Here that room: living room ing alcove by wood coplace mant

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PHOTOS

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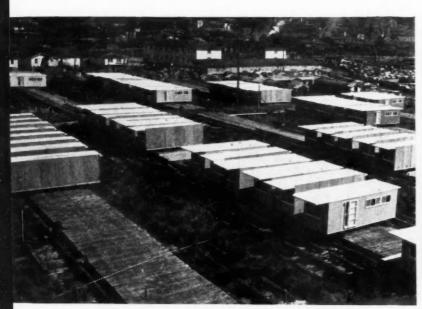




LINOLEUM LAID on fabricated floor section. Holes are then marked for plumbing and other connections. After the cuts have been made, surface of floor is covered with mastic and linoleum is placed and rolled. It's ready for the next station.



SECTION MOVES ONTO the production line for sid walls and roof. Building paper covers and protect linoleum as other sections are attached and as paint is sprayed on in a special paint shop, at finishing stage



FINISHED SECTIONS go to storage yard. Here they await reloading on trailers for haulage as needed at the prepared foundations at building site or for shipment to a furniture factory for special built-in furniture to be installed.



PLACING SECTION on foundation. At the building sile the section is placed on its foundation, in this case made of heavy timbers. For this work a specially constructed placing lift shown at the left of the photo is used.

# "A House Every 30 Minutes"

Vast project is prefabricated for housing workers in 40 square-mile stockade where explosive is made. This army job provides interesting prefab study. MEMBERS of the National Association of Home Builders were handed a prefab house jolt by Frank W. Cortright, Executive Vice-President, in the following item in his "Washington Letter" of August 25:

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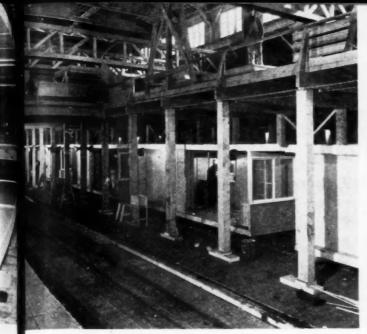
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"Army reveals plant producing prefabricated house every thirty minutes—Production lines capable of turning out a four-room house, ready for assembly, every half hour has just been disclosed by Army sources. A three-bedroom job takes forty minutes, according to the report, which states that the Toledo, Oregon, plant of the Prefabrication Engineering Co., has been operating for several months under military secrecy. The process which uses mass production techniques, prefabricates the units in two to four sections, according to size. Another twenty minutes is required to slide the sections together . . . Although full details are still

68



FACTORY ASSEMBLY LINE in Prenco plant, one of four in this sectional house fabricating plant. The units, which can be seen behind the columns, move along periodically and receive additional parts at each station. Cranes carry the sections.

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TRAVELING HOIST lifts a section. It carries it to a point where it is set on a trailer. Before a unit is moved by this traveling hoist, it has already been spray-painted inside and out and windows and doors have been fitted.



COMPLETED HOUSE ASSEMBLED. Three 8' x 8' x 24' sections have been joined and bolted together, making a completed house 24' x 24'. Utility connections are then made and the house is ready for occupancy. Note the wide window areas.



HERE'S FLOOR PLAN. All furniture shown was built-in at furniture factory where the sections were shipped before going to building site. Joining points show where the sections are bolted together at the site.

restricted, it is revealed that each unit is complete with upholstered furniture, electric heating and cooking facilities, and hot water and refrigeration equipment."

The significance of this news, both to Association members and to the entire home building industry, for sostwar planning, may have some far-reaching effects. American Builder now gives its readers the complete story for them to judge for themselves.

The Prefabrication Engineering Co., with offices in the American Bank Building, Portland, has as its directing head Robert F. Johnson, brother of Dean Johnson of the C. D. Johnson Lumber Company and currently president of the West Coast Lumbermen's Association. He calls his product "Prenco" Sectional Houses. Associated with him are Arnold Southwell, A.I.A., as design consultant, Russell E. Dahl in charge of engineering,

Emmett G. Stack as consulting engineer, and A. J. Arany as field engineer.

Their present manufacturing facilities are at Toledo, Ore., on the Coast about 70 miles southwest of Portland. In part of the C. D. Johnson lumber plant they have four assembly lines manned by some 400 men working one nine-hour shift. Several more shifts are possible with present facilities. The assembly building is 740 feet long, 108 feet wide and has a clear span of 80 feet. A mezzanine floor over half this area is used for jig assemblies. This building is served in its entire length by a ten-ton 80 foot overhead bridge crane. A rail siding parallels the building.

Adjoining is a building 308 feet long and 38 feet wide used for jig work; and another building 352 feet long and 32 feet wide served by a five-ton 32 foot bridge

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# WPB Clears Way for Reconversion of Home-building Industry

By James F. Bonnell

Associate Editor

THE home-building industry appears to have turned the corner and started on its way toward its potentially staggering post-war goals. This became apparent late in October when the War Production Board eased certain of the building restrictions under which the industry has been carrying on its wartime operations, and gave substantial indications that the day might not be far distant (perhaps before this reaches you) when a further easing up would be undertaken

would be undertaken.

The first "breather" came when a relaxation was effected to permit construction of houses "approximating pre-war standards." Coming as a result of the easing up of shortages in certain critical materials, the amendment in effect permits builders to make use of materials as they become available, so that such new housing as may now be built will be of a sort that could conform to minimum construction standards of FHA under Title II.

#### **NHA Still Programs Housing**

Still in effect, of course, are the programming functions of NHA under its war job of determining what and where housing is needed to satisfy the war néed. The newly allowed homes are "war housing" in the sense that they may be built only in such numbers and in such areas as are determined by NHA under its programs to be in need of housing for essential workers (H-1), to relieve congestion in war production areas (H-2), and to relieve cases of individual hardship or to serve returning veterans of this war who are unable to find other suitable shelter (H-3). Under this last category, the agency has recently designated many localities throughout the country as eligible for conversion of larger structures into

a greater number of smaller units.

Though this initial relaxation was limited to removal of square foot area room size restrictions (while retaining a maximum board foot allowance of dimensional lumber per square foot of floor area); to removal of limitations on number of electrical outlets and on size of hot water storage tanks; and required use of clay, masonry or concrete products; and to removal of the "back-to-back" plumbing requirement for bathrooms and kitchens, it shows how the wind is blowing at WPB.

It is a concrete demonstration, for example, of that agency's oft-stressed determination to take the shackles off industry as soon as it can, consistent with the speedy completion of the war, and to give industry a free hand to get its wheels in motion in order that it may be in a position to provide as many as possible of the vast number of post V-E day jobs that must be ready if serious unemployment is to be avoided. The WPB has said, and has fre-

quently underlined its statement with action, that it does not intend to "spoon-feed" American business. Peculiarly free from the sort of long-haired planners who in certain other government setups have been driving businessmen batty, the WPB top officials feel that getting back to full civilian output quickly is one that can not be done best by having all details planned on the banks of the Potomac.

Business, it feels, should make its own plans; and to that end the agency was ready and anxious several weeks ago to make known its own schedules for releasing controls on V-E Day and thereafter. But the showdown of the war in Europe and the very reasonable fear that any formal announcement of a prospective release of controls or end of allocation, should only accelerate the already considerable exodus of workers from war plants in search of jobs that offer greater evidence of peacetime security. Therefore, WPB has had to limit itself to what might be described as off the record assurances to business men and industry groups that its aim and intent, come Victory in Europe, is to release at once all controls except those needed to whip the Japs, and to keep that concluding portion of the war program rolling by a very much simplified system of priority control. That is, whatever war plants need for the Pacific war shall have a priority so that they may get it; all else is to be freed for civilian manufacture and consumption. On certain items that may continue scarce, some sort of modified control will continue, but these will be the rare exceptions. and even in such situations the lid will be lifted the instant the need for keeping it on is no longer present.

#### Reemployment the Vital Motive for Speed

Though original estimates set the cut-back following the defeat of Germany at something like 40% of present output, and the number of war workers no longer to be needed at three to four million, revised calculations set the potential cut-back at nearly 70% of present capacity and the number of men whose war employment will cease at perhaps six million. It is quite apparent that, though WPB intends to play no favorites in resuming civilian output, except for such basic industries as utilities, transportation and food processing, the agency is keenly aware of the important and swift job that the home-building industry, and its parallel home-repair market, neither of them requiring retooling, can do in absorbing a considerable share of the potential unemployment problem once they are given the men and materials with which to work.

# "Not For Sale" Says Builder McCabe

HOME BUILDERS

OWEN J. McCABE (above) inspecting poured concrete foundation wall. At right is downtown McCabe office.

Anticipating and building of needed war housing in their town of Park Ridge, Ill., the McCabe Construction Co. bought and stored good building materials and equipment for the 46 houses they are now just completing and holding for rent rather than selling.

THE McCabe Construction Co. consists of two brothers, Owen J. and Leland J. McCabe. They are conservative builders in that they average around 50 houses per year, but they

keep it up. Owen McCabe told your reporter that they had averaged 50 houses per year from 1936 up to date, and plan to keep it up.

BUILDER

Instead of the usual drab development of war housing, the McCabes built their 46 war houses on individual lots scattered throughout their town. Some of the first houses were of the Cape Cod type and fitted into the general architecture of the neighborhood better than the two-story type pictured on this page but to conserve as much building material as possible for the times, they were asked to concentrate on the type shown.

The houses are of maximum dimensions allowed, and are built on lots measuring 40 by 125 feet. Because of first class construction and equipment, the houses are rented rather than sold. They will be held for from 2 to 5 years before being put on the market, and at that time will command a better price than the limit of \$6,000 existing today.

All the houses rented quickly for a monthly rent of \$56. The incomes of the families renting varies between \$100 and \$150 per week, and the houses are in demand. Much of this situation is due to the fact that the houses are in an established neighborhood and close to the downtown shopping district.

the downtown shopping district.

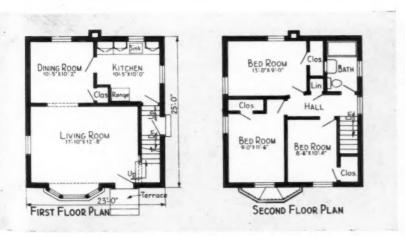
Basements are poured concrete floors and walls and are waterproofed on the outside. Exterior walls are solid masonry of waylite block and brick, A continuous steel I beam and steel staunchions are used in the basement and the joists are fully 7 feet above the floor. A Sunbeam warm air furnace is used to heat the house.

Other materials and equipment in the houses consist of mineral wool insulation, U. S. Gypsum plaster, Duplex spring-balance windows, Libby-Owen-Ford glass, viterous china sink, lavatory and toilet by Kohler, Bruce factory-finished oak floors, Paine flush doors,

(Continued to page 96)



ABOVE house shows large window areas



THE plans shown above are typical of all houses but for minor changes.



THE bay-window type plan is most popular.



#### "Ups and Downs" of Heating Must Go-Comfort Demands A Constant Flow that it were

By John E. McNamara Associate Editor

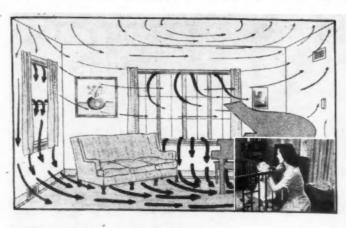
VARIED night and day settings are provided for in this thermostat, part of the Moduflow control instruments which eliminate drafts and cold floors as illustrated in second diagrams on right. A clock in controls synchronizes with the theromstat.

The greater body comfort provided by correctly heated postwar homes will persuade the public to trade their old homes for new—and rapidly.

In the schematic drawings below is shown one of the striking advances in human comfort which can be built into homes immediately after the war. Study these diagrams carefully for an understanding of this new heating triumph.

The one on the left represents the "off" condition in a room when the type of controls now in use shut off the flow of heat at the 70 degrees called for by the thermostat. Cold air is represented by the heavy arrows, warm air by the light ones.

The drawing on the right shows how a more even indoor climate is maintained constantly-no "off" periods with cold floors. Protects the health of the children who are usually on the floor. New home-heating controls bring us the Moduflow system, developed by Minneapolis-Honeywell, which makes this—yes, revolutionary advance in human comfort possible for postwar homes. It brings a constant flow of heat at the desired temperature with no cycle of over-cold and over-hot periods.



WASTED THERMOSTAT SATISFIED BUT !!! BABY ON A DRAFTY SAO AND COLD FLOOR

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It is turers t matic f ments i introdu ARLY man's discovery of fire advanced mankind to a new milestone of progress, historians tell is. If this be true, another new milestone lies just ahead. Modern genius now shows us how to harness the force of fire for a greater-than-ever service to humanity.

Americans have been promised much in new and better things in the days following peace—especially for homes. Many of these things have been advanced by the dizzy dreamers. American Builder has pointed these out to you. The National Association of Home Builders has carried on a vigorous nation-wide publicity campaign to warn us not to expect most of the impractical miracle-home ideas advanced by uninformed sponsors.

But, here and now, we can tell you of an advance which is both phenomenal and practical as well as soon available—the more nearly perfect control of heat distribution from a central heating plant, no matter what the fuel or what the type of heat.

#### Better Health a Sales Point

While the drawings at the bottom of these two pages illustrate how this great advancement works on a warm air system, it should be emphasized that it works in like manner on central steam and hot water heating systems. On any and all central heating systems it brings a health-building benefit to those who will choose to enjoy it in their new or old homes.

In addition to the health building features of constant-flowing heat made possible by the Moduflow system of controls, great strides have been made in the design of all types of heating systems. Radiators are agreeably concealed or recessed at points where they contribute most to heating efficiency. Study the pictures of new types shown on these pages.

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It is reliably predicted by manufacturers that coal will become an automatic fuel by virtue of new developments in stoker manufacturing to be introduced soon after the war. This information comes to American Builder from Norman J. Radder of the Plumbing and Heating Industries Bureau.

The Crane Company, meanwhile, announces that they have advanced far in developing baseboard radiation, a new way of gaining the benefits of radiant heating, which is winning widespread acceptance. (See Radiant Heating story in American Builder for August, 1944).

Baseboard radiation is the term commonly applied by the Crane designers to this new development, since the heat is introduced through continuous radiant panels that replace the conventional baseboard in the room. These panels would be of suitable size and number to provide the amount of heat needed for the size of the room and the outdoor climate.

This new panel heating system has been under test for several years—both in the laboratory and in actual installations. As a result, dependable data for rating heat output have been collected and encouraging progress has been made in solving the customary problems created by any new development.

The baseboard radiation system permits complete freedom in use of floor and wall space and in arrangement of furniture. It also makes cleaning as simple as wiping an ordinary baseboard. See the middle-right illustration on this page for a view of this installation.

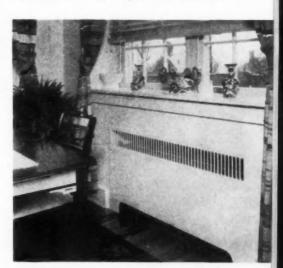
Experience has demonstrated that by distributing the radiant heat over a large surface, the entire room is warmed uniformly. A negligible amount of heat is carried to the ceiling by air currents. Service records demonstrate a temperature differential of only 2 to 4 degrees from floor to ceiling in a room heated from the baseboard. The system is applicable either to new or old homes—in fact, it is the only form of panel heating yet developed that can be applied to existing buildings at reasonable cost, according to the Crane Company.



