

USE THESE MULTIPLE-FUNCTION CELOTEX BUILDING PRODUCTS!

THEY'RE AVAILABLE NOW!

No reason now why you should pass up profitable jobs because of material shortages. Newly-developed multiplefunction Celotex products are available now. And these products not only replace hard-to-get materials, but often do a better job. This has been proved in thousands of farm, factory and housing projects.

Contractors everywhere are proving the value of Celotex Building Products in getting profitable jobs today. Why not drop in at your local Celotex dealer and see these materials – soon!

use **CELO-SIDING**

THE MULTIPLE-FUNCTION BUILDING BOARD 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 – 58'' and 78''. Sizes: 58'' and 78'' in 4' x 8' with square edges; also 78'' in 4' x 10' with square edges; and in 2' x 8' with T&G joints on long edges. Recommend 58'' for greater strength and insulation value. Recommend 58'' for lighter, lower cost construction.

USE CELO-ROK BRAND BOARDS For Interior and Exterior Construction



CELO-ROK WALL BOARDS

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

CELO-ROK WEATHER-PROOF SIDING

is 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 1/2-inch thicknesses, 24 inches wide, in 6-, 8-, 9-, and 10-foot lengths.



O Pla

Homes in Your Community Should Insulate With CELOTEX ROCK WOOL BATTS

Home owners should insulate now for summer comfort and to save fuel next winter. Celotex Rock Wool Batts provide insulation of proved efficiency at moderate cost – but with fine profits for you. Urge prospects to insulate *now* – Celotex Rock Wool Batts are available. Celotex Rock Wool is also available in losse or granule form for blowing applications. Now, easier FHA financing **on** insulation jobs available to your prospects.





Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago 3, Ill. Subscription price, United States, Possessions, Canada, and Mexic. \$2,09; 3 years, \$2,00; foreign countries; 1 year, \$3,09; 3 years, \$6,00. Single copies, 25 cents. Entered as second-class matter Oct. 11, 1930, at the Post Office at a radio, in under the act of March 5, 1879, with additional entry as second-class matter at Mount Morris, Illinois, Address communications to 105 W. Adams St., Chicago 3, in

ARDS truction

K

RDS

vall board

otex tests for

in 1/4", 3

for conve

all constru have squar

ed edges. are edge of

GTS

age 3, Illinei

Plan your post-war homes with this in view Gas water-heating means economy, too!

> ASK ANY MAN who's had experience with automatic Gas water-heating! He'll tell you that a new, properlysized Gas water-heater will be thrifty to operate . . . easy to control . . . give oceans of hot water at the turn of a tap!

3

「こののうちん」と

といういというの

In designing kitchens be sure to include Clean, cool Gas ranges for precision-cooked food!

> ASK ANY WOMAN who has a Certified Performance Gas range! She'll tell you that it will provide precisioncooking ... with half the work ! A silent Gas refrigerator with no moving parts to get out of order . . . will give years of uninterrupted service!

> >

Is year-round comfort with freshness of spring! ASK ANY FAMILY who has one! They'll

Another thing trouble-free Gas will bring

tell you that there's all round joy of living with a new Gas heating and air-conditioning unit. They have balmy warmth in winter . . . seashore coolness in summer...perfect ventilation all year round!

... This is the house that Gas

runs!

PEOPLE OF ALL INCOME GROUPS will benefit, after the war, from the developments now in progress in the laboratories of the Gas Industry. They are being told now . . . in wide national advertising . . . of the greater comfort, convenience and economies that Gas will bring to their homes, tomorrow. They are planning now - for these conveniences in their post-war homes. As part of your post-war planning we suggest you consult your local Gas company for the latest information on Gas equipment and Gas service. AMERICAN GAS ASSOCIATION



THAT WILL BRIGHTEN YOUR FUTURE

Am

Consider These Advantages of **Using Bituminous Coal:**

For low fuel bills...

A BIG CHIMNEY

ECONOMY-the average delivered cost of bituminous coal is less; costs less to use.

- CONVENIENCE modern stokers take the drudgery out of "tending the furnace" by making it an almost completely automatic operation.
- CLEANLINESS-bituminous coal burned properly and with the proper combustion methods is a clean, odorless fuel.
- AVAILABILITY-bituminous is mined in 24 states of the Union-and there is estimated to be enough of it underground to last three thousand years!
- EFFICIENCY-properly sized bituminous provides even, uniform temperatures.
- FLEXIBILITY-bituminous coal meets every home heating requirement and at less cost.

Let your architect help you reduce a major household expense-save money for you year after year by cutting down vour fuel bills.

Let the designer of your new dream home build you a large chimnev that will accommodate all fuels.

Then you can burn any fuel. And this, of course, includes bituminous coal, the thriftiest of all.

Bituminous coal is also automatic when used with modern stoker equipment.

That's why more homes are heated with bituminous than with any other fuel; than with almost all other fuels combined.

Ask your architect to guard your future household budget. and assure the comfort of your home with a "flexible" heating plan that will permit the use of any fuel.

BUY WAR BONDS



60 East 42nd Street, New York 17, New York

Plea boo qua Kitc



Making Work by Saving Work

Just before the war, millions of American housewires began to realize that they were paying an unexary penalty in time and health working in hitchens bally arranged and powrly quipped. Youngstown Presed steel, watchen this rising and developed steel, designed and developed steel. Nithens made from presed steel, wires hought YOUNGSTOWN Kitchens and wires hought YOUNGSTOWN Kitchens audust WIVES DOURNE YOUNUS LOW'N KITCHENS AND DUTITIUSE OF WORKETS.

> YOUNGSTOWN PRESSED STEEL DIVISION Multime Mile: Corp. Dept. H. R.L.L. Watten: Obs Maltim Mile Corp. Dent Hais, Warm, Sum caston. dr. Yoot _____ Prent, send me Look Leal Scrab Book for hickbon ideas-tren Book for hickbon ideas-Pret Vic in cash

> > STATE

5.5

STREET

TT

Name

Street

City

33

In these strenuous days, cre In these strenuous days, crowded service activities, how much the features of YOUNGSTOWN Kitcher meant to all those other houseeven in their old-fashioned kitchern. in their old-fashioned kitchens. When the victory we are all working peace to the world, YOUNGSTOS will again be ready with the of convenience that thousands upon convenience that thousands upon bousewives are longing for. Help Win the Fight by YOU Bodds. After the war, buy YOU Kitchens that will stree work for Kitchens that will stree work for and make production and distributi and make production. YOUN

easy and pleasa

This advertisement will appear in

THE LADIES' HOME JOURNAL GOOD HOUSEKEEPING BETTER HOMES & GARDENS THE AMERICAN HOME HOUSE BEAUTIFUL THE PARENTS' MAGAZINE

isehold g down

944

a large

ncludes modern

an with

ned. budget. heating

JA

rk

Please send me YPS booklet, "Get Acquainted with Your Kitchen Business."

MAKING

PROFITS

by

SAVING

WORK

ready-to-buy" prospects than the modern kitchen field! Youngstown Pressed Steel has kept YOUNGSTOWN Kitchens and their work-saving, step-saving features before 16,000,000

State

As soon as civilian buying begins, no field will be lusher with

Youngstown Ritchens

The new YOUNGSTOWN catalog, "Get Acquainted With Your Kitchen", tells how to plan for new comfort in your peacetime kitchen. Send for your copy today.

11

National magazine reading families, constantly. Floods of inquiries prove that women are thinking NOW in terms of work-saving kitchens for postwar living.

YPS dealers will have the advantage of inqui-ries from prospects in their own territory.

youngstown Kitchens

YOUNGSTOWN PRESSED STEEL DIVISION

Mullins Mfg. Corp., Dept. AB-944, Warren, Ohio

Deinti Public Librari



Plaster Cracks Are Your Cue!

Look up! Speak up! When cracking plaster is causing trouble, always say... "You need an Upson Ceiling, ma'm."

Selling and installing Upson Ceilings can be an important and profitable source of postwar business.

Because millions of homes—many right in your community have cracked ceilings badly in need of repair.

Because patching does not correct the cause of cracking. And replastering is a dreaded ordeal of dust and dirt for the housewife.

Because Upson Ceilings end plaster troubles forever—provide enduring beauty—and can be installed right over old plaster.

Because application is simple and easy.

Upson Quality Products Are Easily Identified by The Famous <u>Blue</u>-Center





Would you like to know

- how one ceiling job invariably sells others?
- how it stimulates sale of other products?
- how others have made good money on Upson ceilings?
- how they are planning to do it again when male rials are available in ample volume?

For full information, write The Upson Company Lockport, New York.

Teci

espective subsection of the su

tul p TEC we b on be Al HOM

the b -E.

Com

To suicid Gover to con asking For supply dealer

they h their busine The rates tention the m

and on For interest ably e willing associa will pa for mo or the and yo JR., U

> DUE Build For th year 1 tion D



Technical data wanted

To the Editor: We say amen to your August editorial, especially to the statement: "Our most difficult, and at the same time most important job, is to make practical, useful, technical information available for co-ordinated use of small firms"—such as ours.

We are interested, for instance, in radiant heating, but WHERE can we find all the known FACTS on that subject?

We write to the manufacturers of new systems or new products, and they send us slick pamphlets with beautiful picture and fine printing and good ballyhoo, but NO TECHNICAL OR FACTUAL INFORMATION that we builders and users of the system or product insist on before sinking time and money in it.

Also, we want to build, live in, and test a "TEST HOME." Whom do we contact to find out what should be and may be incorporated in such a home, and what arrangements can be made for the building and testing?

Let's go, American Builder! You are, and have been, the best magazine in the field—we're depending on you. -E. F. STUNTZ, Stuntz-Yeoman Co., Frankfort, Ind.

Committing suicide?

To the Editor: The building business is committing suicide when it keeps demanding financing which only Government can do, and it is being unreasonable to seek to continue to do business on a profit basis *itself*, while asking other businessmen to function at *no* profit.

For the life of me I can't understand why building supply manufacturers, contractors and building supply dealers don't realize that if the time ever comes that they have to rely on the *Government* for mortgage credit, their own business lives will be so regulated that their businesses, too, will be at the point of socialization. There is too much stress being placed on interest

There is too much stress being placed on interest rates and amortization periods. May I call to your attention that on a twenty-year loan, the difference on the monthly payment per \$1,000 on a loan at 4 per cent and on one at 3 per cent interest is only 45c per month? For those of you who are so hot about getting the interest rates reduced, may I ask the simple, but probably embarrassing question, as to how many would be willing to place your savings in a Savings and Loan association, or a bank, or an insurance company which will pay you only 1 per cent interest for your money? The public, whose savings make up the funds available for mortgage loans, want some return on their money or they won't save it. Dry up private mortgage funds and you will have socialized credit—F. HARDINGE, JR., U. S. Savings & Loan League, Chicago, III. (Continued to page 104)

American Builder discontinues

newsstand sales DUE TO THE extreme paper shortage, sale of American Builder at newsstands will be discontinued as of this issue.

For the time being, subscriptions on a one, two, or three-

year basis will continue to be accepted. Address Circula-

tion Dept., American Builder, 30 Church Street, New York.

s others cts? n

when ^{mate} ime?

Company

CONTENTS AMERICAN BUILDER

VOL. 66 SEPTEMBER No

Publisher's Page11
On and Off the Record23
Washington News Summary
Editorial: Build Model Homes
H-2, A Black Eye for Private Building 56
NAHB Convention Progresses
No. 9 of Blueprint Series
G-I Bill Spells Building Boom
Labor's Confusing Policies
3 Syracuse Builders United
Today's Cost of Pre-War Home
Forward-looking California House68
How-To-Plan-It Series
San Francisco War Housing72
Pre-Fabricated Concrete Slabs74
Move Demountables
Don Graf Job Helps
Homer's How-To-Do-It81
Better Detail Series82
Modular Design Explained
Catalogs and Information
Building News Review—Cortright88
Advertisers' Index116

AMERICAN BUILDER and BUILDING ACE originally "Carpentry and Build ing"), with which are incorporated National Builder, Permanent Builder, any patent office and Canadian registrar of trade marks. Fullished by the SIMMONS-HOARDMAN FUBLISHING CORPORATION. 105 West Adam Street, Chicago 3, Illinois, Samuel O, Dunn, Publisher, Robert H, Morris Business Manager, 105 West Adams Street, Chicago 3, Illinois, Other business ness offices: 30 Church Street, New York 7, New York, National Press Build Rd, Ann Arbor, Mich.; 1038 Heury Building, Seattle 1, Wash; 300 Mont gomery Street, San Francisco 4, Calif.; 530 West Sixth Street, Los Angele 14, Calif.

JOSEPH B. MASON, Editor; Robert E. Sangster, Managing Editor; James F. Ionnell, Eastern Editor; Bernard L. Johnson, Western Editor; J. Harold Hawk ins, Aasistant Editor; John E. McNamara, Associate Editor; Jog Sanders Southwestern Editor; L. E. Arent, Art Editor, Editorial office, 105 West Adams Street, Chicago.

SUBSCRIPTION PRICE in the United States and possessions, Canada and Mexico, 1 year, 82.00: 3 years, 83.00; foreign countries, 1 year 83.00; 3 years, 86.00. Single copies, 25 cents each. Address E. A. Sand, Circulation Manager, 30 Church Street, New York, T. N. Y. Field Superintendent: W. L. Taylor. Field Staff: C. L. Conley, J. H. Free, C. R. Hartung, Ralph I. Henry, Jos Sanders, Dick Whittington.

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

Ame

all eyes are on

the "Standard" DUO.USE BATH

It's a pace-setter—it is destined to exert a pronounced influence on the bathroom of the future.

In addition to being new and novel its unique layout will make future bathrooms more useful, more interesting and more attractive.

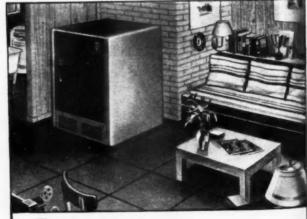
Being practically two rooms in one, with the bathtub and shower in one compartment and the lavatory and water closet in the other, two persons can use it at the same time, each having complete privacy.

It can also serve as a powder room by simply closing the door into the bath compartment. The "Standard" Duo-Use Bath is advertised in full pages,

The "Standard" Duo-Use Bath is advertised in full pages, in full color, in the September issues of House & Garden and House Beautiful magazines. Watch for them and you will see the pace-setter for the bathroom of the future.









Many boilers beyond repair will need replacing. WPB Limitation

Order L-79 simplifies the procedure and customer certification is now generally sufficient to permit replacement. AMEMICAN Boilers are available for replacement under this order. Availability of jackets is subject to WPB restrictions. yo Thi cor wc per Ful loc Do bu thc in can to ev



14.

Truccined TOTOLS COMPLETELY MANUFACTURED ...READY TO INSTALLS

YOU CAN SAVE not only dollars and cents—but valuable time as well—when you use Tru-Sized Doors... This superior product gives complete satisfaction in every way. Quick installation perfect fitting—new beauty.

Fully machined for standard locks and hinges, Tru-Sized Doors help carpenters and builders do a better job than ever before, and in less time. You can save from 55 to 70 minutes on every installation!

BORED IN

LOCKI

9

Daylett Poble Librar Address City

TRU-SIZED

TO BOOK OPENING !

MACHINED

FOR HINGES!

beyond d replacmitation er certiacement, ider this trictions. **Z** REASONS WHY

YOU'LL BE USING MORE GOLD BOND FIREPROOF GYPSUM SHEATHING AFTER THE WAR...



Z THE PUBLIC WILL REQUEST IT!

Judging by the thousands of requests for National Gypsum's new consumer booklet, "So You're Going To Build A New Home After The War," the public is plenty interested in what will go into their postwar home. They want to know how to get stronger, more fireproof construction. And they want to get the best possible value for their money. Building houses with Gold Bond Gypsum Sheathing will prove one way to please your customers and give them confidence in the job you do for them.

TIT DOES A BETTER JOB!

There's no question about that! In the first place Gold Bond Gypsum Sheathing is fireproof! In the second place it comes in standard sizes to fit the framework with a minimum of cutting and fitting. In the third place its tongue and groove edges form a wind-tight wall with greater structural strength. If these aren't enough reasons for you to want to use Gold Bond Gypsum Sheathing for postwar home construction here's another:



MORE THAN 150 GOLD BOND PRODUCTS IN STOCK AT DEALERS

Fireproof Gold Bond Gypsum Sheathing is only one of the National Gypsum products that help you "build better with Gold Bond." All are the result of exhaustive research in the National Gypsum laboratories and on the job. All are now in stock at your dealer's or will be as soon as restrictions on wartime manufacture of certain items are relaxed. For complete information SEE YOUR GOLD BOND DEALER!



PUBLISHER'S PAGE

Government Controls After the War

THE war with Germany will soon end. The War Production Board estimates this will make practicable a reduction at an annual rate of about \$35 billion, or 35 per cent, in production for war. The war with Japan will be won much sooner thereafter than was formerly anticipated.

944.

D

rol

2, N. Y.

The economic problems of peace may be more difficult than those of war. The most difficult will be that of so changing the relations of government and business as to make possible a long period of prosperity. Business is now subject to many more government controls than during the last war. In due time all the controls established for war purposes should be abolished. But how soon?

Some important experience after the last war should not be disregarded. There were then virtually no controls of wages and prices. Between 1916 (before we entered the war) and 1918 average wholesale prices of all commodities increased 54 per cent and prices of building materials 30 per cent. Total production declined in 1919, but non-farm residential and farm construction increased from \$1,455 million in 1918 to \$2,556 million in 1919. Demand for civilian goods increasing faster than supply, wholesale prices of all commodities rose in 1920 to 80 per cent higher, and wholesale prices of building materials to 120 per cent higher, than in pre-war 1916. The increase of construction then halted, general business declined, and average wholesale prices of all commodities, and also of building materials, declined 37 per cent in 1921 compared with 1920. Business, having made large purchases at the high prices of 1919 and 1920, suffered huge losses on inventories due to the terrific decline of prices in 1921. Prosperity-including a large volume of construction-prevailed during the seven years 1923-1929, inclusive, on a basis of wholesale prices in general averaging

about 16 per cent higher and of building material prices averaging about 47 per cent higher than in pre-war 1916.

Prices have increased less during this war than during the last one. In the two years 1916 to 1918, as already shown, wholesale prices in general increased 54 per cent and prices of building materials 120 per cent. In the three years from pre-war May, 1941, to May, 1944, prices in general increased only 41 per cent and prices of building materials only 15 per cent. Nobody desires another such upsurge of prices as occurred immediately after the last war, because it would be followed, as then, by a sharp recession of business and decline of prices causing heavy losses on inventories. There seems only one available means of preventing such developments, and that is a post-war continuance, with gradual relaxation, of government controls of prices until production can substantially increase.

Nobody dislikes and fears government interference with business more than this paper. Business should insist as soon as the war with Germany ends on the government lifting every restriction on the production and use of materials for civilian purposes that is not demonstrably imcompatible with the swift defeat of Japan. The best way to prevent harmful advances in prices is to make supply equal demand. But the law of supply and demand has been largely suspended by government controls during the war, and it will take some time to make production and supply of many commodities equal the accumulated demand. Fortunately, because one war will end before the other, there will be a period of transition; and every possible advantage should be taken of this period to transfer from a war toward a peace basis.

Same O. Dum,

A

IN WARTIME ···· IN PEACETIME "America's Automotive Leader s At America's Service

MEETING THE NATION'S WAR PRODUCTION NEEDS Chevrolet has been turning out a huge supply of Prati & Whitney aircraft engines for bombers and cargo planes; Chevrolet-built GMC planes; Chevrolet-built GMC i'ducks''; 90-mm. guns; armor-piercing and higharmor-piercing and highforgings and military trucks – steadily turning out "VOLUME FOR VICTORY"

MEETING THE NATION'S AUTOMOTIVE TRANSPORTATION NEEDS

One out of every four cars and one out of every three trucks now serving America and helping to maintain America's vital, war-winning transportation system—is a CHEVROLET MEETING THE NATION'S AUTOMOTIVE SERVICE NEEDS

All signs indicate that more people go to Chevrolet dealers for service than to any other dealer organization.... That's why car owners and truck owners say-

CHEVROLET

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN

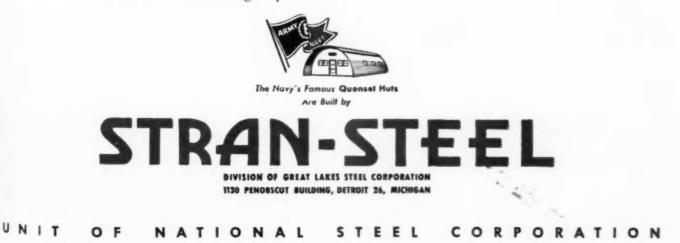
944.

INDUSTRY GOES RURAL

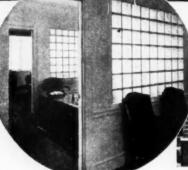
For one reason or another—availability of manpower, economy of supply, improvement of living conditions—the trend of industry is toward decentralized units in rural localities. Yesterday's "whistlestops" will become thriving and prosperous communities through the construction of processing plants, sub-assembly factories and warehouses.

Stran-Steel is qualified to serve the architects and engineers who will translate this trend into actual buildings. The engineering knowhow that gave the armed forces their ubiquitous "Quonset Hut" and other Stran-Steel utility buildings will be applied to the varied needs of industrial development . . . to homes, schools, stores and service establishments, as well as industrial buildings.

Through Stran-Steel experience and research, steel has become a versatile and efficient medium of construction: economical, easy to erect, fire-resistant, rigid, permanent.







In Stores-Panels of Insulux can give salesrooms controlled natural daylighting.

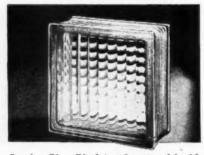


In Offices-Partitions of Insulux can be used to transmit light from office to office.



In Homes-Panels of Insulux can brighten an entry way or add charm to a kitchen, living room, bedroom or bath.

In Factories-Panels of Insulux offer the ideal solution to that troublesome sash replacement problem.



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!



Why not get your share of the current remodeling business? Make extra profits installing panels and partitions of Insulux Glass Block.

VEN

alk abou

ways lea bright

mfortab

etter wi

ght and

Make th

ake sure

eely, eas

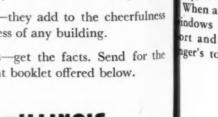
Insulux is available now. It is easy to install. And it is moderate in cost.

Right now-panels of Insulux Glass Block are being installed in hundreds of buildings throughout America. In homes, stores, schools, hospitals, offices and factories!

Panels of Insulux have many advantages. They transmit light far better than ordinary windows. They guard against the infiltration of dust and dirt. They are fireproof-non-combustible. They do not rot, rust or corrode. And they are easy to clean-and to keep clean.

Furthermore-they add to the cheerfulness and attractiveness of any building.

By all means-get the facts. Send for the sash replacement booklet offered below.







–a right window for every room in the house

of the iness? alling sulux

e

. It is t.

Block ildings chools,

ntages. dinary tration n-comorrode. clean. rfulness

for the .

X

EASY TO OPEN-

VEN OVER OBSTACLES SUCH AS THE BUFFET

alk about postwar houses almost ways leads to the fact that they'll brighter, cheerier and more mfortable. And it points to tter windows-for more daythand better ventilation.

Make them big, attractive. And ake sure that they'll open wide, eely, easily-always.

When a prospect sees that even indows over the buffet, davenort and sink will open at a ger's touch, she'll know your house is planned right. She'll know that her struggle with oldfashioned windows can be a thing of the past.

Busy on war work, we are unable to make residential steel windows now. But our postwar line has been determined-so you can plan now. This line is simplified, but complete. It provides an attractive window for every room in the house. Write for information on types and sizes.

DETROIT STEEL PRODUCTS COMPANY Now Chiefly Engaged in War Goods Manufacture Dept. AB-9 • 2260 East Grand Boulevard • Detroit 11, Mich. Pacific Coast Plant, Oakland, California

SATISFY CUSTOMERS WITH THESE FENESTRA ADVANTAGES







EAST OPEN

NEVER WARP OR BIND LARGER GLASS AREAS

MORE BAYLIGHT- DETTER VENTILATION CATCH THE BREEZES





STORM SASE

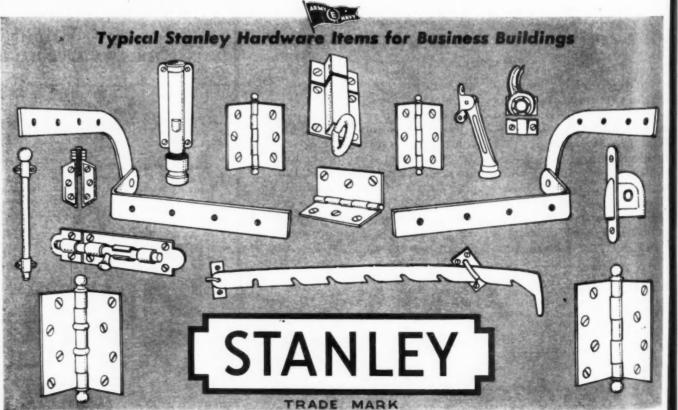
Fenestra

WINDOWS . DOORS . ROOF DECK . FLOOR DECK METAL SIDING AND OTHER BUILDING PRODUCTS

HARDWARE for the MODERN TAXPAYER" BUILDING

The coming building boom in the average community will include those modern, efficient business structures described as "Taxpayers". And their construction will call for hardware of the most durable sort - extra heavy door butts - sturdy window accessories - cabinet hinges, knobs and drawer pulls - and other items made to take the punishment of constant use.

This will be your opportunity to recommend and install efficient, longlife Stanley Hardware - the hardware that delivers continued satisfaction to building owners. The Stanley Works, New Britain, Connecticut.



WOMENSTAR

Am

family many to war In t

A

k

future. to ent grope burnin

Mul switche 'keep where

But ONE . econon for bette

MA F N

STANLEY



A switch in time saves ...

TAKE a tip from Bill Bjones ... he knows that a *switch in time* saves his family from avoidable accidents—saves many steps—saves electricity so vital to war production.

In the correctly planned home of the future, it will no longer be necessary to enter a dark room or hallway grope for the light switch—or leave burning lights behind.

Multiple control by conveniently placed switches will permit home owners to "keep light ahead of them"—when and where they want it, at all times.

But multiple lighting control is just ONE of the many conveniences and conomies that result from "better wiring for better living!" The Westinghouse Better Homes Department was created to assist the building profession in the planning of postwar housing—and to supply authoritative information on all phases of proper application of electricity in 194X homes.

Specifically, our Better Homes Department housing specialists will be glad to give you free technical advice on:

Placing of lighting controls and outlets.

Selection and application of fixed electrical equipment in 194X homes.

Dimensions and clearances, for proper installation and access for servicing

Location and size of wiring, water supply, and drainage lines.

Westinghouse

WESTINGHOUSE PRESENTS John Charles Thomas, Sunday 2:30, EWT, NBC. "Ted Malone," Monday, Wednesday, Friday 10:15 p.m., EWT, Blue Network. Refer your problems relating to the selection, installation, and use of home electric equipment to the Westinghouse Better Homes Department.



HAVE YOU RECEIVED YOUR COPY OF THIS FREE BOOK?

"Electrical Living in 194X" answers practically every question home owners may ask regarding the proper location of multiple control lighting switches better wiring—modern circuit protection—electrical appliances and equipment in homes of the future.

This 64-page book is free! Get your copy by writing Better Homes Department (AB-94), Westinghouse Electric and Manufacturing Company, Pittsburgh 30, Pa.

144.

77

the nose ares heir e of avy cesand nade use. y to ongware on to orks.

000

0

17

Am

Notr

way d Ye back

ought news!

made

propo

agree.

cut ind if we r prospe

We

If

agi

Or

Fo

-YO

the res

corpor omv-

the pri

stand,

ably w

The

profits

do and

enough

taxes d

For H

In the

have er -to cre real risi

Tod

Firs

85.5 taxe left dend

man

earn

\$2.0

the p

Is the

Wouldn

Re

Since 1795 ... it must be better—to be "BIRD"

That is why BIRD has developed CONTROLLED PRODUCTION for all building materials

LONG AGO, Bird determined that any product that bore this name should be of the highest quality consistent with the classification for which it was designed.

But quality is made up of such a lot of little things, that Bird found it impossible to maintain quality unless every step in production was controlled. So Bird owns and operates its own factories to control the vital raw materials for Bird products.

This policy of Controlled Production makes a difference you can actually see and feel. For example, take the Bird Master-Bilt Shingles. Controlled Production starts with the first manufacturing step. The tough layer of felt that acts as the base is produced in Bird's own felt plant, to specifications laid down in Bird laboratories.

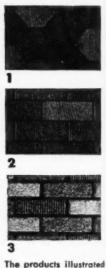
Then the waterproofing asphalt is not only controlled as to quality and amount, but is actually reinforced, for a longer weather-

This is a frank statement to the men who know building—and who know Bird. It will help you in the selection of building materials, just as it has helped Bird to hold a reputation for quality since 1795.

proof life. The color pigments, that give all Bird shingles their enviable tones, must also measure up to precise standards.

Now note the distinctive thick butts on Master-Bilt Shingles, pioneered by Bird to add greater thickness where it does the greatest good. In a similar way, Bird introduced coarse granules to give greater protection to the asphalt underneath—shielding it from the sun's rays, providing "expansion joints" to counteract temperature changes, adding years of life to the shingle. Indeed, each detail of construction is rigidly controlled by a completely balanced formula for production.

Of course, there are easier ways to make a shingle. But Bird has found that Controlled Production makes a difference that goes all the way through, adding extra beauty and durability to all those Bird products so well known to architects and builders.



on this page are splendid examples of CON-TROLLED PRODUCTION: (1) Bird TRI-TAB HEX Shingle — colorful draft-free wind-resistant. (2) The Bird MASTER-BILT Shingle described on this page. (3) Bird INSULATED SID-ING, in varied attractive brick tones: magically modernizes sidewalls, with built-in insulation for all-year comfort.



1944.

,

ustrated

e splen

of CON-

TION : (1)

Shingle

ft-free — (2) The

Shingle

his page

TED SID

attractive

nagically

idewalk, nsulation

USTRY

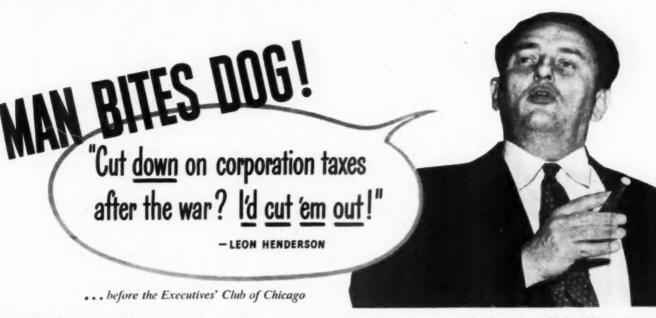
INDEX

ago, III.

P ROOFS

SES

mfort.



Not reduced, mind you. Not even "pared way down"—eliminated!

Yes—when an Old New Dealer from way back tells the world that corporation taxes ought soon to be cut out altogether—that's news!

Beardsley Ruml (of Ruml Plan fame) has made the front pages again with a similar proposal—and many Administration leaders agree. Right after the war, they say, we must cut industry's tax load to the quick—quick if we really want postwar expansion, postwar prosperity, postwar jobs!

Well, then—what's holding the thing up? If business and government just about agree, whom is the argument with?

A large part of the argument, sir, is with -YOU.

Or perhaps we should say, with most of the rest of us.

For most of the people don't realize how corporation taxes influence our whole economy—the jobs we can get, the pay we earn, the prices we pay. And until we do understand, our representatives in Congress probably won't act.



The people see corporations making big profits and say, "So let them pay big taxes. I do and they can, too!" That sounds fair enough—but what are those big corporation taxes doing to your chances of getting ahead?

for Here is the Big Question . . .

In the face of heavy taxation, does business have enough incentive to invest and expand -to create new jobs, start new ventures, take real risks (for all new businesses are risks)?

Today, business earnings are taxed twice. First the Federal Government takes up to 85.5% of the profits through corporation taxes; then it takes up to 94% of what is left in individual income taxes on the dividends. In many cases the most a successful man can hope to keep for himself out of the earnings of a successful venture is about \$2.00 out of each \$100.00 of profit—with the government taking the other \$98.00.

Is that enough? Would you bet \$100.00 at even money to win \$2.00? You certainly wouldn't. If you figure that way on your own money, you can be sure that any man who has to invest a lot of his own and other people's money will feel and act the same way. And so our corporation taxes create a real danger that after the war business will just play safe with its money, instead of starting the new enterprises that will give people good jobs and make the country hum with peacetime activity.

Your future may well depend on how this tax question is handled. But are you thinking about it? . . , pointing out to people you see every day that if we really believe in the private-enterprise system we've got to keep it rolling?



And have you thought about questions like these:

What percentage of our national income do you want used to buy government services that must be paid for by taxes?

Do you want the government to collect <u>extra</u> taxes to try to keep the economy on an even keel—to prevent unhealthy booms and resultant depressions? Are you in favor of taxes made especially low in <u>certain industries or types of enterprise</u> for whose products or services the nation has a special need?

On the other hand, the man in the street asks: "To maintain world leadership and help keep the peace, our postwar budget has to be large—and if the present taxes on business are lightened, whose taxes are to be made heavier?

"Once corporation taxes are reduced, how do I know business won't use too much of its bigger profits to consolidate instead of to expand?"

Are you using your Mindpower to answer these questions? Are you *informed* enough to think straight about them?

For example, do you know what is suggested in the widely discussed new Ruml Tax Reform Plan? (You can find out by sending 25 cents to the National Planning Association, 184 East 64th Street, New York City, for a copy of "Fiscal and Monetary Policy," by Beardsley Ruml and H. Christian Sonne.)