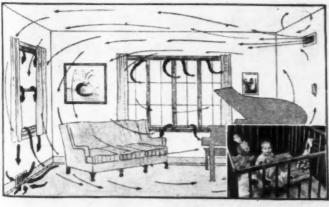
A DECORATIVE breakfast bar proves an effective hiding place for kitchen radiator. Heat rays are directed towards work center.



BASEBOARD radiation, shown above, conceals the pipes of a radiant heating system in the baseboard. The Crane Company has been testing this system for several years in laboratory and actual installations. Permits free use of wall space for furniture.



RECESSING of heating units for hot water or steam systems will be one of the most popular trends in post-war. Installed behind a plaster front, this dining room radiator makes possible large window above without danger of drafts. Grill is decorative.



74°
NO WASTED
HEAT

72°
THERMOSTAT
MAINTAINED

BABY HEALTHY
ON A
70° NICE
WARM FLOOR



DECLINE of public housing, return to peacetime building, growth of their own Association are discussed by H. C. Peterson, Detroit, Dave Bohannon, San Francisco, C. H. Harrison, Detroit president, and C. W. Buchanan, Washington, D. C.



## Home Builders Gather

Discuss Wind-up of Private War Housing Jobs and Cast an Eye on Postwar Programs and Prospects

ORE than two hundred of the nation's leading home builders met recently at the Hotel Statler, Washington, D. C., to discuss the closing out of private industry's enormous job—1,100,000 new units—of providing housing for war workers in vital production areas, and to talk over their still greater plans, prospects and responsibilities, post-V-E day, of creating new and better living accommodations for home-starved America. In an action-packed, seven day conference that featured

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CO-SPONSOR in famed Mid-west City, Ben Wileman, of Oklahoma City, listens to Joe Haverstick, Dayton, tell how Ohio's highest court made the tax stick on public housing projects.



TWO MEMBERS of the Pittsburgh contingent talk it over between sessions— George Goodyear and Wm. B. Dixon, Jr.



DETROIT'S Harry J. Durbin and George W. Miller discuss postwar homes for the motor metropolis.



IT COULD BE comparative baseball or brew that St. Louis's Ralph Duke is debating with Cincinnati's Tom McIlvain.



Frank McCambridge, Denver, and Sid Dwyer, Milwaukee. Those antlers aren't on Frank!

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EXPOSITION chairman George F. Nixon, right, and Martin Huggett, Chicago Secretary, reported splendid progress for the Home Show.



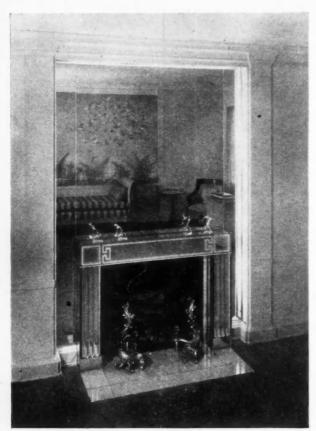
THAT'S Marion County (Indiana) Fred L. Palmer giving the double talk (or take) to Boston's President Arnold Hartman.

speeches by and discussions with leaders in government, industry and finance, members of the National Association of Home Builders heard their industry praised for the substantial lift it had given to the war effort and their prospects for postwar service and growth highly evaluated. Notable among the array of speakers were Eric Johnston, president of the United States Chamber of Commerce; John B. Blandford, Jr., National Housing Agency Administrator; Abner H. Ferguson, Commissioner of FHA; Philip M. Klutznick, Commissioner of the Federal Public Housing Authority; Francis X. Pavesich, Chief of the Guaranteed Loans Division, Veterans' Administration (handling the "G-I" bill); Herbert

U. Nelson, Executive Vice-president of the National Association of Real Estate Boards; Morton Bodfish, Vice-president of the United States Savings and Loan League; and a host of others.

The home builders were proud, and justly so, of their contribution to the overall war job. But many ears pricked up, also, to the prophecies and possibilities of the lifting or relaxation of L-41, come V-E Day, and more particularly to the discussion of plans—many of them in the fait accompli stage—for the home-building industry's mammoth exhibition of model homes, materials, equipment and methods, scheduled for Chicago's Hotel Sherman January 15th-20th, 1945.

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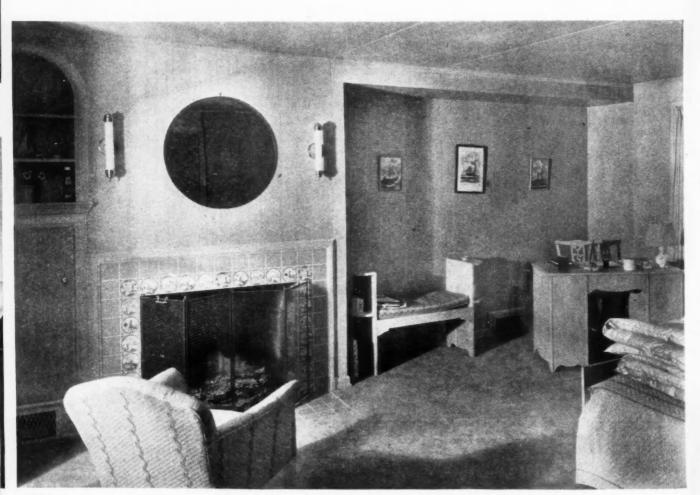
NON-CRITICAL glass in the form of mirrors makes an unusually attractive material for both mantels and facing,

#### These Picture Ideas Will Help You Sell Jobs Now

**S**UGGESTIONS for home owners, or even prospective owners, will help pave the way to jobs that can be done now, despite the handicap of restricted materials, as well as for future business.

Built-ins, especially in combination with living room fireplaces, are features which have a general appeal. Open shelves for books and ornaments, flanking a fireplace, give an architectural balance to the room. If lumber is not available, glass can be used for shelves, and mirrors for backing, or over the mantel. Facings of colorful tile are possible without having a special rating to secure the material. Colored cement or brick hearths are often in order for rehabilitation jobs when the old hearth has seen its best days.

Re-finishing woodwork and floors ties in with usual upkeep and repair jobs, and can be done at the time new work is being carried on. Where living quarters are still at a premium and available space is being worked over to provide additional living accommodations, the changing of partitions, enlarging closets for bunks, building double-deck bunks, and other kinds of built-in furniture is an activity that will pay well, and building materials are available for this type of work.



HERE is an example of how a large bedroom has been given a focal point of interest by the use of colorful tile on the fireplace.

FREE ENLARGEMENTS of this and other sketches you can use to sell many profitable jobs. Write for a set today.



#### HERE'S A REMODELING IDEA

#### ... that can be applied to new building as well

IX/ITH remodeling work representing the main building activity today, you'll find ideas like this recreation basement profitable. Such jobs are well within present limitations and can be handled quickly with available labor.

For walls and ceilings in basements and attics, Armstrong's Temlok Insulating Board is an economical material that can be installed by just one mechanic who's experienced in the use of ordinary carpenter's tools.

Show your prospect the sketch above or an

enlargement which we'll send you free. Show him samples of Temlok Insulating Board. Explain its insulating value, its resistance to moisture, and how its pleasing golden brown color can be left unfinished or painted any color desired.

Be sure you have all the facts about Armstrong's Temlok Insulation for homes and public buildings. Samples and informative literature will be sent free upon request. Write to Armstrong Cork Company, Building Materials Division, 1611 Ross Street, Lancaster, Pennsylvania.

#### ARMSTRONG'S TEMLOK INSULATION



SHEATHING . LATH . BOARD (A) DE LUXE INTERIOR FINISH

## More value for your post-war



## —when Servel *All-Year* Gas Air Conditioning is in the plans for your post-war homes

THERE ARE good reasons why it will pay you to plan your post-war homes for Servel All-Year Gas Air Conditioning. You'll be offering your customers truly "modern" homes—homes with the "new quality of living" that post-war buyers are demanding. Surveys indicate 72% of the people who plan to build or buy homes after the war want all-year air conditioning. So your homes will get quicker acceptance if you supply summer cooling and winter heating with a Servel All-Year Gas Air Conditioner.

You'll make a better profit, too. Builders who have already installed the Servel unit find that the selling price of homes so equipped increases much more than the cost of the equipment.

This is especially true when plans are

designed with the air distribution requirements of Servel All-Year Gas Air Conditioning in mind. This makes possible many economies in framing, in the location of equipment and utility feed lines, etc., which not only keep costs down, but also assure your customers of maximum operating efficiency from the unit.

Your local Gas Company has trained engineers who will be glad to assist you in fitting Servel *All-Year* Gas Air Conditioning into your present building

plans. Discuss your plans with your local Gas Company now. Or write direct to Servel, Inc., 1411 Morton Ave., Evansville 20, Indiana.



Servel All-Year

SUMMER COOLING-WINTER HEATING-IN ONE SIMPLE UNI

### customers...more profits for you



## From the plan stage to the sale of the house, you'll enjoy Gas Company engineering and sales cooperation

Gas Company air conditioning engineers will be glad to show you how you can coordinate your building plans to assure maximum operating efficiency from the unit at a minimum cost. The importance of this service, both as assurance of extra profits to you, and as a protection to your reputation as a builder, can best be judged by the experience of an important financial underwriting agent for one of our large Mid-Western states. He found that many privately designed and built homes required expensive alterations and adjustments after building, in order to provide proper heating.

In addition, most Gas Companies are already promoting Servel All-Year Gas Air Conditioning through their local newspapers, over the radio, and with billboard advertising. Many have already started an intensive direct-mail campaign to all their customers. You'll get the benefit of this advertising when you include Servel All-Year Gas Air Conditioning in your post-war homes. And you may find it possible to arrange a direct tie-up with Gas Company promotion for your own Servel Air Conditioned homes.

## Gas Air Conditioner

MADE BY THE MAKER OF THE SERVEL GAS REFRIGERATOR

Ame

#### CATALOGS and

#### HOW-TO-DO-IT INFORMATION

77—KEEPING UP WITH PLYWOOD—means constant attention to the developments taking place in this wonderful field. The Harbor Plywood Corporation, of Hoquiam, Washington, have just put out three booklets which are full of very practical information about different types of plywood and how to use them in building. For instance, giant Super-Hardboard is made in widths up to 102 inches and in lengths to 50 feet and longer. In one of the booklets are shown 16 types of interior joints and 16 types of exterior joints and a similar group of illustrations of structural and high-stress structural uses of plywood in combination with structural wood members. In fact, here is "must" reading if you want to keep up to date.

78—HOW TO INSTALL KIMSUL INSULATION—is thoroughly explained in a 12-page leaflet that illustrates the processes in a simple manner. While this literature by the Kimberly Clark Corp., of Neenah, Wis., may be intended for the home owner, the leaflet would be a good piece of sales literature to use in getting jobs of insulating. Most owners would rather have a professional job done so as to be sure of it being done right than to take a chance on doing the job themselves.

79—BUILDING MAINTENANCE PROBLEMS—are adequately solved in so far as steel sash and rust are concerned by products described in three leaflets issued by the Truscon Laboratories, of Detroit, Mich. An inhibitive steel coating called Bar-ox not only kills rust on steel and iron but it lengthens the life of the paint which is disintegrated by rust. To go along with steel sash maintenance, a new glazing compound called Tite-Lite has been developed. It does not have the usual defects of ordinary putty and can be removed at any time with a putty knife because it does not harden and dry out.

80—CORE WALL AND ROOF INSULATION—are becoming more and more important as modern methods of building become popular. To supply the need for such insulation, the Pittsburgh Corning Corp. has developed a rigid glass product called P. C. Foamglas which is described and its uses explained in two booklets recently published. The Foamglas is a permanent insulation that is moisture and vapor-proof, fire-proof, vermin-proof and is light weight and has a rigid structure. The material weighs 10½ pounds per cubic foot and is made in a standard size of 12 by 18 inches, varying in thickness from 2 to 6 inches.

81—HOME HEATING EQUIPMENT—is about as popular a subject for discussion when the talk veers around to "that new house plan" as a new hat is to a group of women. Warm air moved majestically through the house might be the slogan of the makers of the 600 series of heavy duty steel furnaces because they are made by and described in a leaflet by the Majestic Co., Huntington, Ind. The leaflet is well illustrated with detail and cut-away pictures of the furnace as well as facts and figures regarding its performance.

82—FORGING AHEAD IN BUSINESS—is a booklet published by Alexander Hamilton Institute, of New York City, for the younger man and returning service man interested in making a more than ordinary successful go of his coming business years. You will be surprised to read the list of firms and the number of men in them who have taken advantage of the courses this Institute offers. The book has 64 pages and is thoroughly explanatory throughout.

83—PLASTICS UP TO DATE—might well be the over-all title of a booklet recently put out by Extruded Plastics, Inc., of Norwalk, Conn. The booklet, which is colorful and well illustrated with photos and drawings, describes their two trade-named products, Tulox and Interlox. The former includes seamless plastic tubing, pipe and hollow rod, both rigid and flexible. Interlox covers a series of functional shapes for the entire building field, including counter edgings, wall board and plywood joint strips and other installation uses such as glass and linoleum. Keeping up with plastic developments is good business.

84—NEVER OVERLOOK AIR CIRCULATION—when you finish planning your new houses for post-war building. Positive circulation by electric fans, as described in a leaflet by Chelsea Fan and Blower Co., of Irvington, N.J., is as important as light or heat if the house is to be up to date and satisfactory to prospective buyers. This company specializes in the movement of air and the leaflet is an education on the subject just for the asking.

85—SMALL BASEMENTLESS HOUSES—call for space heaters and the Locke Stove Co., of Kansas City, Mo., describes their line of coal burning "Warm Morning" heaters in a comprehensive book of 56 pages which contains illustrations and facts and figures as well as sample co-operative sales material for the stoves. The construction of these stoves is such that they burn any kind of coal, coke, briquets or wood. Filled to the top with 100 pounds of coal, the stove burns 24 hours or more without refueling.

86—MODUFLOW CONTROL SYSTEMS—are thoroughly explained in an engineering guide booklet by the Minneapolis-Honeywell Regulator Co. This booklet of 26 pages has a first page devoted to the Theory of Human Comfort which gives the reasons for controlled heating. The following pages, well illustrated with drawings and charts, cover the controlling systems for gravity hot water heating, forced hot water, radiant hot water, two-pipe steam, forced warm air, and gravity warm air heating. Explanatory charts graphically show the difference between room temperatures with conventional control systems and with moduflow control system. Air conditioning systems are also covered in this booklet.

87—NEW INDUSTRIAL FLUORESCENT FIXTURES—are now on the market and are illustrated and described in a catalog just put out by the Mitchell Manufacturing Co. of Chicago. This new catalog gives complete data and information on new 2-40 watt, 3-40 watt and 2-100 watt models with steel reflectors and wireway channels including new perfected instant-start units. The finish is baked or porcelain enamel. Photographic reproductions are used to show how Mitchelite accessories provide for every modern method of hanging or mounting these fixtures. The fixtures are U.L. and E.T.L. approved throughout.

#### SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department, American Builder, 105 W. Adams St., Chicago 3, III. (November, 1944)

State

Please send me additional information on the following product items, or the catalogs, listed in this department:

Numbers

Name

Street

City

OCCUPATION\*

\*Please note that occupation must be stated if full service is to be given



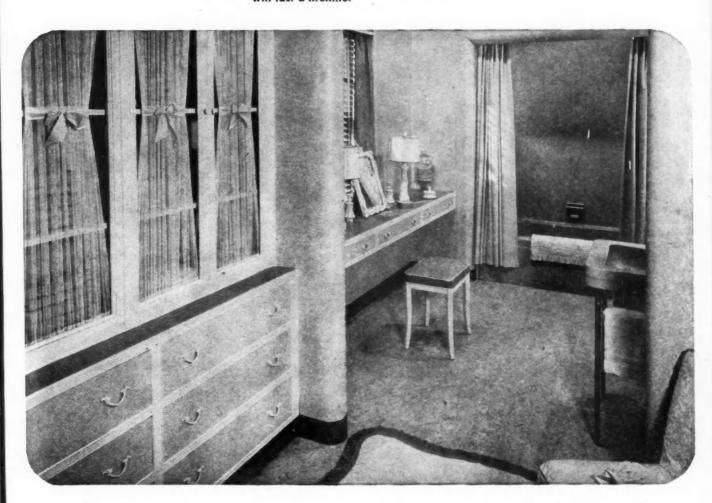
All drawer-fronts are covered with Nairn Wall Linoleum like the walls.



Note how smoothly Nairn Wall Linoleum carries around curved sections.



Not a crack or a wrinkle. Cemented to walls and ceilings, Nairn Wall Linoleum will last a lifetime.





The floors and walls are "twin" Nairn patterns-color correlated with one another.



The base of Nairn Linoleum adds a pleasant note of color contrast.

#### Bathrooms like this boost business for you!...







CONGOLEUM-NAIRN INC. Kearny, N. J.

Put those "wanted features" into your new or remodeled houses so easily and economically through the use of Nairn Linoleum floors and walls. Who would believe that this Bathroom of Tomorrow had been actually remodeled from an "antique"! The colorful beauty and practical advantages of Nairn Linoleum add qualities to houses that help to make them sell on sight-at your price! In addition, Nairn Linoleum floors and walls

-fully guaranteed, of course, when installed in accordance with our specifications - speed construction and permit immediate occupancy.

For modern floors and walls

#### NAIRN LINOLEUM

easy to maintain, colorful, permanent, resilient

#### America

## HOUSE CLIMATE... POSTWAR PLANS AND PEACE PAINT!



Life in pup tents and foxholes is going to make men more conscious of "indoor climate." At the first convention of the Indoor Climate Institute, President Paul B. Zimmerman, Vice President and General Sales Manager of Airtemp Division, Chrysler Corp. points out to Florence Paine, House Beautiful Editor, how this organization will promote the "fourth dimension in living."



2. The man behind the counter, who hears what customers ask, ought to have all the answers. Here's Russell Rypsam, House Beautiful's Art Director, (left) doing a job of brain picking on Ralph Chipurnoi, Housewares Buyer (center), and Louis Stern, Assistant Buyer for Gimbels (New York). See results of this and other field research on paints in November issue of House Beautiful, pages 94-95.



It takes a heap of walking to cover a market, as everyone knows. As a result, retailers (and magazine editors) develop some pretty strong muscles and lasting friendships. Here is House Beautiful's Patricia Guinan at the last New York Gift Show, being shown the new items in the Kensington line by famous Designer Lurelle Guild and Kensington's Sales Manager W. W. Brossman.



You don't learn about markets sitting in an office. And sales records don't tell anything about the business you didn't get. There's Elizabeth Gordon, Editor of House Beautiful, at luncheon in Los Angeles with such people who-ought-to-know West Coast taste in markets as Earl Barker (Barker Bros.), Wallace Neff and Allen Siple (architects), 'Villiam Haines and Jack Moss (decorators).

HOUSE BEAUTIFUL is the magazine that interprets your market for you! It's JIRST in the home field ...the must magazine for buyers who make it their business to know their business!



YOU KNOW IT'S RIGHT WHEN



1904 Right from
HOUSE BEAUTIFUL

BUY

aulph ant TOMORROW'S KITCHEN

WILL BE A BETTER KITCHEN

IF EQUIPPED WITH

ROUND OAK APPLIANCES





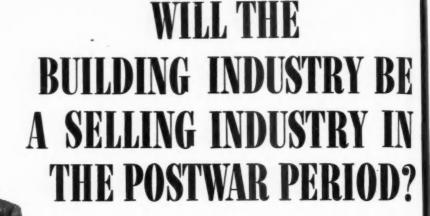
BUY ANOTHER WAR BOND TODAY!

ROUND OAK

HEATING EQUIPMENT

KITCHEN APPLIANCES

ROUND OAK COMPANY . DOWAGIAC, MICHIGAN



The answer depends upon the ability of the industry to aggressively employ the merchandising principles and selling power that have been successful in other fields. The responsibility rests with the manufacturer as well as the dealer.

By the Johns-Manville Roving Reporter

There have been thousands of words written and untold speeches made about the necessity for the Building Industry to do a consumer selling job. Practically every man, woman, or child who expects to make a livelihood in the future in the Building Industry can speak quite glibly about "package" selling. But, let's take a candid look at the situation.



(Advertisement)

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WE ARE LIVING in a very unusual economy today. Because of the war, manufacturers cannot produce anywhere near enough goods to supply the needs of their customers.

Some have been hit harder than others. If the manufacturer's plant happens to be located in an area which the War Manpower Commission calls a No. 1 critical area, he is able to produce goods only in accordance with the manpower he can scrape out of the bottom of the barrel. If the manufacturer is in a No. 2, 3 or 4 area, he can produce more goods.

#### The Big Battle is Ahead

As a result, there have usually been just about enough building materials available from all sources to permit

the dealers of the country to chug along on two or three cylinders, and in the main to keep their businesses afloat.

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Some day this abnormal economy will end and the real battle for survival will begin. All of us have read the staggering figures of potentials for the Building Industry after the war. But let's not be misled. Those

potentials that we hear bandied about can dissolve into a fine mist when the manufacturers of automobiles, washing machines, vacuum cleaners, and all those other products supplying other consumer needs get their selling organizations out into the field and go after the consumer dollar in the post-war world.

#### A Challenge to the Building Industry

What do those manufacturers have that we don't have? Here, I believe, is a challenge to all of us in the Building Industry. Those manufacturers in other industries have the selling power of brand names which have obtained the confidence of the people through national advertising—and, strong dealer organizations with well-trained consumer salesmen.

Now if we are candid with ourselves, we all know that the American economy of the future is going to be far more competitive than any we have known before. When we in the Building Industry speak of becoming a selling industry, it means that the manufacturer must provide the consumer salesmen with brand identification that has national consumer acceptance. And it means that the manufacturer and the dealer must build and train an adequate consumer selling organization. Without these we cannot compete successfully with salesmen in other fields.

The other day I sat in a meeting with a group of Johns-Manville executives, and there I saw post-war planning which was not just so many words. It was the good solid thinking of experienced men who were really "pulling a bead" on this whole problem. They were not only looking to the future, but they were analyzing the past. Let me quote just one statement:

"I know these are troublesome times for our dealers, and I know that our inability to furnish them with a lot of our products, because of our shortage of manpower, is a matter of great concern to many of the dealers who have been loyal to Johns-Manville for years.

#### J-M Radio Program

"But very soon their problems will be selling problems. For the past decade through national and local training schools, we have taken the lead in the effort to make the Building Industry a selling industry.

"Since 1941, when consumer selling became a war casualty, we have been truly doing a post-war planning job with the Johns-Manville Radio Program, 'Bill Henry and the News.' For 5 nights a week, 52 weeks a year, this program, the most popular news program on the air, has been reaching an audience of over 30

REMODEL

million people month after month, for nearly 3 years.

#### Education of Dealer Salesmen

"Yes, it has cost a lot of money. But the consumer acceptance we have built for our name and on which our dealers can capitalize will pay dividends in the competitive days ahead. This indispensable consumer selling asset plus our

plans for dealer clinics and the development of the proper equipment to educate consumer salesmen for our dealers is Johns-Manville's answer to making the Building Industry a selling industry in the post-war period."

#### Planning for the Future

This quotation is typical of Johns-Manville planning for the future. We hope that every serious-minded manufacturer in our field is thinking along similar lines. We are convinced that only through the best thinking and the co-operation of all can the Building Industry become a selling industry and meet the competitive problems of the future.



(Advertisement)

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#### "Helping G. I. Joe" Keynotes Meeting of Mortgage Bankers

SANITY in the lending program must prevail. Veterans must be protected against purchase of farms, homes and business property at inflated, abnormal values," Francis X. Pavesich, Chief of the loan guaranty division of the Veterans Administration, warned in his opening remarks before the late October convention in Chicago of the Mortgage Bankers Association of America.

The bankers sought at this meeting to learn how to serve the best interests of the returning veterans under the new lending provisions of the G.I. Bill.

After pointing out that Congress specifically said that it does not want veterans to buy under the Bill at inflated prices, Pavesich declared that "you will be doing the veterans the greatest favor if you will keep them from rushing in to buy farms, homes and business property at inflated values."

#### Hopes veterans wait for normal prices

He expressed the hope that many veterans will wait until more normal prices prevail before they buy homes and said that under the terms of the bill they will likely have a period of several years in which to take advantage of the G.I. provisions. This results from the fact that their privileges under the Bill extend from the time of the official close of the war, which may be—as it was in the first World war—some time after hostilities end.

#### Cites youth of veterans

Pavesich pointed out to the mortgage men that they will be dealing with the youngest veterans this nation has ever known and that the average age of the serviceman now is around 26.

The address of Pavesich had added significance since it coincided with the issuance of the official regulations covering the lending operations under the G.I. Bill which were made public in Washington the same day. Mortgage bankers, bankers and all lending institutions have been anxiously awaiting these regulations since the bill was passed last summer, since no lending could take place until the regulations determined the methods of handling the loans. Mr. Pavesich's address was the first official statement by a Veterans Administration official since the regulations were finally decided upon.

#### Anyone can lend—not only banks

Pavesich explained that under the bill anyone can lend—individual, corporation or lending institution. The whole program is in the hands of private interests who apply to the Administration for a guarantee of their loans.

He said that there will be around 15,000,000 veterans, which is about a third of the working population of the country and that the lending provisions are likely to have a bearing on one-half of the people who will build homes in the immediate postwar period.

#### Act difficult to interpret

A good part of his address was given over to the technical details of the lending operations. Loan costs will be borne by the veterans, he said, and added that congress had once thought of another plan in this connection but had written it out of the bill. He said that the Act had "been very difficult of interpretation" which explained the delay in issuing the regulations.

He was particularly positive in his statements that one of the hazards of the lending project was the danger of

veterans, most of whom will be young men with limited business experience, paying too high prices for the property they purchase, Pavesich concluded.

#### Title VI Out—Title II In— Draper Announces

RARL S. Draper, deputy FHA commissioner, Washington, D. C., disclosed at the same time that the insurance authorization by congress for housing construction under FHA Title VI—war housing program—will be completely used up by January 1st.

Draper expressed no particular concern about the development because, as he said, "home building and its financing are at the threshold of the reconversion period which is the reverse of that of four years ago when we went from a peacetime to wartime footing. As a matter of fact, we are right now entering that stage in the change-over from a wartime to peacetime status."

#### Resumption of Title II

The next big phase of FHA operations will be resumption of insurance under Title II under which the bulk of its program was handled prior to the outbreak of war. Draper said that many war workers who qualified for housing under Title VI mortgage insurance would not be able to do so under Title II.

#### Improved methods needed

He declared that resumption of activities on the old basis wasn't all of the story by any means and that "there must be a searching for improved methods whereby FHA may assist builders and lenders in assuming risks in housing for the lower middle-income workers.

#### Homes of Pre-war Quality for G. I. Joes Made Possible By W.P.B. and N.H.A. Action

While the meeting of the bankers was in progress, relaxation of restrictions on the use of materials that will permit construction of houses approximating prewar standards was announced jointly by the War Production Board and the National Housing Agency.

Under the relaxations, houses can be built to conform to the minimum construction requirements of Title 2 of the Federal Housing Administration.

The principal relaxations include:

- 1. Restrictions on total floor area permitted in a dwelling unit have been removed.
- The requirement that in certain areas exterior walls be constructed of laid-up masonry, clay, or concrete products has been eliminated.

- 3. Removal of the limitation on the number of electrical outlets.
  - 4. No limit on the size of hot water storage tanks.
- 5. Removal of the requirement that bath-rooms and kitchens be back to back.

Among the provisions designed to conserve lumber that have been retained is the limitation on the use of lumber in the construction of flat roofs. In addition, there has been added a definite prohibition against the use of board lumber for sheathing partitions and ceilings, and for fences. Garage walls are required to be of masonry construction.

Consult your local F.H.A. office for more detailed information on the lifting of these restrictions.

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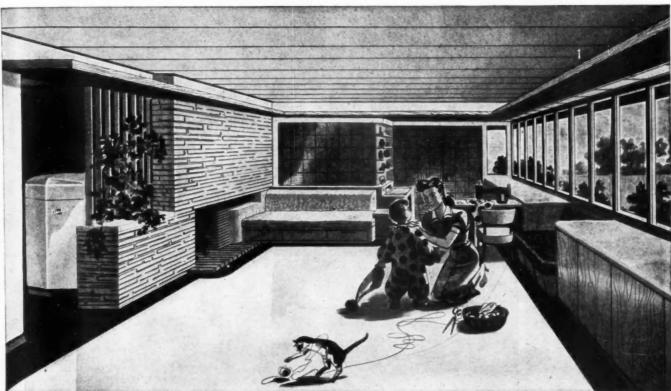
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How to please prospects—and make more money!



Ranch House and Activities Room, designed by Richard B. Pollman, nationally known Detroit Designer.

This modern Ranch House, with its Activities Room where all appliances — sewing machine, washer, ironer, drier—are all housed in convenient, built-in cabinets, and a complete compact heating system is placed in a utility nook, will be pleasing to your prospects.

Even more pleasing is the knowledge that owners can enjoy the utmost in comfort, convenience and cleanliness at lower costs through the years with thrifty, dependable Timken Silent Automatic Heating.

Including Timken Silent Automatic Heating helps builder make every sale a satisfactory transaction—eliminates needless heating worries, 'call-backs and unnecessary repairs, and insures added profit.

Whether you build Ranch Houses or Bungalows in the years following Victory, you cannot afford to overlook the advantages of working with Timken on your heating requirements. Timken Silent Automatic products are backed by 20 years' experience in the manufacture of the highest quality heating equipment, and by more than 200,000 satisfied users.