Have you read "Fair Taxes Can Aid Tomorrow's Job Makers," by Eric Johnston, in The Nation's Business for April, 1944?— "Inflation and Tax Policies," by Roswell Magill, Academy of Political Science Proceedings, January, 1944?—"Possibilities of Postwar Inflation and Surgested Tax Action," by M. S. Eccles, Federa I Reserve Bulletin, March, 1944?

19

How about seeing your book dealer, and getting a copy of that classic on economics, "Progress and Poverty," by Henry George (95¢, Modern Library, Inc.)?—or "Production, Jobs and Taxes," by Harold M. Groves (\$1.25, McGraw-Hill Publishing Co., Inc.)?

And remember—TIME will keep you up to date on all the new developments in this important (personally important) postwar debate.

TIME believes America's greatest need, now and in the coming years, is for the sovereign people to make up their minds and speak them out.

To do so, citizens must keep themselves informed. So, in advertisements like this, TIME is seeking to encourage wide thinking and reading not only of the newspapers and TIME, but also of books and periodicals that argue the cases and advance the causes that are in the news.

For TIME's own future is unalterably linked to a U.S. citizenry deeply concerned about public affairs—to a nation insistent upon seeking the truth and learning from recorded experience.

This is the fifth advertisement in a series TIME is publishing to get more Americans thinking. For 22 years that has been the job TIME's editors have been trying to do; now we harneas the force of advertising to the same objective. This attempt to focus the full voltage of America's mindpower on the problem of changing corporation taxes to maintain the highest possible postwar level of business activity is appearing in more than 50 newspapers and magazines all across the country.



9 ROCKEFELLER PLAZA, NEW YORK 20

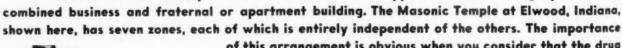


Rex Stoner, Elwood, Indiana WHOLESALER: The Knapp Supply Co., Muncie, Ind.

masingli

HERE is an ideal example of Thrush Zone Control applied to the heating system of a ned business and fraternal or apartment building. The Masonic Temple at Elwood, Indiana,

ALL



HOT WATER HEAT



of this arrangement is obvious when you consider that the drug store is open more hours than the variety store or barber shop, while the kitchen, dining room and lodge rooms on the second floor are used only periodically. Each receives just the amount of heat it requires without overheating. The fuel saved is surprising. When compared with the cost of central city heating formerly used, the new Thrush installation is saving at least half the annual fuel bill. Owners of similar buildings, including apartments and larger residences, will thank you for telling them about Thrush Zone Control. Get all the facts now from your wholesaler or write Dept. G.9.

이 있 네.

THE the w Yo cours Air walls densa minim Wit

Ame

win tectio what Dou Streng

> Conde The princi of Pro print tion. I for fr find it



1011

of a

iana.

ance

drug

shop.

econd

nount

s sur-

ating least

uding

elling

from

WHAT ABOUT THE WALLS OF **TOMORROW'S HOMES?**

Consider the added responsibility they will face . . .

THE WALLS of the homes you build after the war will face added responsibilities.

You must provide adequate insulation, of course. But you must do more than that!

Air-conditioning makes it necessary that walls be so constructed that moisture condensation within the walls is reduced to a minimum.

With the Approved Insulite Wall of Protection, you solve these two problems. Here's what this wall gives you:

Double Insulation . . . PLUS Superior Bracing Strength . . . PLUS Protection against Moisture Condensation Within the Walls.

The drawings to the right explain, in principle, how the Approved Insulite Wall of Protection does its job. Below, the blueprint illustrations show details of construction. For complete information, write today for free "Scientific Facts" booklet. You'll had it interesting, helpful.



FROM WOOD provided with Sealed Lok-Joint Lath.

OUTSIDE THE STUDS, Insulite Bildrite Sheathing. The large boards provide a wind-proofed, weather-tight wall. Bildrite Sheathing has 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, rigid plastering sur-face, prevents joints from face, from opening under trowel pressure.



How moisture condensation is effectively minimized in the Approved Insulite Wall of Protection. Sealed Lok-Joint

side walls and on ceilings, for protection against vapor travel and condensation.

AR

Give the sales application automation provide ow cost They

LEAN

IENT.

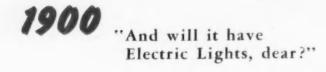
needed.

rincipa

engthy

Inclu

MATIONAL







194V

"And will it have an Electric Range, dear?"

Women do want the cleanliness, economy, safety and convenience of *modern* Electric Cooking! Builders and architects who incorporate plans for Electric Range wiring in their after-victory homes will sell these houses quicker.

Here are the Facts!

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

Reliable surveys show that 2 to 3 times as many

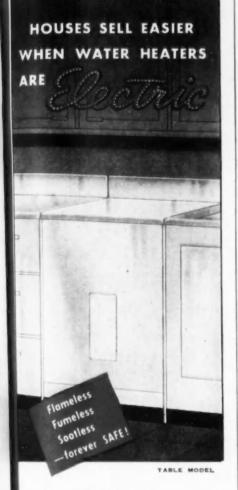
women intend to buy Electric Ranges as now own them !

The additional cost of wiring for an Electric Range adds less than 12c 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





Give those after-Victory houses extra sales appeal. Equip them with modern automatic electric water heaters which rovide instant hot water at extremely w cost !

They're SAFE-flameless, fumeless; LEAN-sootless and smokeless; EFFI-CIENT, since flues or vents are not eeded, they can be installed close to rincipal hot water outlets and need no engthy hot water pipes.

n

ze

a

k-

THE





H-2 FORECAST?-The H-2 program with its impossible restrictions and its continuation and extension of rules that builders hoped would be relaxed or removed has come as quite a shock to the industry. If this is an indication of what is ahead, it means builders will have to take off their coats, roll up their sleeves and go to work politically and every other way.

The time has already come when a large number of the rules and restrictions on building activity should be removed.

RELAXING CONTROLS—It will take even more intelligence to relax controls over materials, prices, and construction than it did to first apply them. There is no doubt that some forms of control-particularly control of prices—will have to continue for some time. There are many materials that will continue scarce and will have to be kept under priority to insure fair distribution. But this emphatically does not mean that every little job from Oshkosh to Oskaloosa must be controlled from Washington in every detail. After all, the local builder knows more about what kind of a house and what size should be built than anyone else. He should be allowed to build the kind of house his knowledge of the market tells him should be built.

PRICES ARE DIFFERENT-Control of material prices is a different matter. Until supply is able to approximately catch up with demand, it would be unwise to remove price control. You have only to look at the history of the last war and the years that followed to see what happens when there are no price controls. Building materials advanced 120 per cent. When they came down it ruined many firms.

The best answer to high prices is more building activity and more production. At present prices most industries can operate at a profit.

ERIC JOHNSON-Officials of the National Association of Home Builders are to be congratulated on having obtained Eric A. Johnson, dynamic president of the U. S. Chamber of Commerce, to speak at their fall conference September 25.

at Washington. As a manufacturer of electrical parts and of brick and tile products he has a personal interest in home building. He is today one of the foremost exponents of a dynamic form of private enterprise. Having him as a speaker is just another indication of the important stature of the NAHB.

CONVENTION PLANS-I have attended more conventions than I sometimes like to think about. In all of them, however, I have never encountered anything comparable to the plans now being made for the forthcoming annual convention and home show of the National Asso-ciation of Home Builders at the Sherman Hotel in Chicago. The building exhibition will offer the first opportunities for builders to see on a national scale what the industry will actually have ready when peacetime building resumes.

Among many interesting ideas, preliminary plans call for the builders who attend the convention to sit at large glass-top tables in comfortable chairs with ample facilities for taking notes. This affair is to be the largest gathering of builders of homes the country has ever had.

FHA AND RESEARCH-The original FHA legislation provides that FHA shall make surveys and studies of housing materials and methods and publish them for the benefit of the public and the building industry. This is a pertinent fact to note at a time when a new bill is before Congress calling for a housing research law. Why has FHA not done more with its research work?

As a matter of fact, FHA did do a good job for many years. For a time it had some 18 research specialists, and in addition contributed \$50,000 annually to the Bureau of Standards to encourage research in home building methods.

The fact that FHA does not have an aggressive, stimulating, and helpful research department right now is just another indication of (a) lack of strong top leadership and (b) the stunting effects of control by the National Housing Agency. Many of the FHA researchers have

been taken into NHA. The whole department has been allowed to languish.

Ame

Wh

to

ar tir sig we cre su



THERE'S only one kind of screen test in the South Pacific-just ask a Navy man who chaperons a frisky PT boat on nightly forays against the enemy, and daytimes fights tropic damp and boredom in a hidden hut.

That's the non-Hollywood screen test against disease-carrying insects... against damp, rust and corrosion. The armed forces' screen test against all the destructive elements of Nature that made LUMITE a new star...on the world's fighting fronts.

For LUMITE is the new plastic screen, woven from Saran*, that laughs at heat, *A product of the Dow Chemical Co. cold, rain. snow. acid fumes and salt air; says "no!" to rust and corrosion, and "yes!" to longer life.

American men will be coming home from battle fronts sold already on LUMITE plastic window screening for their homes . . . offices . . . plants. Because they'll have proved to themselves by experience, the tough durability of LUMITE under every conceivable adverse condition.

Tomorrow's postwar product is being pre-sold to millions of Americans! Tomorrow's postwar market ready at hand for "cease firing!"



Chicopee Manufacturing Corp., Sales Office: 40 Worth St., New York 13, N.Y. World's Largest Makers 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 home, factories, offices, schools! Write now for detailed information.



Why so many of Tomorrow's plans will include CURTIS ARCHITECTURAL WOODWORK

Why are so many architects and builders, from coast to coast, planning to select Curtis Architectural Stock Woodwork for the homes of tomorrow?

First, because Curtis Stock Woodwork has the architectural correctness of design which adds distinction to any dwelling—reflects credit on the designer. Curtis has pioneered authentic styling in woodwork, and many Curtis designs have been created by famous architects. Second, Curtis offers such woodwork in wide variety for every size and type of home. And third, Curtis quality—since 1866 —has assured lasting satisfaction.



WAR

PEACE

rrode ...

o streakidewalls

. . no

mes

dmits

ively

tractors:

w Plastic

your postfactories,

e now for

Wr plans may include a Curtis kitchen, too. ese stock wood cabinets fit any practical space may be decorated as desired.



othing can add more good taste to a room than ell designed interior doors. This is only one of any popular Curtis doors.



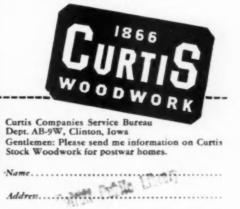
There is dignity and beauty in this Curtis stairway, assembled from Curtis stock parts of Ponderosa Pine.



A Curtis mantel of traditional style will add an atmosphere of gracious living to any bome. Designed by outstanding architects.

Built-in china cases are a "musi" in the plans of many postwar home builders. This is one of several Curtis styles.

From any point of view—economy—correct style — ease of installation and lasting value — Curtis stock woodwork is an ideal choice for new construction or remodeling in the postwar period. Mail coupon for information.



25

Amer

IMPORTANT TO EVERY BUILDER

Here are the facts about one of your biggest post-war opportunities

Q. Is there a real demand for air conditioning in post-war homes?

A. Every survey shows a large and increasing demand. 54% of a group of prospective homebuilders contacted by the National Association of Homebuilders said they would not build nor buy if they could not get complete, year-round air conditioning. McCall's Magazine found 54% of its readers "liked and expected to get" air conditioning, while an additional 29% listed air conditioning as a "must" for their post-war homes. Other surveys confirm this decided trend.



Q. Will equipment be available after the war to meet this demand?

A. Yes, an entirely new and revolutionary *All-Year* Gas Air Conditioner has already been perfected by Servel, Inc., makers of the famous Servel Gas Refrigerators. Developed before the war, it will be available for your homes as soon as materials and production capacity are released from war work.

Q. What's "new and revolutionary" about the Servel Air Conditioner?

A. It's the first and only system that offers—in one simple unit—year-round air conditioning. It heats and humidifies the home in winter, cools and dehumidifies in summer, cleans and circulates air the year-round . . . all at the touch of a finger.



Q. How can I be sure that this new Servel equipment will meet the demands of post-war consumers?

A. The Servel All-Year Gas Air Conditioner has been on actual test in hundreds of homes and commercial buildings throughout the country for the past four years. Users are unanimously enthusiastic about its efficiency and economy.

▶ You've got the right answers to a lot more questions, too, with the Servel All-Year Gas Air Conditioner. For one thing, the experience of builders with test installations proves that houses equipped with this system sell faster. Recognizing the extra value and salability of Servel Air-Conditioned buildings, financial underwriters have indicated their willingness to make larger loans on structures so equipped.

Moreover, though the Servel All-Year Gas Air Conditioner will cost more than adequate heating alone, it is possible, by proper planning, to keep the increase surprisingly low. In fact, advance planning and coordination can effect economies that may offset the additional cost of Servel All-Year Gas Air Conditioning.

Your local Gas Company has trained application engineers who will be glad to assist you in planning for Servel *All-Year* Gas Air Conditioning in your postwar homes. For full details on this "essential for the home of tomorrow," get in touch with your Gas Company now, or write Servel, Inc., 1409, Morton Avenue, Evansville 20, Indiana.

SERVEL GAS REFRIGERATORS are standard equipment in the nation's finest apartment houses



America's Leading Makers of Modern Gas Appliances Dun stru Leh fast Leh norn Earl in s So i man Cem indi

plan

In floor (2) t each

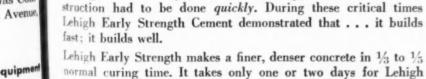
Face

HIGH



tial for the Gas Comon Avenue,

equipment ses



in seven days.

So if you want to save *time* as well as expenses . . . do as so many wartime builders have done . . . use Lehigh Early Strength Cement. Let the Lehigh Service Department help you solve your individual problems.

Early Strength to equal the strength that normal cement acquires

During the last few years time was at a premium . . . and con-

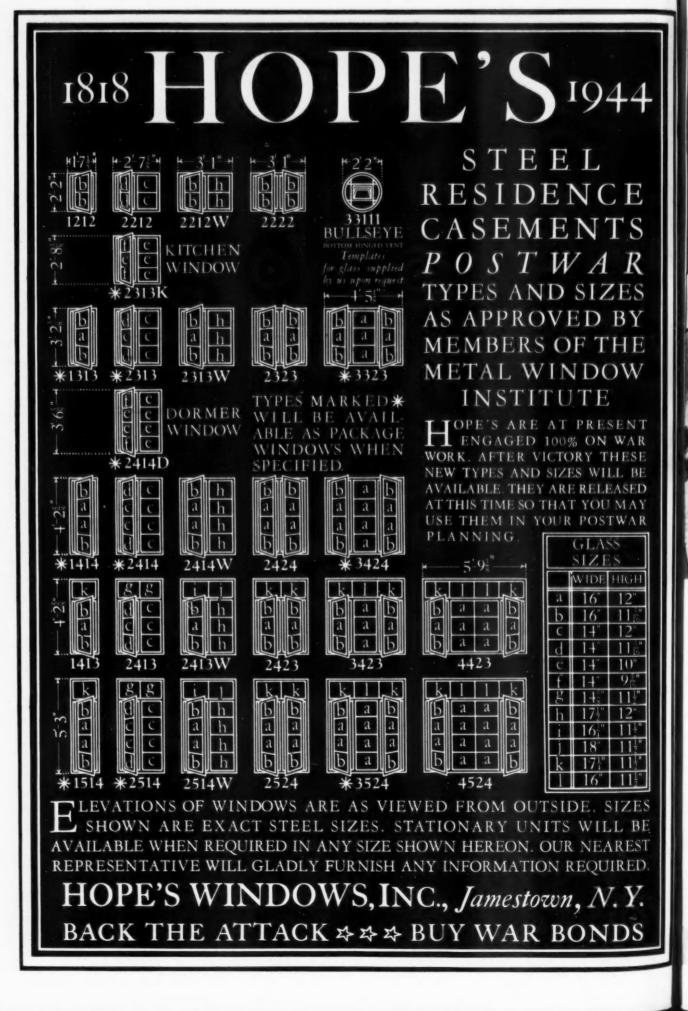


27

Use LEHIGH EARLY STRENGTH CEMENT for service strength in a hurry.

HIGH PORTLAND CEMENT COMPANY . ALLENTOWN, PA. . CHICAGO, ILL . SPOKANE, WASH.

Ame



28

1044

5

2

SY

E V

I T A R SE BE ED

ΑY AR

ĠΗ 2" 1 <u>50</u> 1 <u>15</u> 2"

 $1\frac{10}{16}$

 $\frac{0^{n}}{1^{\frac{1}{2}}}$

 $1\frac{1}{2}^{n}$

 $1\frac{1}{2}$ $1\frac{1}{2}^{n}$

ZES BE EST

RED.

Y.

DS

Specified : NORGE GAS RANGES

These 54 buildings contain 300 living units, each with one to three bedrooms. And each unit with the proven satisfaction of a Norge gas range-another one of the "products of experience."

NORGE BEFORE YOU BUY HOUSEHOLD APPLIANCES NORGE DIVISION, BORG-WARNER CORP., DETROIT 26, MICH.

REFRIGERATORS GAS RANGES HOME HEATERS

FF

ELECTRIC RANGES WASHERS COMMERCIAL REFRIGERATION

OAK LEAF PARK, NORFOLK, VA. Architect: Norfolk Association of Architects, Norfolk, Ve. - Builder: Wm. Multhead Construe-

Hen Co., Durham, N. C.



The above is one of a series of messages to future home builders on Victron Ventilation, appearing in American Home, Better Homes and Gardens, House Beautiful and Small Homes Guide.



Not you, Mr. Builder!

Your cooking will be busily confined to planning delectable dishes in the way of new homes. But women will continue to be queen of kitchen cookery. Hence this message to millions of future "new homers" in House Beautiful, American Home, Better Homes and Gardens, and Small Homes Guide.



These women too are making plans of their own you'll want to know about. They're dreaming of kitchens new and spotless . . . gleaming cabinets and exciting appliances all in their proper place.

And you can be sure that one of the important items will be a Victron Ventilator to preserve the beauty of the kitchen and the woman who presides over it. These women intend to provide a safe, silent exit for messy grease, grime and cooking odors. They've caught the idea of how to be a beautiful cook and a charming hostes. And to help you help them, Mr. Builder, Victor will have available new designs, improved air moving efficiency in Victron Ventilation of tomorrow.

pre

the

bu

yea

wi

sat

qui

typ

in

reo



g deiec. nen will his mese Beauens, and

wn you'll hens new ng appli-

items will ty of the it. These for messy it the idea ng hostess. lictor will oving effi-

RROW



The Ford Cyclone Safety Shingle is designed specifically as a windproof shingle. Experience has proved that Cyclone shingles will hold fast to the roof even though the roof deck is blown completely off the building.* Hard driving snow and rain cannot blow under Cyclone shingles because the butt is securely locked to the roof structure.

The Cyclone Safety Shingle is an exclusive Ford shingle backed by eighty years of experience in making roofing materials. This shingle is a sure cure for wind trouble on roofs and can be recommended with confidence of complete satisfaction in localities where high winds are encountered.

Along with the stormproof feature of Cyclone shingles is the desirable quality of beauty and attractive appearance. The locking notch makes a pleasing break in the lines of the hexagon design that adds to the beauty of this type shingle.

The interlocking operation is simple and experienced roofers find no difficulty in attaining speed in laying this shingle. Ford Cyclone Safety Shingles are recommended for either new or old roofs.

> *Photograph of a section of roof deck blown off the building but the Cyclone Safety Shingles held fast.

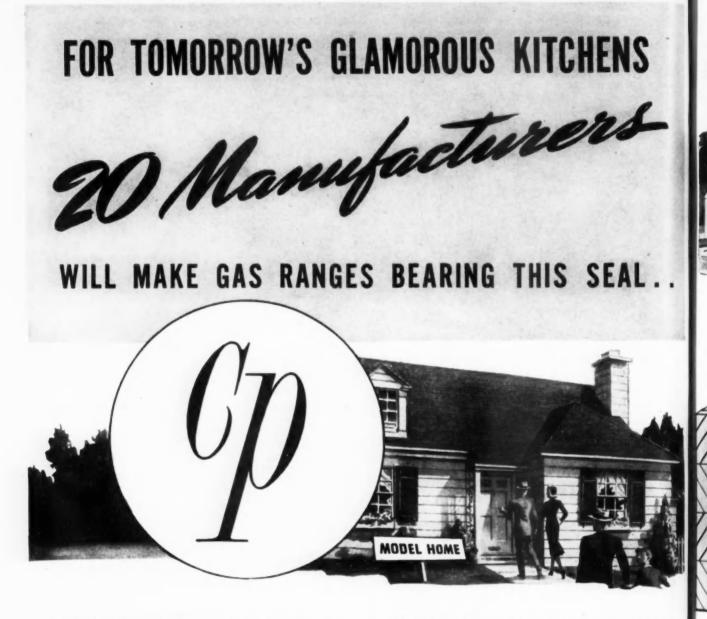


hatchel



OOFING PRODUC CO. Established 1865 111 W. Washington St., Chicago 2, Ill.

ASPHALT ROOFINGS . SHINGLES . SIDINGS . FORD.V.NEER



We believe this to be the soundest and most progressive idea ever available to help you select appliances for the glamorous kitchens that make homes easier to sell. The idea is the famous "CP" Seal.

Gas Ranges bearing this Seal will be built by 20 manufacturers to meet the highest performance specifications of engineers and home economists of the entire Gas Industry. But that is not all. Every range bearing this Seal will be tested by the world famous American Gas Association Laboratories to provide an independent consumer buying guide.

No matter who makes these ranges, every one will be *certified* to provide cooler, cleaner kitchens, the latest automatic controls and big savings in time,



The Flame That Will Brighten Your Future food, fuel and money. That's why women will look for the "CP" Seal in the kitchens of the completely equipped homes you design and build tomorrow.

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

These Leading Manufacturers Will Make Matchless "CP" Gas Ranges For You

A-B Stoves, Inc.OAmerican Stove Co.RCaloric Gas Stove WorksOCribben & Sexton Co.SDetroit-Michigan Stove Co.TThe Estate Stove Co.WGlenwood Range Co.JJames Graham Mfg. Co.OGrand Home Appliance Co.MA. J. Lindemann & Hoverson Co

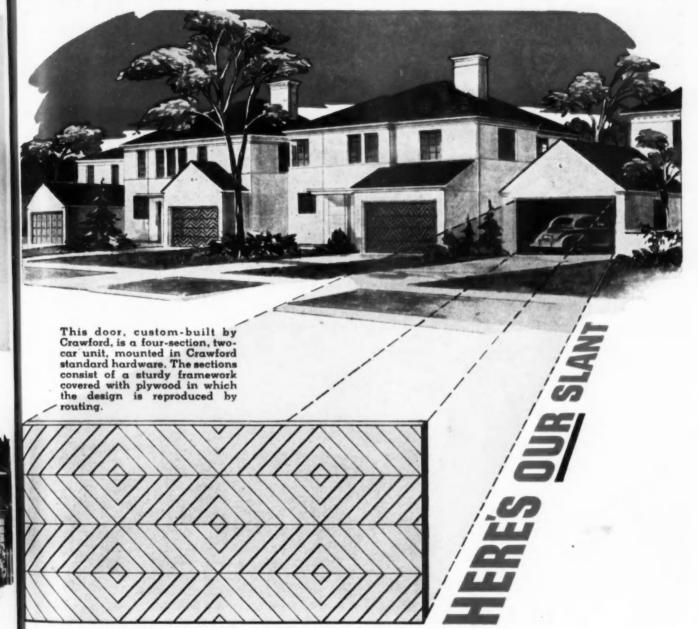
O'Keefe & Merritt Co. Roberts & Mander Stove Co. Geo, D. Roper Corp. Standard Gas Equipm't Corp. The Tappan Stove Co. Western Stove Co., Inc. IN CANADA

Clare Bros. & Co., Ltd. Gurney Foundry Co., Ltd. Moffats, Ltd. Althousion ar and ac rears of when of house,

0

Crawfo Decaus combin ng adv Droved he pas Crawfo

reatin



ill look npletely norrow. Ranges,

cturers,

ke

u

o. ove Co.

0.

nc.

d.

., Ltd.

m't Corp.

on Custom-Built Garage Doors ...

Although Crawford stock doors for residential garage application are so designed that they fit gracefully into all the popular and accepted architectural styles there will still be in postwar lears as in previous years, a certain percentage of instances when doors of individual design will be indicated, especially so when the garage front is an integral part of the front of the louse, as in the example illustrated.

Creating garage doors of individual design for mounting in Crawford standard hardware is sound architectural practice because it permits complete latitude in individual expression combined with the structural, installation, operating and servicing advantages of the standard Crawford mechanism which has proved its superiority in so many thousands of installations during the past 15 years.

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



Amer

YO

the paylight

ndow

v feat

dow

sion

use hu Therm

ider for The hi its fou

glass a

FOR HOMES YOU ARE BUILDING FOR HOMES YOU ARE PLANNING

34

Crane Plumbing CAN SERVE YOU

• For those new homes you are planning to build after the war, Crane is developing a line of plumbing fixtures designed to meet the tastes of modern America—possessing the same high quality and sturdy reliability that have always characterized plumbing carrying the name of Crane. Oftentimes, prospects tend to judge houses by the quality of the plumbing. You will find that sales are easier when the bathrooms and kitchens have modern Crane equipment.

> For today's essential construction, Crane has developed a line of plumbing fixtures of vitreous china and Duraclay that may be purchased without priorities. Bathtubs of porcelain enamel on cast iron are also available where priorities can be secured. If you are not familiar with this plumbing equipment now available in the Crane line, ask your plumbing contractor or call the nearest Crane Branch.





CE 11-004 Hanover Closet





CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGOS VALVES • FITTINGS • PIPE PLUMBING • HEATING • PUMPS NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

Enlarges

your opportunity

to use

aylight

1914

OFFICES HICAGO

· PIPI · PUMP

TRACTORS

the postwar houses you design or build, you can offer extra wight and the thrilling expansive outdoor views that big ndows provide . . . plus an exciting, yet highly practical, w feature for homes.

Thermopane

It's Thermopane-the revolutionary new Libbey Owens Ford ndowpane that insulates.

Thermopane enables you to use large glass areas as extenvely as you wish, without worry about excessive heat transssion, whatever the climate. Thermopane will be an effective les lever in postwar houses because it is one of those "better ings"-one of those "startling home improvements"-that use buyers will want.

Thermopane presents no unusual installation problem. It fits to a modified single sash, just like a single pane of regular severe that the rabbeting will be grooved somewhat der for Thermopane's slightly greater thickness.

The high insulating efficiency of Thermopane is explained its four important features shown at the right. For full inforation-such as insulating coefficients, sizes, thicknesses, types glass and other data-write for our new Thermopane book. bbey Owens Ford Glass Co., 1294 Nicholas Bldg., Toledo 3, O.

4 important features of Thermopane

with the

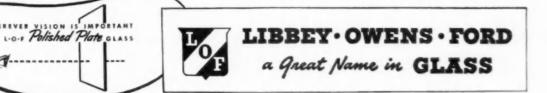
BONDERMETIC SEAL

INSULATING AIR SPACE. The layer of air inside the Thermopane units is hermetically-sealed at the factory. When desired, Thermopane also is made with three or more panes of glass.

BONDERMETIC SEAL. This patented, metal-to-glass seal bonds the two panes of glass into one unit to prevent dirt and moisture from entering the air space.

CLEAR VISION. The dry air is sealed in with the patented bond to prevent frost or condensation from forming on the inner surfaces of the panes of glass.

ONLY TWO SURFACES TO CLEAN. The glass surfaces inside a unit are especially cleaned at the factory . . . and stay clean!



35



Will this be the trend in postwar home construction?

You've heard a lot of fantastic predictions about postwar housing . . . but there has been some good sound thinking, too.

Leaders in the construction field are coming to the conclusion that homes designed, built, and financed complete with labor-saving equipment will hold the center of the postwar stage.

It is becoming more and more evident that houses equipped with electric range, refrigerator, dishwasher, automatic heating, and other electrical appliances will have greater consumer appeal.

Says a recent issue of American Builder, "The day has arrived for homes to be sold with at least the basic mechanical devices and equipment arranged to deliver better living."

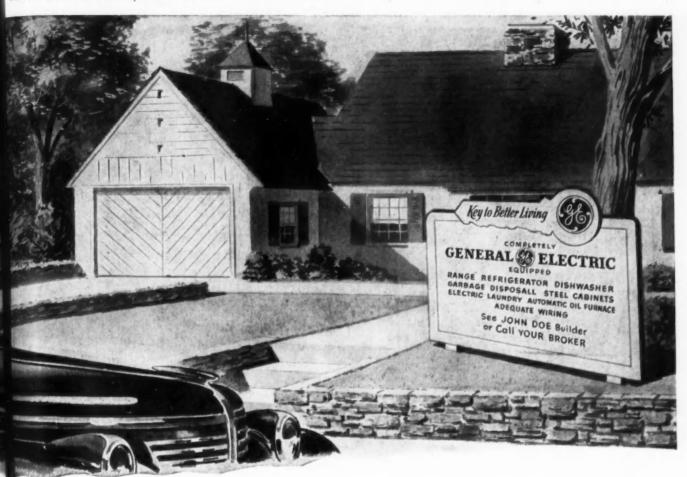
A three-way "plus" -

The buyer will get greater satisfaction from a home that includes the electrical appliances he wants and needs. And, when such equipment is covered by the mortgage, any increase in monthly amortization payments will, in almost all cases, be offset by actual savings in operating expenses.

The builder will have houses with greater appeal to offer. The built-in, labor-saving devices will provide additional features which should do much to promote sales—as well as provide word-of-mouth advertising—for the builder.

The banker, too, will benefit because efficient, money-saving equipment will increase the homebuyer's ability to keep up his payments. A modern, mor buy well We Sinc Hon





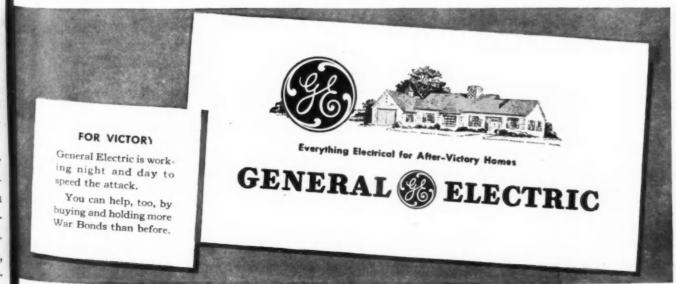
ern, fully equipped home represents a sounder mortgage investment because it increases the buyer's *desire* to avoid risk of foreclosure, as well as his *ability* to meet mortgage payments.

We've got some answers

Since as far back as 1936 the General Electric Home Bureau has been studying the problems involved in building "electrical servants" into the home.

We feel that we have got some of the answers to some of the questions which you may want to ask.

We'll be glad to help. Home Bureau, General Electric Co., Appliance and Merchandise Department, Bridgeport, Conn.



AR IN: "The G-E All-Girl Orchestra," Sunday 10 P. M., E.W.T., NBC—"The World Today" news, every weekday, 6:45 P. M., E.W.T., CBS.

greater ving des which 11 as probuilder. efficient, he home-. A mod-

Ame

There'll <u>still</u> be hot water for Junior... with a GENERAL Tankless Heater

N



(UNTIL VICTORY - a major part of our production is precision war work ... torpedo and bomb parts, fuse setters, special Navy water heaters. Whether there's a regular morning line-up, or just a demand for hot water from several sources at once, you assure constant hot water in the home by installing the *GENERAL* 'Tankless Heater.

Compact, self-contained GENERAL Tankless Heaters cost less to install and take less space than storage tank systems . . . yet supply 3½ to 35 gallons of piping hot water every minute – all day! They hook up directly with any automatically-fired boiler and deliver a continuous supply of sediment-free hot water from seamless copper tubing.

To provide "unlimited hot water" the modern, moneysaving way, you can count on the GENERAL Tankless Heater when you build your "homes of tomorrow". Write for complete Catalog 15. General Fittings Company, Department F, 123 Georgia Avenue, Providence 5, Rhode Island.



Flintko easier double Two custom sales w sales ef lating a Color bedded over a sulation product wire cu In on



Flintkote Insulated Sidings are easier to sell because they do double duty.

r

you the

tank tank hot ectly

con-

mless

onev-

kless

wo.

tings

enue,

Two-for-one value is a powerful customer appeal that means more sales with less effort for you. One sales effort sells *two* jobs...Insulating and Re-Siding.

Colorful mineral granules embedded in heavy asphalt coating over a base of thick Flintkote Insulation Board give this unusual product the appearance of fine, wire cut brick or stone.

In one siding . . . that goes on as

fast as it sells... your customer can give his home a new high in appearance and value at a new low cost. (And a new low in selling effort for you!)

Available in three attractive "brick" finishes...Red, Buff and Tapestry Blend...Flintkote Insulated Siding is also available in a "stone" design.

Your Flintkote sales representative has complete information on this fast-selling product. Ask him about increasing your profits with Flintkote Insulated Sidings. FUNTKOTE INSULATED SIDING is a pleasing, rugged material which combines the known effectiveness of stands and Insulation Board with the obvious advantages of Asphale Brick-Type Siding.

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

lintkote Insulated Sidings

ATLANTA - BOSTON - CHICAGO HEIGHTS - DETROIT - EAST RUTHERFORD - LOS ANGELES - NEW ORLEANS - WACD

American Builder, September 1944. Ameri



The chipped teacup of the PATRIOTIC Mrs. Jones

No matter who the guest—Mrs. Jones brings out her chipped teacup with no embarrassment. On the contrary, with a thrill of pride.

Not very pretty, that chip. But it bears witness to the fact that Mrs. Jones has her nation's welfare at heart.

Mrs. Jones has given up all unnecessary spending for the duration. By doing *without* —she is helping to fight inflation.

Maybe she doesn't know all the complicated theories about inflation. But she does know that her government has asked her *not to spend*.

So Mrs. Jones is making all the old things do . . . not only that teacup. She's wearing her clothes for another year—and another. She's not competing with her neighbors for merchandise of any sort.

And the dollars she's not spending now are safely put away (and earning interest) for the peacetime years ahead. *Then* those dollars will buy things that can't be had for any price today.

If we all are like Mrs. Jones, there will be no inflation with skyrocket prices. If we all are like her, dangerous Black Markets cannot exist. A R

Typica

for th

recreat

Timke

dd H.

Rega

and he

and be

system

of fur

type a

ever te

postwa

New

ioning

time r

Wor

plans !

in hel

heatin

A chipped teacup stands for all that for a sound, secure U. S. A.

7 RULES FOR PATRIOTIC AMERICANS TO REMEMBER EVERY DAY

1. Buy only what you *absolutely need*. Make the article you have last longer by proper care. Avoid waste.

2. Pay no more than ceiling prices. Buy rationed goods only by exchanging stamps. (Rationing and ceiling prices are for your protection.)

3. Pay willingly any taxes that your country needs. (They are the cheapest way of paying for the war.)

4. Pay off your old debts—avoid making new ones.

5. Don't ask more money for the goods you sell or for the work you do. Higher prices come out of everybody's pocket—including yours.

6. Establish and maintain a savings account; maintain adequate life insurance.
7. Buyall the War Bonds

you can-and hold 'em!

Use it up ... Wear it out ... Make it do ... Or do without

A United States War message prepared by the War Advertising Council; approved by the Office of War Information; and contributed by this magazine in cooperation with the Magazine Publishers of America.



A Recreation Room . . . with a view to the future

Typical of the modern home designs now being developed for the great postwar building market is the above recreation room in a Sunken Garden Home, designed for Timken's current consumer advertising campaign by Harold H. Ehlert, member of American Institute of Architects.

Regardless of the size or type of new homes, builders and home owners are unanimous in demanding the newest and best in equipment. No home is better than its heating system. and Timken Silent Automatic, with all its years of furnishing fine heating systems for homes of every type and description, will be in a better position than ever to supply the right kind of heating equipment for postwar home building.

New Timken Silent Automatic heating and air conditioning equipment, ready for production as soon as wartime restrictions can be relaxed, will set new standards of comfort, economy and modern styling.

Work with the nearest Timken Dealer now on your plans for the future. You will find his services invaluable in helping you select the most satisfactory automatic heating equipment.



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



Garden side of this smart, truly American home. This home can be heated better, more economically with Timken Silent Automatic Heating,



Free! New booklet showing floor plans and details of this interesting home, as well as other new homes and recreation rooms, designed by outstanding architects. Offered to stimulate thinking about postwar homes, this booklet contains many worthwhile ideas on modern home designs and equipment. Mail coupon today.

To: TIMKEN SILE	NT AUTOMATIC DIVISION
400 Clark Avenue	e, Detroit 32, Michigan
Send FREE bo	oklet on new homes to:
Name	nonde.
Street Address_	POR -
City and State_	Controlle .
PI	LEASE PRINT NAME

Am

al

Masor

Masoni

rials ar struction Masoni Washin

Ŋ

PR

THE LIG

"Bathroom fixtures, sir ready for tomorrow"

Blueprints of tomorrow's smart new styles in Chrome Accessories for Bathrooms and Kitchens...are taking shape today in Gerity thinking!

Tomorrow's Gerity Accessories—including towel bars, soap dishes, tumbler holders, cabinets and similar items—will be in tune with new trends in home decoration.

And Gerity Chrome Fixtures will be provedand-practical for lifetime durability... they'll defy cracking, peeling, checking, tarnishing and breakage.

Watch Gerity grow in postwar Leadership! Make your plans today to get Gerity Accessories tomorrow! Gerity-Adrian Mfg. Corp., Adrian, Mich.



TOMORROW'S DREAM HOME WILL HAVE GERITY CHROME

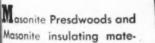
These "BIG GUNS" are loaded with logs!



This battery of high-pressure steam "guns" is in action day and night *exploding wood*... literally blowing it apart into its basic *ligno-cellulose fiber*, to make a versatile material for all types of building. For this basic fiber is recombined to make the famous Masonite* Presdwoods.



The Presdwoods are dense, thin hardboards, made from wood but far stronger . . . uniform, grainless, smooth-and-hard-surfaced, resistant to dampness, heat and insects. Their handsome surface texture suggests paneling, counters, flooring, wainscoting – many interior and exterior uses – and they take many applied finishes as well.



rials are available for essential construction. For full information, write Masonite Corp., Dept. AB-9, 111 W. Washington Street, Chicago 2, Illinois.

MASONITE PRESDWOODS

THE LIGNO-CELLULOSE HARDBOARDS

ROME



Presdwoods can save time in building, for they come in large sheets and are worked with ordinary carpenters' tools. They will not split, crack or warp when properly used — and present the warmth and design possibilities of wood along with durability usually associated with metals.

*Trade-mark Reg. U. S. Pat. Off.

Am

EVEN TO I

TH

Ma



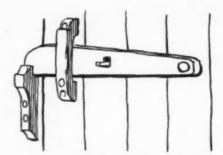
PACKAGED by PENN describes our complete line of *prefabricated* oil or gas fired heating units because they are completely factory assembled and delivered to you ready for immediate connection and use.

95% of the cellar work you usually do has been eliminated by unit design and construction. The proper gun type burner, hearth, controls, fittings, switches, wiring —everything is factory mounted and tested. This factory engineering and coordination results in greater heating efficiency, saves you time, labor and installation headaches . . . cuts your cost considerably. Builders who use heating units Packaged by Penn will have available a full line of modern low cost units that wilt competition with both price and performance. Less installation work and negligible fittings or parts inventories will mean more profitable installations.

Get the complete story today so you will be ready with Penn when the present emergency is over and you start your postwar building program . . . and we again furnish the finest heating units *Packaged* by *Penn* for efficiency and low cost.

PACKAGED by PENNGUN WATER HEATERS PENNGUN WATER HEATERS HYDRO-AIRE (SPLIT SYSTEMS)





In days of witchcraft, door latches were fashioned from whatever material was available. This wooden swivel latch is an excellent example of Yankee whittling ingenuity — carved from native oak, bar, staple, pegs and all.

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

E

ΓER

BULAR

LOCKS and LATCHES

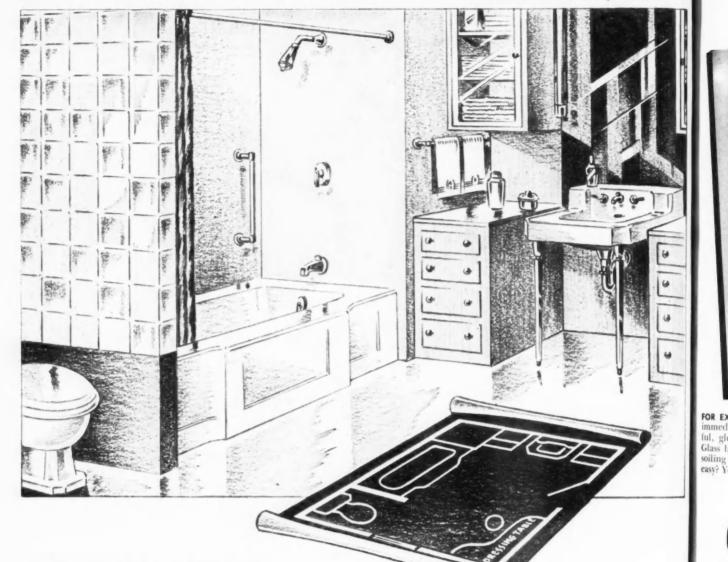
1944 War Housing Calls for DEXTER-TUBULARS

The faster, easier installation of Dexter Tubulars — their guaranteed lifetime of trouble-free satisfaction is no matter of witchcraft. They are the combination of creative originality, precision workmanship and good quality materials. Now, as never before, builders appreciate the time saving advantages of Dexter Tubular installations; and owners appreciate their guaranteed, lifetime performance.

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

American Builder, September 1944.



New space planning for tomorrow's bathrooms

As you can well imagine, Kohler designers and engineers have worked out many details of tomorrow's plumbing fixtures and fittings. Naturally, these will not be announced until conditions permit their manufacture and delivery.

Meanwhile, Kohler appreciates that changes will take place in bathroom and kitchen planning, whether for new homes or modernization.

The bathroom shown is one solution to the problem of providing greater utility. The lavatory is flanked by deep counters with drawer and storage space. Overhead are cabinets for towels and wash cloths. The mirror is large and reflects the light on the opposite wall. From the floor plan notice that the closet has a compartment separated from the tub by a glass-block partition. There is a built-in corner dressing table with natural light from the window.

The fixtures are the Cosmopolitan bench bath with mixer-type shower; Gramercy vitreous china lavatory with shelf, compact mixer fitting, metal legs; Integra one-piece closet.

Kohler is always anxious to co-operate with architects and builders in considering ideas for post-war homes. Write: Kohler Co., Dept. AB-9, Kohler, Wisconsin.

* BUY UNITED STATES WAR BONDS *



46

Am

3

l'ss ss g li a

u

Se sl

si

co lil

th

American Builder, September 1944.

A little entra glasse

AKES ANY HOUSE

EASIER TO SELL!

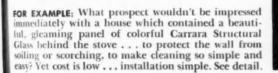
944.

6

4

4

.



GLASS! No other building material can add so much sales appeal to a house at so little

add so much sales appeal to a house at so little cost. And every nickel you spend for extra glass in a house *shows*... the minute a prospect takes a look at the property.

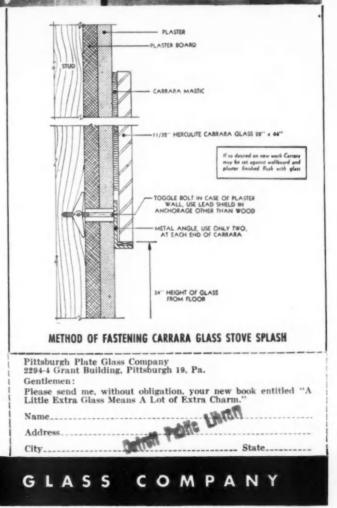
People *like* glass. They are immediately impressed with your house as a "good buy" when they see that Carrara glass splash panel behind the stove, that mantel mirror, or Carrara bath, or glass block partition, or full-length door mirror. Items like these say to the prospect . . . "This is a modern, desirable house."

And because extra glass costs so little, you can use it effectively even in the lowest cost houses. Send the coupon today for our free booklet which shows scores of ways to use extra glass inexpensively to give homes greater sales appeal. The book contains many pages of actual detail drawings, like that below, showing you exactly how each of these many things should be installed.



PLATE

ITTSBURGH



sepition. with

bath china metal

e with as for AB-9,

DS *

E R

P

Ame

Mr. & Mrs. America

are doing their post-war planning with Weldwood!

Plywood is in the post-war plans of your customers.

Mrs. America is looking forward to that warm, livable wood room she's always wanted.

Formerly the rich beauty of wood-paneled rooms was denied her because of the high cost of materials and labor in solid wood construction.

Weldwood . . . in genuine Walnut, Mahogany, Weldtex,* Knotty Pine, Oak, Gum and other fine hardwoods . . . brings her dream within reach for the first time.

And for those rooms to be covered with paper or paint, inexpensive Weldwood Utility Panels with their extra-heavy hardwood faces provide an ideal undersurface free from checking or grain raise.

Mr. America is sold on appearance, too.

But the structural advantages of plywood interest him even more.

He likes the fact that, when he builds, construction time will be shortened - as much as four to six weeks.

He's sold on the fact that, with dri-wall construction instead of plaster, he eliminates the hazards of warping and swelling in sash and wood work.

Weldwood Plywood Panels are crack-proof and are guaranteed for the life of any building into which they go.

Yes, Mr. and Mrs. America are interested in Weldwood. They're learning more about it every day.

And when you build with Weldwood Plywood in any form, you're giving your customers the best in what they want.



Weldwood Plywood and Plywood Products are manufactured and marketed by UNITED STATES PLYWOOD CORPORATION THE MENGEL COMPANY New York, N. Y. Louisville, Ky.

Distributing Units in Atlanta, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Jacksonville, Los Angeles, Louisville, Newark, New York, Oakland, Philadelphia, Rochester, San Francisco, Seattle . . . Send inquiries to nearest point. Write for complete specifications on Weldwood Plywood and other Weldwood products.

with "Airlok" Grid Core ... Strength and beauty. The modern door for the modern home.

Mengel Flush Door





Plastic and Wood Welded for Good

Waterproof Weldwood, so marked, is bonded with phenol formaldebyde synthetic resin. Other types of tater-resistant Weldwood are manufactured with extended urea resins and other aphroved bonding agents. Back of these Weldwood Products are un matched facilisies and experience in Plywood preduction and fabrication. Available also are the services of qualified engineers, chemists and wood technologists.



new resistance to rot, moisture, insects, fire

> greater strength with less bulk

> > plus traditional utility

WOOD

MOST PROMISING OF MODERN BUILDING MATERIALS

When you place your bets on the coming battle of materials for the postwar building market, you naturally will think about the odds on wood.

Modern chemicals and treating methods are increasing vastly the resistance of wood to rot, moisture, insects and fire.

Water-resistant and waterproof glues are making possible plywoods and laminated structural members of greater strength with less bulk and with new and highly interesting architectural possibilities. Add to these new qualities the traditional beauty and warm, friendly texture of wood ... and you have a product that can compete with *any* material.

Two important contributors to the new durability and wider usefulness of wood have been I. F. Laucks, Inc., world's largest manufacturer of waterresistant and waterproof glues, and Monsanto Chemical Company, producer of the newest types of chemicals for the protection of wood. Now that these two leaders have combined their resources, research and experience, you can look for still greater contributions to come!

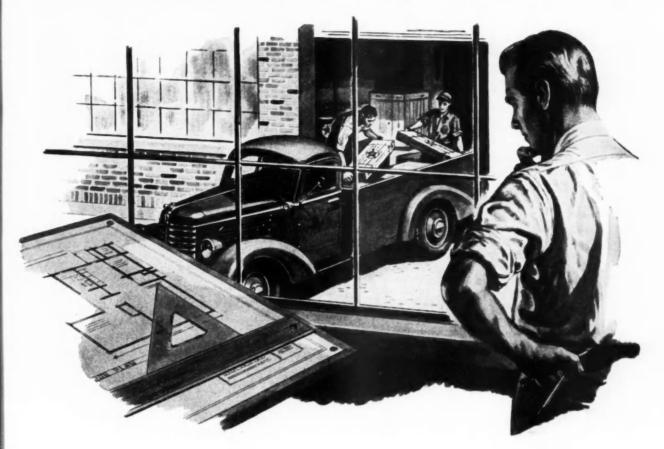
MONSANTO CHEMICAL COMPANY Organic Chemicals Division 1700 South Second Street St. Louis 4, Missouri



I. F. LAUCKS, Inc. America's Glue Headquarters

CHICAGO (2)—6 N. Michigan Avenue. SEATTLE (4)—911 Western Avenue. LOS ANGELES (1)—859 E. 60th Street. Factories: Seattle, Los Angeles, Partsmouth, Va., Lockport, N. Y. In Canada, address: I. F. Laucks, Ltd., Granville Island, Vancouver, B. C., or Hercules-Laux-Merritt, Ltd., Stanbridge, Quebec. American Builder, September 1944.

A job on hand is worth two on blueprints...right now!



Get your share of the big RE-ROOFING market ... sell the name that millions know!

O^F course you're thinking and planning for post-war, new construction. That's good business - but shows no immediate profit. So - in the meantime, go after the available business.

There's one outstanding market today. It's re-roofing. It has been estimated there will be a million new homes built annually after the war. But right now there are more

than two million homes that need re-roofing each year!

Here are two sound suggestions to

follow in getting this profitable business. 1 - Feature Asphalt Shingles because of their outstanding value and nationwide acceptance. 2 -Sell the name that millions know and trust - TEXACO.

Texaco Asphalt Shingles and Roofing are available through Texaco Roofing Dealers supplied by a large network of Texaco warehouses - east of the Rockies. Drop in, write or 'phone your nearest Texace Roofing Dealer, or write The Texas Company, 135 East 42nd Street, New York 17, N.Y.



Washington News Summary

Nelson Sees Fast Building Start

CTEPS will be taken by the War earlier than anticipated and that the Production Board to insure a **U** speedy start for the construction sector of the country's economy as soon as manpower and materials are available. This assurance was given by Donald M. Nelson, WPB Chairman, to a committee of the construction industry, brought together by the United States Chamber of Commerce, which recently laid before Mr. Nelson the need for such prompt resumption of construction.

The committee, headed by Allen J. Saville of the American Society of Engineers, pointed out the responsibility of the construction industry, normally the second largest employer of labor in the Country, and probably the most flexible and easily expansible employer group, to assume a tre-mendous share of re-employment responsibility in the transition period from war to peace. Practical preparation for assumption of this load is required, and to that end several concrete suggestions were made to the WPB Chairman. Subject to the obvious requirement that material controls shall continue till war demands are met, but not a moment longer, the Committee suggested:

1. Approval of civilian work for construction in any local area where such approval shall keep local manpower busy in its own lines of endeavor.

2. Periodic issuance by WPB of a forecast of critical or hard-to-get materials becoming available for nonwar construction; such lists to be public in order that those planning new construction may take the matter of material availability into consideration.

3. Consideration of local manpower availability, required use of critical materials, and value to industry or benefit to community, in selection for WPB approval of specific projects.

4. Authority to carry out the program to be vested in local WPB directors, with assistance of competent community boards as required. No approval of projects to start more than thirty days after approval.

In support of its plan, the committee pointed out that local unemployment problems might become acute

solutions offered could help greatly to cushion the shock.

Further, it stated, many months would be saved in the return to normal operations in all types of construction if assurance could be given the industry that necessary equipment for buildings and other structures, as well as building materials, would be channeled into the now almost empty shelves of equipment distributors and allowed to flow through normal channels as rapidly as war needs permitted.

In the opinion of the committee, major reliance must be placed on the construction industry and upon construction users to determine which work shall start first, and necessary priorities and other assistance must be granted promptly where the outlined conditions warrant. A lift in civilian jobs during the transition period would carry a corresponding lift in morale, the committee pointed out.

In addition to Chairman Saville, members of the group which met with Chairman Nelson included:

Robert P. Gerholz, president, National Association of Home Builders: Douglas Whitlock, president, The Producers' Council; Raymond J. Ashton, president, American Insti-tute of Architects; Wilson Compton, secretary-manager, National Lumber Manufacturers Association; Norman P. Mason, regional vice president, National Retail Lumber Dealers Association; and William Muirhead, president, Associated General Contractors of America.

FHA Prepares-With an estimated \$3 billion market for repair and modernization loans in prospect after V-day, FHA has issued a new booklet exclusively for building material dealers and contractors. Distributed through institutions qualified to lend under Title I and labeled "Here's How To Make Sales and Satisfied Customers With FHA Title I Loans," the booklet gives essential operating facts in handy reference form, and emphasizes what FHA expects of participating dealers in its property improvement program.

Part I has a step-by-step description of procedure, data on amounts,

terms, charges, eligible projects, and filled-in sample forms. Part II law stress on FHA's demand for soun ethical practices by participating dealers, and its determination t eliminate from the program those who abuse its privileges."

FHA officials made it clear American Builder that they do no wish to impugn the legitimate an long-established lumber dealer. The are determined, however, to elim nate 'fly-by-night' operators in the field who, during prosperous times abuse the privileges of Title I loans

The Agency feels that legitimat dealers will welcome its efforts to rid the market of this detrimental and dishonest type of competition.

Lumber Still Short-WPB has limited priority assistance on lumber for repairs to emergency purposes only. Examples : "Damage caused by fire, flood, tornado, earthquake, storm similar catastrophe-where damage makes dwelling unfit for continued occupancy-by reason of roof leaks, weakening of framework, separation of lateral from main supports, broken joists or risers." No help where deterioration has resulted from wear and tear and parts will function without repair for three months or longer Make applications to FHA field of fice on WPB-2896 and include proof that extent of damage is such as to bring it within 'emergency' category.

Wages Freeze-National Wa Board has extended wage freeze to all U. S. building contractors employing eight or less workers. Such employers were previously exemployers under the Board's order. Reason WLB acted on recommendation of Wage Adjustment Board who found that unrestricted wage increases being granted by such contractors were "unstabilizing wage conditions in the industry."

Grass Roots Planning-Detailed inventories now, by local communities, of all existing residential accommodations with an eye to determining postwar needs, are called for by Frederick M. Babcock, finance and housing consultant of Washington. He declared that such inventories would center housing responsibility ties on local citizens familiar with needs and resources to meet them

ber 194

American Builder, September 1944.



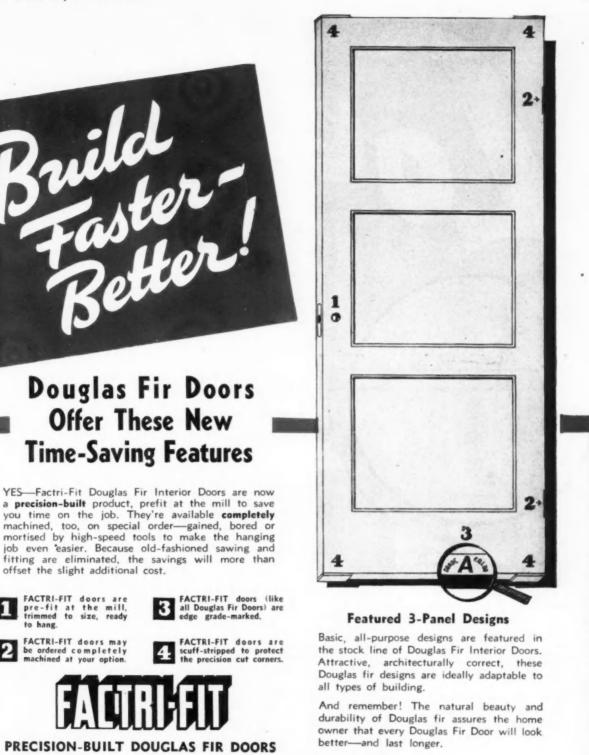
jects, and rt II lays for sound ticipating nation to am those

clear to mate and aler. They to elimirs in the ous times legitimate orts to rid ental and tion.

WPB has on lumber purposes caused by ke. storm e damage continued oof leaks. separation ts, broken where derom wear tion withor longer field of ude proof such as to category

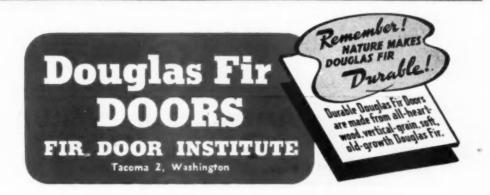
onal Wa freeze to actors emters. Such y exempt Reason: adation of who found increases conditions

Detailed communiial accomdeterminled for by nance and ashington. n ventories sponsibiliniliar with meet them



Write for catalog showing complete line of Douglas Fir Interior Doors, Tru-Fit Entrance Doors and new Specialty Items.

Douglas Fir Doors are now available only for essential building. When war needs lessen, they will again help you build better—and faster.



American Builder, September 1944.

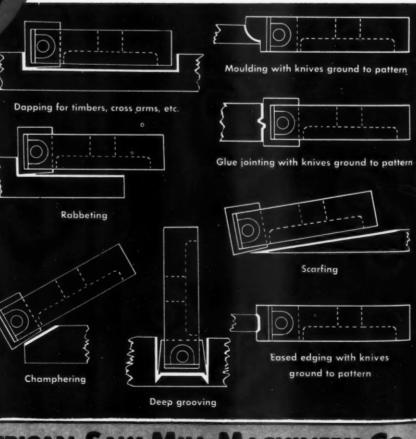
With

You can greatly increase the output of your thop—save money and valuable manhours, too—by using a MONARCH UNI - POINT RADIAL SAVE WITH 4-Knife Countersunk Cutterhead attached directly to motor.

Diagrams on this page show a few of the common building and shop operations that can be done quickly and smoothly with this simple attachment on a precutting production basis. Note how both angles of rafter notch can be cut at one stroke—six or more rafters at a time. This in addition to UNI-POINT'S tremendous time saving features on all angle cross cutting operations, due to the unique engineering principle of one-point cutting.

Learn full details of this safe and permanently accurate woodworking machine, the choice of successful contractors. Send for Catalog 60.

-Knife Cutterhead Attachment!



AMERICAN SAW MILL MACHINERY CO. MONARCHY I-POINT BABIAL SAW I-POINT BABIAL SAW



UILDER

AMERICA

It takes a long time

W ITH the war rushing headlong toward an early decision, WPB and housing officials should be reminded that it takes a *LONG* time to develop any kind of a building program; particularly the kind of a private home construction program that must be relied on if jobs on a big scale are to be provided quickly.

If WPB and housing officials think the recently announced H2 program is a satisfactory start toward civilian building, they are mistaken. The type of stripped, sub-marginal houses permitted are not at all in accordance with what Americans expect in their postwar homes. They are not the kind private industry wants to build.

H2 a bad start

nt l

ttern

The whole H2 program is very disappointing in its first stages, and if it is an indication of the kind of *continuing* regulations and restrictions builders can expect, indicates real trouble ahead.

The beaurocratic practice of telling a builder the exact size, amount of equipment, selling price and numerous other details of houses he can construct is repugnant, and should be soon ended. The H2 program not only carries on these limitations but makes the whole home building procedure more impractical and unworkable than ever before. At the same time it throws the doors open to public housing construction.

This may be the first step towards the kind of public housing approach we have frequently been warned about. Which is that regulations, restrictions, and controls would be kept in force in such fashion as to discourage private enterprise and private home building. Then the public housing advocates can claim that "private enterprise has failed," and home construction should be taken over by federal agencies.

Whatever the real implications of the H2 program, the fact remains that it is unworkable and unsatisfactory and should be changed.

Propose model homes now

WPB has already authorized manufacturers to go ahead with experimental models of postwar cars, vacuum cleaners, and other civilian products. It is equally or even more important that home builders be permitted now to go ahead with experimental model or sample postwar homes. Such model homes would permit builders to test out their improved plans, get an idea of present building costs, and determine public reaction to new ideas in materials, equipment, and design.

Five hundred experimental model homes erected in communities scattered all over the United States would do a great deal to advance postwar building. They should definitely not be limited to war areas, but should be built in communities wherever the builders or local building interests are enterprising enough to go ahead now. Materials required would be small in relation to the 340,000 houses built last year, the 715,000 in 1941, or the million homes expected in postwar. Yet the results would be highly helpful by permitting builders in many communities to make the first step toward private peacetime building.

Many enterprising builders would be willing to build a "sample home" now. Fritz B. Burns of Los Angeles is one builder who has already embarked on an experimental model home of much interest. His entire area will benefit. In some towns the building of such a house might be sponsored by the local builders' association; in others, all of the local building interests might get together to build under the sponsorship of the local Chamber of Commerce.

If the building of experimental model homes of this type was done by the practical, successful building men of the country, they would not be visionary or crackpot in nature. They would be soundly built according to the most forward-looking ideas of each community. They would have the best materials and equipment available at this time. They would give the American public a sound and practical preview of the postwar home, and would help building off to an early start.

Can you build a model home in your town?

WPB has authorized manufacturers to build experimental models of cars, vacuum cleaners and other civilian products. Can you build an experimental model home in your town? One that will definitely show what's ahead and pave the way for a quick resumption of building? Consult your nearest FHA and WPB offices.

H-2 PROGRAM

Packs a Punch That Can Blacken The Eye of Private Home Building!

While masquerading as a step to speed the resumption of private peacetime home building, it provides a cloak to get public housing off to a \$100 million start before the war ends.

By John E. McNamara Associate Editor

A BONE has been thrown to the builders with the hope that the dust of scrambling and fighting for it will blind them from seeing that the meat has been chewed off and the marrow sucked out.

We're talking about H-2 housing, one of NHA's pigeon-holes through which people are expected to crawl in order to build homes in the transition from war housing to postwar homes.

But what kind of homes will private industry be able to provide under this program? FHA apparently does not think they will be very good. It has decided to keep them out of Title II so as not to endanger the security of its mutual mortgage insurance fund.

Yes, they will be financed under Title VI, but they won't even be given the same "benefit of doubt" given to H-1 (which, if you are not up on the alphabetizing of house building, means war housing for inmigrant war workers). No, they won't qualify for a 90 per cent mortgage or a small down payment. The maximum mortgage will be \$5400, the same as for a \$6,000 Title VI house.

So, if a \$7500 selling price is allowed, the buyer will have to put up \$2100. How, may we ask, is a builder to take on a project of three hundred such homes and hold half of them for rent, as is provided in the dictum setting forth this supposed beneficial step towards resuming private home building? How many builders can tie up the difference between \$6800, the approximate cost without profit of a \$7500 house, and \$5400, the amount of the mortgage? This only amounts to \$1400 times 150, or the small sum of \$210,000.

No one but the Federal Public Housing Agency can afford to build housing for rent under the H-2 housing program. Surely the men who recommended this plan to WPB know enough about home financing to know that private home building is impossible under this cloud.

Could it not be, by logical deduction, that they were guided in the formulation of their recommendations by those who are enabled to build immediately by this formula, the public housers? Do we need any longer to confine ourselves merely to a strong suspicion that NHA is dominated by those who want public housing to the exclusion of private homes, privately financed?

Consider, if you will, what kind of housing can be built at the present time under this program. Bear in mind that no provision has been made to make available for home building anything better than what can be secured now for Title VI war housing. Copper wire is

not available to wire the houses properly to accommodate all the equipment the public is saving its money to buy. Quality cast iron and steel bathroom fixtures cannot be secured—only the ersatz.

Seasoned lumber is out of the picture. Air conditioning, a must in \$7500 houses, can't be had. The list need not be extended. The lack of the essentials mentioned is enough to prevent the building of a house any respectable builder would want to sell a returning veteran or himself hold as a rental investment.

What would be the net result if builders bit into this bone that has been thrown their way?

The homes would most certainly be labeled "postwar homes." Postwar home building, on the threshold of an unprecedented building boom, would get a black eye from which the industry would be long in recovering.

The cry, no doubt already rehearsed, would rise that private enterprise cannot be trusted with the vast job of providing millions of homes for postwar America.

"But," you may ask, "how then can the public housers hope to build housing that will not give a like black eye to public housing to add to its other black eyes from past performance? Won't they face the same difficulty of securing good materials?

The answer is an emphatic NO. Public housing can be built of steel-reinforced concrete. Lumber will be no problem. There is fabricated wire which can be released from surplus stock of other government agencies by fellow-bureaucrats. Bathtubs and other plumbing fixtures are already stock-piled by FPHA, purchased originally to have public housing prepared for eventualities and never caught short in the market like private builders. who can buy only on priorities for specific projects.

Materials then will not stand in the way of building public housing to the same extent that they will hinder private builders from delivering a quality job of home construction.

Can we look upon H-2 housing as anything more than a cloak to get a \$100 million of unused funds, appropriated by USHA to local housing authorities before the war for slum clearance housing, spent now on public housing's postwar projects under the guise of serving the war effort, and at a time when Congress has just reduced to \$7,500,000, the amount which it feels is sufficient to bring the publicly-financed part of the war housing job to a close? in

in

modate to buy nnot be

1944.

. 1

ndition ist need entioned respectteran or

into this

postwar ld of an eve from

rise that vast job erica. housers lack eye

es from difficulty ising can

will be n be reagencies bing fixsed origintualities builders. jects.

building ill hinder of home

nore than appropriefore the on public erving the just resufficient r housing

COMING—Big Home Show **Issue of American Builder!**

TO BRING to builders everywhere complete news of this momentous convention and building material exposition, American Builder will publish one of its most important issues next January.

John B. Blandford, Jr., NHA Administrator, and other government officials have repeatedly pointed out that private builders must resume residential construction as soon as possible, and probably before the end of hostilities. This convention will be held at the peak of the planning period for building industry reconversion; its national importance is obvious.

tion hall rather than on uncomfortable rows of chairs. "Postwar Homes Will **Be Planned Here''**

EXPOSITION floor plan keyed as follows: (A) Wall-

board, Insulation, Roofing, and Flooring; (B) Paint &

Wallpaper; (C) Metal Products & Builders Hardware;

(D) Brick & Cement Products; (E) Plastics; (F) Wood

Products & Veneers; (G) Tile & Ceramics; (H) Millwork; (I) Finance; (J) Glass; (K) Kitchen Equipment; (L) City

& Community Planning; (M) Models of Prise Winning

Homes. Builders will sit at glass-top tables in conven-

GTOU can't turn out houses on a doughnut machine," explained George F. Nixon at the recent unveiling of plans for the NAHB Home Show next January 15 in Chicago. "We will have something for the public better than the 'miracle' home and it will be put together from the latest materials and techniques shown at this Postwar Building Material Exposition," he continued, speaking as chairman of the show's committee.

00 0

0

0

00 200 00

CONFERENCE

0000 0 o 0

0

00

00

Elizabeth Shoemaker as Director of the Exhibit then told how the firm of Skidmore, Owings and Merrill were commissioned to design the big show as the feature attraction of the National Association of Home Builders annual convention. The meeting will be held in Chicago's Sherman Hotel.

As a postwar laboratory for more than 3,000 home builders that are expected to attend the convention, the home show should accelerate activity among the manufacturers supplying the residential construction field. Plans are such as will set a new trend for displays; the striking mod-

ern design discards the old type exhibit booth which Miss Shoemaker "has disliked for years." There are no places for vistiors to sit down at the exhibits, no tables for literature; literature will not be permitted in the exhibit halls. A large, beautiful garden, covering 12,000 square feet, with comfortable chairs for more than 200, will provide a quiet place for exhibitors to talk with the home builders. Literature that usually spills over the individual exhibits and often is thrown away in the aisles by over-burdened visitors, this time really will be displayed in a large "Literature Room" near the garden.