Your inquiry will bring a FREE copy of our new 16-page book, showing designs of homes and recreation rooms for postwar planners, and place your name on our mailing list to receive future important announcements to builders.

## TIMKEN Silent Automatic

Quality Home Appliances for Comfort, Convenience and Economy Division of THE TIMKEN-DETROIT AXLE CO., Detroit 32, Michigan



POTLATCH FORESTS, Inc., Lewiston, Idaho



WEYERHAEUSER TIMBER COMPANY, Klamath Falls, Orego



POTLATCH FORESTS, Inc., Potlatch, Idaho



POTLATCH FORESTS, Inc., Coeur d' Alene, Idaho



SNOLQUALMIE FALLS LUMBER CO., Snolqualmie Falls, Wash



WEYERHAEUSER TIMBER COMPANY, Longview, Washington



WEYERHAEUSER TIMBER COMPANY, Everett, Washington



BOISE PAYETTE LUMBER COMPANY, Emmett, Idaho



Don't be misled ...

## There'll be no Reconversion Problem in the Lumber Industry

As soon as war demands are satisfied, you'll be able to obtain lumber of pre-war quality and with the usual prompt delivery. The situation is tremendously reassuring.

There will not be a moment lost in the change-over from war to peace production. We'll simply continue to manufacture as we are today. For war demands and civilian demands are very similar—they both call for standard sizes, grades, and items. Instead of our product being shipped for military use, its distribution will be re-channeled to Retail Yards and industrial users.

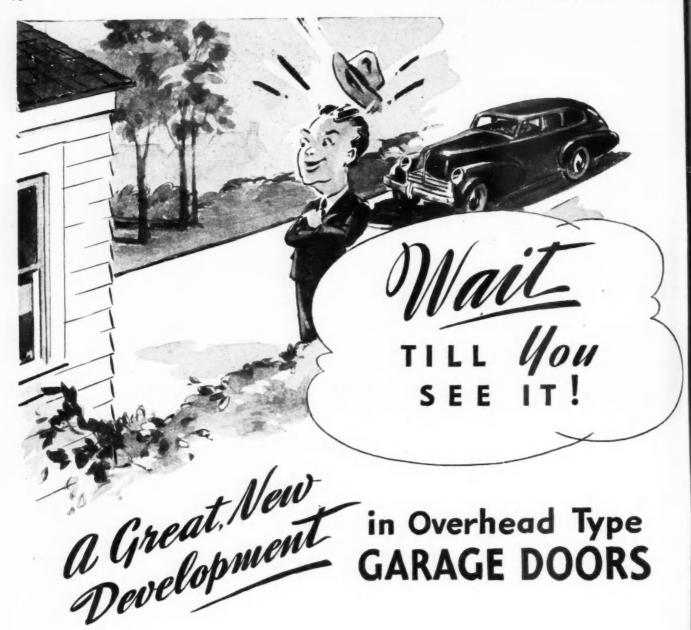
You can count on lumber of pre-war quality again — and that was the best manufactured lumber that ever reached the American market. It was uniformly graded, carefully machined, and properly seasoned. You can expect that quality again from weekly experiments.

Millions of feet per day of well seasoned lumber will be available as soon as distribution restrictions are removed. Modern kilns are drying lumber in great volume. They accomplish in a matter of days what formerly required months.

With the return of skilled workers, with the new techniques developed in forest and mill, and with new and more efficient equipment, quality lumber production will equal normal consumer needs.

WEYERHAEUSER SALES COMPANY
SAINT PAUL 1, MINNESOTA

WEYERHAEUSER 4-SQUARE LUMBER AND SERVICES



This remarkable door is the result of the combination of the latest engineering developments of an outstanding west coast aircraft manufacturer and the long experience of practical men who have spent years in the garage door field . . . contributing factors that enable us to offer:

- An ALL-METAL door that costs no more than the lower-priced overhead-type wood doors . . . .
- A beautiful, modern, flush-type door of distinctive new design . . . .
- A door that anyone with any mechanical ability can install in one hour. Experienced installers have hung them in fifteen minutes.

(Watch for our announcement of a new mechanical opener at a surprisingly low price.)

See the Berry Door on display at the Builders' Convention, Sherman Hotel, Chicago, January 15-20, 1945

BERRY DOOR COMPANY
BIRMINGHAM, MICHIGAN

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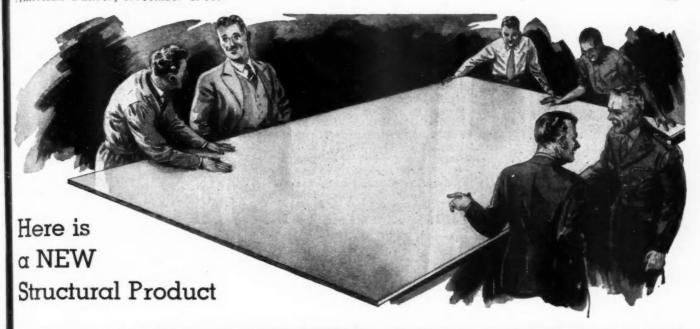
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## INDERON

#### A High-Strength Material, in Large Panel Form, With a Smooth, Hard, Infrangibly-United Plastic Surface!

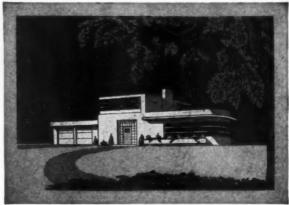
INDERON was developed as a utility container material for the Army Air Forces, was later adapted to many other war uses where strength, durability and dense, hard surface qualities were essential.

INDERON is waterproof, highly resistant to abrasion, impact, vapor permeation and other destructive forces. INDERON, made by chemically and infrangibly uniting Douglas fir veneers, plastic glues and a fibrous plastic film, is a large-size structural product which needs no surface protection, no decorative treatment, no structural support.

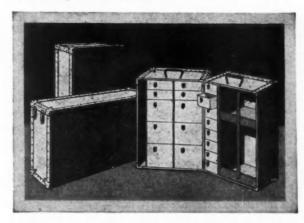
INDERON is stable. It does not warp or twist. It combines beauty, strength, durability and the economical panel form of standard plywood.

#### What Are the Uses of Inderon?

INDERON has literally thousands of applications in such fields as: Marine, Aviation, Railroad, Bus and Truck, Home, Office, Apartment, Farm and General Industry. Available now only for Army-Navy use. INDERON will become one of the most useful of all structural products in the post-war era. Write NOW for full information!



INDERON is ideally suited to play a large part in post-war home building—and in industrial construction as well. Consider INDERON in its three post-war grades (Standard, Decorative and Industrial) for exterior walls, concrete forms, roofs ,kitchen cabinets and fixtures, floors, porch decking, etc. Its low cost will make it a "Jack-of-all-trades" among structural materials.



INDERON is successfully serving the Army Air Corps as the preferred material for packaging many vital parts, medical supplies and delicate instruments. INDERON has also been used for many other important war purposes and has proved its ability to resist tropical fungus, termites, weathering and water immersion.

\_ Manufacturers \_

Buffelen Lumber & Mfg. Co. Tacoma 1, Washington

945

For Information, write
Chicago Sales Office
9 So. Clinton St., Chicago 6, III.

Washington Veneer Co.
Olympia, Washington

#### Cortright-

(Continued from page 49)

than dishonorable after active service of ninety days or more, or by reason of an injury or disability incurred in service in line of duty, shall be eligible for the benefits of this Title."

Of some 14 million eligible men and women, an estimated 3 to 5 million will take advantage of these guaranteed loans. Opinions vary as to the percentage of business that will be done on existing properties, and the percentage on new construction. Some say 50-50, others 60-40.

TERM—"Any such veteran may apply within two years after separation from the military or naval forces or two years

after the termination of the war, whichever is the later date, but in no event more than five years after the termination of the war."

All veterans, therefore, are given a minimum term in which to act of two years after the termination of the war. Present guesses are that if the Japanese war ends in 1945 or 1946, the official termination of the war will not be until 1948 or 1949. (World War I emergency was not declared terminated until 1921.) Even this period of time is generally believed to be too short because of the immense suppressed civilian purchasing demand. Our position that the veteran should have ample time to take advantage of the provisions of the Act, possibly 8 or 10 years after discharge,

is now supported by many other groups.

SECTION 500—"Loans guaranteed by the administrator under this Title (not to exceed \$2,000) shall be payable under such terms and conditions as may be approved by the administrator: provided, that the liability under the guaranty, within the limitations of this Title, shall decrease or increase pro rata with any decrease or increase of the amount of the unpaid portion of the obligation: provided further that loans guaranteed by the administrator shall bear interest at a rate not exceeding 4 per centum per annum and shall be payable in full in not more than 20 years."

"The decrease or increase pro rata" phrasing above has been the cause of most of the discussion and argument. Since it seems likely that the full loss up to \$2,000 will be guaranteed, rather than a pro rata amount, private lending institutions will seek, and probably secure, the great bulk of the business.

SECTION 505—"The administrator shall designate such agency or agencies, if any, as he finds equipped to determine whether the guaranty of loan should be approved under this Title. In any case wherein a principal loan—is approved by a federal agency to be made or guaranteed or insured by it—and the veteran is in need of a second loan to cover the remainder of the purchase price or cost—the administrator—may guarantee the full amount of the second loan." (Not exceeding \$2,000 or 20 per cent of the purchase price or cost.)

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Veterans' Administration was faced with the choice of determining by their interpretation of the Act whether a large part of the business should be channeled into FHA's conservative appraisal and insuring procedure, or permit it to flow through private appraisal and lending institutions with the consequent risk of non-standardized evaluating. The fact that the regulations in their present form do not give FHA a large part in processing G.I. applications is evidence of the Veterans' Administration's confidence that the industry will measure up to its responsibilities. HOLC's good record undoubtedly was an influencing factor in reaching this conclusion.

**FHA Urges Better Management** by Builders. During our recent Conference, Vincent Carlin of FHA's Property Management Division won a round of applause when he announced that only 2,000 dwellings insured under Section 603, 19 under 608, and 83 Title I's have gone to foreclosure in the entire country. He stated that in many instances if sponsor mortgagors had used the same basic principles of good management, tenant selection, maintenance, advertising, marketing methods FHA has, they could still have retained the equities that have been built back into good health. He urged that builders consult their local FHA offices for assistance and advice



### A Cedar Shingle Roof Builds Good Will for You

NOTHING SETS OFF THE HOUSE like a No. 1 Certigrade Red Cedar Shingle Roof—and no other roof will give the owner greater satisfaction during its many care-free years of life.

Red Cedar Shingles serve equally well for sidewalls. Double-coursed sidewalls are substantial, exceedingly attractive, long-lasting, economical and give the appearance of more expensive construction.

Let us send you a free set of working blue prints of Red Cedar Shingle applications. Write . . .

#### RED CEDAR SHINGLE BUREAU

White Bldg., Seattle 1, Wash., U. S. A. Canadian Office, Vancouver, B. C., Can.



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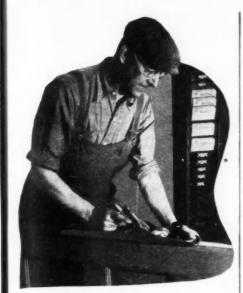
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#### **TOOLS**

#### for Reconstruction Jobs

There's a gigantic line-up of building jobs ahead — additions, reconversion and repair as soon as manpower and materials are free from the demands of war. Stanley's part in this busy future era is to supply you with the necessary tools — tools designed for fast, accurate work and long service.

In spite of the demand, there has been no letdown in the rugged strength and dependable accuracy of Stanley woodworking tools. In fact, the return to peacetime manufacture will permit the fine finishes and wide variety of specialized tools for which the Stanley line has been famous. When the time comes to replace your war-worn tools—make your choice Stanley.

#### STANLEY TOOLS

133 Elm St., New Britain, Conn.



STANLEY

THE TOOL BOX OF THE WORLD

FHA Breaks Record—Representing a dollar volume in excess of \$100 million, FHA acted favorably on more than 20,800 applications covering existing construction during July, August and September of this year. Not since the second quarter of 1939 have application figures for this type of FHA insured financing been equalled. These facts are of particular interest to home builders and lending institutions concerned with FHA's evaluating policy in the early postwar years. Commissioner Ferguson has bluntly warned the industry that FHA will not insure new or existing properties on the basis of wildly inflated values. On the other hand this recent record of insurance activity on present market levels would indicate that FHA believes a new level of value has been reached. Construction costs have risen approximately 30% during the last four years and it seems unlikely that they will return to 1940 levels.

In announcing this insuring accomplishment, Commissioner Ferguson discloses the reasoning applied. "There are several basic tests which should be applied when considering the purchase of an existing house," Mr. Ferguson asserted. "The first consideration for the prospective home buyer should be whether the house is soundly constructed; second, will the neighborhood remain 'good' over a long period of time; third, does the purchase price represent hird, does the purchase price represent a fair value over such a period, and fourth, are the financing terms such that he will be able to meet them, not only out of what he is earning at the time but also from his expected future income."

Government's Stake in War Housing—A rather startling concept of the amount of war housing that the government has built is obtained when it is realized that if all the housing was built in one place it would be sufficient to accommodate the entire population of a city larger than Philadelphia. All told, the government has provided 808,000 units. Of these, about 575,000 are family units, 68,000 are trailers or some other form of stop-gap housing, and 165,000 consist of dormitory accommodations for single persons. Admittedly, the potential threaf to the market of this vast amount of housing in government hands is serious enough. But it should be borne in mind that roughly half of the units fall under the category of temporary housing which under the law must be removed after the war. It is becoming apparent, however, that too much reliance cannot be placed in the demolition provision.

**Public Housing Projects Solicited:** 

While FPHA is not shouting it from the housetops, new application blanks have been quietly distributed to field offices to be used by localities in lining up future public housing projects. No additional public housing program has been authorized, of course, but FPHA feels that its action is justified by the President's directive of some months ago requesting all Federal agencies to line

(Continued to page 94)

## BIG NEWS FOR SMALL HOME BUILDERS!

PLASTEEL First, Complete

#### PREFABRICATED WINDOW UNIT



Until the "go" signal for non-war production is sounded, we cannot reveal the details of our PLASTEEL window unit. But bear this in mind—it is a complete window set-up...completely prefabilicated! Designed exclusively for small homes of the future; priced accordingly. To be sold—assembled in a single carton—through building supply dealers.

CROFT STEEL PRODUCTS, Inc. 370 Lexington Ave., N. Y. 17

25 Years Experience in Designing and Manufacturing Steel Windows

## UNIVERSAL SETS THE PACE! SCREENS IN COLOR!

FOR STANDARD STEEL WINDOWS



A complete, new line of metal and all-plastic screens —in color! That's item #1 on Universal's postwar program. Watch for it at your building supply dealer.

#### UNIVERSAL SCORES AGAIN! ELECTRIC VENTILATING-AND-EXHAUST ATTIC FANS

One Unit! Completely Assembled!

Buy 'em off the shelf — just like any other packaged goods. A revolutionary principle in attic ventilators. Another Universal scoop all set for postwar production.