A contest will provide material for one of the outstanding highlights of the exhibit. Details of the contest call for selection of the best designs for a city house, suburban home, farm house, summer cottage, small home for two, and industrial housing. The jury is being chosen to pick the winners from the standpoint of postwar livability; models of these will be on display at the show.

(Continued to page 92)



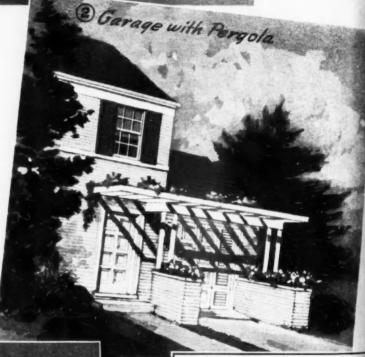


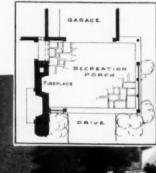
PLANT ROOM, which serves also as a winter hot-house by use of electric heating unit and reflector. Note hinged sash for accessibility from either side.

Garages with Oomph!

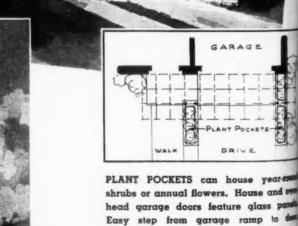
GARAGES, to reverse the old adage, may be ornamental as well as useful. They need not be, as so many are, the wart on the otherwise well-designed house.

Examples of combined beauty and utility are evident in these postwar designs for garage entrances prepared especially for *American Builder* by architects Henry Otis Chapman and Randolph Evans of New York. Note the eye-catching doors, with glass or fillet panels, or side sections painted to resemble blinds.





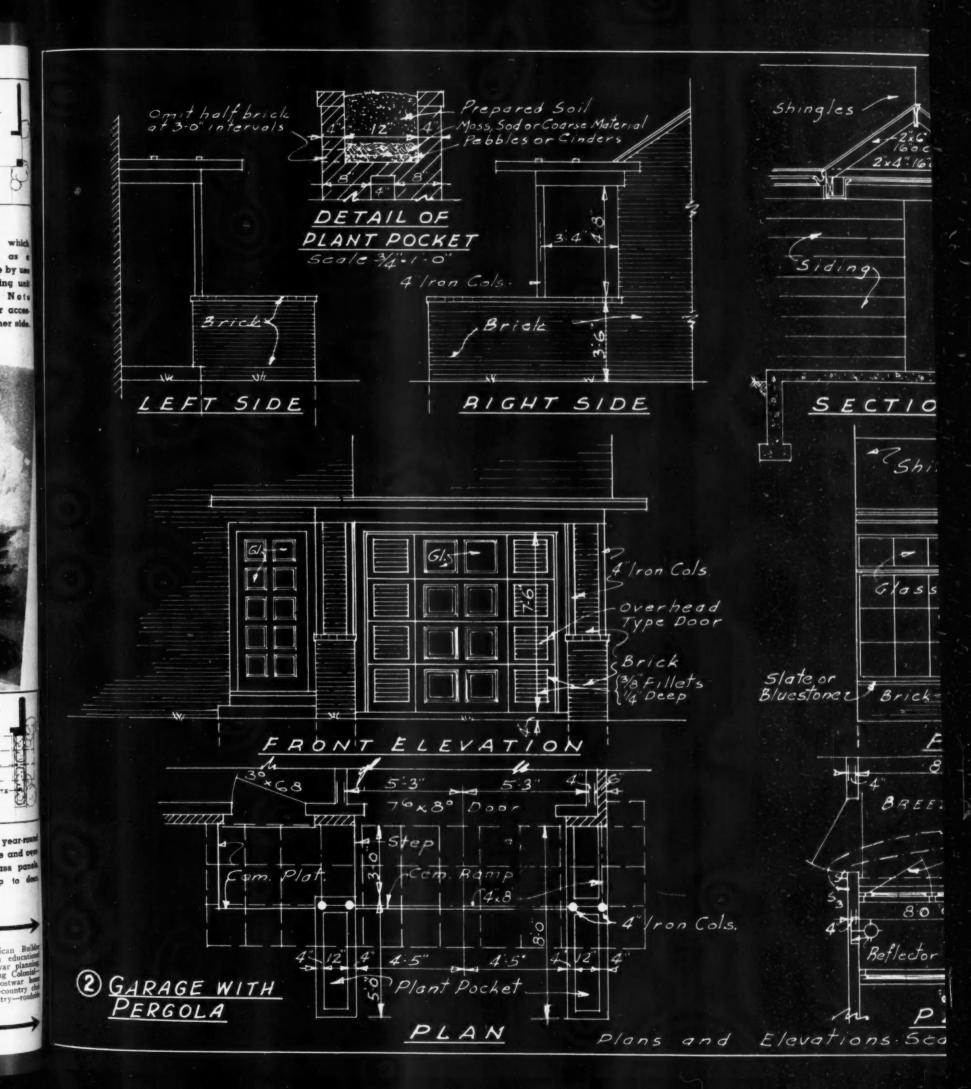
HANDY CARPORT, with door to house, can double as recreation porch. Note fireplace.

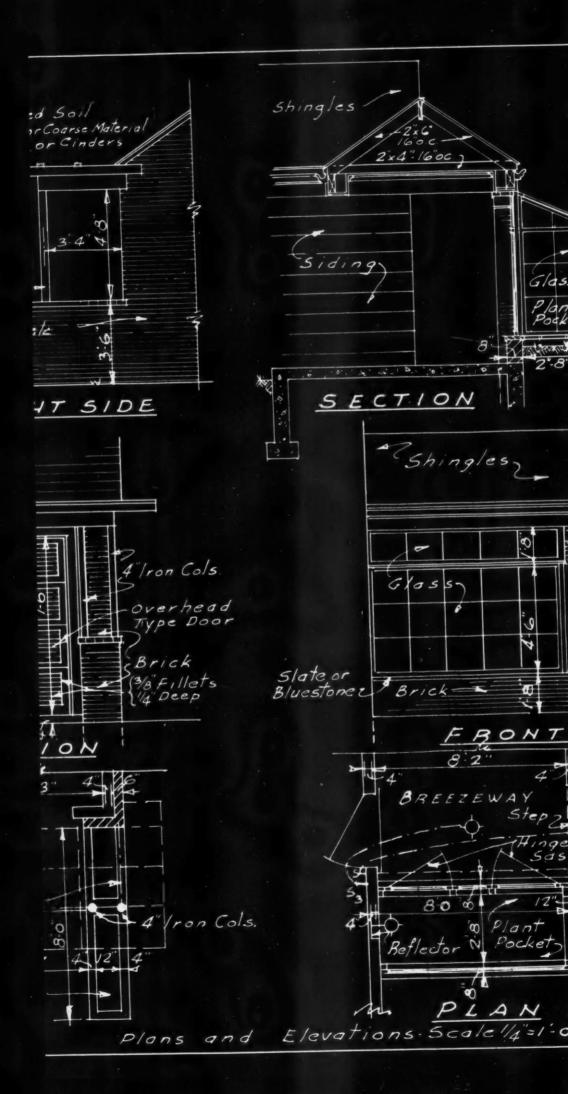


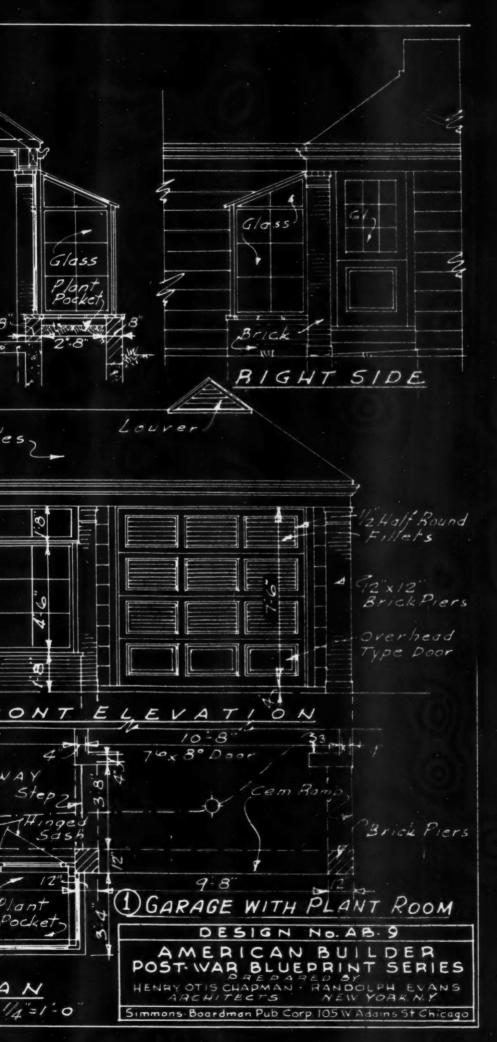
No. 9 of Blueprint Series—American Build blueprints are presented each month as an education feature to promote and stimulate sound postwar plant Previously covered subjects include a rambling Coloral private garages with architectural charm—postwar for suburbs—a 6-house postwar community—country of cabins—a "sensible modern" for town or country-reader stands and restaurants. Plans not for sale.

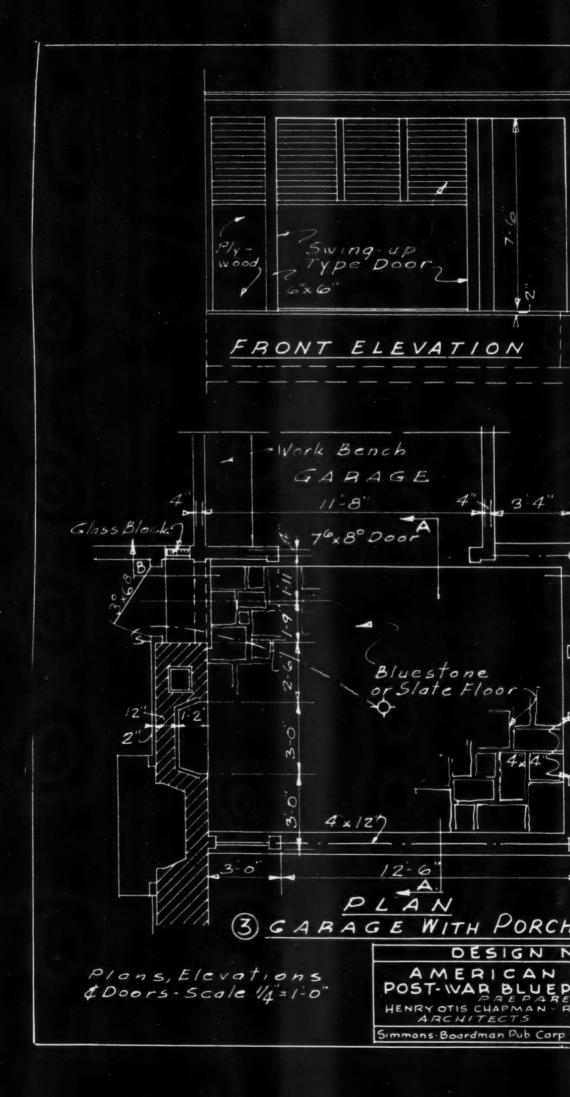
(

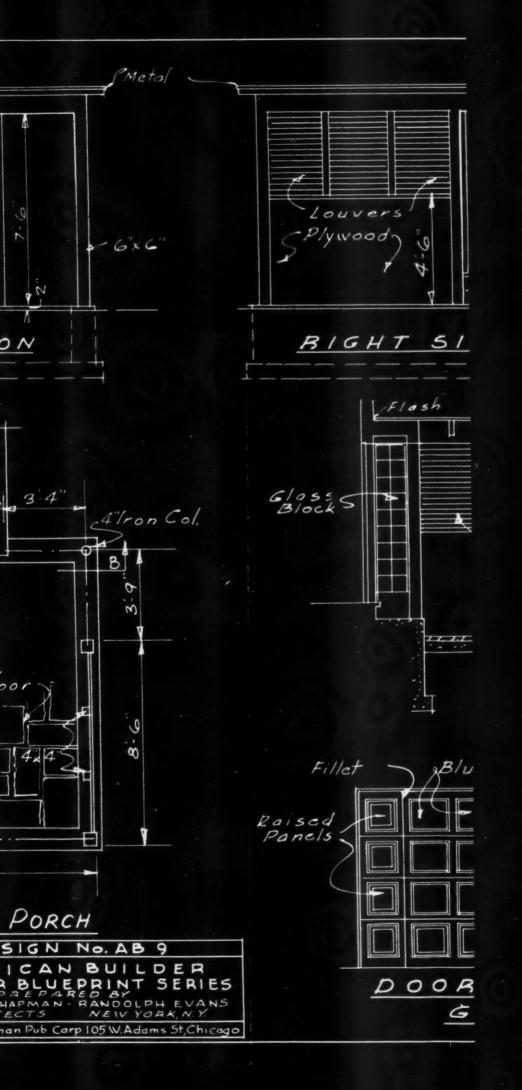
58

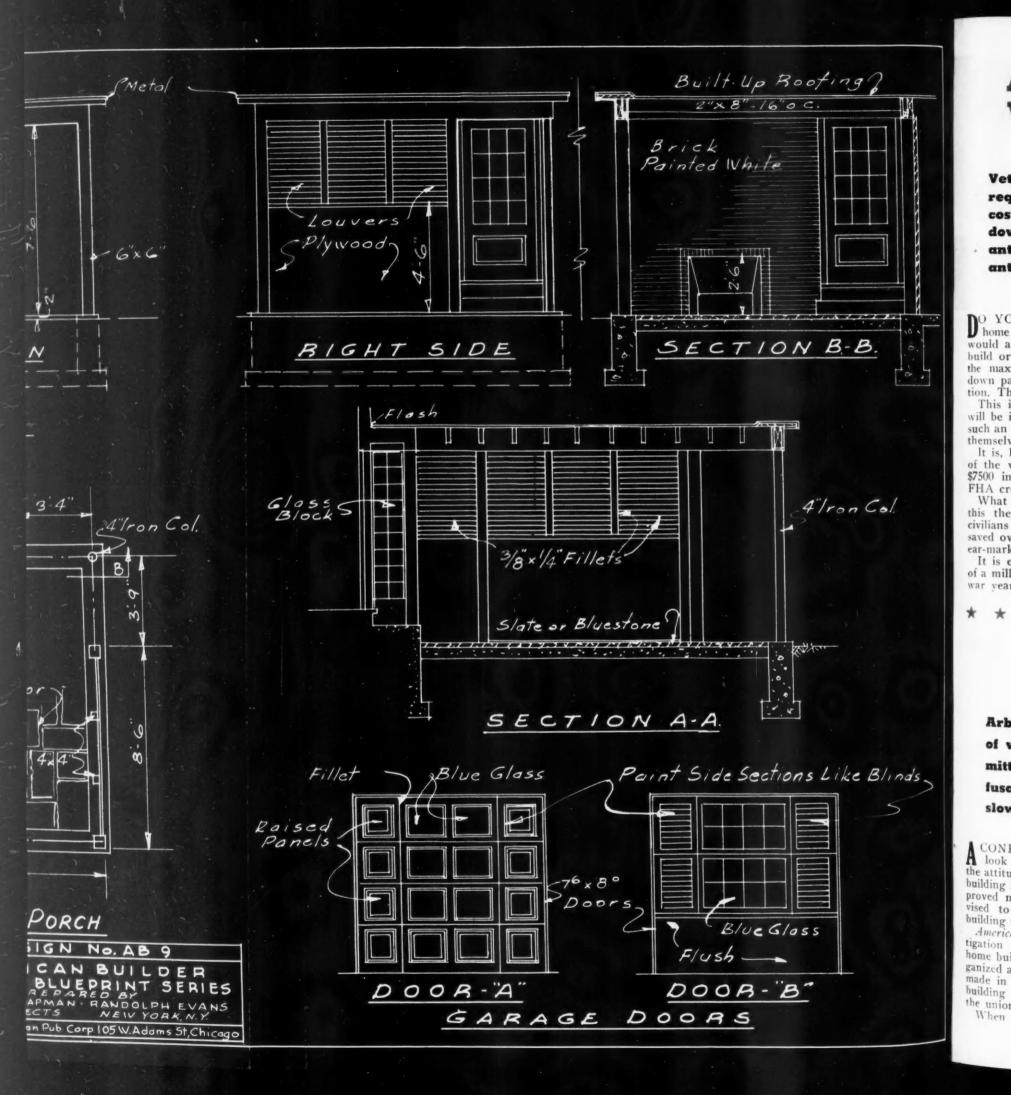












An Unprecedented Building Boom Wrapped Up in G-I Bill of Rights

Veterans who comply with FHA credit requirements can purchase homes costing as much as \$10,000 with no down payment. Eighty per cent guaranteed by FHA. Down payment guaranteed by Veterans Administration.

D^O YOU realize what the potential expenditures for home buying authorized by the "G-I Bill of Rights" would amount to if all of 15 million veterans chose to build or buy homes at a cost of \$10,000 each? This is the maximum they can spend for homes with a \$2,000 down payment guaranteed by the Veterans Administration. The foruca is fantastic. It amounts to \$150 billions

tion. The figure is fantastic. It amounts to \$150 billions. This is merely romancing with figures. We know it will be impossible for all veterans to qualify to take on such an obligation, even if they were all disposed to load themselves with such a burden of debt.

It is, however, conceivable that as many as 10 per cent of the veterans might wish to build homes averaging \$7500 in cost, and that at least this many could satisfy FHA credit requirements for such a loan.

What a building boom this alone forecasts! Add to this the tremendous pent-up demand for homes for civilians who, by the end of the war in Europe, will have saved over \$100 billions, much of which is known to be ear-marked for down payment on new homes?

It is easier than ever to see the truth of predictions of a million homes a year for at least the first five postwar years.

How Many Veterans Will Buy New Homes?

IF TEN PER CENT of the 15 million veterans bought new homes at an average cost of \$7500, \$11¼ billions could go into home buying by veterans alone in first postwar years. What's your guess on the number?

What an opportunity this unfolds to the home builders of America! What a death knell this can toll for public housing! How can anyone get to first base advocating public housing when, with no down payment, 15 million of our population have an open door to home ownership?

We have as yet heard no one interpret this law in just this way. But regardless of the regulations which the Veterans Administration sets up for the operation of the law, we can read American English, and it clearly states this in the bill. Now you read it yourself.

Sec. 505 of Public Law 346-78th Congress, which is the "G-I Bill of Rights," reads as follows:

"In any case wherein a principal loan, for any of the purposes stated in section 501, 502, or 503, is approved by a Federal agency to be made or guaranteed or insured by it pursuant to applicable law and regulations, and the veteran is in need of a second loan to cover the remainder of the purchase price or cost, or a part thereof, the administrator, subject otherwise to the provisions of this title, including the limitation of \$2,000 on the total amount which may be guaranteed, may guarantee the full amount

(Continued on page 110)

Will Labor Practices Nip This Big Potential Building Boom in the Bud?

Arbitrary restrictions of the amount of work building mechanics are permitted to perform for a day's pay, refusal to install mill-fabricated parts, slows home building, sky-rockets costs.

Good Public Relations for Labor

LABOR will win great public support if it takes steps now to cut building costs by streamlining its methods and encouraging greater production per man hour.

A CONFUSED and uncertain outlook is all that one gets in seeking the attitude of organized labor in the building industry with relation to improved methods of construction devised to lower the cost of home building in the postwar era.

American Builder started an investigation of this problem by asking home builders operating in union organized areas what progress could be made in lowering the cost of home building through the co-operation of the unions.

When we had secured a list of

union-dictated practices which, if eliminated, would reduce home building costs, we next asked labor leaders what they planned to do about them to help bring building costs down.

Here are some of the union practices which builders claim cause costs to remain high:

1. Simple concrete form work must be done by carpenters when it could easily be handled by unskilled labor, releasing carpenters for the types of work which require the skill of a trained and experienced mechanic.

2. The use of ready-mixed concrete

63

is prohibitive in cost in some highly organized areas, because a higher rate must be paid the truck driver hauling concrete than when he hauls anything else.

3. Lathers are restricted on the amount of lath they are permitted to put up in an eight-hour day. The result is that the average lather is finished with what he is permitted to do in from four to five hours. He just sits on the job idle and puts in the balance of his time doing nothing. If he works beyond the quota given

(Continued to page 94)

"We Pooled^{Br}



EIGHT rafters are notched with one stroke of this new Uni-Point saw acquired by Syracuse builder Andrew Mayer, and used by him and partners in precutting Title VI jobs. Using multiple cutting methods, the two men above notched 286 rafters in 1¾ hours. Building costs were drastically reduced by power equipment.

GUSTAVE DENT, George Johnson and Andrew Mayer first got acquainted and then became friends at meetings of the Better Builders' Association of Syracuse, N. Y.

They had been competitors for years, but it was not until they started arguing out mutual problems at Association meetings that they discovered that the other fellow was not such a so-and-so after all.

All three were good, substantial builders, each accustomed to going his own individualistic way building a few houses a year.

The war changed things quickly. The Better Builders' Association became a part of the National Association of Home Builders. George Johnson and Andy Mayer made frequent trips to Washington to attend national meetings where they learned what was happening to builders everywhere. Gus Dent stayed at home and did his best to keep things going.

At meetings of the Better Builders' group, the threat of public housing in Syracuse soon became a number one topic. The association members worked long and hard to show that there was a need for private housing.

and that public housing was the wrong way. The association is still working on this subject.

During these times Dent, Johnson and Mayer got to be close friends. They tried to figure a way to get into private war housing, but individually they were afraid to tackle it. Then matters boiled down to a point where it was a case of some big outside firm from New York coming into Syracuse, or of having the building done by the public housers. That was where the firm of Dent-Johnson-Mayer, Inc., originated.

"The boys from Syracuse" pooled their brains, experience, equipment and sufficient capital to set up a going concern. They soon found that three heads were better than one. Each had a particular type of experience or some special ability that contributed. The experiment in co-operation developed into a sound, successful business venture. The firm built more than 200 houses, and the builders, individually and collectively, have had the most successful business venture in their entire careers.

Power equipment has played an important part in the success of their wartime building, and it is one item GEORGE Johnson, left, and Andrew Mayer, right, who teamed up for war building. Third partner, Gustave Dent is pictured on cover with new saw.

that will be definitely continued in peacetime work. The day I visited their Syracuse job one of the first things I was taken to see was the new Monarch Uni-Point radial saw which had just been acquired, and which is pictured above. Andy Mayer had made a thorough study of power cutting methods, and as a result of his recommendation all lumber was precut in a central cutting shed. Some of the Title VI houses they built were fairly well scattered over several blocks. Precut lumber was trucked from the central shed to the sites.

The pooled equipment of the three builders made this one of the best equipped jobs I have ever seen, and included Carter electric door mortisers, Porter-Cable power hand saws, a Delta woodworker, and numerous other items. The combined brains and experiences of the three men enabled them to develop unusually efficame Associ 2—Colic hor

-Fiz

3—Ta house poolin

cutting of othe electric in muc 5—Fou

better *0-oper certain niques

tinue so

in peacet the adva siderable complete planning out, with own hou over-all portunity communi be a pot public ho

The c features most clea Point sa clares he Brains, Experience, Equipment"

:—First got acquainted and became friends at Better Builders' Association meeting.

2—Co-operated to keep out public housing and outside firms.

3—Tackled local Title VI war house jobs on co-operative basis, pooling equipment.

4—Precut all lumber in central cutting shed. Made maximum use of other power equipment, such as electric door mortisers, resulting in much lower costs.

5—Found that "three heads are better than one." May continue "0-operative building, and will certainly employ improved techniques in peacetime.

aed in visited e first as the al saw d, and Mayer power t of his as pre-Some ilt were several trucked sites. he three the best een, and mortisnd saws,

umerous

d brains

men en-

ally effi-

ndrew

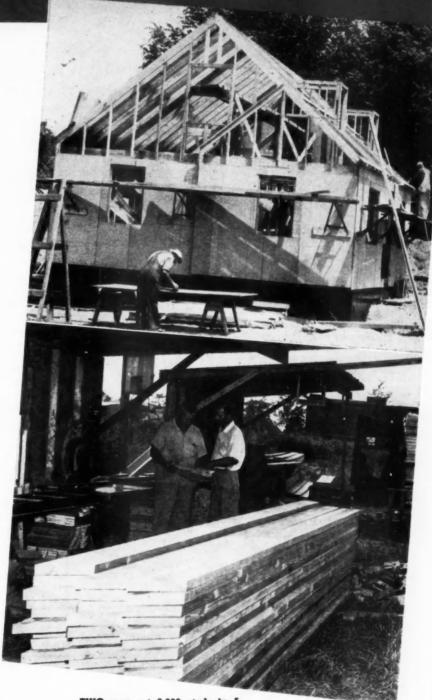
inw in

Dent.

trolling the job that resulted in very real economies. All three work on the job, and also act as foremen or supervisors.

So successful has this venture been that it is probable that they will continue some sort of co-operative plan in peacetime work. They pointed out the advantages of acquiring a considerable tract of land which can be completely controlled as to community planning, architecture and general layout, with each builder putting up his own houses in conformity with an over-all plan. This offers a real opportunity for better houses and better communities in the future, and will be a potent answer, they believe, to public housing projects.

The cost-cutting and time-saving features of power equipment were most clearly demonstrated by the Uni-Point saw, which Andy Mayor declares he bought after reading about



TWO men cut 2,000 studs in 5 hours. At top: one of Title VI houses going up. Bottom: Gus Dent and Andy Mayer talk precutting.

ROW OF TITLE VI houses under construction by Syracuse builders Dent, Johnson, and Mayer. These are planned so that garage, porch, and upstairs bedrooms can be added as indicated in sketch at right. Wolfe Markham, architect.

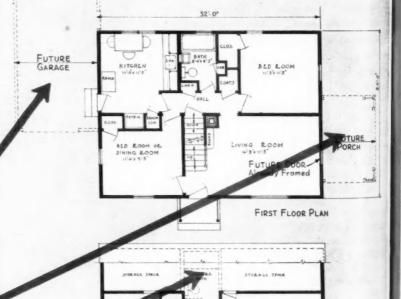
it in the advertising pages of American Builder.

More than 2,000 studs were cut to exact size by two men in five hours. Another operation, which was carefully clocked, was the multiple cutting of rafters. A four-knife rafter notch cutter was used, which notched eight rafters with one stroke of the saw: actual cutting time, 8 seconds. Two men cut 286 rafters notches in one hour and 45 minutes.

According to Andy Mayer, an even greater use of mechanized equipment will take place in postwar building. He foresees still further development in the building of sub-assemblies, even to the possible extent of building complete wall sections with doors and windows (Continued to page 102)

War houses planned for peacetime expansion

- 1 _LACK of garage is one of principal faults of war houses. These builders provide buyer with plan for garage to be added later, fitting architecture of house.
- 2 _BECAUSE everyone wants a porch, buyers are shown how this future "outdoor living room" can be added. Future door is proper ly framed when house is built.
- 3. _FUTURE bath is provided in these Title VI plans, and can be added at minimum cost. Also the two second floor bedrooms add greatly to the future value of the house.



STORAGE

LD ROCH

SECOND FLOOR PLAN

COST tion coun show other or les can] in yo alrea ing

FTH

A of

Americ

real cos

builder

Compan to prov

a cost s

fully n

superin

the Cre

The

ma

44.

RE

67

And A.S., 100,656 And 100,656

AFTER receiving predictions from many sources of the cost-to-be of homes in the postwar period, *American Builder* decided to get the real cost picture from some of the builders themselves.

The Charles H. Cress Building Company, Lombard, Ill., is the first to provide us with complete data on a cost study. This study was carefully made by H. Viktor Hoyer, superintendent of construction for the Cress Company, who directed the costing and building of the house shown here in the 1941-42 period.

Based on today's labor and material costs, he secured sub-contract bids and quotations on materials and equipment, based on ceiling prices. After conferences with his supplier, Hoyer believes that, unless abnormal inflation comes, the costs taken today should reflect about the cost of postwar homes, assuming that war conditions will permit the resumption of normal home building during 1945.

How Much Have YOUR Costs Increased? Cress Says His Have Risen 15%				
			+	
			Walks and Drives 35 Iron Work-Structural 139 Tile-Bath and Powder Room. 47 Cencreits and Masonry. 955 Carpentry-Material & Laber 2,000 411 Millwork. 537 Screens. 70 Finish Hardware. 63 Stairs. 64 Cabinets. 77 Insulation (Celling only) 65 Sheet Metal 160 Heating and Plumbing 1,776 Medicino Cabinet 30 And Bathroom Accessories. 34 Electric Fixtures. 111 Lathing and Plastering 62 Glass and Glazing 66 Painting. 30 Window Shades. 22 Lineleum. 77 Permits. 25 Misc., Labor and Material 15 Profit and Overhead. 87	Are Todary's n Right. 42 Today's act Cests 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 5 100 7 100 17 100 3 100 3 100 3 100 3 100 3 100 3 100 3 100 3 100 3 100 3 100 3 100 3 100 3 100 3
			Tetals	8.21 \$10,856.00

3.0

1 11

SPACIOUS living room with fireplace and bay, screened porch, dinette separated by service bar from kitchen, roomy closets and sleeping rooms spell advanced planning.

Roof BED ROOM CICI DATH BED ROOM BED ROOM CICI DATH BED ROOM BED ROOM CICI DATH BED ROOM BED

COMPARE This Case Study WITH YOUR COSTS

COSTS VARY greatly from section to section throughout the country. While one area may show a 15 per cent increase, others may show rises of more or less than this amount. American Builder Invites you to send in your cost studies if you have already made them and are willing to have them published.

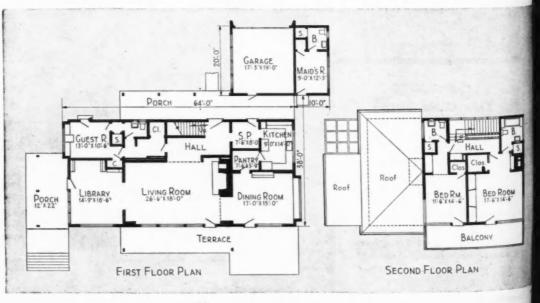




This California House "Looks Ahead"

Built late in '41 from designs by the office of Paul Laszlo of Beverly Hills, this example of straight-line functional planning is exerting a stimulating influence on postwar home design thinking. ...

RESIDENCE of Erich Philipp, Los Angeles, with its 64loot frontage, is a far cry from compressed, skimped space war housing! Its generous dimensions and modern comfort facilities visualize those postwar "dream home" features that America is looking forward to. The photograph above, by Maynard L. Parker, shows the gardenfront of this house; floor plan at right.

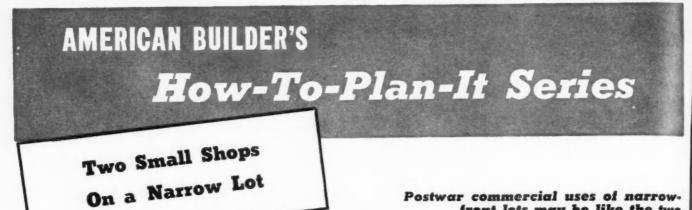


POSTW COMFC BY TH HOMEpanelle ary styl below, ing win ing pla doors as



American Builder, September 1944.

Ame



DOUBLE STORE building of high-grade, exclusive appearance to n go on a 25-foot lot, is selected to carry along American Builder's current series of suggestions for small neighborhood business structures for the postwar period.

This is a building erected by Kersey Kinsey of Los Angeles, from plans by Randall Duell, Architect, and J. B. Mc-Intosh, Registered Civil Engineer. It is laid out for use as a dress or haberdashery shop, but not as a food market.

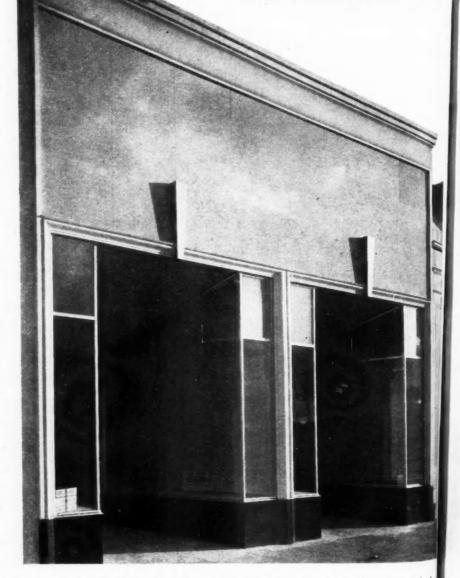
The front is impressive in black structural glass, aluminum mouldings and key-stone ornaments, and polished terrazzo entrance floors gently slope to the glass doors, which are recessed 9 feet from the front line.

As indicated by the construction details on the page opposite, this is a building of braced wood frame, with cement stucco side walls and rear. The bracing conforms to the California law for quake-proof construction, and is a good safety provision for any section of the country.

Builders will be interested in the framing system used here to carry the wide all-glass front with sufficient strength and stiffness over this 25-foot span. Three 4" x 12" wood posts, 22 feet long are used (with 6 x 10's indicated as an alternate). The horizontals are 4 x 8's; and all are securely strapped and bolted together by 11/2" x 1" steel connectors. The posts rest on 3/16" x 12" bearing plates, well bolted down to the concrete foundation.

This building is 60 feet deep, the front 10 feet being used for display windows. Half way back, 3' by 7' skylights are placed in the flat roof. Toilet rooms. 4' x 5'-3", are partitioned off at the rear. The roof is framed with 2" x 6" rafters on 24" centers, covered with 1" x 6" diagonal sheathing and compo. roofing. It slopes 12" from rear to front, where roof drains and downspouts take the run-off to the street.

The trend of postwar development seems to be toward the outer edges of towns, where communities will need neighborhood shopping centers. Small commercial buildings will be necessary to house the various types of stores to Postwar commercial uses of narrowfront lots may be like the two stores photographed below



accommodate all the family shopping. Comparatively small investments, both as to land and building, if well planned and attractively executed, will fill the

hill

New materials for store fronts and efficient interior layouts, and adequate lighting will attract both renters and buying public.

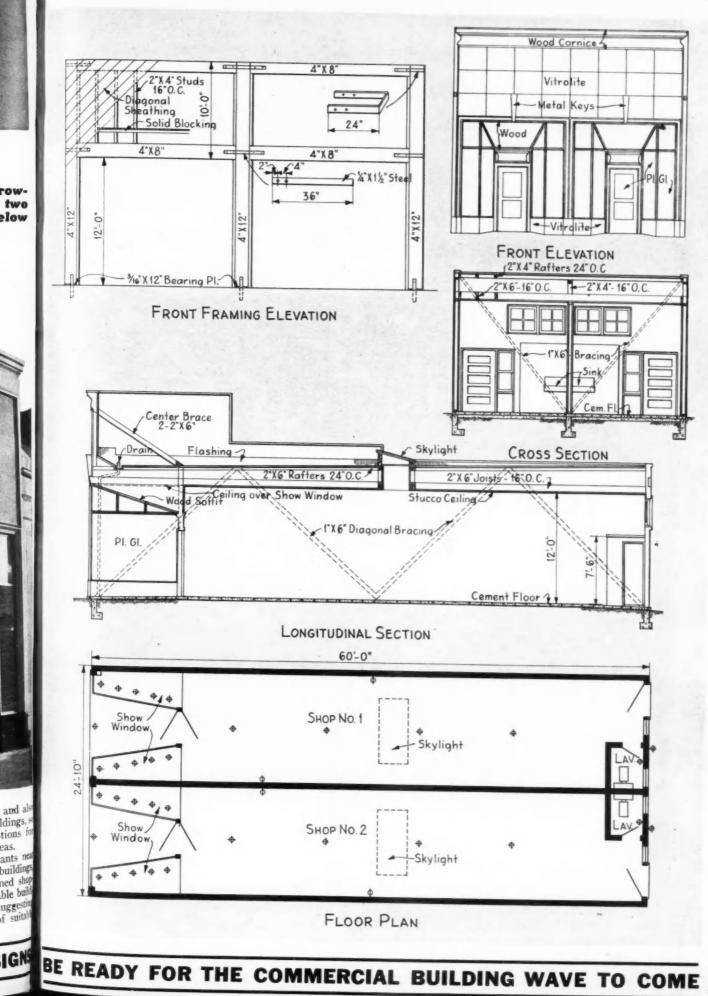
American Builder searches out examples of practical commercial buildings that are being built now, and als those proposed for postwar buildings, si that we may give you suggestions for your portfolio of postwar ideas.

24-10

The retail buying public wants near appearance as to exteriors of buildings plus comfortable and streamlined show ping facilities. Many a profitable build ing job can be created by suggestil such investments to owners of suitab vacant properties.



American Builder, September 1944.

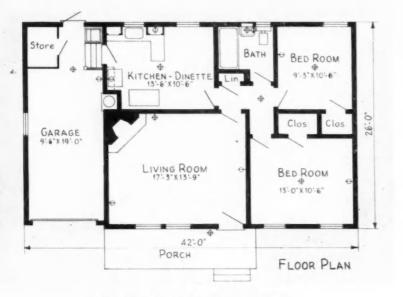


Private Home Builders Play Spectacular Part In San Francisco Bay Region's War Housing

72

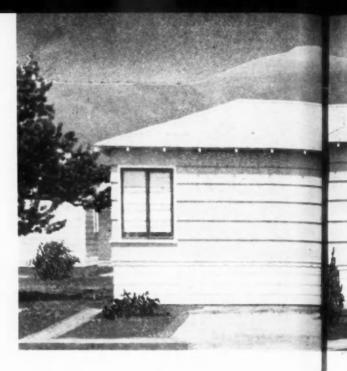
By

Francis L. Newton, Executive Secretary Associated Home Builders of San Francisco



THE above basic floor plan was used for 100 houses in the San Rafael area.





N FEW other sections of the country have private home builders provided as great a variety of at-tractive Title VI homes as those builders of the San Francisco Bar Region.

FHA, since the initiation of Title VI, has issued commitments for a total of 27,399 homes for the five counties about San Francisco Bay. Over 20,000 of these have been completed and occupied in San Mateo. San Francisco, Marin, Contra Costa and Alameda counties.

These homes include a variety of styles, ranging all the way from the San Francisco row house on its 24-foot lot with its individual from to the single-story California farm ANY ind house bungalow of the suburban sco area counties. They have done much to pin down the labor turnover in the 33 large and small shipyards scattered about the shores of the five counties which have witnessed, according to the U.S. Census Bureau's latest preliminary figures, a population increase of 371,000 since April of 1940.

Over 90 per cent of the Title VI homes built in these counties have been constructed by builders affil ated through their local chapter with the National Association of Home Builders. These organiza tions include the Associated Home Builders of San Francisco, the par ent western chapter of the Nation Association, Associated Hom Builders of Alameda County, Marin Builders' Association, and Penin sula General Contractors and Build ers' Association.

THE neat little house pictured at the left enjoys widespread and increasing appeal. BED R AUT FLO





he counbuilders ty of atts those sco Bay

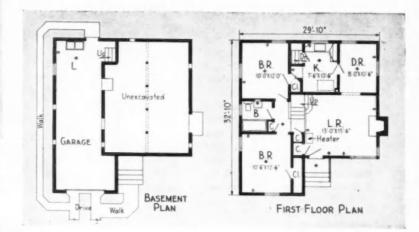
of Title ts for a the five sco Bay. een comn Mateo, ra Costa

ariety of from the on its nal front suburban much to er in the rds scatthe five ssed, ac-Bureau's a popunce April

Title VI ties have ers affilichapters iation of organizaed Home the par-National e d Home ty, Marin d Peninnd Build-



ha farm IANY individual as well as row-type houses in the San Fran-Suburban asco area have two levels with garage under part of the house. RANCH-TYPE houses similar to the one pictured above are gaining popularity rapidly in various parts of the country.









RIGH

crete

SUCCESS AT L

Kruger and Funk of Tacoma demonstrate revolutionary all-concrete method on 29 war homes to sell at same price as ordinary frame ones

F. J. KRUGER and THOMAS F. FUNK, patentee (right), developers of this practical concrete slab building method, photographed on the job by "American Builder." They plan to franchise home building developers in other states to use their system.

RIGHT: At casting yard the wall panels, molded flat, are raised by power crane on fifth day and trucked to building site foundations as needed, one complete house to a load; weight—about 13 tons. Panels vary in width from 6 to 15 feet by story height, with window openings a c c u r at e l y placed according to the architect's working drawings. There are no restriction on style or design.

FOR MORE THAN three decades builders have wrestled with the idea of a poured concrete house that they could build at a cost no greater than for ordinary frame construction. As early as 1910, Thomas A. Edison proposed an elaborate set of steel forms into which an entire house could be poured in one operation; but that wizard of patented electrical devices found that home building was quite a different matter; and nothing came of his all-concrete house dream except newspaper publicity and disappointment.

Later, Van Guilder offered his hollow-wall machine for molding house walls in place by a succession of poured-on layers to reach, finally, the desired wall height; but, after flourishing briefly, this method lost its converts.

Then Peter Frantz proposed pouring the house walls flat (horizontal) at the building site and raising them,

when set, to their vertical positions. Special equipment was developed for this purpose and a number of houses were built. Stagg Field at the University of Chicago was fenced by this lay-down-stand-up method. However, for the average home builder, the advantages of this system did not appear sufficiently attractive, and it was soon forgotten.

John J. Earley, famous concrete products man and sculptor of Washington, D. C., ten years ago developed a small-house system of shop-cast concrete panels, and put up several houses at Bethesda, Md., using these as a 2-inch veneer on a heavy stud frame (*Amer. Bldr. Nov., 1934*). They were beautiful to look at and enjoyed prompt consumer acceptance, but proved too expensive, and were not truly fire-safe.

With all of this background and concrete-house history in mind, imagine the amazement of your *American*

Builder correspondent in recently running onto the elaborate casting yard and the 29-house accomplishment in pre-cast concrete panel construction of Royalith Builders (Messrs. F. J. Kruger and Thomas J. Funk) just beyond So. Tacoma, Washington, on the Fort Lewis road near Lakewood Community Center!

Here was a demonstration of allconcrete, fire-safe home building by use of large pre-cast slabs or wall panels, creating good looking small homes for war industry workers in a subdivision development approved by FHA and offered at the standard price for similar houses of ordinary construction!

Shades of Thomas A. Edison, Van Guilder and Frantz!

Also, we were astonished to find no local newspaper ballyhoo from these two practical-minded inventor-builders! They have preferred, rather, to concentrate on the physical prob-



American Builder, September' 1944.

A7 LAST!—With Pre-cast Concrete Panels for House Walls

ie it is

aphed inchise system.

tly runng yard ment in truction

ng yard ment in truction s. F. J. k) just gton, on ikewood a of allding by or wall g small

g small rkers in pproved standard ordinary son, Van

o find no om these or-buildrather, al probWALLS OF PRE-CAST Concrete give fire-Safe homes at \$6,000

By Bernard L. Johnson

RIGHT: Nailing gyplath onto pre-cast concrete slab for inside finish of house.



DERRICK truck sets wall panel in place on prepared foundation; erecting time for walls complete for each house, 1³/₄ hours; loading time at yard. ³/₄ hour; one truck load, one house.

BELOW: PRE-CAST concrete panel houses in process of construction near So. Tacoma, Washington, by Royalith Builders. Approved by FHA, these are part of 29 now building, with 56 more to follow on their "Oak Park" job.



CARPENTERS setting up additional forms as the readymix truck fills others. Each panel is dimensioned and detailed accurately from blueprints to fit a definite place in a house. At upper left, formways recently cleared of panels and ready to start again.

lems of the job and to let their experience and results speak for them.

The essential features of the Royalith system of building are well illustrated in the accompanying photographs and drawings. Central in the plan of operation is a concrete casting yard from which the big structural units are delivered by power crane and special low-bed motor truck to the prepared foundations at the building site. A practical delivery distance is up to 50 miles.

Wall sections, floor sections and roof sections can be produced for practically any type or style of dwelling house, farm building or light commercial structure. Any building or part of a building that can be analyzed into units weighing up to about 5000 pounds each can be successfully handled by this system.

Royalith for its Lakewood project of war industry homes are 8 feet high by 6 feet to 15 feet wide (the 15-foot units containing a very large window opening). In thickness they are 61/2 inches, with the backs cored out for lightness, with insulating air spaces, leaving a web 23% inches thick. These wall panels are reinforced with 3/8-inch steel on 32-inch centers to give them sufficient stiffness to resist the strains of moving, hoisting and trucking. Second-hand bars from canceled government jobs are being used. A concrete mix of 1-31/2-4 (3/4" gravel) is specified.

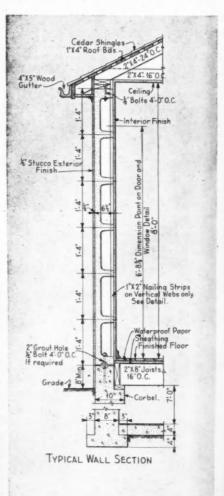
The key to quick and easy erection on the job for these big pre-cast slab units was found to be absolute accuracy as to squareness, plumbness and careful placing of any special architectural features, including win-The wall panels being produced by dow openings, called for in the plans.

All such are laid in accurately by the boss carpenter as the forms are set up at the casting yard, preparatory to pouring the concrete.

five fitte time T ers : tems of c the c setti 40 n

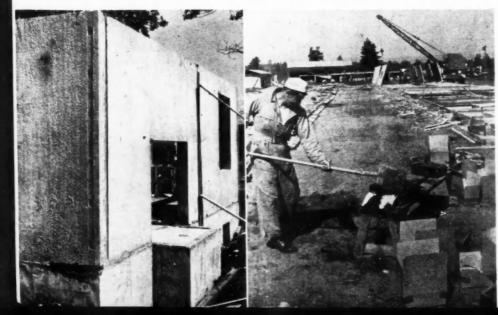
DET

With a house elevation properly analyzed into structural panels and these panel units then laid out in forms and cast, they are left to harden for



76

BELOW: Left, corners are bolted and grouted; right, filling paper carton sand cores.



five days, and are then hauled to the building site and fitted together on the prepared foundation in quick time and without "grief." The experience of Mr. Kruger of Royalith Build-

77

ers and Mr. Funk representing the Stevens Systems, Inc., which controls the patents on this type of construction, gave a loading time per house at the casting yard of 45 minutes, and an unloading and setting time at the house foundation of 1 hour 40 minutes.

(Continued to page 106)



rately again.

y the e set atory

perly

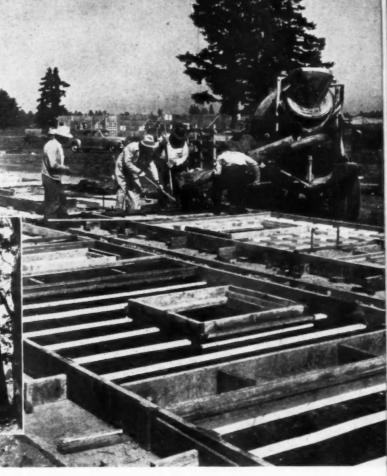
and

orms

n for

ROYALITH house with walls completed, finished with stucco coat over pre-cast concrete panels.

BELOW: Details of ROYALITH method of precast concrete construction, plans of above house.



POURING readymix into wall panel forms at casting yard. Four substantial concrete strips, 12 by 200 feet, give an accurate working base. Tar paper is first laid, then the embedded nailing strips, window forms and edge joint moulds. Sand-filled cartons are placed as cores.

Roof

SECOND FLOOR PLAN

35'-0

St

FIRST FLOOR PLAN

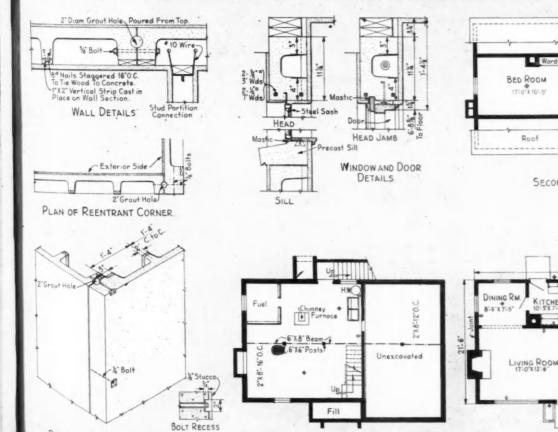
BED ROOM 15-0-110-0

Root

BED ROON

BED ROOM

15-4'x10-0



DETAIL OF EXTERIOR CORNER JOINT.

BASEMENT PLAN



STREET VIEW of prefabricated housing units being erected on Alabama project after demounting and shipping from ariginal site

How 140 Demountables Were Moved and Re

Having served its purpose as a war housing project, a group of prefabricated units will now relieve a housing shortage 800 miles away.

ROM time to time there has been speculation on the possibility of moving much of the demountable war housing to new locations. Now this job has been done in several spots; here is how one such transfer was handled. The pattern may be repeated many times in relocating such temporary quarters.

In this case, a housing project of some 140 demountable family units, which had served its purpose in connection with an ordnance plant at Burlington, Iowa, was recently moved more than 800 miles to Sayre, a mining district near Birmingham, Ala. Here these units will relieve a housing shortage in connection with coal mining operations of the Republic Steel Corporation.

The one- two- and three-family units of frame construction were originally erected in Burlington by Willis Way System with Louis Justement as architect. They were dismounted, shipped to Alabama and re-

PLUMBING fixtures packed in kitchen sink cabinets and crated for shipment. Here the equipment is shown awaiting installation on the Alabama project described here.

erected by Sullivan, Long & Hagerty, contractors of Bessemer, Ala., at a contract price of \$299,167. The Federal Public Housing Authority will operate the project. This concern also has the contract to erect a new community center building and to install water works.

As the houses were demounted in Burlington each wall, floor and roof section was numbered to avoid confusion in re-erection. These panels which had been put together with double headed nails were then stacked in box cars. Inside trim, hardware and other small items were

stored in coal bins. Also sink cabinets in the kitchens were used to good advantage in storing plumbing fixtures including lavatories, commodes and fittings. Shower cabinets were disassembled and crated. Some 90 box cars were required to move the disassembled houses. One of the biggest jobs was getting the bulky panels in and out of the cars.

Unloaded near the project, the materials were then trucked to the immediate site of the houses, stacked on the job and covered by tarpaulins until such time as used.

Foundations for the houses were laid on concrete block piers. The various panels for floors, walls, ceilings, gables and roofs were erected by hand, this being considered better than by derrick on account of the varied nature of the operation. Walls consist of a cypress shingle exterior, two inches of rock wool insulation



and plys

is also

wood fle

ing, also

in movin accordin

superinte Hagerty

dard, g

said on

truing u

point v

ioined

consider

the hous

ance. H

terior tr

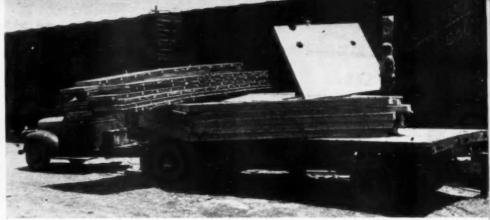
Very damage

> follow tory a to hel the we of Am subjec date.

is ma becom







ABOVE: Panels being unloaded from cars, and (BELOW) being taken off trucks at new site.



BELOW: Roof panels being re-erected; note two crews, one on ground, one on roof.



BELOW: Close-up of one of the row of houses after reassembly at the new site.



g from briginal site in Burlington, lowa.

d

nets

good

fix-

odes

e 90

the

the

ma-

im-

cked

were

The ceil-

ed by

etter

f the

Walls erior,

ation

Re-erected

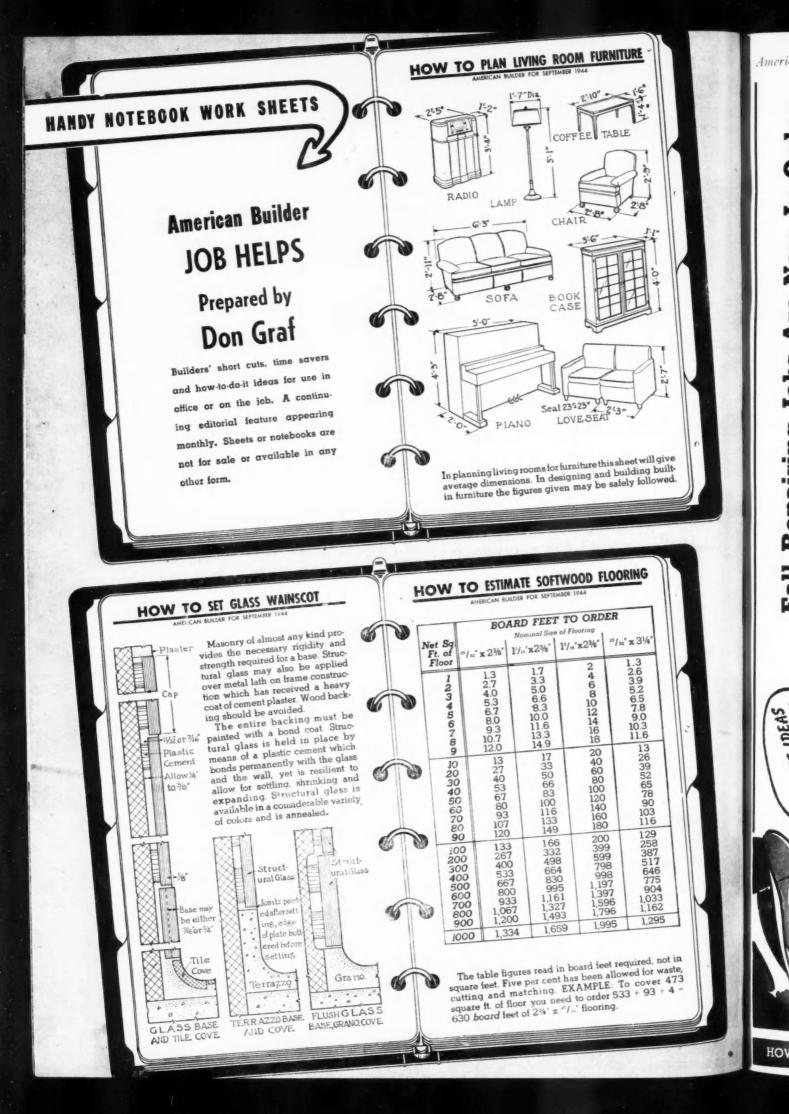
and plywood interior wall. Insulation is also provided between the hardwood floor and the plywood sub-flooring, also in the ceilings.

Very little glass breakage or other damage to materials was experienced in moving and re-erecting the houses, according to L. E. Galloway, field superintendent for Sullivan, Long & Hagerty, working under L. E. Goddard, general superintendent. He said one of the biggest jobs was truing up the roofs, especially at the point where the various sections joined. This had to be done with considerable finesse in order to give the houses a finished and trim appearance. He said that some of the interior trim was broken and cracked in the moving process and had to be replaced. The contractors were obligated to replace any missing or damaged materials.

(Continued to page 96)

What About Postwar PREFABRICATION?

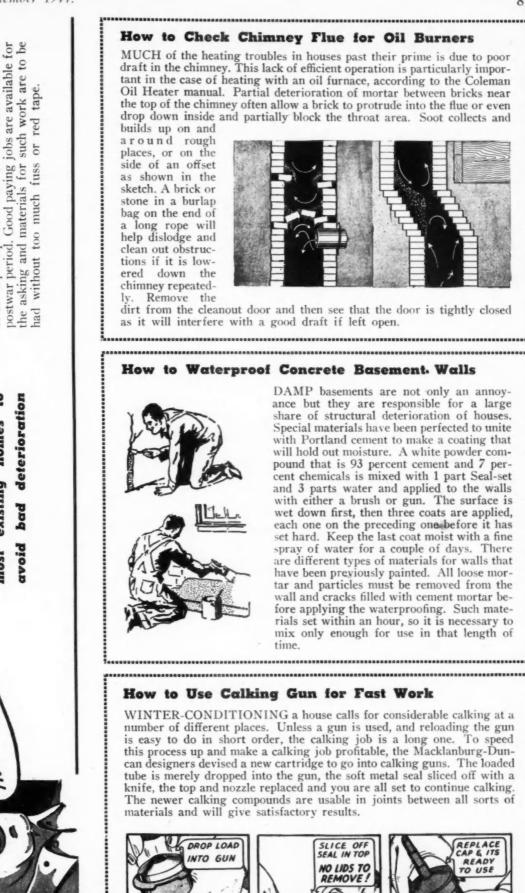
THE building industry is studiously following all developments in factory assembled units for possible use to help deliver better housing after the war. Here is another in a series of *American Builder* stories on this subject to keep our readers up to date. More will follow as progress is made and the latest information becomes available.



for be

are to

THERE is every reason in the world why all homes should be put in good repair as rapidly as possible, and most home-owners not only have the money or the credit but the desire to get their houses in ship-shape condition for the winter and the



Fall Repairing Jobs Are Now In Order

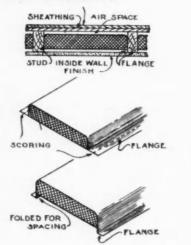
Winter-conditioning work 10 avoid bad deterioration most existing homes is vitally necessary



HOW TO DO IT . HOW TO DO IT

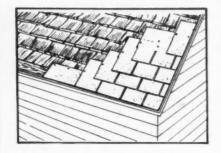
How to Install Sidewall Blanket Insulation

FUEL conservation this coming winter is as important as ever, and all kinds of insulation materials are available without priority or any difficulty on the part of the buying home-owner. Sidewall blanket insulation comes in widths suitable for standard on-center placements of studding and rafters. Be sure to use the proper width so that the flanges will fold for a tight fit. Always face the moisture-proof side of the blanket toward the inside of the house. Nail or staple the flanges at the intervals recommended by the manufacturer of the insulation being applied. If it is necessary to cut the blanket to fit against diagonal bracing or fire stops between studs, use a sharp hook knife, such as linoleum layers use. Short cutting strokes are best.



How to Re-Roof Over Old, Leaky Roofs.

UPKEEP and repair materials, such as asphalt roofing, are available for necessary activities to keep home properties and farm buildings in good repair. Before re-roofing inspect the old roof and remove rotted shingles and wood, see that flashings and valleys are waterproof, and that no nails or high spots will interfere with your doing a smooth job of re-roofing. Put a starter strip along the caves or, if the condition of the old roofing is too bad, cut the edges



off and install 1 by 2 or 1 by 3 boards nailed flush with the eaves. Along the rakes, as at the eaves, the asphalt shingles should over-lap $\frac{1}{4}$ inch and form a straight true line. Sometimes a wood strip is needed at the rake as well as at the eaves. If old shingles are badly curled, split them, nail them down, and put a shingle lath along the butts. Moss should be brushed off clean with a wire brush.

How to Fix Old Swinging Garage Doors

OVERHEAD-TYPE garage doors are the modern answer to the old swinging doors that have seen their best days. However, it may be hard to get new doors and suitable hardware for hanging them, so fixing up the old ones before winter sets in is in order. As the Fir Door Institute suggests, take a walk down almost any street and see how many old swinging doors you can count that need repairing. The first thing to do in repairing old doors is to see that

the frame is square and solidly spiked in place. Then plug up the screw holes and screw the hinges down tight. Put a wire with a turnbuckle in the middle of it from the top of the inside stile to the outside or meeting end of the bottom rail of each door. Tighten the wire up to hold the door from sagging. If the glued joints of the doors are loose, drive some screws through iron angle plates at the corners. A quarter-round molding nailed on the outside bottom edges of the doors about $\frac{1}{2}$ inch above the floor will shed water and avoid it from freezing under the doors.



Methods as Detailed Show Best Parts of Substantial Framing

Another o

House Construction

AB

THE DETAIL drawings on the page opposite give accurate information on the building of a brick veneer house. Fitted into a plate as they are, there is no detail missing in the construction method. Footings, foundation wall dimensions, details of cornices, rakes, basement columns and beams, together with angle iron lintels and roof pitches for both house and dormer roofs are all included.

Much future home building will take advantage of clay products for exterior walls. Brick veneer houses will come in for a full percentage of the total to be built. In this type of construction, it is best to provide an air space between the brick veneer and the sheathing, as shown in the drawing.

PREPARED FOR AMERICAN BUILDER BY R. J. ALEXANDER

Plate No. 2-A is the second in a series of good construction details which show tried and true methods of home building. An alternate type of foundation is shown if concrete blocks instead of poured concrete are used. The relative sizes of footings, as indicated, are important especially where a steel beam and iron columns are used for load-bearing partitions in the middle of the basement. The hardwood blocking between the flanges of the beam and the joists is good construction.

Architectural details are important parts of good brick veneer exteriors. The molding details shown, and how they are used at the cornice and returns are good examples of sound practice both as to architecture and honest construction methods of building.

82

BUILDER'S BETTER DETAIL PLATES

83

tion iled s of ning

0

the inof a to a detion cormns are for s are ding prod-

al to trucn air eneer m in

Brick

for

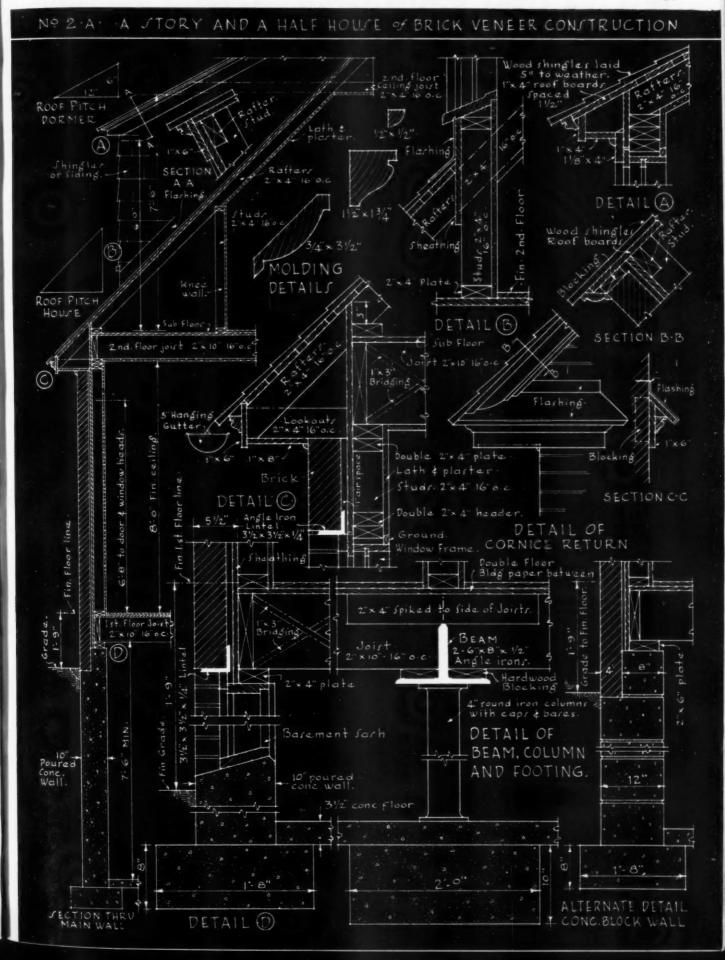
ER

ł

nd in n detrue. An on is instead the the cially n colcaring of the blockof the l con-

e imk veng dey are eturns prace and ods of

DO IT



84

American Builder, September 1944.



ple, convenient, and uniform method of referencing and dimensioning drawings and establishing the correlation between the details and the dimensions of the building.

REFERENCING THE BUILDING LAYOUT TO THE GRID—A building layout is referenced to the grid if the layout dimensions are such as to maintain the grid locations for the parts of the structure as shown on the modular details.

Dimensions between parallel grid lines are multiples of 4", called "grid dimensions," and may be used for layout.

The difference between grid dimensions and actual dimensions of the building is often so small—generally not more than 2"—that it is negligible at the scale of layout drawings. Grid dimensions in 4" multiples are more convenient for layout dimensions than actual dimensions, which involve fractions of inches.

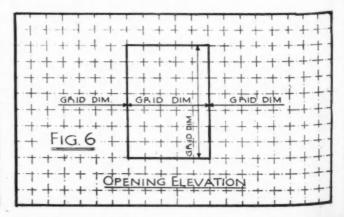
Modular planning in no way limits the complete freedom of the architect in making preliminary sketches.

The plan shown in Figure 1 on the opposite page is a typical layout using only grid dimensions.

These dimensions establish a complete grid relationship and show how this is done without using cross-section paper. Grid dimensions approximate the actual dimensions, which are determined by modular details.

The grid applies 4" as a standard increment for building layout without restricting economical design and efficient use of materials. Also, referencing to the standard grid imposes no limitation on the adoption of economical sizes for building materials and equipment. While sizes closely approximating grid dimensions afford the simplest dimensioning, considerations of economy, in either manufacture or application, may result in the selection of sizes differing substantially from 4" multiples.

REFERENCING ASSEMBLY DETAILS TO THE GRID—An assembly detail is referenced to the grid by dimensions that give the exact locations for the materials and equipment relative to grid lines. A detail thus referenced is called a "Modular Detail." Dimensions showing referencing to grid lines are an essential part of a modular detail. If the dimensions to grid lines are altered, for a particular assembly of building parts, each different grid location requires an individual modular detail. Hence, for simplicity in design and field erection, it is essential to maintain a specific grid location for each detail.



An Explanation for the Builder and Architect of the Application to Building Plans and Details of Modular Co-ordination

CO-ORDINATION, which is the basis of Modular Planning, may be defined as the dimensioning of building units so that they will fit together, and the use of building dimensions consistent with such co-ordinated sizes. It involves:

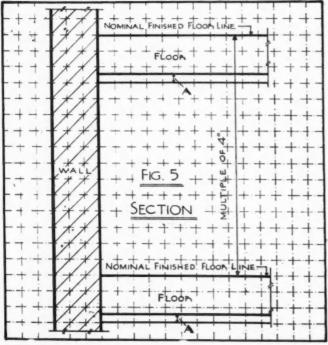
- SIZES of building materials and equipment which permit their field assembly with a minimum of cutting and fitting.
- 2. DETAILS which show the assembly of the above, and
- 3. MODULAR PLANNING which correlates building dimensions with the above SIZES and DETAILS.

STANDARD MODULE—After careful consideration and study, a 4" unit has been selected as the standard dimensional increment, or module, which affords the maximum practicable standardization and simplification consistent with present standardization and building practice.

It is used as a dimensional increment and structural layout unit. The sizes of building products are not, however, required to be exact multiples of the 4" module.

STANDARD GRID—To effect correlation between building layouts and details and the dimensional co-ordination of materials, the 4" module serves as the spacing for a uniform three-dimensional grid to which the building layout and details are referenced.

The grid provides the architect and draftsman with a sim-



betw FOU to se build flexil and of di TI floor econ build or 2' 2'' x nomi 12", 6", e It for i tubs, crem may of a of 4' LAY wall

Ame

å

24

MO

OF V

Fi

whic

lines the 1 American Builder, September 1944.