#### UNIVERSAL FABRICATORS

Formerly Universal Metal Screen Co. 1801 Boone Ave., Dept. U., Bronx, N. Y.

#### Cortright-

up new construction programs for the postwar period. The modest hope has been expressed by FPHA officials that the submission of applications may reach sufficient volume within the next three months or so to permit a comprehensive appraisal of public housing needs.

Russia Follows FHA Pattern according to the following item wired the Philadelphia Inquirer by War Correspondent Alexander Kendrick: "'Own your home' is a familiar slo-

"'Own your home' is a familiar slogan in the United States, but it has now also become a slogan over here. The

government has allotted 257,000,000 rubles for this year for financing the construction of homes and the repair of private homes damaged in the war. A person can get a 10,000-ruble loan from the State for homebuilding, and can pay off in seven years, just like the FHA. In three years before the war, 400,000 persons built their own homes with State loans, but the postwar boom in home building is expected to be really tremendous. The Urals, the Don basin, Stalingrad and the Rostov will get the major share of the loans." (The Soviet Embassy informs us that one ruble is the approximate equivalent of twenty A Plausible-Sounding Salvage Plan for the use of material made available when government war housing and other construction is demolished has been advanced by some plumbing organizations. The essential idea is to retrieve as much plumbing equipment as possible and use it in remodeling down-at-the-heel housing. It is understood that union plumbers are prepared to do the work at special rates. Also, the plan involves a price concession by the government agencies in charge of building demolition and the sale of surplus property.

#### **New Judge**

(Continued from page 49)

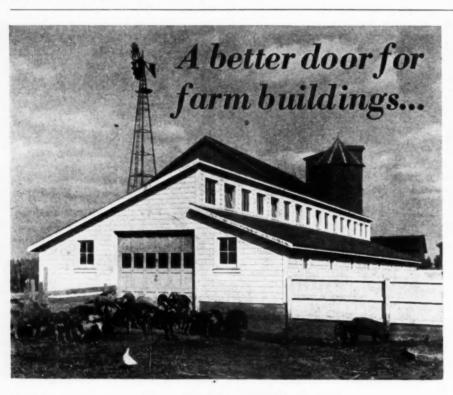
The selection of Mrs. French is extremely fitting, since the Federation's program for the coming year will be devoted primarily to the American Home, and because Mrs. French herself has had long experience with zoning and other problems associated with realty and home ownership, both in her own community and elsewhere throughout the country.



MRS. HERBERT FRENCH

Exposition headquarters in Chicago reports that more than half the available exhibit space has already been contracted for with applications still pouring in. More than 500 entries have been received to date in the Design for a Postwar Home Contest, with builders from Maine to California submitting plans. reports indicate that the men who will house postwar America are thinking along the lines of the "homey" American house, with no radical or freakish departures in the way of design. Practicality, livability, comfort, economy-these are the points stressed, though it is predicted there will be an extensive use of new materials, appliances and labor saving devices that will underline the home's comfort and livability.

Work on construction of the winning models is shortly to be started by the Diarama Corporation, who are making them to scale, in order that they may be ready to set down in their properly land-scaped surroundings when the Exposition opens on January 15th, 1945.



#### **Barcol OVERdoor**

OVERdoors

OVERdoors Electric Door Operators Up-to-date farmers are using Barcol OVERdoors, especially on new buildings like the modern, efficient hog house shown above. It used to be that hogs were raised in squalor; now they are given clean, tight, warm buildings and good yards, for one reason—it makes for better hogs. This hog house has a Barcol OVERdoor at each end so the trucks can drive straight through. Barcol OVERdoors are quality built, rattleproof, weathertight, easy working, long lived—exactly the kind of door intelligent farmers will use. Architects and builders—specify Barcol OVERdoors for farm buildings!

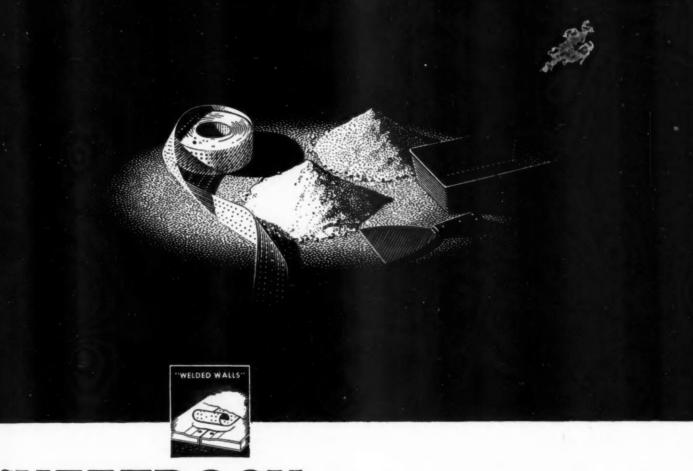
FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES IN PRINCIPAL CITIES

BARBER-COLMAN COMPANY

104 MILL ST.

ROCKFORD, ILL.

... Ever Hear of a "Wall Welder"?



### SHEETROCK Fireproof WALL AND CEILING PANELS









What in the world is a "wall welder"? Instead of welding ships' hulls, he welds walls... Sheet-rock\* walls and ceilings.

First the Sheetrock is applied in big panels...

they go up on the "double quick"—with speed and ease that saves time and money in building. Then the "wall welding" begins. With the simplified Perf-A-Tape\* System of joint concealment almost anybody now can qualify for the job.

A few deft touches—like a "disappearing act" the joints are cleverly concealed—in their place are smooth sweeping surfaces—stronger at the "weld" than the Sheetrock panels themselves . . . and that's that.

The results also are a real revelation in converting old rooms into smooth, smart interiors right over the old surfaces. New Sheetrock interiors are quickly and easily built with walls and ceilings that "stay young."

These and other Sheetrock developments are due to U-S-G research—always probing new possibilities—proving new products and processes to meet every modern need for better, stronger fire-armored walls and ceilings. For Sheetrock has a name to maintain—the best known name in gypsum wallboard.

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

#### Uos

#### UNITED STATES GYPSUM

Manufacturers of Building and Industrial Products Since 1901

GYPSUM . LIME . STEEL . INSULATION . ROOFING . PAINT

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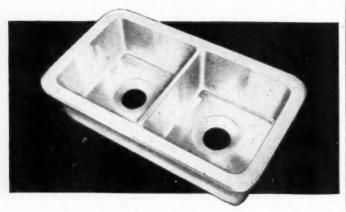
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#### **FAST-SELLING** KITCHEN UNIT

#### Created for a waiting market -available for quick delivery





You'll find that PERMA-GLOSS TWO COM-PARTMENT SINKS have a big appeal to housewives. Here's why: they save time in average kitchens; they lighten work by saving footsteps; they provide a lasting clean appearance.

Wide consumer demand for this fast-selling item makes it an unusual opportunity for domestic engineers and plumbing contractors.

Perma-Gloss Sanitary Ware is all-clay, high-fired, with a glaze of extreme hardness. It is acid-proof, craze and dunt proof, and withstands thermal shock. The beauty of its glaze will not be affected by any liquids used in kitchens, nor by cleansers. This glaze will shine as brightly after years of use, as it does on the day it is installed.

Perma-Gloss B-534 two compartment sinks are made in size 32" x 18"-depth 61/2", with 21/2" or 31/2" center outlets. Built into table tops, work boards, or cabinets, they adhere to a = 3/8" tolerance in over-all dimensions. Such accuracy in fabrication saves labor costs in installation and saves space. Perma-Gloss is of light weight . . . easy to install ... inexpensive ... and meets all government specifications. Extensively used in war hous-

ing. For further information, consult our distributor or write to



#### Challton CEBAMI CORPORATION

SANITARY WARE DIVISION OF GENERAL CERAMICS COMPANY

#### 

#### Build a Model Home for G.I. Joe-

(Continued from page 53)

It's a simple and obvious plan. And it's easy to arrange. There's nothing in the ruling to prevent it. You conform fully with WPB's order.

You build a house for a veteran on his priority. You arrange with him, for a consideration to be agreed upon by you and him, to hold his house open for public showing for a period of a few weeks or a month.

Incidentally, no questions are asked of the veteran as to his need for a priority. His word is automatically taken that he cannot otherwise find suitable housing accommodations. There is no investigation. He does not have to prove it.

After you have shown, the house as a model home, the veteran moves his family in and he has kept his agreement with WPB. He owns the house and he occupies it himself.

Here then is your method for building model homes now. Model homes are always finer homes. What better could you do for returning veterans than letting them have the first post-war model homes?

Editor's Note: As we go to press officials of WPB and NHA are preparing changes to remove restrictions on the size and price of houses which can be built under the H-2 program (see American Builder's attack on the inadequacy of the H-2 program on page 56 of the September issue).

Whatever improvements are made in construction standards for the H-2 program will, you can depend upon it, he extended to the H-3 regulations for veterans.

Also as we go to press comes a notice that the Veterans' Administration has established the procedure to be followed by veterans in applying for a loan for building a new home or purchasing or remodeling an old home. It follows:

The veteran applies to a bank or savings and loan association and describes the house he wants to build, buy or re-model. The mortgagee then determines if it is a suitable property and a reasonable value for the veteran and that the veteran can pay the loan out of his income.

If approval is given, the veteran next goes to the nearest office of the Veterans' Administration where his eligibility is checked and the amount of the loan is determined.

Under the G.I. Bill of Rights a maximum of \$2000 may be guaranteed in full. This permits a veteran to buy up to a \$10,000 house with no down payment if he can show that his income justifies it.

#### "Not For Sale," Says McCabe

(Continued from page 71)

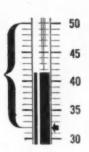
Yale hardware, glass block panel in dining room, Wall-tex on bathroom walls, Pratt and Lambert, Sherwin & Williams and Moore paints that were bought before war quality came on the market.

Kitchen cupboards and cabinets are made by a local mill to exact dimensions. The basements are full, providing adequate space for coal bin, laundry room with double tub, and a recreation room the entire width of the house.

The plan throughout is well designed for maximum convenience. There is a closet off the dining room for overcoats. Upstairs each of the three bedrooms has a closet, two of which are extra large. The bath room is not cramped in size, and there is a good linen closet off the hall. Two bedrooms have cross ventilation and there is a window in the end of the hall.

Normally the McCabes build in the \$10,000 bracket and they are, therefore, looking forward to the G.I. Joe business in the near future. They are planning on a good-sized sixroom house with attached garage, tile baths, automatic heat, and other quality items for this business. Priorities are available for G.I. Joe, and the general Chicago area has best grade lumber and equipment all ready for distribution to builders doing this building. Already inquiries have been made by ex-service men at the downtown office headquarters of the McCabe Construction Co.

## PREVENT COLD WEATHER DELAYS ON CONCRETE JOBS



Use

#### SOLVAY CALCIUM CHLORIDE

FOR SPEED, EARLY STRENGTH AND EXTRA PROTECTION

Concrete construction work this winter can proceed without delays despite cold weather or sudden temperature drops. Wasteful, costly waits between operations for re-use of forms can be cut . . . the protection period can be reduced.

SOLVAY Calcium Chloride added to the mix doubles the strength normally developed during early periods . . . overcomes slowing effects of low temperatures . . . permits re-

use of forms and quicker finishing and use of concrete. It does not change the normal chemical action of portland cements, and makes for a denser, stronger, more waterproof concrete.

Write for FREE booklet—"Calcium Chloride and Portland Cement." Address Dept. 34-11.

SOLVAY SALES CORPORATION
40 Reetor Street New York 6, N.Y.

HERE'S DEPENDABLE
RECOMMENDED
LOW-COST

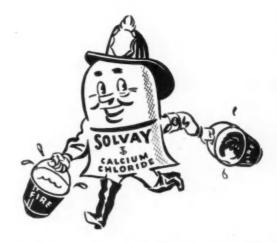
#### FIRE PROTECTION!

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

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

Send for complete information. Write to Dept. 34-11.

SOLVAY SALES CORPORATION, 40 Rector St., New York 6, N.Y.



Use PAILS, BARRELS, PUMPS with



SOLVAY Calcium Chloride

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Why...

## PAMUDO is a leading distributor of DOUGLAS FIR PLYWOOD

Specialization . . . .

Since 1921—and step by step over the years we have concentrated our efforts on one species—DOUGLAS FIR PLYWOOD. Through this undeviating policy we have developed our organization in the way best fitted to cope with the ever-increasing range of uses of this modern "miracle wood."

#### Experience . . . .

Our long association in the marketing of DOUGLAS FIR PLYWOOD—the work of pioneering each new type and grade as developed—has given our organization a fund of knowledge invaluable to all interested and is your assurance of skilled guidance.

#### Facilities . . . . .

With our Home Office at Tacoma—in the heart of the plywood industry—with 6 Branch Offices and Warehouses strategically located to serve the major market areas—each ably staffed with experienced personnel—we offer a complete service for your DOUGLAS FIR PLYWOOD requirements.

Avail yourself of this service in developing your market for Douglas Fir Plywood in the post-war period

PLYWOOD



#### PACIFIC MUTUAL DOOR CO.

Mills: Oregon — Washington Home Office: Tacoma 1, Wash.

SIX BRANCH OFFICES AND WAREHOUSES

Perwood, M. J. Suittmore 31,

Kansas City 3, Kan Los Angeles 21, Cal.

WHITE US POR PROSE LIST AND GRADE USE GUIDE

#### Good Hardware Helps Sell Homes-

(Continued from page 63)

already bored. The Tubular unit is inserted into the hole, trims mounted, and the job is completed in a matter of minutes. These factory bored doors, as advertised by the Fir Door Institute, will fit most all of the better grades of tubulars.

Aside from the saving in installation of tubular locks, a further saving can be made by selecting the proper hardware for each application. Inside passage doors, such as those between living room and hall, should have a platin tubular set, without the locking feature. Although the saving on a single latchset is unimpressive, multiplied by the number of communicating doors in a house, the total is a worthwhile amount. Closet doors can have a knob on the room side and just a closet turn inside, thus making a further saving in cost. The bathroom should be equipped with a locking device operated by an emergency pass-key so that the door can be unlocked from the outside. These are the principal savings that may be effected to bring down the cost of solid brass locks and latches near to the cost of brass coated steel.

Plastic and glass knobs have proven satisfactory alternates when properly selected. The round glass knobs make goodappearing trims and are considered quality items. The plastic knob, likewise, is a satisfactory application on interior doors. Though it does not have the luxurious appearance of solid brass, it is rugged and dependable, providing it is of good grade and solid material. Recently the hollow plastic knob has been placed on the market and certainly price is the only thing that recommends it. The difference between a solid and a hollow plastic can be readily determined by snapping the fingernail upon the face of the knob and a hollow sound will identify the hollow knob. Plastics have the advantage of not tarnishing and, since they are the same material through and through, there is no surface finish to wear off, as with the brass coated steel, or, for that matter, steel coated with anything.

On the other hand, plastic must have a color of some sort, and the color may or may not fit into the color scheme of the decorations and furnishings of the room in which it is used. In short, then, solid plastic or glass may be substituted for solid brass for interior use to further cut the cost and still have good hardware in contrast to steel.