44.

and

he-

HE

the

ions de-

f 4",

menmore

ings. t for

frac-

edom

is a

nship

aper.

which

lding it use

poses

build-

roxi-

plica-

ostan-

THE

id by

erials

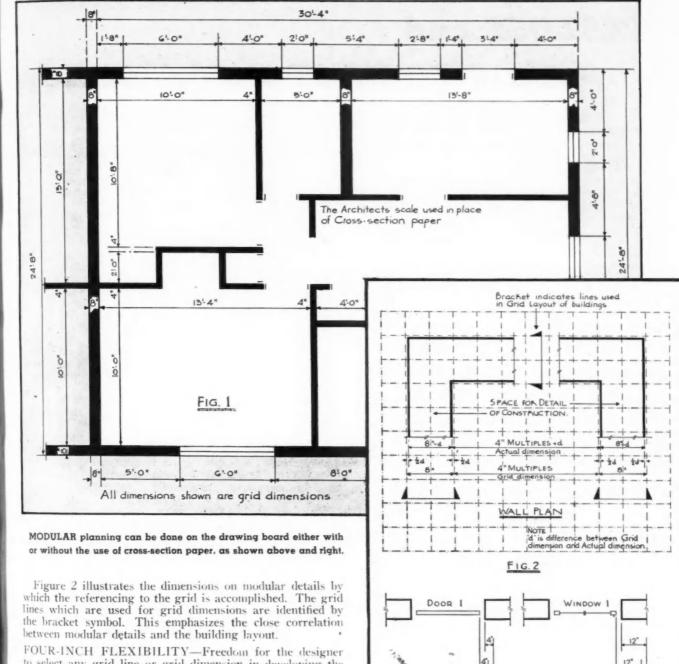
enced

referdetail. icular

n re-

ity in

pecific

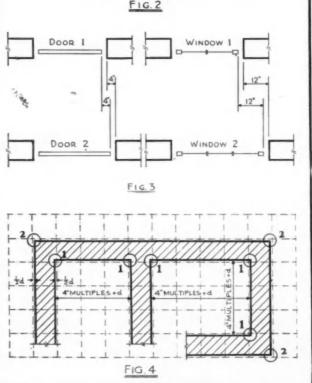


FOUR-INCH FLEXIBILITY—Freedom for the designer to select any grid line or grid dimension in developing the building plan constitutes a 4" flexibility of layout. This 4" flexibility applies to wall lengths and heights, room sizes, and sizes and locations of openings, and provides a variety of dimensions that is adequate for these purposes.

This 4" flexibility does not apply to thicknesses of walls or floors. These dimensions are governed by considerations of cconomy, including the efficient manufacture and use of building materials. For examples, $2" \ge 2" \ge 3"$, $2" \ge 4"$, or $2" \ge 6"$ wood studs may be used in walls and $2" \ge 6"$, $2" \ge 8"$, $2" \ge 10"$, or $2" \ge 12"$, etc. wood joists in floors. The nominal thickness of masonry walls may be 4", 6", 8", 10", 12", etc. Thicknesses of concrete slab floors may be 4", 5", 6", etc.

It would not be economical to require complete 4" flexibility for items fitted to the structure such as windows, doors, bathtubs, kitchen cabinets, etc. Sizes for these are based on increments of 4" or multiples of 4". For example, door widths may vary by 4" while window widths may vary by the width of a light, which might be 8", 12", 16", 20" or any multiple of 4".

LAYOUT OF WALLS—A symmetrical location of the wall structure relative to grid lines generally affords best (Continued to page 100)



85

CATALOGS and HOW-TO-DO-IT INFORMATION

59—POSTWAR BLUEPRINT: AND NO FOOLING—The sum and substance of a 60-page booklet recently published by U. S. Gypsum Company is that during the decade immediately following the end of the war architects, contractors, building material dealers and the present trade groups will continue to design, supervise, service and erect homes in the postwar period as they have in the past. This book is a thorough-going analysis of the number of homes, buying power of the public, division of the market as to new, remodeled, single, double and multiple houses. It contains, also, a history of the past decade and gives a practical forecast for postwar blueprint of your business. This book is titled, "Let's Be Sensible." Good reading here.

60—INSULATION DATA SHEETS NOW AVAILABLE—With the continuing necessity for fuel conservation, and the availability of all sorts of insulation without priorities, this portfolio of data sheets showing proper application of insulation in many types of construction will be handy reference material to have on hand. Made available by the Wood Conversion Company, these Balsam-Wool data sheets explain and illustrate exactly the proper methods of using insulation as well as attic ventilation and other means of creating comfortable living coupled with fuel conservation.

61—TECHNICAL DOPE ABOUT PLYWOOD PANELS—While plywood is still difficult to obtain without high priorities, the time is fast approaching when the "engineered" developments perfected during the war will be available for general use. To this end, the Douglas Fir Plywood Association has made available section 8 of their hand book, "Technical Data on Plywood." This section 8 is "the design of flat panels with stressed covers." While this is somewhat technical, it is very informative material and will be valuable information to have for future designs using plywood.

62—YOU TELL THEM WHAT YOU THINK—From the American Central Manufacturing Corporation comes an 8-page folder in the form of a questionnaire asking a lot of questions about what should be put into postwar kitchens. While this is mainly a consumer folder, it does have a lot of information in it, and will give you some idea of how this company will arrive at their future designs which will no doubt be brought to your attention when the green light of home building stares us in the face. It is suggested you look this folder over for ideas, as well as to write the company and tell them what you think your future home buying prospects will want in their kitchens.

63—KITCHEN CABINETRY FOR POSTWAR, WORK-SAVING KITCHENS—Now that we are getting ready to install kitchen equipment in homes, it is just smart to know all about the items that will become available, such as the cabinetry offered by Kitchen Maid Corporation. A wide variety of separate units made of hard wood, plywood, metal and newest compositions are described in a small folder recently published. We suggest you send for this folder and have the information it contains available when you are next in the market for kitchen equipment.

64—ASPHALT FLOOR TILE BOOKLET NOW AVAILABLE Practically every future home with a basement will have at least part of it devoted to living space of one kind or another, and the floors will call for asphalt tile. This may also be quite true of rooms on the first floor. Therefore, the recently published booklet by the Tile-Tex Company is very worthwhile at this time. The booklet gives the features, specifications, colors and sizes, and installation directions. Well illustrated with both drawings and photographs, and color charts, this booklet will make a valuable contribution to your postwar planning.

65-NEW GLASS BLOCK FOR OLD WORN OUT WINDOWS-

Many a window in a house looks out on a view which has no value whatsoever. While the light coming in from the window is usable, the view may be just the opposite. A good suggestion for remedying this is to replace the existing window opening with Insulux glass block. These blocks provide light and insulation as well as an attractive appearance, both from without and from within. A new booklet describing how to make such installations has just been made available by Owens-Illinois Glass Company. Add this booklet to your list, and use the idea to secure additional jobs of home remodeling and rejuvenation.

66—THERMOPANE WINDOWS ANSWER A LOT OF QUES-TIONS—Double-glazed sash, using the Libbey-Owens-Ford new product with the bondermetic seal between the two or three panes of glass provide good daylight engineering which gives good insulation, clear vision without frost or condensation forming between the panes, and still leaves only one surface on each side to clean. An interesting book has been prepared giving technical data as well as sizes, thicknesses, types of glass, and other important information. This is a new product well worth knowing all about.

67—LOOK TO A VENTILATION FAN FOR COOLNESS—There should be no doubt in anybody's mind that attic ventilation is a most important part of home cooling. A new booklet by the Emerson Electric Mfg. Co. gives full information on methods of using electric exhaust fans for pulling heat out of a house. Just any fan stuck in the attic won't do the job. It takes thorough understanding of the principles as well as the type and capacity of the fan to do an intelligent and thorough job. It won't be long until electric fans of this type, as well as for other parts of the house including the kitchen, will be available and should be regular equipment in practically all postwar homes.

SERVICE COUPON—CLIP and MAIL to CHICAGO	
Readers Service Department, American Builder, 105 W. Adams St., Chicago 3,	(September, 1944)
Please send me additional inform items, or the catalogs, listed in th	
Numbers	
Name	
Street	Statistical actions and an an and an and an and an and an an and an an and an an and an an an and an an an and
City	State
OCCUPATION*	

M^A friends

Ame

the far people made i

You De Lux ment t suggest develop and ma 944.

N

e, iy ne nd ke

ch in oce ck. ell om inois use

en sht

ion les.

an.

cal her rth

ere

ila-

lew

full

ans in

nd-

t be

her

ail-

GO

944)

duct

given

A TEMLOK IDEA with profits for you

MANY A FAMILY would like to fix up a room where the youngsters could do school work, entertain friends, and play the radio without disturbing the rest of the family. In most homes there is space in the attic. But people need someone to show them *how* this space can be made into an attractive room—at small cost and within current restrictions.

You can do this profitably with Armstrong's Temlok De Luxe. Show your prospects this sketch, or an enlargement that we'll send you free. This definite, attractive suggestion gets the talk down to brass tacks . . . helps develop many worth-while jobs. Sell just one such job, and many of the owner's friends will be prospects for you. You have strong selling points in Temlok De Luxe. It not only decorates, but insulates. An attic installation quickly repays its cost in fuel savings alone. Temlok De Luxe is factory finished in beautiful soft colors—no further decoration needed. It reflects light without glare, quiets unwanted noise. And it comes in three popular forms: panels, planks, and boards which can be combined in attractive designs. Temlok is so quick and easy to install, that you can take on such jobs even when you're shorthanded. No special tools or skill is needed.

FREE ENLARGEMENTS of Temlok Ideas

including this one will help you sell many

profitable jobs. Write for a set today.

Be sure you have all the necessary information to sell Temlok for homes and public buildings—a set of "Idea" sketches, samples, prices, literature. Just send a note today to Armstrong Cork Company, Building Materials Division, 1609 Ross Street, Lancaster, Pennsylvania.

ARMSTRONG'S TEMLOK INSULATION

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



The next housing program— Home builders eager to resume activity appreciate the necessity of deferring civilian building until after the fall of Germany. Although there will be a substantial number of priorities issued this fall for the H-2 program, they will be spread thin in various congested areas throughout the country, and will be of small satisfaction to an industry which must gear up to produce a million postwar homes a year. Furthermore, it is far from clear just how this H-2 program can be financed.

Inventories about exhausted-During the last year builders have drained mills and warehouses to complete the H-1 housing job. Ersatz substitutes which have been used have proven unsatisfactory. Therefore, it is ap-parent that along with any new housing programmed, the preliminary step must be that of providing for an adequate flow of all materials and equipment items. It is certainly WPB's job, upon learning the size and character of the next program, to start such production in motion. Just as the third quarter authorization of 50,000 recessed-type cast iron bathtubs has been made, so must many other essentials be permitted. Furthermore, it is quite clear that if Title II insurance is to be used, this housing will require better quality millwork, hardware, plumbing equipment, etc.

Regulations governing veterans loan program-Under the supervision of Francis X. Pavesich, who has just been named Director of the Loan Program, progress in the formation of these all-important regulations is now being made. The ambiguous phrasing of the act has resulted in the sharpest differences of opinion as to the exact meaning of Sections 500 and 505. The best legal advice in interested government agencies has been sought, and all industry groups are contributing their best judgment. Mr. Pavesich, as a former financial advisor to the Home Loan Bank Board, is eminently qualified to tackle the knotty problems imposed by the housing title. It is not possible to predict when these clarifying regulations will be issued, but it will certainly be a matter of some weeks.

Action on public housing deferred—It now appears that Congress may not act on the two Washington slum clearance bills introduced this spring. Hearings before the McGehee sub-com-

mittee are not expected to be resumed until September, and if there is a congressional pre-election recess, *it is quite possible that this dispute will fall in the lap of the next Congress.* On the Senate side the competing bills were referred to Senator Walsh's sub-committee, which committee has stated that no hearings will be called until the House committee has completed its work.

In the meantime the National Industrial Conference Board has been engaged to summarize the evidence presented before the Burton Committee. This New York research organization will tackle the difficult job of sifting out the substantiated facts from the mass of conflicting data, claims and charges. Members of the Burton Committee are frank in admitting that they are completely confused and befuddled by the voluminous and contradictory testimony.

For the record—In a radio speech last week, OPA Administrator Chester Bowles said that with the return of normal conditions "rent control must be eliminated." The OPA chief said, "As quickly as wartime conditions permit, we must do away with all unnecessary regulation and leave tenants and landlords free to make their own arrangements."

Labor union builds test house— With the primary motive of "discovering the actual cost of constructing a sixroom dwelling," the Textile Workers Union of America is building a sample house at Front Royal, Virginia. This CIO affiliate has purchased land in the vicinity of a group of houses built for workers at the American Viscose Corporation plant. Since the largest item of cost in home building is that of wages to the various trades, it would appear that great economies might be effected if the various trade jurisdictional rights are forgotten in this project.

FPHA homes lose naval engagement—Although that intrepid Civil War general, Jubal Anderson Early, was a great water fighter (as evidenced by his victories at Cedar Creek and the Kanawha River) even he might well have quailed at the flood which last week swamped the Arlington public housing project named for him. With nearly 400 residents evacuated, and Senator Harry Byrd and Representative Howard Smith threatening a Congressional investigation, FPHA officials ad-

mitted that the choice of site for Jula Early homes had not been considered good, but was believed to be one "that could be made to work with some inconvenience."

Arlington County's Manager Frank Hanrahan stated that the Federal authorities had been warned the project's drainage was insufficient. On the other hand, FPHA's formal statement eschewing blame for the flooding, stated that the county had applied for funds for drainage, but the grant had been delayed. Failing an adequate drainage installation, "The Late Jubal Early" ferry service might be set up.

One "Defense Homes" project sold—Of the 25 defense housing projects offered for sale last January, only one of substantial size has been transferred to private ownership. Stuart Gardens, a 980-unit project at Newport News, Virginia, has been sold for \$3,615,000. A Government profit of \$100,000 on its operation of the project was realized.

Further evidence of critical lumber situation—In an effort to reduce lumber leakage to an absolute minimum, WPB has just issued an order stating that preference ratings to owners requiring lumber for repair work will be given only in extreme emergency cases. In addition to damage caused by fire, flood or storm, applications will be approved for leaks in the roof, weakening of framework, separation of lateral supports from main supports, broken joists or risers, etc. Form WPB 28% may be secured from the nearest FHA field office.

Secretaries' Council to be set up

—At a two-day conference of the Preidents and Secretaries of Local Associations affiliated with the NAHB, to be held at the Statler Hotel here in Washington, September 22 and 23, a Secretaries' Council will be formally established. Quoting from the proposed By-Laws, the objectives of this Council will be:

"(a) To promote sound, efficient and progressive practices in the administration and management of local home builders associations affiliated with the National Association of Home Builders of the United States."

The agenda includes an impressive list of speakers on all subjects related to the successful operation of local builders associations. Matters of securing membership, finance, successful meetings, publicity, public relations, state-wide action on legislation, and co-operation with allied industry groups in the community will be effectively covered.

Full conference will follow– Following the Secretaries' Council meetings, approximately 200 home builders, and their associate member guests, from every part of the country will confer with government officials for three days. On the fourth day there will be a Directors' meeting. Those attending will be of the empha how t areas thirty and W relaxat the tr postwa portan Eri

NAH

The a Presid of Con pressiv home tion as Johnst vitatio gracio statem As a and o a dire ing th ship i of the presen

Se

Sp Horiz try," sponsi tunitie standi he wi be ob proble gover rapidl closes gover world will b Home "Ame his d thusia Amer

-Alt

vened both full-so other wheln it con for in ject (partic spade be de is pra tentio Conse being remai

On

Senate side th ator (Postw may 1 r 1944 or Juba nsidered ne "that once in-

r Frank Federal he proj-On the atement, g, stated or funds ad been drainage Early"

project ng projary, only en trans-Stuart Newport sold for profit of e project

critical

effort to absolute ssued an atings to bair work mergency e caused tions will of, weakto of laters, broken PB 28% est FHA

e set up

the Pres-I Associ-IB, to be in Wash-3, a Secformally proposed s Council

icient and in the adgement of sociations ional Asuilders of

essive list ted to the builders ing memmeetings, state-wide -operation the comovered.

follow-

incil meete builders, rests, from rill confer hree days. will be a attending

will be brought up to date on all phases of the industry situation, with particular emphasis placed on where, when and how the H-2 program for congested areas is to be programmed. Nearly thirty officials from NHA, FHA, OPA, and WPB will attend. Veterans housing, relaxation of government controls in the transition period, and long-range postwar planning will all have an important place in the deliberations.

Eric Johnston will speak at NAHB dinner September 25th— The appearance of the dynamic, young President of the United States Chamber of Commerce at this conference is impressive recognition of the vital part home builders must play in the transition and postwar period. Although Mr. Johnston receives as many as 300 invitations a month to speak, he has graciously agreed to make an industry statement to our group at this time. As a manufacturer of electrical parts,

As a manufacture of electrical parts, and of brick and tile products, he has a direct interest in home building. During the last year, he has taken leadership in bringing together all segments of the construction industry to formally present its problems to government.

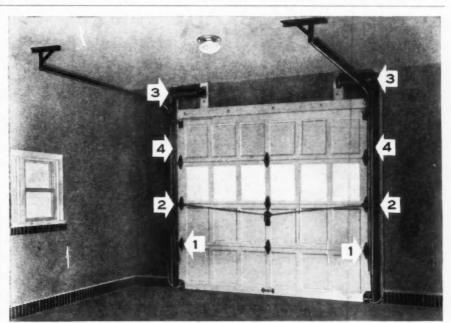
Speaking on the subject "New Horizons for the Construction Industry," Mr. Johnston will define our responsibilities, and indicate the opportunities which lie ahead. As an outstanding champion of private enterprise, he will restate the basic principles to be observed as we approach postwar problems. During the period ahead when government controls must be lifted as rapidly as possible, he will urge the closest teamwork between industry and government. Known throughout the world as a bold analyst, his statement will be far-reaching in its importance. Home builders who have read his book "America Unlimited" are familiar with his delightful style, his unlimited enthusiasm, and his profound belief in the American system of free enterprise.

Congressional vacation ended -Although the Congress has reconvened, there is less than a quorum in both Houses, and it will not engage in full-scale legislative operations for an-other month or so. The issue of overwhelming importance now confronting it concerns the framing of broad policies for industrial demobilization. The subject of unemployment compensation is particularly hot at this time. Since the spade work on this legislation must be done by several committees, there is practically nothing to require the attention of the members on the floor. Consequently, only short sessions are being held and most Congressmen have remained away from Washington.

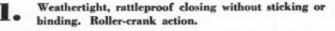
On industrial demobilization, basic differences are developing in the Senate Drafting Committee. On one side there is the bill sponsored by Senator George, Chairman of the Senate Postwar Committee representing what may be called a middle-of-the-road approach. It calls for a states' rights basis dealing with unemployment benefits for war workers. Radically differing from this bill is a measure introduced by Senator Kilgore, which almost goes as far as setting up a new WPA for dealing with unemployment among released war workers and returning servicemen. Organized labor has given its backing to the Kilgore proposal. It is unfortunate that the controversy over how far the government should go in tiding workers over the adjustment period threatens to delay the whole reconversion program to an alarming extent

How does this affect builders? —It is obvious that in many ways the home building industry is wrapped up in these over-all problems involving the adjustment of the nation's economy back to a peacetime basis. In the first place, the broad legislative program dealing with reconversion policies will include measures on surplus property disposal. The question of what happens to large new industrial plants and their workers is bound to have an important bearing on the building picture in the localities involved. Also, it goes without saying that builders are vitally interested in the matter of when civilian production is to be resumed.

Lumber needed after September 1, must now be authorized by FHA before purchase orders can be certified under WPB's recently issued lum-



Only the Barcol OVERdoor has <u>All</u> of these features:





closing. Tailored "Twin Torsion" balance springs. Safe and

Self-latching. Spring bolts engage automatically when

Tailored "Twin Torsion" balance springs. Sale and quiet. Neat appearance.

• Continuous vertical track brackets on all doors. Rigid. • Conceal and protect cable.

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES IN PRINCIPAL CITIES





... the SIGN that BEATS **** the BLURMITE* JINX!

Blurmites are bad actors! To halt their destructive action; to keep interior wall and ceiling surfaces attractive and bright, it's necessary to install a material that's designed to "stand the gaff." That's why plastic-finished Marlite is your best bet for installations that will assure customer satisfaction . . . that will build dealer business, reputation and profitable repeat orders. Modern Marlite—with the exclusive bigb-beat-bake finish that permanently seals the surface against deteriorating action of dirt and moisture — is easy-to-install for new construction or remodeling; durable, practical and moderate in cost; easy-to-clean—and it never needs refinishing or repainting. It pleases customers—and makes money for you!



MARSH WALL PRODUCTS, Inc. P3 MAIN ST., DOVER, OHIO MARSH WALL PRODUCTS, Inc. P3 MAIN ST., DOVER, OHIO Mily-ful PLASTIC-FINISHED WALL PANELS - FOR CREATING LANTIFUL INTERIORS

any time.

American Builder, September 1944

ber control Order L-335. Applicable only to privately-financed housing, the new procedure will enable NHA to account to WPB for lumber used under the quarterly allotment program. Lum ber required for remodeling, installation of new equipment, repair, or to complete housing under construction, provided the amount needed after September 1 does not exceed 1,000 board feet. is specifically exempt by the order. Application for authorization is made to FHA on WPB Form 2896.1, unless application for priorities was made on WPB Form 2896, as revised July 7. WPB officials warn that lumber may not be received prior to the quarter in which its receipt is authorized, although it may be received any time later.

Building materials released_

Another straw pointing the direction of the wind is the WPB order issued this week to release some 40 items of building materials, including copper and copper alloy fittings. Stating that military needs have been met, WPB representatives explained that there is no reason to keep remaining stocks on hand. However, the manufacture of copper and copper base alloy controlled material forms and shapes for use in building construction, and the use of these materials in the fabrication of many building material items, continues to be prohibited under the new order. Among the items on inventory of manufacturers, jobbers and retailers, that may now be used without restrictions, are weatherstripping, gutters, leaders, downspouts, flashings and flashing valley lining. tie rods, and termite shields.

Surplus war property—A recent release of OWI draws a staggering picture of the job SWPA (Surplus War Property Administration) is facing. Ranging from \$15 billion in huge war plants to bandages, adhesive tape, and hairpins, the disposition of surplus property and materials without disrupting normal markets will require inteligent and honest administration of the highest order.

Independent estimates as to the total dollar volume run as high as \$100 billion, although the Baruch-Hancock report makes a conservative estimate of \$50 billion. Seven general categories have been established: (1) industrial facilities; (2) merchant ships; (3) military construction-airfields, camps, navy yards and bases, and installations of all kinds; (4) war housing, including living accommodations for war workers, and community facilities such as hospitals and schools built as Federal proj ects; (5) finished goods, such as blankets, shoes, and planes; (6) stockpiles. such as tin, industrial diamonds, copper and other controlled materials; (7) and inventories in the hands of war contractors (including raw materials, goods in process and equipment).

Government-owned housing-The first item on the Government's list of real estate to be sold is 20,000,000 acres of land, largely owned by the

America

Army. ederal ave bee More th Governn orary s f the L vithin t ent Go ss than laced of ubstant NHA ha state fo tructure ne-four cres th:

"Buil

ool in u of a fo ared by elopme f Com erving ion spo rivate (arded i ules, re milding truction akes a solete f this s n direc Instruc ar vea ction ca ind rev cal bui allied in ackling

The

e build Detroit, d all th mpass he asti Director each rough rojects nelv ; ad bus ghted ptione lousing pt the H. I nment ntends

Valle

Hitler Hitler his Cal have ref is asked some 40 as a preimprove coming public caused a announce (and source (and source) to pay plicable ing, the A to acd under 1. Lum tallation to comon, pro-Septem. ard feet. der. Apmade to , unless made on July 7. ber may arter in although

er.

ased_ ection of sued this of buildand copmilitary presentao reason Id. Howoper and material building ese mate ny builds to be Among acturers. r now be weatherwnspouts, ining, tie

-A retaggering plus War facingnuge war tape, and surplus t disruptire intelon of the the total

\$100 bilncock retimate of categories industrial (3) milimps, navi ons of al uding livworkers as hospieral proj as blan stockpiles ds, copper ; (7) and r contrac-, goods in

ousingment's list 20,000,000

d by the

Army. Thanks to private enterprise, Federal expenditures in war housing ave been insignificant by comparison. More than half of the homes built by Government for war workers are temorary structures and under the terms of the Lanham Act must be torn down within two years after the war. Permanent Government war housing costing ess than \$1 billion will eventually be placed on the market at a fair price and ubstantial recovery made. Although VHA has acquired 55,000 acres of real state for its developments, permanent tructures occupy only approximately pne-fourth of this, leaving about 40,000 cres that will become surplus property.

"Building codes—An essential ol in urban development" is the apt title of a forcefully written pamphlet preared by the Construction and Civic Deelopment Department of the Chamber of Commerce of the United States. Ob-erving that "Private building construcion sponsored by private enterprise or rivate capital will be stimulated or rearded in the postwar period by the ules, regulations and restrictions of the uilding codes which govern such con-truction in urban areas," the booklet akes a strong case for modernizing our bsolete building codes. The importance of this subject to every home builder is n direct proportion to the volume of onstruction he expects to do in the postar years. The time has come when ction can and must be taken to review nd revise all out-moded codes. Many cal builders' associations, working with llied interests in the community, are ackling this important problem.

The Bildor, official publication of the builders' association of metropolitan Detroit, in its June issue, has incorporated all the best features that can be encompassed in an association publication. The astuteness of Editor and Executive Director William J. Guinan stands out in each of its 180 pages. Illustrated broughout with private war housing projects of the Detroit builders, and imely articles by government officials and business leaders, the issue is highighted with a point-by-point analysis aptioned "Ten Weak Spots in Public Housing." In another article, "We Astept the Challenge," Detroit President C. H. Harrison makes clear that govmment must make known the rules it intends to follow in the postwar years.

Vallejo tenants defy government rent increases—Ch arging Hitler tactics," war worker tenants in his California public housing hotbed have refused to pay modest rent increasts asked by FPHA. Nearly a year ago ome 40,000 of these tenants organized as a pressure group to demand certain improvements, and to register for the coming national election. West Coast public housing czar, Langdon Post, caused a near riot last month when he announced some moderate rent increases (and some rent reductions). At a mass meeting this week, tenants flatly refused to pay the increases, and have been

threatened with eviction on the deadline for rent delinquencies, August 10th. Apparently force will be necessary, as a definite challenge to the government to "Try to throw us out" has been thrown at FPHA.

Home builder-owners of war housing must prepare for drastic industrial cutbacks. One of the penalties imposed on the private builders of this country who constructed war housing was the requirement that the major part of it must be rented. As a result, hundreds of thousands of Title VI units are now owned and managed by home builders. For the time being there are plenty of tenants available in most areas and the problem of vacancies has not been experienced. With the collapse of Germany, however, the cutback in industrial war plants will be staggering. The only satisfactory answer clearly lies in the prompt relaxation of eligibility requirements by NHA.

'Henry Kaiser will produce building materials in the postwar period. In partnership with Sam A. Perkins, President of the Standard Gypsum Company, the country's number one war industrialist will enter the gypsum product field. Along with wallboard, Mr. Kaiser intends to produce steel-framed prefabricated sections of houses and plastic cement similar to stucco for exteriors. Committing his company to spend millions on existing and new



Use TRU-BILT EXTERIOR PLYWOOD for Permanence and Long Life

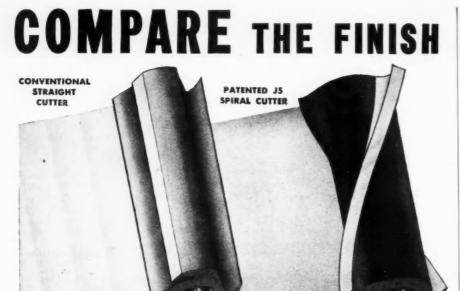




Each ply of TRU-BILT Exterior Plywood is wedded to its mates for life. Pure phenolic resin binder is applied by a special spreader in an exclusive assembly line. In carefully controlled hot-presses, it permeates into and permanently joins the wood layers.

The finished product is weatherresistant and moisture-proof. Each piece is carefully smoothed and accurately sized in sheets up to 72" x 144" and thicknesses from $\frac{1}{4}$ " to $1\frac{1}{8}$ ".





The CARTER J5 POWER PLANE cuts Smoother as well as Faster with the Exclusive Spiral Cutter

No matter how fast you "hog off" the wood with a Carter J5 Power Plane -even when making cuts 3/16" deep, with or against the grain - you leave a smooth surface that needs no sanding.

92

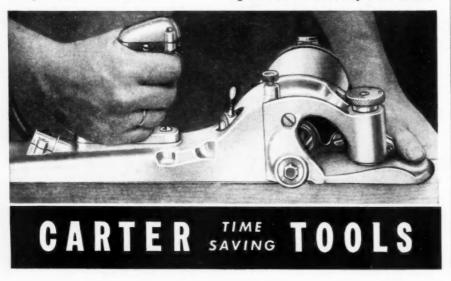
The reason for this super-smooth finish is the patented Carter spiral cutter that shears off the wood at 18,000 R.P.M. The first time you try a J5, you'll see how it eliminates the chatter marks and edge splinters so often left by a conventional straight cutter.

With a Carter J5, you can handle door, sash, screen and similar work 3 to 5 times faster than with hand tools. It develops a full 1 H.P. - weighs only 16 lbs. - planes surfaces up to $2\frac{1}{2}$ " wide, any depth to $\frac{3}{16}''$ - takes a straight or bevel cuts to 45°.

Other size Carter Planes available. Write for Catalog. R. L. CARTER DIVISION, The Stanley Works, New Britain, Connecticut.



SHARPENS ITS OWN CUTTER — Just set it up in the Bench Bracket and use the simple Grind-ing Attachment...takes only a few minutes.



American Builder, September 194

production facilities along the We Coast, Mr. Kaiser for the time bei will act as a supplier and "is not rea to say he will go into residential construction." Following the example United States Steel Corporation purchasing the Gunnison Housing Com oration, Mr. Kaiser's action is tangil evidence of the interest big business taking in the home construction field.

A. F. of L. Criticizes NHA in H-2 program-Chairman Ham Bates of the American Federation Labor Housing Committee condemn the programming of "sub-standar wartime priority construction" in sale. Claiming that the minimu standards of space, design, structur soundness and durability imposed h WPB will make this housing una ceptable in a highly competitive post war market, the A. F. of L. oppose their workers purchasing such mini mum housing.

NAHB National Convention

(Continued from page 57) Officials of both the National As sociation and the Chicago Metro politan Home Builders Associatio say they conceived the Exposition plan as a result of frequent ques tions from home builders as to what can be expected from the manufac turers when home building restric tions are relaxed. "What is read now, what can be expected in the in mediate postwar period, in the long term postwar period? What sub stitutes are ready, nearly ready, o may be expected in a year, five years ten years? What new designs, new forms, new techniques, new finance ing plans? What products an processes will not change, because they can meet the test of the coming vast new construction programs? Builders want to know the answers means to these questions.

The design of the show will pro vide the background for many such postwar products and technique and has no preferred locations. Th treatment is so open that most of the 300 or more exhibits can be see from any part of the three exhibit halls. It is full of color and starting effects.

The basic plan suggests further originality on the part of the exhibitors who will have "space" in a variety of wall panels and center-of the-room locations, built in irregula and unusual shapes. Although the floor plan, covering 40,000 square feet, abounds in queer shapes and forms, the entire design was planned for the best display of each product and technique in the construction George of the field. Jacques Seltz, the well-known Swiss designer of the Skidmore and Pers and ganization, created the basic plan and Pers and will co-ordinate the planning of er played Swiss designer of the Skidmore or

Ameri

hibitor fined t constru ings w Tho and Co

surpris

where be hel custon ers wi sitting topped it easy during has be ings. will be to disp Fifty (for sm vides a ment f been se hall fo builder ature 1 In t of the

100 fee of city Here to will be graphs pleted Mr. Nation the bui and set take a preced

compa for the that th tail in



have present homes This

only to

sociatio

in war

politan sociatio

conven

tion, fo

Commi

Large

hibitors. The exhibits will be confined to products that enter into the construction of a home, and furnishample ings will not be included. ation

Those attending the Exposition and Convention will receive another surprise when they see the ballroom where the Convention program will be held. Instead of sitting in the customary row of chairs, the builders will hear their speakers while sitting in groups of ten around glasstopped tables. This plan will make it easy for the builders to take notes during the programs, a practice that has been increasing at such meet-ings. One hundred of these tables will be sold to exhibitors who wish to display literature under the glass. Fifty of the table tops will be used for small models. This not only pro-

vides a more comfortable arrangement for a convention hall than has vention been seen heretofore, but utilizes the hall for a new type of display. The builders can hardly miss the literional As ature under the glass table tops. o Metro

In the ballroom too, will be one exposition of the big feature exhibits-a panel ent ques 100 feet long, showing the progress of city and community planning. Here too, the sides of two long walls will be lined with blow-up photographs of housing projects completed by Association members.

> Mr. Nixon has said, "Our 1945 National Convention must reassure the builders, excite them, teach them, and send them away ready to undertake a building program the unprecedented magnitude of which will compare with the vast job of tooling for the war." Every builder can feel that the NAHB will overlook no detail in making the 1945 meeting a means to this end.

v will pro many such technique tions. Th at most o can be seen ree exhibi nd startling

sts further of the ex space" in a d center-of in irregula though the 000 square shapes and vas planne ach produc onstruction well-known kidmore or sic plan and ining of er-

\$6,000 PRIZE COMPETITION for House Designs Open only to members of NAHB

BUILDERS of houses are finally to have an opportunity to win prizes, presenting their ideas of what postwar homes will look like and contain.

This design competition is open only to members of the National Asociation of Home Builders. \$6,000 m war bonds is offered by the Metropolitan Chicago Home Builders Association, host to the January, 1945, convention of the national associa-tion, for prizes for the best designs, George F. Nixon, Chicago, chairman of the National Convention's Exhibit ommittee, announced late in August.

Large models of the six prize winners and illustrations of the twelve honorable mention entries will be dis-played at the exhibit during the con-

awarded each of the six first prize winners.

The competition is unusual in that the six divisions into which it is divided call for emphasis on the way in which the house is planned to serve its occupants because of their kind of work and habits of living.

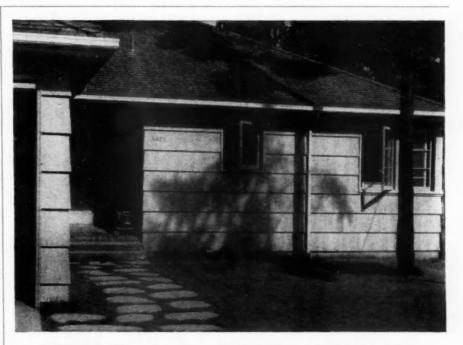
"What's the use of having just a beautiful exterior if the inside doesn't give the family it's built for the things their living habits demand?" is the sentiment expressed by Chairman Nixon at an early meeting on the contest.

Accordingly, the builder members of NAHB will be asked to submit designs for each of the six following

vention. A \$1,000 war bond will be classifications: (1) The City Home (2) The Suburban Home (3) The In-dustrial Worker's Home (4) The Farm Home (5) The Summer Resort Home (6) The Veteran's Home or the Home for Two.

The judges include Raymond J. Ashton, president of the American Institute of Architects; John A. Steele, national chairman of the American Legion G-I Bill of Rights Committee and former governor of Illinois; Commissioner Abner H. Ferguson of FHA; and John Cumming Lindop, president of Metropolitan Chicago Home Builders Association.

The rules of the National Design Contest have been mailed to members of the NAHB.



TO BUILD GOOD HOMES OF PROVEN MATERIALS

THIS SEEMS TO BE the consensus of opinion among builders who want to serve their post-war customers well and preserve their reputation as builders.

Among proven materials that have served America's home and farm building needs for many generations are Red Cedar Shingles. For the roof, they offer long life, weather resistance and negligible unkeep. Double-coursed on sidewalls, they offer beauty, economy and excellent insulation.

Let us send you a complete set of working blueprints of Red Cedar Shingle application. Address-

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

.



er 194 ne We ne bein not real itial con

ng Con

tangih

isiness

i field.

IHA I

n Ham

ration

ondem

-standar

ion" j

minimu

structura

posed b

ng unad

tive pos

. oppose uch mini

57)

ssociatio

s to what

manufac

g restric

is read in the im

the long

that sub

ready, 0

five years

signs, ner

ew financ

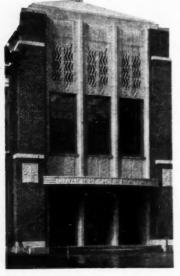
lucts an

e, becaus

he coming

rograms?

ne answers



94

Selects

NEW LONDONER HOLLOW-CORE FLUSH DOORS PAT NO. 2272227

STEIRO and HANSEN General Contractors CHAS. and CLARENCE REUGER, Architects Men who design and build America's finest structures know all about the excellent performance records of New Londoner Hollow-Core Flush Doors — in all climates — under unusual conditions. Architects, builders and Contractors select these famous doors because of their sturdiness, ease of installation, and because experience has taught them the practical value of using doors that "stay put". Learn more about New Londoner Hollow-Core Flush Doors and what they can do for you. This information is yours for the asking.



American Builder, September 194

America

Spl

turi

Will Labor Kill Boom? (Continued from page 63)

to him by the union steward, who lay out and limits the work every morning, he will be fined by the union.

4. Glazing of windows in the mill instead of on the job would speed the work and cut costs, builders declare, but local unions in many areas will not permit ready-glazed windows to be handled by the carpenters.

5. Many local unions require that a steel worker be employed to erect a steel I beam and column. Though there is no other work for him to do the steel worker must be paid for his time to and from the job as well as his time on the job, it is reported. The cost in one area for this work runs from \$9 to \$10. A carpenter on the job could do it for a cost of \$3 to \$3.50. 6. The plumbers' union prohibits

6. The plumbers' union prohibits any cutting and fitting of pipe in the shop where it could be done more efficiently and at lower cost, it is said. The union regulation requires that it all be done on the job with much time wasted in setting up and taking down cutting equipment. 7. In brick laying there are two

7. In brick laying there are two factors which make for higher costs. First, the men are held down to a maximum number of bricks they are permitted to lay up in a working day, builders indicate. Second, the number of brick layers who can be served by one mason tender is held down to an expensive maximum by arbitrary union dictation—usually one tender to two masons.

8. Among painters it is said to be the practice to spend about two hours out of eight preparing brushes before starting work and cleaning up and changing clothes before and after work. With this loss of working time, it is estimated that the cost of union painters is actually 25 per cent higher than the advertised scale. Spray painting, with its attendant economies, is not permitted at all.

Where painting of concrete is called for, the painters demand that they do this work, although it is of such a nature that a common laborer could do it satisfactorily.

In fairness to organized labor in the building trades. American Builder wishes to point out that these costincreasing practices do not exist in the same degree throughout the country. There is no uniformity of practice from city to city.

This lack of uniformity is in and o itself said to be a factor making for greater cost. It stands in the way of mass production of many of the parts which go to make up a house. Manu facturers of completely fabricated and glazed window assemblies report that they can secure only spotty distribu tion and are barred from many of the major markets because the union Th will not handle their products. keeps the cost of manufacture of th units higher than they would be if the manufacturer could produce for a the country, not for a limited portion. (Continued to page 96)

LIN SATIS GUA

Buy Mon

American Builder, September 1944.

r 194 3)

vho lays y morn. nion. the mill peed the

dows to

e that: erect ; Though m to de d for hi well as ted. The ork runs r on the to \$3.50. prohibits be in the more eft is said es that it uch time ng down

are two ler costs wn to a they are king day, e number served by wn to an arbitrary e tender

aid to be wo hours es before up and und after king time, of union ent higher ray paintnomies, is

e is called at they do of such a orer could

bor in the Builder hese cost t exist i the couny of prac

in and o naking for he way of f the part se. Manuricated an report that y distribu any of the he union Th ucts. ure of the d he if the ce for al ted portion. 26)

Splashproof bathrooms

declare turn "lookers" into "buyers"

Walls and ceiling of softtoned Nairn Wall Linoleum provide a beautiful permanent finish that will last as long as the house itself.

Between-mirror panel becomes dramatic when an undersea design in gay linoleum is inset on plain linoleum.

This modern, practical linen cabinet is entirely splashproof when front, sides and top are covered with smooth Nairn Wall Linoleum.

Resilient, quiet Nairn inlaid floors are satin-smooth, require a minimum of care. They may be personalized with contrasting strips, borders, insets.

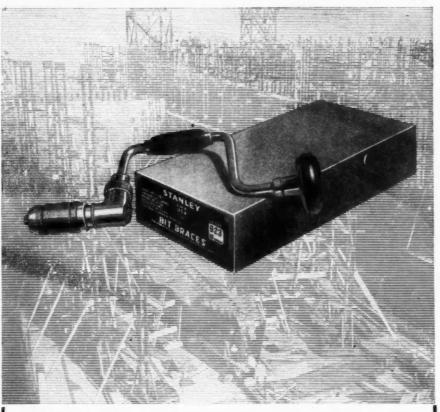
The base of Nairn Linoleum (recessed under cabinet) adds a pleasing color note of contrast... is easy to clean, to keep clean.



Back the Attack Buy More War Bonds Than Before "Wanted features" such as the colorful beauty of Nairn Linoleum floors and walls which also add durability and serviceability to a room ... will make postwar houses sell on sight. Install a bathroom like this in your "show house" and watch it sell the house. In addition, Nairn Linoleum floors and walls speed construction, permit immediate occupancy. When installed in accordance with our specifications, they are fully guaranteed.



MAKERS OF GOLD SEAL CONGOLEUM AND NAIRN INLAID LINOLEUM **KEARNY, NEW JERSEY**



STANLEY TOOLS

Anvil Tools Awls **Bars** - Ripping **Bit Braces Boring Tools Breast Drills** Chisels - Cold Chisels - Wood Hammers **Hand Drills** Knife Levels **Marking Gauges Mitre Boxes** Planes **Punches** Rules Saw Sets Scrapers **Screw Drivers** Sledges Soldering Irons (Electric) **Spoke Shaves** Squares Vises

The building of American fighting power-through shipyards, training camps, factories and housing projects -depended on quickly placing such familiar tools as hammers, screw drivers, planes and bit braces in the hands of armies of craftsmen.

Stanley met this gigantic demand by applying "battle standards" to tool design, simplifying many items for mass production without sacrifice of strength and precision. With the lifting of restrictions, Stanley Tools will again appear in their former styles and finishes. Just as they served in vital war construction, Stanley Tools will meet the needs of the great reconversion era to come.

STANLEY TOOLS 133 Elm St., New Britain, Conn.



(Continued from page 94)

It was on this point principally that American Builder editors dwelt in talking with national heads of some of the building trades.

Men in high authority in the International Brotherhood of Carpenters said that they make agreements with manufacturers of fabricated parts of houses and completely fabricated houses and that all local unions are bound by such agreements.

This, they say, means that if a manufacturer of factory glazed windows operates a closed A. F. of L. union shop, the locals anywhere in the country will accept and install his product when the union label is affixed to it.

Next this was double checked with executive heads and business agents of local unions. They were found to be in disagreement with the assurances given by the national leaders. These local leaders declared that "no pre-glazed windows will be touched by carpenters in this district.'

If this disagreement and confusion exists within the unions themselves. then what chance is there for a reduction in building costs in the postwar period? If home building costs are going to be excessively high, is the public going to buy new houses in the volume that is predicted—a million homes a year after the war?

American Builder invites the international unions of the Building Trades Council of America to state their side of the case in point.

Move Demountables-

(Continued from page 79)

While plumbing and lighting fixtures were disassembled before moving the houses, wiring and piping in the walls was left intact and it was only necessary to join up with it. However, the plumbing contractor had to provide new lead-ins for the sewage as it was not considered economical to dig that up at Burlington as it was placed six feet underground in the original erection, this being below the frost line. nomy,

Field Supt. Galloway said about 100 men were used on the project. They were worked in crews, one for clearing the foundation, one for erecting the concrete tile piers, one for floor framing, one for erection of walls, one for ceiling, one for roof and one for interior finishing. As crews became proficient at their appointed tasks, production was speeded up considerably.

Heating for the building is provided by means of coal stoves. Butane gas was used as the fuel in Burlington. Ice boxes are provided for refrigeration.

This housing project following the successful moving operation now provides 100 units for white and 40 for colored tenants. David F. Elmore was project engineer for the Housing Authority .- George H. Watson.

liv reation

O

merica

able, m With w n fully s

ndow g greater

e weat

ll help atever

ated wo

ur plans n, watc



merican Builder, September 1944.

y that elt in some

Interenters s with irts of ricated ns are

a manindows union in the all his is ai-

ed with agents und to assurleaders. hat "no ouched

nfusion nselves. reducpostwar osts are , is the is in the million

ie inter-Building to state

9)

ting fixore movoiping in d it was with it. ontractor for the ered ecourlington erground is being

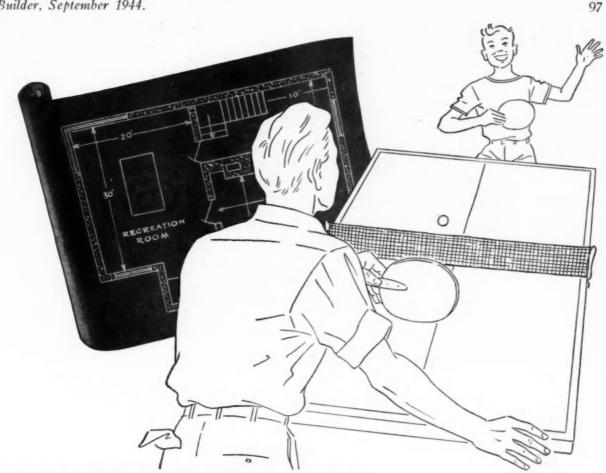
about 100 ct. They for clearerecting for floor walls, one d one for s became ed tasks, consider-

g is proes. Butane Burlinged for reowing the

now pro-Elmore Ŧ. e Housing tson.

THE

BEST



OM 0 PLAN MORE RO FOR

XAR-CRAMPED families will want more room for happier living in their homes of tomorrow. Surveys indicate that treation rooms will be much in demand-as well as more able, more convenient bedrooms, dining rooms and kitchens.

With windows, doors and woodwork of Ponderosa Pine, you n fully satisfy these urgent needs. Bays, corner windows, and ndow groups of Ponderosa Pine can help you achieve effects greater spaciousness and charm . . . yet meet the need for fuel onomy, since these windows are pre-fit and pre-assembled for e weathertightness. Ponderosa Pine doors and woodwork I help you add to convenience and increase storage space. hatever type of home you design or build, durable, toxicated woodwork of Ponderosa Pine is available in styles to fit ur plans. To give homeowners more value in the homes you in, watch woodwork!

WITH

PINE



FREE BOOK SHOWS HOW

Ideas for increasing beauty, livability and convenience in every room of the house are contained in this free idea book, "The New Open House"-one of today's most useful guides to postwar planning. Mail the coupon for your copythere's no cost or obligation.

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

Tistdu ana

Dotten Partie

PONDEROSA PINE WOODWORK Dept.ZAB-9, 111 West Washington Street Chicago 2, Illinois

Name

City.

Address

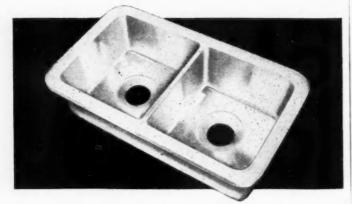


1944.

Americ

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 savings 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 $\pm \frac{3}{8}$ " 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





Cement Products Bureau Reorganized

DIVISION of the Cement Products Bureau into two parts-**U** one a Farm Bureau, the other to be known as the Housing and Cement Products Bureau—has been announced by the Portland Cement Association.

John A. Ruhling, an engineer with years of experience in concrete construction and applications of concrete products to various uses, is manager of the Housing and Cemen Products Bureau.

The new Farm Bureau is headed by W. G. Kaiser, whe has been manager of the Cement Products Bureau since March, 1933. Kaiser, a past president and Fellow of the American Society of Agricultural Engineers, has had wide experience and is well known in the farm construction field

The new arrangement was made, according to W. M Kinney, general manager of the Portland Cement Association to enable the Association to render greater service in the housing, concrete products and farm fields which have be-come so highly specialized as to present many diversified technical problems.

In the farm field this service will be available to various farm agencies, rural contractors and agricultural engineers concerned with designing and building facilities to save labor and improve the productivity of farms.

The Association will also be able to co-operate more closely with contractors, builders and concrete products manufacturers in solving problems involved in use of concrete for housing and industrial construction and improvements.

Helps Break Down "Impractical Miracle Home" Build-Up-

SEEKING to clarify the thinking of millions of Americans who will build or remodel homes after the war, the Gypsum Association is inaugurating a five-point program of education and preparation for peacetime building activity.

The false hopes of many that immediately after the war builders will be able to supply dust-free rooms, soundproof walls, solar houses and other much-publicized innovations will hinder what construction can be done early, says Henry Schweim, general manager of the association. Combating this trend is the No. 1 point of the program.

"Unless the public understands just what is possible and what is still years ahead," he declares, "it will be difficult to sell even the fine homes and improvements that we now have ready or will have very soon. Today the public is oversol on modernisms. It is time someone helped promote realism.

Local building codes, fire protection, remodeling, and the vast demand for postwar farm construction are other points covered in the Gypsum Association's program. It will be carried out through direct approach to the building industry through newspaper and general magazine publicity, and through other educational channels.

The program's points are:

1. Debunk the "dream house" publicity. Make it clear to everyone that houses with everything from the vacuum cleaner to the dishes built-in are not going to come the day the war is over.

2. Impress local officials with the importance of allowing proved new materials and new methods of construction, both All throu of which may make possible better building, otherwise post war homes may be outdated and the building revival checke by shortages of older materials.

3. Emphasize the importance of safety features, fire pro tection and durability in homes. The desirability of a home will increase with its substantiality and safety.

4. Promote remodeling and modernization of homes and apartment buildings. Although wonder houses will not b possible, older buildings will have to put on new clothes to compare favorably with the new ones that will go up it quantity.

5. Educate farmers to the best methods of construction

When the farmers v od! Th teed's wel BOOK fo lts 20 ja

deas and w easi emodel c arrowing vpes of f



BUI

CERTAIN

American Builder, September 1944.

1944

artsousing by the nce in oducts ement

r, who since of the d wide n field W. M. ciation, in the ave beersified various gineers ve labor

rete for ents.

scle

sible and

ifficult to now hav oversol realism."

, and the

er points

t will be

industry,

icity, and

ction, both

wise post

al checked

s, fire pro-

of a home

homes and will not be ew clothes

ll go up i onstruction



= MORE SALES for YOU!

When thousands and thousands of busy farmers write for a book it's got to be good! That's the record of Certainteed's well-known WARTIME HAND-BOOK for Farmers!

Its 20 jam-packed pages of practical ideas and suggestions show the farmer e it clear how easily he can repair, re-roof or e vacuum remodel cow sheds, barns, laying houses ne the day farrowing houses . . . and over 50 other types of farm building. f allowing

All through the 1944 season, Certain-

teed National Advertising has been promoting this Handbook to 5,000,000 farm families through colorful advertisements in such popular farm, dairy and poultry journals as Country Gentleman, Progressive Farmer, Successful Farming, Hoard's Dairyman, and Poultry Tribune.

Now is the time for you to capitalize this intensive Farm Market promotion. Let your farmer-prospects know you can make deliveries of Certain-teed Building Products to fit their every need.



CERTAIN-TEED PRODUCTS CORPORATION, 120 S. LaSalle St., Chicago 3, Ill.



The Certain-teed FARMER'S WARTIME HANDBOOK tells the farmer what Certainteed Products are available and how to use them to best advantage. Available without charge to Certain-teed dealers in reasonable quantities.

Americ

Vha

or

SEE.

ry to th

home own

billion de

give the p

All norma

ime cond

are going

ause that

The Beau

lanent, is

Beauty of

istrous si

amaged

lices. Pe

signs an

iscrimina

or the ki

ame roon

iow is th

finer post

will have

than the

DEFEAT

ONT

NUFACTURE

Urges Speed Planning Postwar Maintenance!

VOICING a warning that all industry must crystallize its postwar plans without delay, the Postwar Planning Committee of the National Paint, Varnish and Lacquer Association calls attention to the urgency of the situation in the latest issue of its bulletin, "Looking Toward Tomorrow."

"Work as hard preparing for peace as you are working for war production," the Committee urges. "Every job readied now is as important as every tank and glider and landing craft used in the invasion."

Continually driving home the opportunities for job-giving expansion in the paint and painting industries, this issue of the progressive bulletin points up the part paint will play in the maintenance field. The deferred maintenance market, it is estimated, has now mounted to \$30 billion in size. Of this, 10 to 20 per cent represents the nation's homes which are drastically in need of immediate attention.

Urging the paint makers to get across to the public the need for repainting when old coatings wear thin, so that costly disintegration of property need not occur, the bulletin continues: "Remember, as you bring home to the public the urgent need for such property maintenance, you are rendering great service. This property, worth some \$500 billion-this tangible wealth of the nation, of which more than \$100 billion is in residential property alone-is the result of the hard, long years' labor of millions of individuals. If property owners aren't made aware of the danger of losing what they have worked so hard to gain, it will mean a useless sacrifice of billions of dollars of the nation's wealth."

Modular Planning—

(Continued from page 85)

standardization of details and dimensions. These advantages should be understood in the development of Modular Details even though they are sometimes outweighed by other considerations. A SINGLE modular Detail will apply to all inside corners and, similarly, to all outside corners.

LAYOUT ON FLOORS-It is essential that the modular details for floors establish a uniform referencing for the finished floor as a means of co-ordinating items such as masonry partitions, glazed tile, stairs, doors, and radiator enclosures.

The referencing shown in Figure 5, page 84, gives floor to floor dimensions that are multiples of 4"

The dimensional adjustment necessary to meet the variety of thicknesses for structural floors can best be made near the ceiling as shown at "A" in Figure 5.

LAYOUT OF OPENINGS-The grid locations for the edges of structural openings in walls may differ considerably in different types of construction. It is convenient to have a uniform method of referencing these openings and for this purpose the rectangle formed by certain grid lines is considered as the grid opening. These grid lines are identified by modular details for the jamb, head, and sill of windows and doors.

SUMMARY OF THE BASIS FOR CO-ORDINATION -The grid provides a uniform basis for the correlation of building layout, details, and sizes for building parts, and affords a simple drafting technique. The broad requirement of referencing to the grid imposes no arbitrary restriction on the economical use of materials.

The practical applications of the method involve a balance between economy in the use of materials and the versatility and flexibility needed for design on the one hand; and, on the other, consideration of economy derived from improved standardization and simplification of procedure in design and field erection.

These principles apply in varying degree to particular classes of materials and types of construction; some simple applications to masonry wall construction are explained in the sections which follow.





WOODWORK

 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"

BATHROOM CABINET A new, inexpensive venetian 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 lowcost 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 swingoverhead 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

American Builder, September 1944.

)44

tion tion

king died ding ving

ie of ay in

rket, Of h are

ublic thin, occur, ne to ance, some which

is the duals. osing use-

dvan-

odular

ply to

odular

or the

ich as

diator

loor to

variety

e near

or the

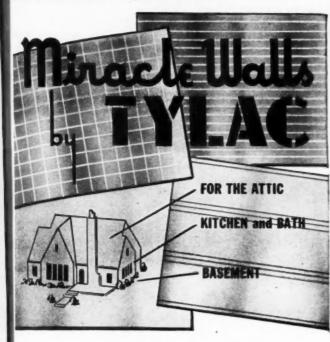
nsider-

ient to

gs and

d lines

TS.



What "SEE DAY" Will Mean for the TYLAC Dealer . . .

"S EE-DAY" will bring the greatest volume of business in history to the TYLAC Dealer. When our war is won millions of home owners will begin to improve and modernize. This multibillion dollar market, with its ready cash buying power, will give the greatest response ever to the advantages of TYLAC. All normal desire for beauty has been suppressed by today's wartime conditions --- BUT, in the "Victory Era" your customers are going to demand Beauty . . . in their homes first of all, because that is where they live.

The Beauty of TYLAC, easy-to-install, easy-to-clean, and permanent, is one of its many selling advantages. The Economical Beauty of TYLAC requires no painting or refinishing . . . The lustrous surface will not crack, craze, peel, or chip . . . is undamaged by household acids, boiling water, fats, oils or fruit juices. Personalized Beauty through the wide range of TYLAC designs and colors gives endless combinations suited to the most discriminating of individual tastes. Miracle Walls by TYLAC for the kitchen and bath, upstairs and down, and the basement game room.

Now is the time to plan your future as a dealer for an even finer post-war TYLAC ... no dealer in the wall products field will have a shorter lapse of time between "V-Day" and "See-Day" than the TYLAC Dealer.



ínto Your Present Buíldíng Plans

LIVING ROOM

Fitting precisely

Whatever the size or type of homes you will build they are going to have fireplaces — — and Bennett Fireplace Units and supplies can contribute to faster ..., more economical construction and complete customer satisfaction.

Your choice of two models—the Bennett Fresh-air Unit or the Guaranteed Recirculating Unit enables you to make sure of ...

- (1) Smoke-free draft.
- (2) Generous, evenly distributed heat.
- (3) Elimination of cold floor drafts.
- (4) Stopping the loss of heat from the rest of the house.

Those are outstanding sales advantages.

Now re-engineered for greater efficiency than ever before, the complete Bennett line will be in production *immediately* after removal of war restrictions. Bennett-Ireland, Fireplace Division, Norwich, N.Y.



101

S. J. McCarthy to New Castle Products

S. J. McCarthy, widely known sales executive in the domestic heating and home appliance field, has joined New Castle Products at New Castle, Indiana, as general sales manager. Mr. McCarthy formerly was sales manager of the heating division of the Norge Company.

Ohio Home Builders Start Formation of a Strong State-wide Association—

"Unless a strong building organization exists in the future, legislation will force small private home builders out of business," declared Tom McIllvain of Cincinnati, one of the principal speakers at the meeting in Columbus, Ohio, of builders of that state gathered to form a militant state association. He lauded the builders of America for "organizing today coast to coast under the unifying banner of the National Association of Home Builders."

Charles Malowney of Springfield, Ohio, opened the conference as chairman with a statement of the purposes of the gathering, following a speech of welcome by Ivan H. Gore, representing Wilbur Kerr on behalf of the Columbus Builders' Association.

"Housing today is government owned, financed and managed," G. J. Goudreau, president of the Cleveland Home Builders' Association, said in his opening remarks. He issued a scorching speech against public housing and its preferential treatment of one group of Americans against all others who pay an economic rent and contribute their just share to the local tax load.

A state licensing law for home builders was almost unanimously approved by the delegates.

* * *

L. F. Weyand Made a General Manager by Minnesota Mining and Manufacturing Co.

F. WEYAND, general sales manager of the Minnesota Mining & Manufacturing Company's Adhesive and Coatings Division since 1936, has been promoted to general manager, a new post entailing responsibility for all production, sales, research and laboratory activities of that division.

Weyand has been associated with the Minnesota Mining & Manufacturing Company for 28 years. Under his leadership, the Adhesive and Coatings Division has become widely diversified, both as to the kinds of adhesive produced and the classes of trade served, and has grown into one of the important divisions of the 3-M organization.

Weyand will continue to maintain headquarters at the 3-M factory in Detroit, where all adhesive and coating activities of the company have been centered for eight years. The company's executive headquarters are in St Paul, Minn.

"We Pooled Brains, Experience"

(Continued from page 66)

installed in a shop. He believes that the local home builder is the one who will make prefabrication of this type work.

The houses being built by Dent-Johnson-Mayer, Inc., at substantial, small Colonial structures of better quality than most war housing. They are well insulated, have full concrete basements, well-equipped kitchens. None of these builders was accustomed to putting up such small houses as the war regulations require. They feel that Syracuse pelple will be dissatisfied with such houses, and to avoid later criticism have had them planned for future expansion.

As shown on the accompanying plans, they have provided for a future garage, a future porch, and a future bathroom upstairs. The buyers are shown how easy it will be to make these later additions. Where a window has to be changed to a door, as in the case of the entrance to the future porch, the opening is framed so that the new door can be knocked (Continued to page 104)



Am

Nea Hon the thei Hon

thes Cor exac

The

Unl not vide nee: hou tion rial:

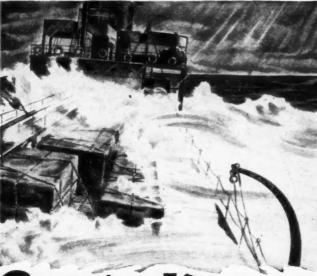
ANY



Hon prov satis \$30

Afte ing well to w

HO



STSALKRAFT

Protects Deck Loads of War Supplies as Effectively as it Shields Buildings and Materials . . .

For nearly 25 years SISALKRAFT has proved its unmatched weather-tight properties in the building industry.

Now, its outstanding ability to repel ice, snow, sleet, salt water, dirt and wind enables SISALKRAFT to protect war supplies from damage by severe weather. In any month of war service, SISALKRAFT is successfully taking more punishment than it would normally get during a lifetime in the sidewalls of a home.

The toughness, tear-resistance and scuffproof qualities of SISALKRAFT make it the ideal packaging for hastily handled war goods — and for wind-tight buildings.

Those very qualities that make SISALKRAFT so valuable in protecting war materials are the very same qualities so necessary in building construction, concrete curing and general job protection. Put SISALKRAFT first in your list of post war materials!



Manufacturers of SISALKRAFT, FIBREEN, SISAL-X, SISALTAPE AND COPPER-ARMORED SISALKRAFT 1944.

American Builder, September 1944.

omestic d New al sales r of the

in the builders cinnati, blumbus, militant rica for ng banrs." the con-

ooses of Ivan H. Columced and

eveland remarks. ing and nericans nd con-

almost

jer by Co.

Minnedhesive noted to ility for vities of

Under Sion has s of adand has the 3-M

rs at the coating or eight re in St.

e builder work. Inc., are lity than full conof these li houses cuse peoroid later on. provided bathroom e to make changed

re porch, knocked

PRECISION · BUILDING is widely known



Nearly one million people have visited the Homasote* Homes exhibits—in leading department stores throughout the country. Thousands have indicated—in writing their desire to own a Homasote Precision-Built** Home.

The fact which has startled almost every visitor to these exhibits is ::: with Homasote Precision-Built Construction, the owner can have his home designed exactly as he wants it—any size, any type, anywhere.

Unlike prefabrication, this construction system does not limit the design in any way whatever—yet it provides all the economies and other advantages of engineering technique and mass production. The finished house looks no different from the same house conventionally built—but the quality is higher, in both materials and workmanship.

ANY SIZE ANY TYPE ANYWHERE



Homasote Precision-Built Construction is already proved by eight years' experience—by thousands of satisfied owners—by \$8,000,000 of private homes and \$30,000,000 of Government housing already built.

After Victory, Precision-Built Construction—employing local labor—will provide profits for hundreds of well-established, independent dealers. We invite you to write for the full details. "Trade Mark "Reg. U. S. Pat. Off.

HOMASOTE COMPANY, Trenton, N. J.



"All In" after a day of Heavy-Duty Sawing?

Not if it's

Speed matic

the Mass Production Saw

Hour-after-hour sawing of heavy pieces precision cuts like angled cut-offs, compound bevels—that's the kind of work SPEED-MATIC was specifically designed for. It's got all the power you'll ever need for fast, effortless sawing. Blade enters cut at 7,000 revolutions per minute—so fast it practically feeds

itself. Perfect balance makes SPEEDMATIC the truly one-hand saw. Extra wide base sets it down securely and safely, even when tilted to cut at a 45° angle. SPEEDMATIC doesn't require the strained attention to the work that makes for operator fatigue.

Why be content with anything else, when this top-quality saw will prove cheapest in the end? Call your Porter-Cable dealer for a demonstration (his name is in the classified 'phone book),

in the classified phone becamp or drop us a postcard for complete information.

> Porter-Cable

Machine Co.

1721-9 H. Salina St., Syracuse 8, N. Y.





U.S. Pat. 1,887,814

The exclusive interlocking grid core within the Rezo door provides constant air circulation adds extra strength and greater rigidity.

the air-cell flush door with the greatest experience behind it

Residential construction particularly multiplies the advantages to be found in Paine Rezo doors. In any home they become important decorative elements in themselves, add to the impression of

spaciousness. Yet with beauty, they combine patented features in construction that mean no swelling or shrinking, nor future alignment troubles for the lifetime of the building... You can specify Paine Rezo doors with confidence, for Paine is no newcomer to flush door manufacture. Back of them is America's largest producer of flush type doors, with a record of nearly half a century of successful installations from coast to coast. Write today for an illustrated, factual bulletin.



Amer

(Continued from page 102)

through with a minimum of difficulty. The future second floor bath is also planned so that the plumbing can be connected inexpensively. The builders are confident that the buyers of these homes will eventually make these later additions. Plans for these additions have already been drawn by the architectural firm of Wolfe Markam, who prepared the plans for the subdivision.

One of the most interesting parts of the whole co-operative venture is the way that these three "rugged individualists" have managed to compromise their differences of opinion. They are all outspoken, independent, and accustomed to running their own jobs in their own way. On this job they soon learned the advantage of "talking things out," and have gotten along all right. Which seems to me pretty good proof that builders can lick the tough problems of the building business now and in the future better by co-operation than by calling each other names.

LETTERS

(Continued from page 7)

Fears well founded

To the Editor: Things are at a standstill here; there seems to be considerable fear that the first housing released will be tied up with restrictions such as ceiling sale prices and ceiling rentals and minimum requirements that may be so rigid that under present working conditions and present costs we would still be unable to proceed.

I feel that whatever number of houses are allowed to be built should be allocated to each city without any restrictions as to the sale price, size or design. Each builder knows best what price and type of housing is in demand.

Looking at it from another angle, if the building goes wrong, he is operating on his own money or credit.— WALTER S. JOHNSON, Walter S. Johnson Bldg. Co., Inc., Niagara Falls, N. Y.

Deep down in his heart

To the Editor: I have just read your Publisher's Page in the August issue—I have read past pages with interest too—and I want to take this opportunity of congratulating you on this month's page in particular.

If everyone in the United States who really and sincerely, down deep in his heart, believes in the ideas as expressed by you, would stand solidly and vocally behind his belief, it would not seem probable that we would be pestered with so many "isms," "pink" ideas, etc.—H. M. NICHOLS, First Federal Savings & Loan Assn., Pittsburgh, Penna.

Surplus to "Gratting Large Concern"?

To the Editor: It's no hot air that I like your publication, as it's not full of junk on how to cut rafters, etc., and contains a lot of outside construction activity—from other countries, too, and what is doing generally. And your giving the higher ups a lambasting on some of these restrictions.

Wish you would also mention something about Government sales of surplus property, so as to let the small contractor and individual in on it, instead of all going to some grafting, large concern that can handle carload lots and make a fortune.—A. TORNBERG, Braham, Minn.

Says H2 Inadequate

To the Editor: I am very much amazed to see a statement to the effect that the H2 program calls for only 25,000 units quarterly during 1945. Surely we are not aiming at a national figure of 100,000 houses for 1945! If we are, we should discontinue attempting to play down the Dream House and start playing down the Demand. This cannot fit into the picture as we have gathered it in connection with the demobilization of our armed forces.—ALAN E. BROCKBANK, Federal Homes, Inc., Salt Lake City, Utah. American Builder, September 1944.