In general, the selection of a rose trim is safe as it fits into the average interior better than any other style. The rose trim is simply a round escutcheon upon which there is a round brass knob. These are available in diameters ranging from 13/4 inches to 21/4 inches, the smaller sizes being most popular.

Good hardware gives trouble-free service, and if its quality is thoroughly pointed out to the prospect, as outlined in this article, its overall cost of approximately 1 percent of the building cost can be made to do 10 percent of the selling job.

Other ideas about using good hardware in connection with house merchandising will be presented in a coming issue.

HANDY bit guide helps you to bore straight and true holes for the installation of tubular lock sets.



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America

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BRAG

PLYW SHEAT (1/4in Well

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\* Plyvboard wood, interio

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Strength and Rigidity of Frame Walls Results of U. S. Forest Products Laboratory Tests of 9ft. x 14ft. Wall Ponels TYPE OF CONSTRUCTION RELATIVE RELATIVE RIGIDITY STRENGTH HORIZONTAL SHEATHING 1.0 DIAGONAL SHEATHING 4.3 8. 1.6 1.4 4.2 3.5 7.0 PLYWOOD SHEATHING (Glod) 14.4 MOST RIGID

#### **Vapor Transmission Tests**

(From Tests at U. S. Forest Products Laboratory)

NOTE: The lower the figure, the more effective the vapor barrier.

Loss in Grains per MATERIAL Sq. Ft. per Hour
A. Plywood, 1/4" Douglas fir, 2 coats asphalt paint0.308
B. Plywood, 1/2" Douglas fir, 5-ply
C. Plywood, 1/4" Douglas fir, soybean glue, plain3.080 to 4.620
D. Insulating Sheathing, surface coated (asphalt both sides and aluminum paint on one side)2.190 to 3.050
E. Plaster-Wood lath7.900
F. Insulated lath and sheathing-board type  (1/2" and 3/4")18.50 to 24.65
G. Plaster, fibreboard or gypsum lath14.20 to 14.80

## Tests Prove Douglas Fir Plywood is Better for Wall Construction

\* Detailed above are the results of two series of tests at the United States Forest Products Laboratory. The comparative strength and rigidity of Douglas Fir Plywood as wall sheathing is clearly set forth in our chart, while the other shows the effective resistance to vapor transmission of plywood construction.

\* Dri-bilt wall construction utilizes three different grades of Douglas fir plywood — Plyscord, Plywall and Exterior.

#### PLYSCORD FOR SHEATHING

\* Plyscord is the sheathing grade of Douglas fir plywood—an unsanded utility panel of unusual rigidity made with moisture resistant (but not waterproof) binder and available in 5/16", 38", 1/2" and 5%" thickness. It is ideal for single-use concrete forms, after which it may be reused as subflooring.

#### PLYWALL FOR INTERIORS

\* Plywall is the standard wallboard grade of Douglas fir plywood, and is intended only for interior use. It is strong, rigid, kick-proof and puncture-proof—



ideal for interior walls. Available in  $\frac{1}{4}$ ",  $\frac{5}{8}$ " and  $\frac{1}{2}$ " thicknesses.

#### EXTERIOR-TYPE PLYWOOD

★ Exterior-type is made especially for permanent outdoor use. Manufactured with a completely waterproof binder, it is accepted by FHA and approved in the Uniform Building Code of the Pacific Coast. It is a leading choice for exterior walls and may be given many different design treatments.

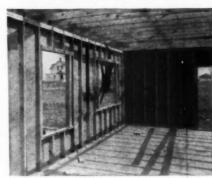
DOUGLAS FIR PLYWOOD

Above and below: Outside and inside views of house construction in which plywood is used for sheathing and subflooring. Labor savings often amount to 50% or more because of the large panel form.

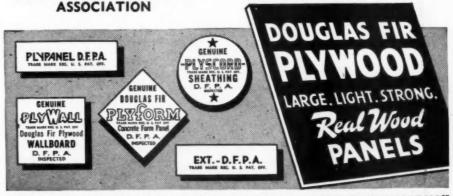
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STRENGTH

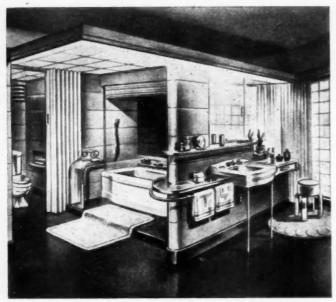
8.6



When war needs lessen, Douglas fir plywood will again be available to help you build better homes—faster.



SPECIFY DOUGLAS FIR PLYWOOD BY THESE "GRADE TRADE-MARKS"



Courtesy Briggs Design Department

## Any house you build can have these fixtures

Not every house you build can justify such a luxurious bathroom as this; but it does indicate the interesting possibilities of *Formed* Iron Plumbing Ware for any house, regardless of price.

Formed Iron fixtures are a complete break with tradition. They are modernly styled with an eye to functional design; can be specified in white or a wide range of colors; are acid-resisting at no extra cost; have a high-glaze finish; and most important, are scientifically designed to eliminate unnecessary weight with no impairment of strength and serviceability.

Another assurance you have is that Formed Iron fixtures can be porcelain enameled on Armco Ingot Iron — the *original* enameling iron and the most widely used metal base for this exacting purpose.

Keep Formed Iron fixtures in mind for your post-war plans. They'll give your buyers lasting satisfaction, which means lasting goodwill for you. The American Rolling Mill Company, 3171 Curtis Street, Middletown, Ohio.

Help finish the fight
— with War Bonds



#### Handwriting on the Wall-

(Continued from page 64)

that can create the tremendous flow of war material we have put out must or should have a third of its people living its slum conditions! The building industry will never convince them that there is any valid reason why such a production capacity cannot be utilized in peace-time for the purpose of providing decent shelter for the people generally.

#### Low Cost Homes Possible

Whether or not mass production will be employed in meeting the problem of providing adequate homes for people whose top limit for a house is around \$3,000 has become a topic for considerable debate. Some say it cannot be done I believe that it can. So far as designing, engineering and merchandising of low cost houses by mass production methods are concerned, it can be done whenever we have the courage tenacity and imagination to do it.

Our own war experience hints of the possibilities. Several thousand comfortable, permanent four-room houses, without frills or embellishments, have been built with Celotex Cemesto Units at cost of \$2,500 or less. This price did not include any profit for the builder nor the cost of the lot. However, these houses were only partially prefabricated and were not manufactured by the assembly line process, which I envision for the future. I am confident that American ingenuity that has found it possible to produce Flying Fortresses and B-25 bombers with their hundreds of thousands of intricate parts on an assembly line, can produce houses in somewhat the same way. Reductions in costs thus effected will make it possible to produce houses for from \$2,000 to \$3,000 that are at tractive, as well as comfortable and durable.

#### Variety in Color and Detail

It is true that there will be some limitation in design for such a house, just as automobiles and other mass-produced articles are limited in the number of models or styles manufactured. Yet when we buy an automobile we are satisfied to choose from comparatively few models. A large percentage of women's hats are produced by mass methods, yet seldom do we see two hats that look exactly alike. The secret is styling and merchandising. Public taste is not born; it is made. When you see a certain material become suddenly fashionable, it is no accident. Generally, it was planned that way. And the same can be done for home styles.

Any good product can be sold at the right price if it is properly designed, made and merchandised. The appearance of one mass-produced house can be made to differ from another by various methods, such as changes in porches, trim, room arrangements, color, or location on the lot—yet the fundamental parts can be similar.

Now, how will this tremendous need for low-cost housing on the part of this vast segment of our population be translated into demand? It is possible that the stimulating force may come from factors entirely outside the present building industry. There are rumors even now that several mass producers of other goods may, after the war, turn their attention to housing—that they are investigating materials, and working out techniques—that they are planning aggressive merchandising campaigns in principal population centers. Ship builders, steel makers and automobile manufacturers have been mentioned as likely newcomers. Let the home building industry not underestimate them by saying they know nothing about housing. They can learn—fast! If they enter the field you may be sure they will do a thorough and efficient job.

The thing that disturbs me is that organizations like these may decide to take the play entirely out of the present building material channels. Are the present members of the home building industry prepared to stand by and watch others take over the richest potential market the country has ever known? Because that is what the low cost market will be.

Because that is what the low cost market will be.

Never before in history has there been so much discussion about slum clearance. It is rapidly becoming a political issue. Slums are natural allies of disease and crime and something will be done about them. Slum clearance is likely to be undertaken as a "make-work" measure after the war—one of the biggest and most important jobs ever to be tackled as a national project. When that is done, when we begin to (Continued to page 102)

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The stand door size ward in the standard make pojobbers stallation four ground

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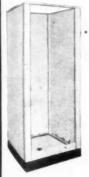
NO. 85homes, co lic build 78. Deep 1/4" MAS

MET

21

A step forward

The standardization of shower cabinet and glass door sizes announced by Fiat marks a step forward in the industry that will be of definite benefit to the architect, builder, jobber and plumber. Standardization will expedite bathroom planning, make possible bigger values in showers, simplify jobbers stocks, and promote uniformity in installation methods. Fiat showers are classified into four groups with six basic sizes.



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#### .. GROUP NO. 1

Skipper type, low cost showers 32 x 32 x 76

GROUP NO. 2...

Cadet type, medium priced showers 32 x 32 x 80 36 x 36 x 80 36 x 36 x 80

(corner)



#### GROUP NO. 3

Marine, Ensign type, for "above average" installations

32 x 32 x 80 36 x 36 x 80 40 x 40 x 80 (corner)



Admiral type, de luxe class 32 x 32 x 80 36 x 36 x 80 36 x 36 x 80 40 x 36 x 80 36 x 40 x 80 40 x 40 x 80 (corner)



#### Glass Shower Doors. One standard size--24 x 72

Measurements conform to the American Insti-tute of Architects 4" unit module system.

AVAILABLE FOR DELIVERY NOW

NO. 85—Recommended for homes, clubs, hospitals or public buildings. Size 36 x 36 x 78. Deep type receptor—heavy 4." MASONITE walls.

NO. 80 Volunteer — has remarkable strength and is easily erected. A good shower for economical installations. Size, 32 x 32 x 76 and 30 x 30 x 76.



1265 ROSCOE ST., CHICAGO 13, ILLINOIS 21-6 BORDEN AVE., LONG ISLAND CITY I, NEW YORK 32 SAN GABRIEL BLYD., PASADENA J, CALIFORNIA

## ualitybilt

 Manufacturing fine quality woodwork for nearly 70 years that combines authentic designing, superior workmanship and dependable materials, has resulted in the widespread acceptance of Qualitybilt Woodwork. Illustrated are several Qualitybilt specialties just a few among the complete Qualitybilt line. Ask Your Millwork Distributor for "Qualitybilt"



DESIGN FL2429



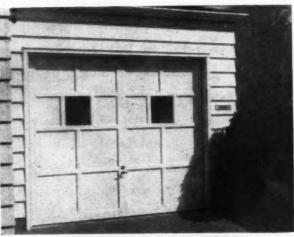
DESIGN FL3039

#### BATHROOM CABINET

A new, inexpensive venetion design. Comes complete with hardware ready to install. Made of W. P. Pine. Available for immediate shipment.

#### **CORNER CHINA CASES**

One of many designs available. Ideal for today's low-cost homes or for remodeling. Quickly installed — requires no recess. Made of clear W.P. Pine.



#### "UNI-ROL" GARAGE DOOR

DESIGNED BY THE HOUSE OF QUALITYBILT .... MECHANIZED BY STANLEY

Many exclusive features make this the desirable swing-overhead Garage Door. Easily installed . . . equipped with Stanley hardware . . . Qualitybilt construction. Rot-proofed and pre-fit for openings 8'-0" wide by 7'-0" high, and 8'-0" wide by 6'-6" high. Attractive in design . . . budget-wise in cost . . . convenient in operation.

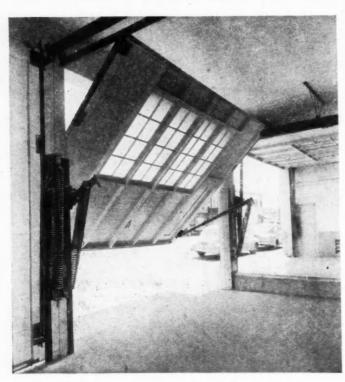
FARLEY & LOETSCHER MFG. COMPANY

SASH - DOORS - BLINDS - FRAMES - CABINET WORK - INTERIOR TRIM DUBUQUE . IOWA

#### AVAILABLE!

## VERTHE TOP' DOOR EQUIPMENT

#### FOR INDUSTRIAL APPLICATION



Large, one piece industrial doors, such as the ones above, when fitted with No. 912 "Overthe-Top" Door Equipment, are lifted to a full over head position with effortless ease in a matter of seconds. "Over-the-Top" Door Equipment is so simple and practical it can be installed on any rigid door, built right on the job. Another big feature: only 5 inches of head room are required. The heavy duty springs are quickly adjusted to obtain just the right amount of power. "Over-the-Top" Door Equipment is low in cost, yet gives long, satisfactory service. Investigate the numerous other exclusive advantages which both builder and owner appreciate in "Over-the-Top" Door Equipment. Write for full information.

## FRANTZ Guaranteed BUILDWARE

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

#### McCullough named President of the Masonite Corporation

WIDELY known throughout the lumber field, with which he has been associated during his long business career, Matthew P. McCullough, for many years treasurer and a director of the Masonite Corporation, has been appointed president to fill the vacancy caused by the recent death of Ben Alexander. Charles J. Winton, Jr., also a director, succeeds Mr. McCullough as treasurer, while John M. Coates, the firm's legal counsel, has been appointed a director.

Mr. McCullough, who has been treasurer of Masonite since 1928, is also chairman of the board of Employers Mutual

Liability Insurance Company, a director of the Marathon Corporation, both of Waussau, Wisconsin, and president of Alexander & Yawkey Lumber Company, Prineville, Oregon. "Masonite Corporation manufactures a line of dense,

"Masonite Corporation manufactures a line of dense, thin hardboards, made from wood but far stronger. It is uniform, grainless, smooth-and-hard-surfaced, resistant to dampness, heat and insects. Because of its handsome surface texture, it suggests paneling, counters, flooring, wainscoting, and many interior and exterior uses," McCullough says.



#### Handwriting on The Wall-

(Continued from page 100)

tear down whole areas and are faced with the necessity of constructiong hundreds of thousands of homes and multiple living units required to house properly the people who have never before had decent housing, we cannot escape the necessity of doing a mass production job.

These are possibilities everybody in the industry should be thinking about. The handwriting of low-cost housing is on the wall—low cost housing by means of mass production methods. It seems to me that every man and every organization in the industry should be striving to make some contribution toward this end—not as a matter of charity or duty, but as a common-sense business proposition.

That idea has motivated our research and product development for the past seven years. We have constantly sought to contribute to the perfection of new and improved structural techniques. Our aim, of course, has been to strengthen and broaden our own future. But a part of that aim has also been to prepare ourselves for the moment when we can render valuable and perhaps vital assistance to our customers—and that includes every factor in the building industry—dealers, architects, engineers, contractors, building mechanics—and the home buying public.

This does not mean that we expect every dealer, every architect, every contractor and every building craftsman to enter the low cost housing field. The postwar demand for dwellings among the upper and middle income groups will tax the industry's capacity for dwellings of the traditional type. That demand must be satisfied.

But, at the same time, the industry cannot stand at that line. Some of us must forge ahead, pioneer new materials and new methods of construction. For, if we of the building industry are to progress and prosper over the long pull, we must continue to improve and keep pace with every other major industry. Make no mistake about that. Some of us must get busy and keep busy. And we must sell ourselves and everyone else on the importance of overcoming every obstacle that stands in our way.

We must do more than talk and plan; we must act. There is no time to waste. The future is today at the horizon.

Bror Dahlberg

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ORANGEBURG PIPE is a "natural" to diversify your sales and replace business lost through wartime shortages of lumber and other critical materials. There's a ready market today for ORANGEBURG PIPE—as well as an enormous postwar market.

Light weight and longer lengths make ORANGEBURG easy for you to handle. And its many big advantages in installation and service make it easy to sell. Does not chip, crack or break easily. Can be sawed to any length—no waste.

ORANGEBURG PIPE with TAPERWELD couplings is the ideal pipe for house-to-sewer connections, conductor pipe, downspouts, and any tight-line drainage. Quickly made, watertight joints prevent infiltration and entry of root growth.

ORANGEBURG PERFORATED PIPE with snap couplings is specially designed for septic tank filter beds, farm and muckland drainage, foundation footing drains.



## The Builder AND PRECISION-BUILDING

One outstanding fact has impressed every one of the million people who have visited the Homasote\* Homes exhibits in leading department stores throughout the country.



... With the Homasote Precision-Built\*\*
System of Construction, the owner can have his
home designed in just the way he wants it.

For Precision-Built Construction is not prefabrication ... it is not based on standard sections, rigidly controlled and restricting design. Rather, it produces any size, style

and type of home which you and your client may designate. Precision-Building is mass production applied to conventional construction.

The one great overall purpose of Precision-Built Con-

struction is to deliver more house for the money... better materials, sounder construction, more convenience features; a house that is cooler in summer, warmer in winter, with the lowest of upkeep costs. And every Precision-Built Home, whether it costs \$4,000 or \$40,000, is built to the same high quality, in both materials and workmanship.

Precision-Built Construction is rapidly becoming a major force in home construction. \$8,000,000 worth of private homes, and \$30,000,000 in Government housing have already been built. When residential construction is resumed—after Victory—Homasote Precision-Built

Construction, employing local labor, will provide profits for hundreds of well-established, independent dealers in all parts of the country. We invite you to write for the full details.

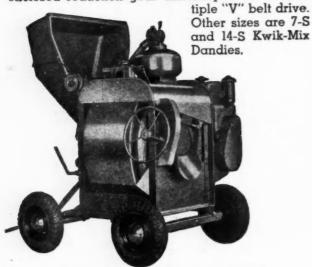


*Trade Mark	**Reg. U. S. Pat. Off.
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Carl Carl	
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HOMASOTE COMPANY, Trenton, N. J.

#### KWIK-MIX A House Every Thirty Minutes— (Continued from page 69) MIXERS

Kwik-Mix convertible 10-S Dandie . . . side or end discharge . . . change can be made in the field to suit pouring conditions. Special features are: easily accessible drum drive shaft . . . flow-line discharge chute . . . simplified skip-flow shaker . . . enclosed reduction gear assembly in oil...mul-



#### **KWIK-MIX 10-S DANDIE**



Kwik-Mix 31/2-S Concrete Mixers . . . side or end discharge ... tilting or nontilting ... anti-friction bearings . . . spring mounting ... high speed trailing ... welded construction.

#### KWIK-MIX 31/2-S SIDE DISCHARGE TILTER



Kwik-Mix Non-Tilting 6-P Plaster or Mortar Mixer .. fast discharge, 7 seconds ... light weight, only 850 pounds...air cooled engine...V-belt and worm drive . . . low shoveling height. Also 4 wheel 10-P tilting model.

KWIK-MIX CONCRETE MIXER CO. PORT WASHINGTON . . . WISCONSIN

crane. Adjacent to these is a well-equipped cut-up department, 100 feet by 140 feet, having a clear width of 45 feet. In connection with these manufacturing areas there is a complete swamill-type planing mill with facilities for prefabrication production. These working areas comprise approximately 110,000 square feet, all served by electric power, compressed air and transportation.

Prenco Sectional Houses consist of three-dimensional plant-manufactured sections approximately 8' x 8' x 24' about the size of a commercial trailer. Two Prenco sections form a 1-bedroom house, three sections a 2-bedroom house, and four sections a 3-bedroom house. Other practical combinations are easily adaptable to schools, row housing, first aid stations, field construction offices, dormitories and numerous other requirements.

Prefabrication Engineering Company is now producing a complete 3-bedroom house every 40 minutes, transporting it to the site and assembling it ready for occupancy.

Each Prenco section is completely factory finished, including plumbing, electric wiring, exterior and interior painting and major pieces of furniture. Sections are transported from factory to site by either rail or truck and trailer.

Upon arrival at the site, where the foundation is ready, the Prenco sections are placed and bolted together, the roof is capped and the vertical joints battened together both inside and out. As soon as utility connections are made, the house is ready for occupancy. Only about 5 per cent of the entire work to complete a Prenco house is done in the field.

The simplicity of on-the-spot joining of the Prenco sections works advantageously in reverse—the house is readily demountable—it is 100 per cent salvageable. Removal of bolts, roof capping and battens, and disconnecting the utilities quickly prepare the Penco sections for truck loading and removal to another site.

The experience of Robert Johnson and his associates in prefab construction goes back several years. In 1942 the U.S. Dept. of Agriculture selected a Prenco design for a knocked-down grain bin and a quantity were turned out

in the emergency grain bin drive of that year.

Since that time the firm has produced on a volume basis sectional semi-circular igloos; precut wooden barracks buildings crated for export; tug boats; precut barges; emergency dormitories; houses from designs prepared by the John B. Pierce Foundation; hospital buildings for the Navy using the Modulok System; and at present, manufacturing sectional houses from designs prepared by the Tennessee Valley Authority.
Production lines for the Army housing job shown here

have been operating now for several months under military secrecy. The number of houses constructed cannot be told, but they would house the population of a fairly large city.

Where they are being sent cannot be told just yet, but many northwest motorists have seen the long truck-trailers units, each carrying two sections. "What are trailers units, each carrying two sections. they?" queries can now be answered.

Manufacture at Toledo starts in the cut-up department, where plywood sheets and lumber, cut in the adjacent mill, pass through a series of trim saws, gang drills, and jig assembly tables.

Overhead cranes and a fleet of material-carrier trucks carry pieces to the sub-assembly and parts department

on the second floor of the assembly line shed. Here the "stressed skin" floor, wall and ceiling panels are nailed and glued for extra strength with light weight. Partition panels, window and door assemblies are completed; and certain sections are wired for electricity. Each sub-assembly is made exactly to fit, down to the holes for plumbing and insulation pad between plywood layers of outside walls. Douglas fir plywood is the main material.

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Panels for an entire house section are wheeled onto elevators that drop them to the final assembly floor.

(Continued to page 106)

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## Remodeling?

Check the heating equipment

Is the present system overloaded?

Will the building be increased in size and thus increase the heating load?

Will the heating system be zoned?

Is the boiler old and damaged?

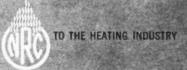
Are you converting to automatic firing?

NATIONAL RADIATOR
Boilers, Radiators and Convectors
are the answer and are now available
... Write for literature

#### The NATIONAL RADIATOR Co.

221 Central Avenue, Johnstown, Pa.

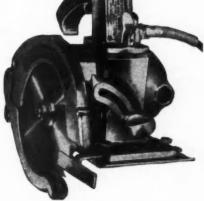
50 YEARS OF SERVICE



## Mass Production Building Requires MASS PRODUCTION SAWING



## Speed matic



you must boards one-at-a-time, the Porter-Cable SPEED MATIC will do it 10 times faster than the best hand-saw man you can hire. But for full use of the SPEED MATIC, plan for multiple cutting. Figure your job. from forms to give all rafters . . the material that cuts to the same length to the man with the SPEED-MATIC, It's the first essential of mass-production building.

Whether it's one building or a sub-division, the efficient, fast SPEEDMATIC is the surest way to keep pace with the times. Watch the SPEEDMATIC rip through a twelve foot board—then you'll know the economy of modern methods. Better yet, lay out a dozen timbers, side-by-side, and listen as SPEEDMATIC rips its way across without a moment's hesitation.

SPEEDMATIC IS TOUGH BECAUSE: it has an oversize motor; helical gear drive that delivers 11% more usable power to the blade; the broad shoe sets it securely and safely—even in tilted positions for angle-cutting. BALANCED GRIP MAKES IT THE ONLY TRULY ONE-HAND SAW. Available in 7½", 8", 10¼" and 12" sizes.

YOU'LL BELIEVE WHEN YOU SEE. Phone your dealer, or the local Parter-Cable representative (he's listed in the classified directory of your telephone book) and ask him to show you the SPEEDMATIC at work. That's the real proof. Drop us a postcard for full details.

#### PORTER-CABLE MACHINE CO.

1721-11 N. Selina St.,

Syracuse '



Millions of Americans have learned to know SISALKRAFT as the tear-resistant material in which war supplies are wrapped. They have seen it used on their war jobs - on shipments of their war goods to fighting fronts!

In their new homes they will want dependable, permanent protection from wind and moisture. SISALKRAFT is going to be more in demand than ever — because it protects their investment lowers their heating costs-gives them added comfort - all at so little cost.

#### Goes on Fast . . . Lowest Applied Cost!

Don't lose time with flimsy paper. Use tearresistant, fibre-reenforced SISALKRAFT! Nail it on! No batten strips, fewer nails, no patching. Get a piece of SISALKRAFT. Test it! Use it over sheathing - as flashing for window and door openings — under floors — and to protect finished floors and stairs.



Cacturers of SISALKRAFT, FIBREEN, SISAL-X, RICALTARE AND COPPER-ARMORED SISALKRAFT

#### A House Every Thirty Minutes

(Continued from page 104)

where four sets of tracks carry moving lines of house sections through various stages of completion to the loading dock.

Walls, partitions and roof are in place in the time it usually takes to hang a door. Electricians connect the panel wiring and install switches and fixtures. Plumbers place the prefabricated shower bath. Sink, wash basin, water pipe and drain pipes are brought in from the plumbing prefabrication department and the section moves into an enclosed paint room for color finish.

A traveling crane loads sections onto waiting truck-

trailers, or onto flatcars.

Many of these hurry-up homes are shipped by truck from Toledo to Portland, where special furniture is installed at the plant of the P. B. John Furniture Co. The furnishings carried into these dwellings includes a

dining table and six chairs that can be folded and tucked out of the way against the wall. Also three living room cabinets, two bookcases, one chest of drawers, a high-boy cabinet, a storage cabinet, three low chests built to be installed under the windows of the house, and a compact dressing table. In addition to these items, mattress and box spring, a day-bed sofa and a mirror are installed.

Then, as one of the crowning features, comes a flower box measuring about 8 feet by 10 inches, which, when the house is finally placed on permanent location, will be a porch adornment.

The post-war plans of Mr. Johnson and his associates contemplate a wide and varied prefab building service for industry, both domestic and export, as well as for individual home owners and farmers.

#### Mahan Sees 15 Per Cent Increase for Postwar Homes—Expects 400,000 First Year

CONSTRUCTION of 400,000 residential units in the first full post-war year followed by 500,000 the following year and a gradual increase after that was seen by L. E. Mahan, St. Louis, vice president, Mortgage Bankers Association of America, speaking before members of the National Fraternal Congress of America at their annual convention here. Mahan's estimates were based on data he compiled in recent months. The bulk of post-war construction is sure to be residential, he declared, and said that in this classification houses ranging from \$5,000 to \$6,000 will predominate.

Labor and materials costs right now are high, Mahan said, but they should not be taken as a guide for the future. He said many sales today are inflated sales—he described them as "expedient" sales—which will not prevail in normal times. Immediately after the war, we may experience a slight increase in costs but this will soon be adjusted.

"Some of the best opinion seems to center around the belief that we will have a 15 per cent rise over the 1941 level in building costs," he said.

Mahan told the fraternal investors that he is convinced that the mortgage, as an investment medium, faces a more favorable future than at almost any time in our history.

Mahan quoted figures which he compiled this summer showing that the total mortgages outstanding in the country as of the end of last year amounted to nearly \$34,400,000, of which private interests own ten times the total of those held by federal agencies.

In his address, Mahan outlined the history of government activities in the field of farm mortgage lending and declared that, in his opinion, the effort had been a failure. Despite the fact that the government has been able to do little in the farm mortgage field to help farmers as a group, it has succeeded in gaining almost absolute control of this field. Private capital has almost entirely withdrawn from this field because of the federal subsidy in lower interest rates and special terms which private interests cannot meet.

One of the most unfavorable factors in the mortgage field today is the out-of-date laws pertaining to mortgage financing. In many states, these laws were created during the earliest days of the nation and have no relation whatsoever to the world we live in today.

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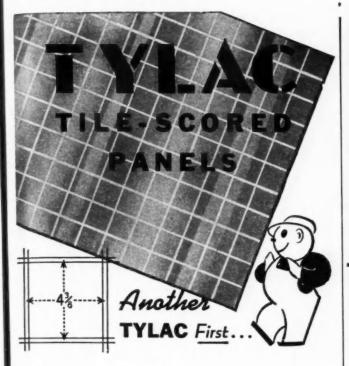
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TYLA

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JYLAC originated and maintains the accurately scored tile pattern measuring 43/8" from center-to-center of each scoreline... The exact 41/4" square size of ceramic tile—with a 1/8" mortar joint.

TYLAC originated and maintains tile scored panels with two scored and two plain edges . . . No waste in fitting . . . A scored edge may be butted against a plain edge, with joint concealed by TYLAC Calk and Touch-Up, eliminating wall point mouldings and providing an exclusive over-all beauty and distinction. TYLAC originated special machinery for triple-checked accuracy of its tile-scored pattern . . . So exacting that any portion of any one panel may be installed vertically or horizontally adjacent to any portion of any other panel.

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Fuel rationing makes good weatherstripping essential. Allmetal installations stop drafts, increase comfort and conserve

#### A PROFITABLE BUSINESS FOR YOU

Conservative estimates say two million homes with gaping doors and loose windows still require weather-strip protection. To conserve fuel and maintain civillan health the War Production Board has made Zinc available to us for manufacturing weatherstripping. Every Builder and Carpenter can do this essential work. Fuel saving will pay the Homeowner's Cost.

ALLMETAL, Weatherstrip for Double Hung Windows, casements and doors is furnished cut to size and ready to install. Simply send the number, kind and dimensions of openings. No priorities now required. Take Advantage of this Opportunity

ALLMETAL WEATHERSTRIP 231 W. OHIO STREET-CHICAGO 10, U.