14.

onthe

diwn

red

ive ts"

on.

to hey ave oof ing by

'e

a,

g

ts

)-

d

h

25

g.

ge

n-

11-

as

nd be

M.

lic.,

m

nd of

w.

all

ad

m.

te

ly

ot

5!

av

)e.

th-

111

ral

HErzs to Stay

Bilt-Well Woodwork of Ponderosa Pine has become firmly established in the public's mind . . . and will continue it's prominence in the Post-war Era.

America's alert and aggressive leaders in the building industry are always interested in good design and expert craftsmanship where wood is involved.

Bilt-Well has always believed in the future for fine woodwork and shall continue to believe that the combination of artistic design and the manufacturing "knowhow" are indispensable to the home of tomorrow as it was in the past.

Throughout the years, we have progressed with America's Architects and Builders by combining a world of experience with modern-day designs and methods.

CARR, ADAMS & COLLIER CO.

Dubuque, lowa



THE BILT-WELL LINE

Bilt-Well Superior Unit Windows • Bilt-Well Colonial Front Entrances • Bilt-Well Clos-tite Windows • Bilt-Well Basement Windows • Bilt-Well Carr-dor Garage Doors • Bilt-Well Lok-Tite Trim • Bilt-Well Stair Parts • Bilt-Well Telephone Cabinets • Bilt-Well Nu-Style Kitchen Cabinets Bilt-Well Colonial Mantels • Bilt-Well Combination Doors • Bilt-Well Ironing Board Cabinets Bilt-Well Bathroom Seats • Bilt-Well Breakfast Nooks • Bilt-Well Medicine Cabinets





SHOWER FACILITIES will be on the "must" list of one out of three new-home builders! This known demand, plus takenfor-granted shower needs on public, commercial and institutional buildings, makes BATHE-RITE SHOWER CABINETS an

So, for your own future benefits, and for the satisfaction of your clients, you'll want to check the reasons why BATHE-RITE is the quality standard in modern prefabricated shower convenience. Their popularity has always been based on superior strength and durability, greater beauty of design, and a wealth of features that speeds up installation. This combination of advantages recommends BATHE-RITE Shower Cabinets for all your new-building plans.

important factor in your new-building plans.

Learn how Bathe-Rite Shower Cabinets can help you in designing bathing facilities. Write for bulletins, specifications and prices.

MILWAUKEE STAMPING COMPANY 828-S South 72nd Street Milwaukee 14, Wisconsin

J. Harry Christman

J. Harry Christman Advanced by Milcor Steel Company—

Milcor Steel Company's Vice-President, J. Harry Christman, who has been in charge of the concern's Chicago Branch since 1936, has been assigned new duties connected with special sales problems and merchandising policies, E. A. Tanner, President, announced last month.

Mr. Christman has been with the company since January, 1915, except for eight months during World War I in which time he became a Captain in the Air Service. He was appointed Sales

Manager of the company in 1919, and Vice-President in 1927. Byron B. Barker has been named to take Mr. Christman's place as Manager of the Chicago Branch. Barker began as a sales representative of the company in 1931, and operated in the Chicago territory through 1936.

At the same time, the appointment of Don L. Rossiter as District Sales Manager of the Canton, Ohio, branch of the company was announced by C. G. Wollaeger, Vice-President in Charge of Sales. Rossiter has been one of the Ohio sales representatives of Milcor for many years.

Libbey-Owens-Ford to Plug Storm Sash In National Magazines—

Libbey-Owens-Ford Glass company, first and only glass company to run an advertising campaign in national publications on storm sash, has announced a repeat performance this fall, with schedules calling for the appearance of full pages in Life and Farm Journal. Fuller & Smith & Ross, Inc., of Cleveland, is the agency.

The campaign, reports Ralph Winslow, advertising director of the concern, ties in with the program planned by the government to save fuel vitally needed for the war by observance of such conservation measures as storm sash and weatherstripping.

In addition to the schedules placed in national magazines, Mr. Winslow said that promotional pockets containing eight colored display pieces, postcards for customer mailing, and pre-prints of the magazine ads had been prepared for the company's dealers. There are also prepared ads which dealers may run locally over their own signatures.

* * *

Prefabricated Concrete

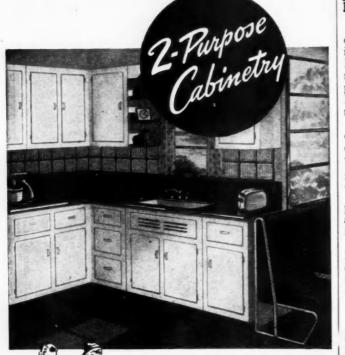
(Continued from page 77)

Your reporter, watching and photographing this interesting process, was impressed by the precision and speed of the operation. Poured concrete foundation was ready and rough working floor had been laid. The truck-load of cast wall units pulled up alongside the foundation and in front of the power derrick truck. Two steel-cable slings were quickly slipped around the first panel and it was swung up and over to the wall and lowered onto a bed of freshly placed mortar. A 2-inch half-round slot in the top of the wall and in the bottom of the panel provided a strong key. The steel lifting pads, in recesses in the bottom edge of the panel, were disengaged.

The foreman carefully plumbed the panel as it was braced at the back with a 2×4 and nailed. The next panel followed immediately; was set, plumbed and braced and held in alignment at the top with a wooden clamp.

The joint between panels was fastened tight with four bolts through holes preformed in the edge webs, and also sealed with grout poured in (later) from above, into the 2-inch diameter hole, formed by the half-round grooves cast into each panel edge. The grouting mortar has a consistency of 1 part portland cement, 2 parts fine sand and 10 per cent fire clay.

At the corners a similar bolted and grouted joint connection was used, and has been found to be entirely satisfactory. On the first house erected, an elaborate dovetail corner con-(Continued to page 108)





Not Tomorrow's Kitchen, But A Kitchen Available Tomorrow As Well As Today

WAR HOUSING PEACE PLANNING

Viewed with a practical eye, this Kitchen Maid Cabinetry meets today's double requirements: standard unit kitchens—(1) available now for war housing; (2) available *immediately* after V-Day for all residential purposes.

By concentrating its recent efforts on defense and war housing (more than 50,000 kitchen installations), Kitchen Maid has been able to maintain 100% cabinetry production. As a result, reconversion is not a serious problem, and you can feel perfectly safe in specifying Kitchen Maid for your early post-war kitchens—now!

Built now of hardwood, plywood, and other compositions, this fine cabinetry combines all the advantages of the best materials available. But it will never be "good enough". When improvements can be made for the "kitchens of tomorrow", Kitchen Maid will make them. For further facts, see your local Kitchen Maid man, or—

WRITE FOR THIS NEW FOLDER



106

FOR QUICKER, SAFER fall concrete

use

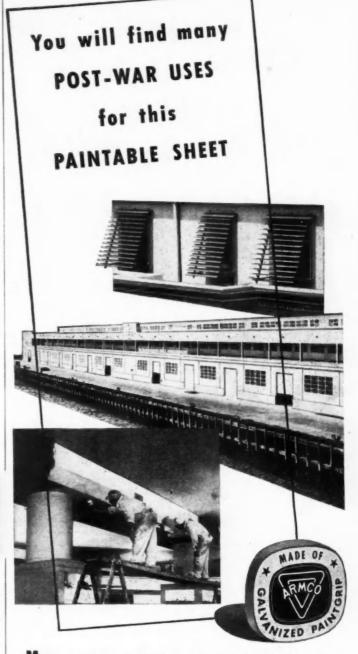
SOLVAY Calcium Chloride

At temperatures below 50° F. the development of strength in concrete is seriously slowed up—which in turn holds up finishing and increases operating costs. The addition of Solvay Calcium Chloride to concrete mix offsets the dangerous effect of low temperatures by accelerating set and increasing early strength. This means shorter protection period . . . quicker finishing and release of forms . . . and concrete that is denser, stronger, more waterproof.

WRITE FOR FREE BOOKLET "CALCIUM CHLORIDE AND PORTLAND CEMENT." ADDRESS DEPT. 34-9.

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

×. .



METAL awnings, siding for piers, exposed air ducts for homes and stores, roof drainage systems for homes these are just a few of the many successful uses for ARMCO Galvanized PAINTGRIP Sheets.

This original Bonderized galvanized metal requires no acid-etching or weathering. It takes and preserves paint because it has a neutral surface film that insulates the paint from the zinc. This retards drying out of the paint oils, prevents early peeling, gives double protection. Tests show that good paint lasts several times longer on PAINT-GRIP than on ordinary galvanized metal.

In your post-war construction, you'll find ARMCO Galvanized PAINTGRIP the ideal sheet to use wherever sheet metal work must be painted. It will cut down paint and repair bills and further establish your reputation as a sound builder. The American Rolling Mill Company, 2891 Curtis Street, Middletown, Ohio.

HELP FINISH THE FIGHT-WITH WAR BONDS

nan 927. an's 1 as ated

44.

the the lent ales

lass icathis iges

., of

recthe oband

ines, ight and the hich

ting the ough units ower pped the Attom pads, aged. aced owed

bolts ealed -inch into cy of cent

lign-

tory.

Sumanal, Reinforcing or Bilding Steel other Bilding Steel Structural. Shipped from Stock and sizes of steel for quick shipment from ten plants.

Joseph T. Ryerson & Son, Inc. Plants at Chicago, Milwaukee, St. Louis, Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City.



American Builder, September 1944.

(Continued from page 106)

struction was tried. The technical division of FHA first ruled that such would be necessary; but later this more simple corner was developed and approved and is now being used with complete success as additional houses are set up. The entire project, known as "Oak Park," for which pri-

The entire project, known as "Oak Park," for which priorities have been issued, will consist of 85 houses. They are $4\frac{1}{2}$ and $6\frac{1}{2}$ -room houses over full basements, some of one story, some story-and-a-half with two bedrooms upstairs. Five different basic floor plans, each with five different elevations are used, all as designated by Stuart & Durham, Architects, Seattle.

On these houses, so far, only the outside walls are of the precast concrete panel construction. The floors have regular $2 \ge 8$ joists to support rough and finished flooring. Also the roofs and the gable ends are of frame construction. However, it is expected that later some precast concrete slab floors will be used and, probably, some concrete gable panels.

The exteriors are finished off with cement stucco in several attractive textures, so that the panel joints are completely hidden. Inside the finish is gyplath nailed to the embedded strips in the concrete slabs. These walls have a thermal efficiency of about double the ordinary stud wall. The windows are steel such casements.

Attractive in outward appearance, these concrete-walled houses gave the writer a distinct feeling of solidity and strength. No dampness was present. Warmth and snugness seemed inherent in this construction. Complete safety from grass and brush fires—always a rural home hazard—was a reassuring factor here.

Produced, as these houses were, at a cost comparable to ordinary frame house construction and offered for sale, or rent, at no increase over such prices, they impressed the writer as a real example of "more house for the money." A practical success had at last been achieved, it seemed, in that long quest for an all-concrete, fire-safe home. The buying public should take it; and in the postwar period many building organizations in other market centers should be able to duplicate the Kruger and Funk "Royalith" performance.



A

...

4.

rst re ng 1p.

rire

ne

rs. vahi-

the

lar the

Wlab

els. eral ely ded

effiows

lled

and

less rom is a e to , or the A that

pubnild-

e to

Ľ

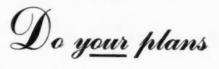
0n

bg

e 5

CO.

. S. A



provide a house

or a home?

DEPENDABLE RADIANT COMFORT MAKES THE DIFFERENCE!



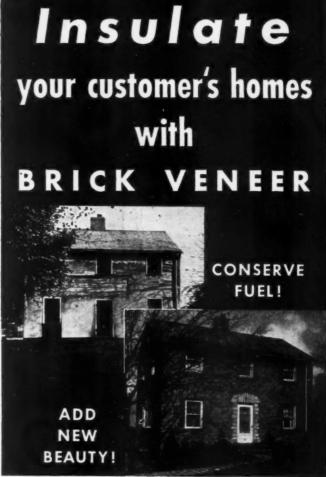
Eight to nine months of every year-comforting warmth is a necessity, in the majority of homes.

Many builders have found, to their sorrow, that unsatisfactory heating installations which caused resultant cool floor drafts and cold window areas also caused purchaser complaints.

Radiant Warmth comfort at areas of cold infiltration transform your houses into homes ... and give customer satisfaction.

SPECIFY "NATIONAL" HEATING





Brick veneer has been approved by WPB as a form of insulation and may be used without permission. In existing homes, brick veneer will not only meet insulation requirements, but add to the beauty and value of homes. Suggest brick veneer now. It necessitates no essential materials, requires no lumber. Cost for your client is surprisingly low. Send today for free copy of "Mason's Handy Guide," which will assist you in computing the quantities of brick and mortar in figuring brick veneer jobs.



MAIL THIS COUPON TODAY!

STRUCTURAL CLAY PRODUCTS INSTITUTE Desk A 1756 K Street, N. W., Washington 6, D. C.

Please send me a free copy of "Mason's Handy Guide" for assistance in brick veneer construction. I am enclosing \$1.00 for a kit containing the booklets listed below:

1. Clay Masonry Graphics 2. Cavity Walls—A Money-Saving Method of Using Brick and Tile

. State.

Name

AND

Address .. City....

PART PART LA BRICK

3. Recommended Mortar for Clay Products Masonry

4. Your Home of Burned Masonry

TILE



109



Weighs only composition materials. 3 lbs. without cord.

TOOL COMPANY • 7737 South Chicago Avenue, Chicago 19, III.



FOR A LIFETIME BOND USE BARCLAY ... WATERPROOF ADHESIVE CEMENT

HOLDS FAST-WORKS FAST Adheres to wood, metal, concrete, plaster and all kinds of building board.

Capacity, 50 sq. ft. to a gallon

FOR FASTENING

WALLBOARD DUCT WORK HAIR FELT CORK FIBRE GLASS

TILEBOARD INSULATION BOARD ASBESTOS BOARD DECORATIVE GLASS

F

and all kinds of insulating material

BARCLAY MANUFACTURING COMPANY, INC. 385 GERARD AVENUE, BRONX 51, N. Y. MAKERS OF RARCLAY TILEBOARD

Bar	clay M	fg. Co.,	385 Gera	ard Ave.,	Bronx	51, N	. Y.
			f nearest	distribut	or		
	Send	Barclay	catalog				
NA	ME				-		
AD	DRESS.			122	11		
CIT	Y		AM THE	STATE			

G. I. Building Boom Foreseen-

(Continued from page 63)

of the second loan: Provided, that such second loan shall not exceed 20 per centum of the purchase price or cost and the rate of interest thereon shall not exceed that on the principal loan by more than 1 per centum: And provided further, that regulations to be promulgated jointly by the Administrator and the head of such agency may provide for servicing of both loans by such agency and for refinancing of the principal loan to include any unpaid portion of the secondary loan with accrued interest, if any, after the curtailment thereof equals twice the amount of the secondary loan.

Well, how do you read it? Does it not say that "-The Administrator-may guarantee the full amount of the second loan-?" And doesn't this mean the full amount of the down payment of 20 per cent? Don't you read it as we do, and conclude that a veteran who passes credit requirements can buy a house up to \$10,000 with no down payment?

Of course, the law provides that the Veterans Administrator shall set up rules and regulations for the administration of the law. It provides also that he shall use existing federal credit agencies to assist him in administering the law, such as checking on the value of the property to be purchased by veterans to establish that the purchase price is in line with market values, and to determine if the veteran can afford to carry the monthly amortization, taxes and other costs attending the purchase of a home. There is only one such Federal agency equipped to render such service-the Federal Housing Administration.

Unless something unforseeable prevents veterans from taking advantage of this never-before existant opportunity to gain home ownership, building homes for veterans alone should put the industry on a boom level for the next five years.



FIND THE STUMPS





Only two stumps are barely showing in this view, taken 10 years after the area was logged. Yet many more are hidden by the fast-growing young pines that rapidly are forming a new forest. This change goes on-year in, year out-in the Western Pine region if it is not interrupted by destructive forest fires. That is why fire prevention is so important. The self-renewing ability of timber augurs well

for future supply even in cases where continuous

production has not been definitely planned. Add good forest management, as on Tree Farms, and it is brighter than some persons may believe. There is sound basis to conclude that Western Pines* are a permanent source of good lumber.

WESTERN PINE ASSOCIATION

YEON BUILDING, PORTLAND 4, OREGON

*THESE ARE THE WESTERN PINES-IDAHO WHITE PINE • PONDEROSA PINE • SUGAR PINE





You can do a lot with Tile-Tex

Today's restrictions on construction still make it possible to use Tile-Tex asphalt tile in recreation rooms, kitchens and hallways where the cost of the installation does not exceed \$200.

Here's an opportunity for you to keep busy with Tile-Tex on work of this type. Home-owners everywhere are interested in modernizing within today's limitations. Write today for "Floors that Endure" and the name of the nearest Tile-Tex Contractor.

The Tile-Tex Company CHICAGO HEIGHTS

944.

ll st

on oly ay or id if int

The the ount read redit h no

lmine adll use lminf the that nd to onthly purgency using

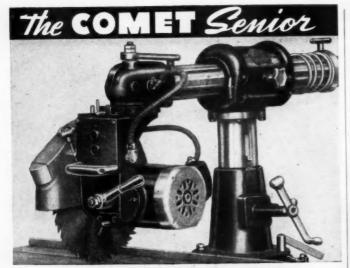
from pporr vetel for



Mixers. acked by

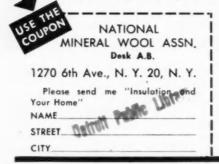
ouilding. alog.

MPANY



STANDARD LOUID for POSTWAR CONSTRUCTION Across the nation and in other lands, builders will make Comet Radial Power Saws standard equipment in post-war construction programs. War-time use builds peace-time preference. They know they can count on Comets. Write for free literature. CONSOLIDATED MACHINERY & SUPPLY CO., LTD. 2029-33 Santa Fe Avenue, Los Angeles 21, California COMETS out quicker Drastic FUEL SHORTAGE AHEAD INSULATE NOW! Oil is tight. Coal is very scarce. Government authorities say this may be our last War Winter . . , but our worst for fuel. Insulate NOW. Protect your family's health . . . save 25% or even more on fuel. Insulation soon pays for itself. Get the facts.

This is the message we are delivering to home owners in advertisements in national consumer



national consumer magazines. "Insulation and Your Home" contains *unbiased* information on *all* types of insulation. We will be happy to send you a complimentary copy. The coupon is for your convenience.

New Stove Eliminates Smoke, Soot!

A new "bungalow furnace" which, though using soft coal, eliminates smoke and gases by actually burning them, and which provides about 50 per cent more heat and onethird less residual ash, has recently been introduced and exhibited by the Bituminous Coal Institute.

The new stove, only three feet high and two feet square, will comfortably heat a four or five room house, it is claimed by the institute. It has a capacity to insure ample heat for fifty hours.

Landing Mats Today—Metal Lath for Plastered Walls Tomorrow—



Airstrips for our fighting flyers are speedily constructed of these sections made in the National Gypsum metal lath plant at Niles, Ohio.

The picture, taken at an "E" award ceremony, shows, left to right, Development Engineer Charles E. Gruelick, Carnegie-Illinois Steel, inventor; Division Engineer Charles L. Hall, Columbus, Ohio; and President Melvin H. Baker of the National Gypsum Company.



44.

soft

ing

one-

ex-

it is

nple

ructed

al lath

vs, left

rles L.

ker of

ED

ed magives ew and f wood years and the

D

tins list tions of e way to

CO.

Missouri

0.

ellents



Milwaukee BUILDERS HARDWARE

"NU Jamb" Spring Hinges • "Matchless" Floor Spring Hinges • Universal Pivot Hinges • Lavatory Latches • Indicators, Bolts • Lavatory Stall and Door Fittings •

Adjustable Screen Hinges • "Rite-Way" Closet Garment Fixtures • "Milwaukee" Door Guards.

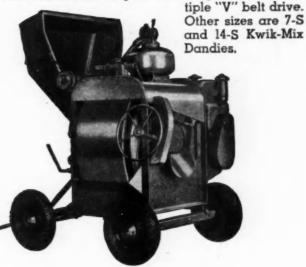
MILWAUKEE—The Popular Quality Line of Builders Hardware — Assures Customer Satisfaction.





KWIK-MIX 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 ... multiple "V" belt drive.



KWIK-MIX 10-S DANDIE



Kwik-Mix 3½-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 PLASTER – MORTAR MIXERS



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.



A

(1)

th

tr

sa

m

in

n

it m

re

0

10

th

TH

Show New Heating Controls in Rockefeller Center Demonstration

Personally controlled heating for postwar apartment house dwellers, through a new heating control system, went on exhibit August 9th in the Rockefeller Center office, New York. of the East River Savings Bank. The new heating controls will be demonstrated with the aid of a model, typical apartment house.

The new system, introducing independent control of temperatures for each apartment in multiple dwelings, is the product of the research laboratories of Minneapolis-Honeywell Regulator Co. Heating fuel and other economies, made possible by the new system, will be exhibited throughout the country, following those already held in Philadelphia, Boston and Brooklyn.

N. A. Holmer Sales Manager of Carney **Cement and Rockwool Companies-**

N. A. Holmer, formerly director of sales and marketing for the Elastic Stop Nut Corporation of Newark, N.J., is now general sales manager of the Carney Cement Company and the Carney Rockwool Company, with quarries and plants at Mankato, Minnesota, the company announced recently.

Holmer was formerly general sales manager of the Mid-State Steel & Wire Company of Crawfordsville, Indiana, distributing farm steel products to a national market of jobbers, lumber dealers, building and hardware supply out-

lets. Previously he headed Sales for Unity Mills Distributing Company, a concern distributing steel products and building materials to the Northwest market.

Carney building products include masonry cement, natural cement for blended concrete, rockwool, industrial insulation, rip rap and crushed stone.



6-Circuit Safety-type Service Equipment, with 60 Amp. Tumbler Main Switch and Fuse. Bell Transformer space optional.

> Adapted to the requirements of the modest bungalow -- or of the most elaborate house,

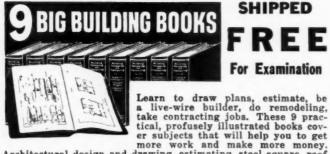
FUSE TYPE SERVICE EQUIPMENT

contributes to the low cost of good construction. It is contributes to the low cost of good construction. It is designed to give maximum protection. The box is of galvanized steel. The front, with its pearl gray lacquer finish, is neat and unobtrusive, and easily kept clean. Each unit is compact and pleasingly designed . . . Main switch and distribution circuits are combined in one unit. Capacities: 30 amperes, 115 volt, 2 wire, or 30-100 amperes, 115-230 volt, 3 wire. Available with from 2 to 20 circuits. amperes, 1 20 circuits.

Write for Bulletin 63

with description, dimensions, capacities, etc., of () Fuse Type and () Type A.C. Circuit Breaker Service Equipment.





Architectural design and drawing, estimating, steel square, roof framing, construction, painting and decorating, heating, air-conditioning, concrete forms and many other subjects.



Keep busy now at good pay, and be pre-pared for after-war building boom. Big op-portunities are always for MEN WHO KNOW HOW. These books supply quick, easily under-stood training and handy, permanent reference information that helps solve building problems.

Dept. 6633,

Coupon Brings Nine Books FREE For Examination

Vocational Publishers since 1898 AMERICAN TECHNICAL SOCIETY Chicago 37, III. Drexel at 58th Street,

are the most up-to-date and complete

we have ever

published on many

these

subjects.

You may ship me the Up-to-Date edition of your nine big books, "Building, Estimating, and Contracting" without any obligation to buy. I will pay the delivery charges only, and if fully satisfied in ten days, I will send you \$2.00, and after that only \$3.00 a month, until the total price of only \$29.80 is paid. I am not obligated in any way unless I keep the books.

Nam	e	UNCE .
Addı	ress	New .
City	****************	State

Please attach a letter stating your age, occupation, employer's name and address, and that of at least one business man as a reference. Men in service, also give home address.

114

944.

louse 1 ex-Zork. trols part-

ol of s the onevmade it the oston

Y



outing ilding atural lation.

TS

an

ng.

ea.

vill

tal

be

V'S

ecting

TING

on

'S

"Universal" Le with tripod and Level-Transit complete S 1 1

American Builder, September 1944.

Can be furnished with Stadia Wires	\$5.00 Extra
Extension Leg Tripod	\$10.00 Extra
Compass	\$12.50 Extra
Expert Repairing on	All Makes of
Instrumer	ats

REALLY

WANT!

Avoid costly errors .save time and money

UII OT

Progressive builders and contractors everywhere are using and praising this modern, simple, highly accurate combined Level-Transit. The most practical and dependable builders' instrument on the market.

"Universal" LEVEL-TRANSIT

Especially designed for running levels and taking vertical angles on all survey and checkup operations. Patented Ball Bearing Race assures perfect adjustment under severest conditions . . . 25 power telescope. Light, easy to operate. Has many features of higher priced models. Write today for full information and FREE booklet: "How to Lay Out Building Lots."

DAVID WHITE CO. 311 COURT STREET, MILWAUKEE 12, WISCONSIN

America's New washing Sink Standard The SINK WOMEN

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!

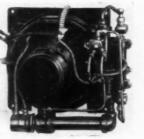
The EBCO MANUFACTURING CO.

401 W. TOWN ST. COLUMBUS 8, OHIO

Johnson **OIL BURNERS** produce more useable heat from every fuel dollar!

> Actual efficiency tests have proved again and again that Johnson Burners capture and use an extraordinarily high percentage of the potential heat in every gallon of fuel oil they use.

> If you want real fuel economy that goes on year after year ... check up on the engineering and the performance



of Johnson Burners. Any heating engineer can tell you.

No matter what your need may be, there's a Johnson Burner designed to meet it. If you are making post-war plans ... or even if you have an immediate problem...it will pay you to get in touch with us. S. T. Johnson Co., 940 Arlington Ave., Oakland 8, Calif., and 401 No. Broad St., Philadelphia 8, Pa.

S. T. JOHNSON CO.

115

41 years of engineering and building fine Oil Burning Equipment

AI

Fas

GLA

fi 9 h m n n CI e w B



New materials—now and in the post-war period—bring new problems of cutting, shaping and working. That's why it's important to have versatile Walker-Turner Radial Saws in your shop. These machines crosscut, rip, dado, shape, route, tenon and miter—on wood, metals, plastics and ceramics— much faster, much more accurately, much more economically than hand labor.

The Walker-Turner Radial Saw rips 38" wide; travels 211/2 on a sliding ram to make deep cuts wide; travels 21½" smaller blades (a 12" blade cuts 4¾" deep). "Slab cutting" method, patented geared motor, effect substantial savings in wheel and blade use. Write for literature. Walker-Turner Co., Inc.. Plainfield, N. J.





and the American floor sander by actual performance has proven itself 25 to 40% faster than machines formerly used. We have machines in stock.

Write today for circulars and prices.

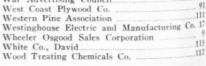
THE AMERICAN FLOOR SURFACING MACHINE CO. 511 So. St. Ciair St. Toleds, Ohia



Adam Electric Co., Frank	
Allmetal Weatherstrip Co	_108
American Floor Surfacing Machine Co., The	1116
American Gas Association	3
American Plywood Corporation	. 94
American Radiator & Standard	
Sanitary Corporation	8
American Rolling Mill Company, The	
American Saw Mill Machinery Co.	
American Technical Society	
Armstrong Cork Company	87
Association of Gas Appliance &	
Equipment Manufacturers	32
P. F. T. Matela Co. The	
B. & T. Metals Co., The	
Barber-Colman Company	89
Barclay Manufacturing Co., Inc.	110
Bennett Ireland Inc.	101
Bird & Sons, Inc.	18
Bituminous Coal Institute	4
Borg-Warner Corp.	29
Carillon Ceramics Corporation	0.9
Carr, Adams & Collier Co.	
Carter Div., R. L.	
Celotex Corporation, The	24
Certain-teed Products Corporation	
Cheney Metal Products Co.	117
Chevrolet Motor Division	
Chicopee Manufacturing Corp.	12
Congoleum-Nairn, Inc.	. 24
Consolidated Machinery & Supply Co., Ltd.	95
Construction Machinery Co., Ltd.	.112
Construction Machinery Co.	
Crane Co.	54
Crawford Door Company	\$3-53
Curtis Companies Service Bureau	25
Detroit Steel Products Company	
Douglas Fir Plywood Association	110
Ebco Mfg. Co.	
Farley & Loetscher Mfg. Co.	100
Fir Door Institute	10.52
Flintkote Company, The	39

Ford Roofing Products Company 31
General Electric Home Bureau
General Fittings Company
General Motors Corporation
Gerity-Adrian Mfg. Corp 42
Great Lakes Steel Corporation
Homasote Company
Hope's Windows
Insulite
Jaeger Machine Co., The
Johnson Co., S. T
jourson cos, o. 1. managementation 110
Kitchen Maid Corp., The
Kohler, Inc. 46
Kwik-Mix Concrete Mixer Co
Laucks, Inc., I. F
Lehigh Portland Cement Company
Libbey-Owens-Ford Glass Co
Majestic Company, The
Mall Tool Company
Marsh Wall Products, Inc. 90
Masonite Corporation
Mengel Company, The
Milwaukee Stamping Company
Monsanto Chemical Company
Mullins Mfg. Corp. 5
Mullins Mig. Corp
National Brass Company
National Electric Manufacturers Assn
National Gypsum Company 10
National Manufacturing Company4th Cover
National Mineral Wool Association
National Radiator Co., The
National Steel Corporation 13
Norge Division
Houge Division
Overhead Door Corporation
Owens-Illinois Glass Co. 14
CHARGE AND CHARGE COL
Pacific Mutual Door Co

-		
	Paine Co., The	
	Paine Lumber Co., Ltd.	
1	Penn Boiler & Burner Manufacturing Corp.	
3	Pittsburgh Plate Glass Company	
2	Ponderosa Pine Woodwork	97
	Porter-Cable Machine Company	103
\$		
	Red Cedar Shingle Bureau	93
3	Ryerson & Son, Inc., Joseph T.	
8		
	Samson Cordage Works	
l.	Servel, Inc.	26
	Sisalkraft Co.	102
7	Smith, Inc., Landon P.	
5	Solvay Sales Corporation	
	Sonneborn Sons, Inc., L.	
5	Stanley Tools	96
5	Stanley Works, The	16
ţ	Sterling Wheelbarrow Co.	.117
	Stran-Steel Division	
)	Structural Clay Products	109
7	or actartar only a routers manners	
5	Texas Company, The	51
	Thrush & Co., H. A.	. 20
	Tile-Tex Company, The	111
ì	Time, Inc.	19
1	Timken Detroit Arle Company The	41
	Timken-Detroit Axle Company, The	41
3	Tylac Company	101
3	Tylac Company	
1	United States Plywood Corporation, Inc	48
5	Upson Company, The	. 6
,		
	Victor Electric Products, Inc.	
2		
	Wagner Manufacturing Company	108
	Walker Turner Co Inc	110
2	War Advertising Council	911
4	Wast Coast Planced Co	91



Youngstown Pressed Steel Division



5







 The large, rigid panels of Plyscord cover large areas quickly, saving time and labor.
 Plyscord is light in weight, too. One man can handle panels of Plyscord easily and effectively.

• As wall sheathing, Plyscord is ideal. The panels add to the tightness and the rigidity of the finished home.

Large Plyscord Panels Are Strong, Rigid . . . Cover Walls and Roofs Quickly, Economically

In all post-war building . . . and on today's essential jobs . . . let Plyscord speed and improve wall and roof sheathing operations. Plyscord is the special sheathing grade of Douglas fir plywood—an unsanded utility panel of unusual rigidity and strength.

As wall sheathing, Plyscord has many advantages. Panels 5/16inch thick provide 40% greater wall rigidity than diagonal sheathing.

Tests show that Plyscord will hold nails firmly, too, making it an ideal roof sheathing. One test at the University of Washington revealed that a force of 85 lbs. minimum was required to pull an 8inch cedar shingle from its 5/16 Plyscord base. After 3 years' exposure, shingles have been subjected to an 85 m.p.h. wind with no trace of damage or loosening of nails.

Plyscord is useful, too, as a "one-

use" concrete form material. It goes up quickly, strips easily, and can be re-used as sturdy subflooring.

Write for information. And remember: because of its many advantages, Douglas fir plywood is today available only for war and essential building. When war needs lessen, it will again be one of your most useful building materials.

Douglas Fir Plywood Association Tacoma 2, Washington



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

A gri machi attent ing alo give H Mirac door, openi and c

AA.

OVE

ideal. d the

1944.

ver

man nels ily



A griculture, too, demands efficiency. Animals, machines and other equipment need constant attention and good care. The farmer, often working alone, needs every aid modern engineering can give him. The "OVERHEAD DOOR" with the Miracle Wedge will serve him well. This quality door, built as a complete unit to fit any size opening, is available for government, industrial, and commercial use, and for many farm uses.

Tresks and Hardware of Salt Spray Steel OVERHEAD DOOR CORPORATION HARTFORD CITY, INDIANA, U.S.A. Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales-Installation-Service.

COPYRIGHT 1944, OVERHEAD

1. 18 N

ORATION



When installing sliding doors on barns or sheds use National's "Big 4" Hangers, they will give most satisfactory service under varied conditions in all sections of this country.

BIGA

HANGERS

Farmers are being urged to build and maintain efficient farm structures to shelter stock and protect harvested crops. Builders and Dealers, take advantage of the farm building market, sell and install National Hardware—a complete line for farm building needs.

BUILDERS-SEE YOUR DEALER TODAY



NATIONAL MANUFACTURING CO.

PROTECT FUTURE "RED POINTS" ON THE HOO