#### Russell to Continue Fight for Fair Rent Committee; Succeeds W. J. Demorest

NEWLY elected General Chairman of New York A Metropolitan Fair Rent Committee, William E. Russe will carry on the work of this group. It was formed to protect the interests of landlords under Federal rent control; a

present it is waging a battle for a ten per cent increase in rent ceilings for this important residential area.

Mr. Russell is senior partner in the law firm of Russell and Russell, Chairman of the Board of the Lawyers Mortgage Corp. He is corporation counsel and a member of the Board Simmons-Boardman Publishing Corp.

William J. Demorest, who resigned as Chairman, expressed his satisfaction that a man of Russell's background and outstanding ability was available as his successor.

Russell's first statement declared in part . . . "Rents here had been frozen at practically the lowest levels ever known some residential rents had already declined almost 50 per censince 1930 while at the same time operating expenses in creased about 50 per cent.

There is no justice in denying to property owners a modest increase in rents when every other type of business and all classes of labor have been allowed, and rightly so, increase over the pre-war levels. Real estate has been in a continuou depression for thirteen years and now a Government agency freezes rents at ruinous levels in an area where no rent in creases of any substance have occurred. Surely the justion of the property owners' case is such that no court will den



William E. Russell

. and be sure to provide for a shower!"

If you could make a quick survey of the families in your community who plan on building or buying new homes you would find SHOWERS an important

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One reason for this is the satisfaction and popularity demonstrated by over 100,000 BATHE-RITE SHOWER CABI-NETS in use today in homes, factories and military bases.

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## "Keep this under your hat"

SAID THE ENGINEER TO THE RESERVOIR



IMPORTANT FUNCTION of a reservoir roof is to cut down evaporation losses. Wood does that well, because it's an excellent insulator. But even with wood roofs, water vapor makes a pass at getting out, is caught by the roof and condenses there. And being damp all of the time is tough on any material.

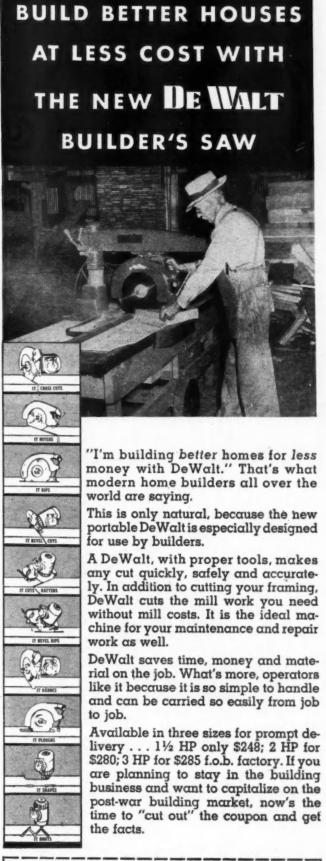
THIS IS where the Wolmanizing process steps into the picture. It protects the wood that protects the water. Being deeply impregnated with Wolman Salts\* preservative, Wolmanized Lumber\* is highly resistant to decay.

TANK BUILDERS learned long ago that the use of this vacuum-pressure treated wood saves them a lot of worry and cash. So, too, have other builders, architects and owners discovered that it pays to employ Wolmanized Lumber wherever there's danger of decay (or termite attack). American Lumber & Treating Company, 1645 McCormick Building, Chicago 4, Illinois. \*Registered Trade Marks

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FOR SAFETY AND ENDURANCE

AMERICAN LUMBER & TREATING COMPANY



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Safety is a prime factor in the construction of



TYPE AC THERMAG CIRCUIT BREAKER LOAD CENTERS and SERVICE EQUIPMENT

M Load Center, with 10 S. P. M Type AC Thermag Circuit Breakers, for light and appliance branch circuits. (Cat. No. LC-100-3L7F. List price \$19.55) All current-carrying parts are covered — prying hands can't reach them . . . Needless circuit interruptions are prevented when momentary, harmless overloads occur — but circuit breakers "trip" on short circuit or harmful overload . . . Automatic protection eliminates fuses — operate like an ordinary tumbler switch . . . Approved by Underwriters' Laboratories, Inc. Write for Bulletin 63 — containing complete information . . . Frank Adam Electric Co., Box 357, St. Louis (3), Mo.





## Howe becomes General Sales Manager of the Crawford Door Company

FRANK M. HOWE, Chief Inspector of the Crawford Door Company of Detroit, Michigan, has been made General Sales Manager of the Company. Mr. Howe was formerly with Excello Corporation. Crawford Door is presently engaged in extensive small parts manufacture in the Aircraft Engine accessory field, in addition to the manufacture of upward-acting doors for war plants, warehouses, and military supply depots.

"What will the new postwar home look like? We've seen many conjectures, some far-fetched and fanciful, but, being realistic about such

matters, our slant is that there will be no startling revolutions. The pleasant and familiar styles—American Colonial and Farmhouse, French Provincial and the English Countryhouse—are too well liked to disappear overnight," Howe said in commenting on the future.

"And so, as we project our engineering plans for new postwar Crawford Doors, we remember that many of them will be required to fit into the graceful styles that

wear so well.

"Naturally, we are exploring new materials and new techniques and in this we are inspired by our success in converting our entire production to the making of important, high precision aviation parts. When we reconvert, we will take advantage of every new idea that proves its merit on the basis of improving the quality, appearance and performance of our product," Howe said.





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Barclay, Plastic-Coated Wallboard, is used by thousands of physicians in their offices. As scientists they recognize its sanitary quality. Requiring an atmosphere of dignity and cleanliness, they approve its sparkling, colorful beauty. PLUS VALUE is the economy of Barclay, not the least of which is its ease of erection.

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## Perfection IN A SMALL "PACKAGE"

Now PAYNE introduces the successor to old-fashioned central heating:

#### ZONE-CONDITIONING

Gas heating and ventilating, con-trolled by zones or rooms. For large or small houses.

Write today for new booklet

Mere size does not determine a home's capacity to give pleasure and comfort to the owner. Witness this "gem" of a house, designed by architects W. J. Varner and Herbert Mann and built by Noland Morris ... for Mrs. Louise Bergman, Los Angeles. \* Its heating system equals, in quality and performance, that of any mansion: a compact PAYNE

> Forced Air Unit, one of many models for every heating need.





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DANDY REVERSIBLE No. 847! FOR SWINGING DOORS—POPULAR PRICED.

Center screw covered by latch bar at all times.

Convenient for security.



Furnished with back latch to protect door from damage, from wind, etc.

Here is a quickly installed, economical and efficient latch for swinging doors. Fits right or left hand doors without changing spring. Long latch bar permits space up to %" between door and jamb.

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MALL Planes are full ball-bearing mounted . . . grease incased gears transmit the power to cutter head . . . and a trigger switch places full control at one's finger tips. Comfortable handles plus perfect balance make for easier handling. A removable bevelling fence can be supplied for fitting, sash and doors. With skilled hands at a premium, you can do hand planing faster and cut costs with Portable Electric MALL Planes.

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lasting lesson on this
point! And that means
a bigger-than-ever demand for Majestic Circulator Fireplaces, because
they circulate heat like a warm-air furnace...
they provide all the heat needed for many Spring
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on every job! Write for details on time-saving,
materials-saving Majestic Circulator Fireplace
Units!



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**Building Necessities** 

#### Vermilya becomes Director of Research for the John B. Pierce Foundation

HOWARD P. VERMILYA, formerly Technical Director of FHA, has been appointed Director of Housing Research for the John B. Pierce Foundation. Mr. Vermilya, who was for ten years in charge of the development of housing design and construction standards and investigation of new ma terials and techniques for the Federal agency, will be in charge of the Pierce Foundation's expanding Housing Research program, devoted to the development and adaptation of new materials for housing production.

#### Gypsum Industry Stepping Up Production to Aid Post-war Demand

RECOGNIZING the probability that there will be a shortage of material for sheathing, which may hold back the anticipated post VE-day building boom, the manufacturers of fireproof gypsum sheathing are pre-paring to step up production to meet the demand.

With an actual erection cost no higher than ordinary sheathing, gypsum sheathing will provide the added benefit of fire protection, as well as weather resistance and long life, the Gypsum Association pointed out in making this announcement.

Manufactured according to unvarying standards i mass lots, this sheathing is produced in large panels which can be applied to the wall studs with little or no cutting eliminating waste and saving one-third on erection time. Over it can be placed wood siding, brick veneer, shingles, stucco or almost any other type of exterior finish.

A core of processed gypsum between two sheets of weather-resistive paper, this sheathing is easy to handle and easy to erect, the Gypsum Association said. Already in mass production, it is readily available and will be able to supply the urgent need for sheathing that would otherwise be unmet because of the shortage of lumber.



Here's the sink women want in their own homes-whether they're building, buying or renting! And no wonder! Its trim, modern beauty is built around a battery of worksaving features. A patented round dishwashing compartment, a large dual strainer, an extra-long swing-spout mixing faucet, a handy spray fixture, an integral soap dish, non-drip edges and other advantages of design! It sells itself on sight! And it's easy to install. Fixtures are mounted on the flat back ledge-no in-the-wall piping is required. The flat rim insures a watertight fit to any type of sink top. You'll want to be ready now with full details on the sink that will be featured in tomorrow's homesthe EBCO Dishwashing Sink. Write today for information!

The EBCO MANUFACTURING CO. 401 W. TOWN ST. COLUMBUS 8, OHIO

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STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

erican Builder and Building Age, published monthly at Chicago, Ill.,

Of American Builder and Building Age, published monthly at Chicago, Ill., for October 1, 1944. State of Illinois } es.

County of Cook } es.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Robert H. Morris, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the American Builder and Building Age, and that the following is, to the best of his knowledge and building Age, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March S, 1933, embodied in Section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Simmons-Boardman Publishing Corp., 105 W. Adams St., Chicago S, Ill. Managing Editor, R. E. Sangster, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill. Business Manager, Robert H. Morris, 105 W. Adams St., Chicago S, Ill.

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Sworn to and subscribed before me this 2nd day of October, 1944.

[Seal.]

G. L. GREEN,

Notary Public.

(My commission expires Sept. 19, 1944.)

Milwaukee BUILDERS HARDWARE SELECTED . . . BY PERFORMANCE PROOF . . . FOR THE NATION'S FINEST BUILDINGS Double Acting Spring Hinge. The leader in door hinges. Modern, extra strong, requires

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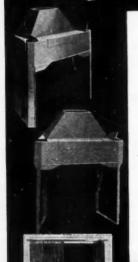
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**SONNEBORN'S** LAPIDOLITH LIQUID

#### Jack Jones goes to Penn Boiler and Burner Manufacturing Company

PENN Boiler and Burner Manufacturing Corporation, of Lancaster, Pa., has announced the appointment of Jack Jones to its sales staff in the capacity of Special Sales Representative. Mr. Jones, who has been associated with the automatic heating industry for the past twenty years, was formerly New York Branch Manager for Perfex Controls, and prior to that Sales Manager of the Oil Burner Division of Malleable Iron Fittings Company, of Bramford, Conn.

#### Letters to the Editor-

(Continued from page 7)

To the Editor: I don't know who gave you the figures used in your item "How Much Lumber" but I'll bet a new hat it was a government "efficiency" expert.

The average house he says takes 6 square singles, or is 20'x20'. Some house. Yet he states it uses 1590 ft. of oak flooring. Thtis must be a Government built house.

These figures compare equally with governmental reasoning of today. The people of this country do not need any government agency supervision .- A. U. FISHER, Miami,

#### From Royal Canadian Air Force

To the Editor: Prior to my enlistment the American Builder was my regular periodical, and many years' issues are stored at my home. Being with a Mobile Construction and Engineering unit we miss issues from time to time while on jobs in isolated regions. Hope to be stationed here for a while and to catch up on ones I've missed.-F/L. POZZIL, Montreal, P.Q., Canada.

NEW HOMES CAN HAVE



Very soon, America will start the building of millions of homes. It will be a big market, a tre-mendous market. But . . . Amermendous market. But . . . Americans have always wanted something better. They will expect, and demand, that post-war homes be better than pre-war homes. Wood Treating Chemicals Company, one of the leaders in the field of wood preservation, will help you build homes with a new quality and a new sales appeal.

#### WOODTOX

is a time proven clean treatment of wood. Easily applied and of wood. Easily applied and economical in cost. Gives lasting protection against decay, rot, termites, lyctus beetles and wood borers r. . and makes wood moisture repellent to aid in

the control of swelling, shrinking, warping, checking and grain raising.

#### SEND FOR BULLETINS

For architects, builders, lumber dealers . . . these bulletins list standard wood treating preparations, giving full descriptions of purposes and application methods and prices . . . pointing the way to new sales appeal and better homes.

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Sapstain Control, Wood Preservatives and Moisture Repellents

WOOD That Resists Decay , Termites Dimensional Changes



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### HERE, NATURE AND MAN WORK TOGETHER





Nature has a great urge to grow trees. As the hazard from fire can be lessened through greater public caution in the woods and more vigilant fire control, Nature will do its part in returning new forests to harvested lands. Thickets of young pines in the Western Pine region are adding layers of wood each year on tree trunks that will be converted into logs and lumber at a future harvest.

And Western Pines\* are responding to good forest management to provide a maximum yield from these acres of young forests, while old timber serves the needs of today.

#### **WESTERN PINE ASSOCIATION**

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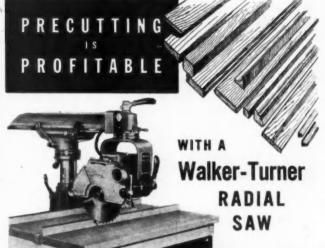
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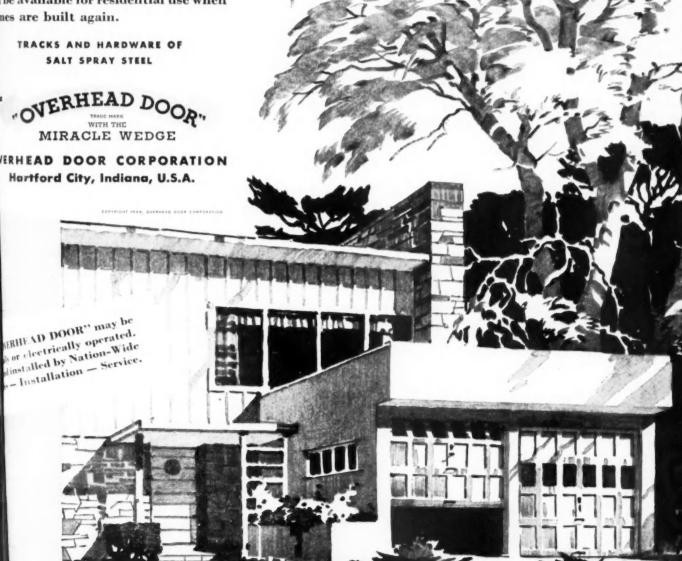
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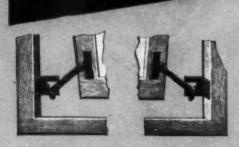
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